BARRY ELLIOTT AND JAMIE ELLIOTT

FINANCIAL ACCOUNTING AND REPORTING

12TH EDITION

Preface and acknowledgements xx

Part I
INCOME AND ASSET VALUE MEASUREMENT SYSTEMS \

I Accounting and reporting on a cash flow basis 3
2 Accounting and reporting on an accrual accounting basis 22
3 Income and asset value measurement: an economist's approach 40
4 Accounting for inflation 59

»RY FRAMEWORK - AN ATTEMPT TO ACHIEVE UNIFORMITY 22

5 Financial reporting -- evolution of the regulatory framework in the UK 99
6 Financial reporting - evolution of international standards 134
7 Conceptual framework 158
8 **Published accounts of companies** 184
9 Preparation of published accounts **231**

Part 3
BALANCE SHEET - EQUITY, LIABILITY AND ASSET

10 Share capital, distributable profits and reduction of capital 259
11 Off balance sheet finance 284
12 Financial instruments **318**
13 Employee benefits **342**
14 Taxation in company accounts **372**
15 Property, plant and eqiupment (PPE) **399**
16 Leasing **433**
17 R&D; goodwill and intangible assets; brands **453**
18 Inventories 490
19 Construction contracts 516

Contents

Part 4

123

20 Accounting for groups at date of acquisition 535
21 Preparation of consolidated balance sheets after the date of acquisition 552
22 Preparation of consolidated income statements and consolidated statements of changes in equity 565
23 Accounting **for associated** companies 580
24 Accounting for the effects of changes in foreign exchange rates under IAS 21 595

Part 5
INTERPRETATION **613**

25 Earnings per share 615
26 Cash flow statements **642**
27 Review of financial ratio analysis 664
28 Trend analysis and multivariate analysis 706
29 An introduction to Financial Reporting on the Internet 748

Part 6

30 Corporate governance 765
3 I Environmental and social reporting 81 I
32 Ethics **for** accountants **84E**

Appendix: Outline solutions to selected exercises **871**
Index 825

Preface and acknowledgements xx

Part I
INCOME AND ASSET VALUE MEASUREMENT SYSTEMS !

I Accounting **and** reporting **on a** cash **flow** basis

11 Introduction 1
12 Shareholders 3
13 What skills does an accountant require in respect of external reports? **4**
1.5 What skills does an accountant require in respect of internal reports? 5
1.6 Procedural steps when reporting to internal users 5
1.7 Agency costs 8
1.8 Illustration of periodic financial statements prepared under the cash flow concept to disclose realised operating cash flows 8
1.9 Illustration of preparation of balance sheet under the cash flow concept 12
1.10 Treatment of non-current assets in the rash flow model 14
I I I What are rhe characteristics of these data that make them reliable? IS
1.12 Reports to external users 16
Summary 16
Review questions 17
Exercises 18
Rpfprpnrp^ 70

2 Accounting **and reporting on an accrual accounting basis** 22
2J Introduction 22
22 Historical cost convention 23
2.3 Accrual basis of accounting 24
2.4 Mechanics of accrual accounting - adjusting cash receipts and payments 24
2.5 Subjective judgements required in accrual accounting - adjusting cash receipts in accordance with IAS 18 25
2.6 Subjective judgements required in accrual accounting - adjusting cash payments in accordance with the matching principle 27
2.7 Mechanics of accrual accounting - the balance sheet 27
2.8 Reformatting the statement of financial position into a balance sheet 28
2.9 Accounting for the sacrifice of non-current assets 28

2.10 Reconciliation of cash flow and accrual accounting data 32
Summary 34
Review questions 34
Exercises 35
References 38

3 Income and asset value measurement: an economist's approach 40
3.1 Introduction 40
3.2 Role and objective of income measurement 40
3.3 Accountant's view of income, capital and value 43
3.4 Critical comment on the accountant's measure 46
3.5 Economist's view of income, capital and value 47
3.6 Critical comment on the economist's measure 53
3.7 Income, capital and changing price levels 53
Summary 55
Review questions 55
Exercises 56
References 57
Bibliography 58

4 Accounting for inflation 59
4.1 Introduction 59
4.2 Review of the problems of historical cost accounting (HCA) 59
4.3 Inflation accounting 60
4.4 The concepts in principle 60
4.5 The four models illustrated for a company with cash purchases and sales 61
4.6 Critique of each model 65
4.7 Operating capital maintenance -- a comprehensive example 68
4.8 Critique of CCA statements 79
4.9 The ASB approach 81
4.10 The IASC/IASB approach 83
4.11 Future developments 84
Summary 85
Review questions 86
Exercises 87
References 96
Bibliography 96

REGULATORY FRAMEWORK - AN ATTEMPT T UNIFORMITY *91*

5 Financial reporting - evolution of the regulatory framework in the UK *91*
5J Introduction 99
5.2 Mandatory regulations 9?
5.3 Arguments in support of standards 103
5.4 Arguments against standards 104
5.5 Structure of regulatory framework [05

5.6	The Operating and Financial Review (OFR)	[06
5.7	The Financial Reporting Review Panel	114
5.8	The Financial Services Authority	117
5.9	The Revised Combined Code (June 2006)	117
5.10	Interim reports following Cadbury	120
5.11	Developments for small companies	122
5.12	Evaluation of effectiveness of mandatory regulations	130
	Summary	131
	Review questions	131
	Exercises	132
	References	133
6	**Financial reporting- evolution of international standards**	**134**
6 1	Introduction	134
6.2	National differences	134
6.3	Reasons for differences in financial reporting	135
6.4	Classification of national accounting systems	139
6.5	Attempts to reduce national differences	140
6.6	The work of international bodies in harmonising and standardising financial reporting	141
6.7	US GAAP	153
	Summary	155
	Review questions	155
	Exercises	155
	References	156
7	**Conceptual framework**	**158**
7.1	Introduction	158
7.2	Historical overview of the evolution of financial accounting theory	159
7.3	IASC *Framework for the Presentation and Preparation of Financial Statements*	162
7.4	ASB *Statement of Principles* 1999	164
7.5	AICPA *Improving* Business *Reporting - A Customer Focus: Meeting the Information Needs of Investors and Creditors*	174
7.6	ICAS *Making Corporate Reports Valuable*	175
7.7	Conceptual Framework developments	176
	Summary	177
	Review questions	179
	Exercises	180
	References	182
8	**Published accounts of companies**	**184**
8.1	Introduction	184
8.2	A public company's financial calendar	185
8.3	Criteria for information appearing in a published income statement and balance sheet	186
8.4	The prescribed formats - the income statement	186
8.5	What information is required to be disclosed in Format I and Format 2?	187
8.6	Cost of sales	188

BJ. Distribution costs L92
8.8 **Administrative expenses 192**
8.9 Other operating income or expense 192
8.10 What costs and income are brought into account after calculating the trading profit in order to arrive at the profit on ordinary activities before tax? L22
8.11 Does it really matter under which heading a cost is classified in the income statement provided it is not omitted? 193
8.12 Discontinued operations disclosure in the income statement 193
8.13 Items requiring separate disclosure 195
8.14 The prescribed formats - the balance sheet 196
8.15 Statement of changes in equity 199
8.16 Reporting performance 200
8.17 Segment reporting 205
8.18 The fundamental accounting principles underlying the published income statement and balance sheet 206
8.19 Disclosure of accounting policies 206
8.20 Fair view treatment 211
8.21 Additional information in the annual report 214
8.22 What information do companies provide to assist comparison between companies reporting under different reporting regimes? 215
Summary 220
Review questions 220
Exercises 222
References 229

9 Preparation of published accounts 231
9.1 Introduction 231
9.2 Stage I: preparation of the internal income statement from a trial balance 231
9.3 Stage 2: preparation of the income statement of Illustrious SpA in Format I style 232
9.4 Stage 3: preparation of the balance sheet 236
9.5 Preparation of accounts in Format I following IAS 8 and IFRS 5 236
2^ Additional information value of 1FRS 5 24J
22 Additional information value of IAS 24 242
Summary 244
Review questions 244
Fxerrisps 245
References 256

BALANCE SHEET - EQUITY. LIABILITY AND ASSET

10 Share capital, distributable profits and reduction of capital 259
UU Introduction 252
10.2 Total owners' equity: an overview **260**
10.3 Total shareholders' funds: more detailed explanation 262
10.4 Accounting entries on issue of shares 264

10.5 Creditor protection: capital maintenance concept 265
10.6 Creditor protection: why capital maintenance rules are necessary 265
10.7 Creditor protection: how to quantify the amounts available to meet creditors* Haim* 266
10.8 Issued share capital: minimum share capital 267
10.9 Distributable profits: general considerations 267
10.10 Distributable profits: how to arrive at the amount using relevant accounts 269
10.1 I When may capital be reduced? 269
10.12 Writing off part of capital which has already been lost and is not represented by assets 269
10.13 Repayment of part of paid-in capital to shareholders or cancellation of unpaid share capital 275
10.14 Purchase of own shares 275
Summary 278
Review questions 278
Exercises 279
References 283

I I Off balance sheet finance 284
I I.I Introduction 284
I 1.2 Primary financial statements: their interrelationship 284
I 1.3 Primary financial statements: changes in their interrelationship 285
11.4 Reasons that companies borrow 285
I 1.5 Capital gearing and its implications 286
11.6 Off balance sheet finance 288
11.7 Substance over form 289
11.8 Impact of converting to IFRS 293
11.9 Balance sheet as valuation document 294
11.10 Why companies take steps to strengthen their balance sheets 296
11.11 Definitions cannot remove uncertainty: IAS 10 and IAS 37 297
11.12 ED IAS 37 *Non-financial Liabilities* 306
Summary 312
Review questions 313
Exercises 315
References 317

12 Financial instruments 318
12.1 Introduction 318
12.2 IAS 32 *Financial Instruments: Disclosure and Presentation* 318
12.3 IAS 39 *Financial Instruments: Recognition and Measurement* 328
12.4 IFRS 7 *Financial Statement Disclosures* 337
Summary 338
Review questions 339
Exercises 339
References 341

13 Employee benefits 342
13.1 Introduction 342
13.2 Financial reporting implications 343
13.3 Types of scheme 343

13.4 Defined contribution pension schemes 345
13.5 Defined benefit pension schemes 346
13.6 IAS 19 (revised) *Employee Benefits* 348
13.7 The liability for pension and other post-retirement costs 348
13.8 The income statement 351
13.9 Comprehensive illustration 351
13.10 Plan curtailments and settlements 353
13.11 Multi-employer plans 354
13.12 Disclosures 354
13.13 Other long-service benefits 355
13.14 Short-term benefits 355
13.15 Termination benefits 356
13.16 IFRS 2 Share-Based *Payments* 357
13.17 Scope of IFRS 2 358
13.18 Recognition and measurement 358
13.19 Equity-settled share-based payments 359
13.20 Cash-settled share-based payments 361
13.21 Transactions which may be settled in cash or shares 362
13.22 Transitional provisions 363
13.23 IAS 26 *Accounting and Reporting by Retirement Benefit Plans* 363
Summary 365
Review questions 366
Exercises 368
References 371

14 Taxation in company accounts 372
14.1 Introduction 372
14.2 Corporation tax 372
14.3 Corporation tax systems - the theoretical background 373
14.4 Corporation tax systems - avoidance and evasion 374
14.5 Corporation tax - the system from 6 April 1999 376
14.6 IFRS and taxation 378
14.7 IAS 12 - accounting for current taxation 379
14.8 Deferred tax 381
14.9 FRS 19 (the UK standard on deferred taxation) 388
14.10 A critique of deferred taxation 389
14.11 Examples of companies following IAS 12 392
14.12 Value added tax (VAT) 392
Summary 395
Review questions 395
Exercises 396
References 397

15 Property, plant and equipment (PPE) 399
15.1 Introduction 399
15.2 WhatisPPE? 400
15.3 How is the cost of PPE determined? 401
15.4 What is depreciation? 403
15.5 What are the constituents in the depreciation formula? 406
15.6 How is the useful life of an asset determined? 407

157 Residual value 408
15.8 Calculation of depreciation 408
15.9 Measurement subsequent to initial recognition 412
15.10 IAS 36 *Impairment of Assets* 414
15.11 IFRS 5 *Non-Current Assets Held for Sale and Discontinued Operations* 419
15.12 Disclosure requirements 420
15.13 Government grants towards the cost of PPE 421
15.14 Investment properties 422
15.15 Effect of accounting policy for PPE on the interpretation of the financial statements 423
Summary 425
Review questions 426
Exercises 426
References 431

16 Leasing 433
16.1 Introduction 433
16.2 Background to leasing 433
16.3 IAS 17 (and its national equivalents) - the controversy 435
16.4 IAS 17 - classification of a lease 437
16.5 IAS 17 - accounting for leases by lessees 438
16.6 Accounting for the lease of land and buildings 444
16.7 Leasing - a form of off balance sheet financing 445
16.8 Accounting for leases - a new approach 446
16.9 Accounting for leases by lessors 447
Summary 448
Review questions 448
Exercises 450
References 452

17 R&D; goodwill and intangible assets; brands 453
17.1 Introduction 453
17.2 Accounting treatment for research and development 453
17.3 Research and development 455
17.4 Introduction to goodwill and intangible assets 459
17.5 Accounting for goodwill under IFRS 3 459
17.6 Is there a correct treatment for amortising goodwill? 462
17.7 Accounting for intangible assets under IAS 38 467
17.8 Disclosure of intangible assets under IAS 38 469
17.9 Brand accounting 471
17.10 Intellectual property 473
17.1 I Review of implementation of IFRS 3 478
Summary 480
Review questions 480
Exercises 483
References 488

18 Inventories 490
18.1 Introduction 490
18.2 Inventory defined 490

18.3 The controversy 491
18.4 IAS 2 *Inventories* 492
18.5 Inventory valuation 493
18.6 Work-in-progress 500
18.7 Inventory control 502
18.8 Creative accounting 503
18.9 Audit of the year-end physical inventory count 505
18.10 Published accounts 506
18.11 Agricultural activity 507
Summary 510
Review questions 511
Exercises 511
References 515

19 Construction contracts 516
19.1 Introduction 516
19.2 Identification of revenue **516**
19.3 Identification **of** contract costs **517**
19.4 Recognition of contract revenue and expenses 518
19.5 Public-private partnerships (PPPs) 521
Summary 526
Review questions 527
Exercises 527
References 531

PART 4
CONSOLIDATED ACCOUNTS 533

20 Accounting for groups at the date of acquisition 535
20.1 Introduction 515
20.2 The definition of a group 535
20.3 Consolidated accounts and some reasons for their preparation 535
20.4 The definition of control 537
20.5 Alternative methods of preparing consolidated accounts 538
20.6 The treatment of positive goodwill 540
20.7 The treatment of negative goodwill 540
20.8 The comparison between an acquisition by cash and an exchange of shares 540
20.9 Minority interests 540
20.10 The treatment of differences between a subsidiary's fair value and book value **542**
20.11 How to calculate fair values 543
Summary 545
Review questions 545
Exercises 546
References 548

21 Preparation of consolidated balance sheets after the date of acquisition 552

21.2 Pre- and post-acquisition profits/losses 552
21.3 Inter-company balances 554
21.4 Unrealised profit on inter-company sales 556
21.5 Provision for unrealised profit affecting a minority 560
21.6 Uniform accounting policies and reporting dates 560
21.7 How is the investment in subsidiaries reported in the parent's own balance sheet? 560
Summary 561
Review questions 561
Exercises 561
References 564

22 Preparation of consolidated income statements and consolidated statements of changes in equity 565
22.1 Introduction 565
22.2 Preparation of a consolidated income statement - the Ante Group 565
22.3 The statement of changes in equity (SOCE) 567
22.4 Dividends or interest paid by the subsidiary out of pre-acquisition profits 568
22.5 A subsidiary acquired part of the way through the year 569
22.6 Published format income statement 571
Summary 572
Review questions 572
Exercises SZ3
References 579

23 Accounting for associated companies 580
23J InrraHnrtinn 580
23.2 Definitions of associates and of significant influence 580
23.3 The treatment of associated companies in consolidated accounts 581
23.4 The Brill Group - the equity method illustrated 58J
23.5 The treatment of provisions for unrealised profits 583
23.6 The acquisition of an associate part-way through the year 584
23.7 Joint ventures 585
Summary 587
Review questions 587
Exercises
References 594

24 Accounting for the effects of changes in foreign exchange rates under IAS 21 £25
24J Introduction 5?5
212 The difference between conversion and translation and the definition of a foreign currency transaction 595
24.3 The functional currency 595
24.4 The presentation currency 596
24.5 Monetary and non-monetary items 596
24.6 The rules on the recording of foreign currency transactions 597
24.7 The treatment of exchange differences on foreign currency transactions 597

24.8 Foreign exchange transactions in the individual accounts of companies illustrated - Boil pic 597
24.9 The translation of the accounts of foreign operations where the functional currency is the same as that of the parent 599
24.10 Granby Ltd illustration 599
24.11 The use of a presentation currency other than the functional currency 606
24.12 Granby Ltd illustration continued 607
24.13 Implications of IAS 21 608
Summary 609
Review questions 609
Exercises 609
References 612

PART 5
INTERPRETATION **613**

25 Earnings per share **615**
25.1 Introduction 615
25.2 Why is the earnings per share figure important? 615
25.3 How is the EPS figure calculated? 616
25.4 The use to shareholders of the EPS 617
25.5 Illustration of the basic EPS calculation 618
25.6 Adjusting the number of shares used in the basic EPS calculation 619
25.7 Rights issues 621
25.8 Adjusting the earnings and number of shares used in the diluted EPS calculation 626
25.9 Procedure where there are several potential dilutions 629
25.10 Exercise of conversion rights during financial year 630
25.11 Disclosure requirements of IAS 33 63J
25.12 The Improvement Project 633
Summary 634
Review questions 634
Exercises 636
References 64J

26 Cash flow statements **642**
26.1 Introduction 642
26.2 Development of cash flow statements 642
26.3 Applying IAS 7 (revised) *Cash Flow Statements* 643
26.4 IAS 7 (revised) format of cash flow statements 645
26.5 Consolidated cash flow statements 649
26.6 Analysing a cash flow statement 652
26.7 Critique of cash flow accounting 654
Summary 656
Review questions 657
Exercises 658
References AAT

27 Review of financial ratio analysis 664
27.1 Introduction AM

27.2	Accounting ratios and ratio analysis	665
27.3	Six key ratios	666
27.4	Description of the six key ratios	668
27.5	Description of subsidiary ratios	670
27.6	Application of pyramid of ratios to JD Wetherspoon pic	677
27.7	Segmental analysis	679
27.8	Inter-firm comparisons and industry averages	685
27.9	Ensuring true inter-firm comparisons	686
27.10	World Wide Web pages for company information	689
27.11	Non-financial ratios	690
27.12	Interpretation problems when using ratios and consolidated financial statements	691
	Summary	693
	Review questions	693
	Exercises	624
	References	704
28	**Trend analysis and multivariate analysis**	**706**
28.1	Introduction	706
28.2	Horizontal analysis between two periods	706
28.3	Trend analysis over a series of periods	708
28.4	Historical summaries	710
28.5	Vertical analysis - common size statements	710
28.6	Multivariate analysis - Z-scores	713
28.7	H-scores	715
28.8	A-scores	716
28.9	Combining cash flow and accrual data	717
28.10	Accounting polices	717
28.11	Balanced scorecards	718
28.12	Valuing shares of an unquoted company - quantitative process	719
28.13	Valuing shares of an unquoted company - qualitative process	722
28.14	Shareholder value analysis (SVA)	723
28.15	Measuring and reporting values in the annual report	724
28.16	Shareholder information needs	729
28.17	Professional risk assessors	731
28.18	Aggressive earnings management	734
28.19	Impact of differences between IFRSs and national standards on trend analysis	735
	Summary	736
	Review questions	736
	Exercises	738
	References	747
29	**An introduction to Financial Reporting on the Internet**	**748**
29.1	Introduction	748
29.2	What is XBRL?	749
29.3	What XBRL is not	752
29.4	How can it be used?	753
29.5	What is needed to use XBRL?	755
29.6	Progress of XBRL development	756

29.7 Companies currently using XBRL 758
Summary 759
Review questions 759
Exercises 760
Bibliography 761

PART 6
ACCOUNTABILITY **763**

30 Corporate governance **765**
3QJ Introduction Z65
30.2 The need for corporate governance guidelines 765
30.3 Corporate governance in different countries 766
30.4 Corporate governance requirements 768
30.5 UK Voluntary Code - The Cadbury Report 770
30.6 **The** Greenbury Report 772
30.7 The **Hampel** Report 772
30.8 The Higgs Report 773
30.9 The Smith Report 776
30.10 The Combined Code ZZZ
30.11 Directors' remuneration ZZZ
30.12 Directors' remuneration - illustration from the Annual Report of Diageoplc 781
30.13 Directors' remuneration - conclusion ZiJ
30.14 Relations with shareholders ZiJ
30.IS Institutional investors 791
30.16 The Myners Report 792
30.17 Corporate governance - directors' remuneration summary 794
30.18 Auditors 795
Summary 804
Review questions 804
Exercises 806
References 809

31 Environmental and social reporting **8JJ**
1LJ Introduction 8JJ
31.2 Accountants' role in a capitalist industrial society 8J_I
31.3 Sustainability 812
31.4 Background to companies* reporting practices 813
31.5 European Commission recommendations for disclosures in annual accounts 814
31.6 Evolution of stand-alone environmental reports 816
31.7 International charters and guidelines 8J2
31.8 Economic consequences of environmental reporting 821
31.9 Summary on environmental reporting 821
31.10 Environmental auditing: international initiatives 822
31.11 The activities involved in an environmental audit 823
31.12 Concept of social accounting 826
31.13 Background to social accounting 827
31.14 Corporate social responsibility 83J

31.15	Need for comparative data	832
31.16	International initiatives towards triple bottom line reporting	834
	Summary	837
	Review questions	837
	Exercises	839
	References	845
	Bibliography	846

32 Ethics for accountants **848**

32.1	Introduction	848
32.2	The nature of business ethics	848
32.3	Ethical codes for businesses	850
32.4	The background to business ethics	852
32.5	The role of ethics in modern business	854
32.6	The role of professional accounting ethics	857
32.7	The **role of the** accountant as guardian of business ethics	862
32.8	Growth of voluntary standards	863
32.9	Conflict between Codes and Targets	866
	Summary	866
	Review questions	867
	RoforpnfDC	fi*9
	Bibliography	869

Appendix: Outline solutions to selected exercises **871**

Index **879**

Our objective is to provide a balanced and comprehensive framework to enable students to acquire the requisite knowledge and skills to appraise current practice critically and to evaluate proposed changes from a theoretical base. To this end, the text contains:

- current standards,
- illustrations from published accounts,
- a range of review questions,
- exercises of varying difficulty,
- outline solutions to selected exercises in an Appendix at the end of the book,
- extensive references.

We have assumed that readers will have an understanding of financial accounting to a foundation or first-year level, although the text and exercises have been designed on the basis that a brief revision is still helpful.

Lecturers arc using the text selectively to support a range of teaching programmes for second-year and final-year undergraduate and postgraduate programmes. We have therefore attempted to provide subject coverage of sufficient breadth and depth to assist selective use.

The text has been adopted for financial accounting, reporting and analysis modules on:

- second-year undergraduate courses for Accounting, Business Studies and Combined Studies;
- final-year undergraduate courses for Accounting, Business Studies and Combined Studies;
- MBA courses;
- specialist MSc courses; and
- professional courses preparing students for professional accountancy examinations.

Changes to the twelfth edition

Accounting standards

UK listed companies, together with those non-listed companies that so choose, will apply international standards from January 2005.

For non-listed companies that choose to continue to apply UK GAAP, the ASB has stated its commitment to progressively bringing UK GAAP into line with international

standards and the ten KRSs 20-29 that have been issued since April 2004 are part of this process.

For companies currently applying FRSSK, this will continue. The IASB launched field tests of an SME Exposure draft in June 2007.

Accounting standards - twelfth edition updates

Chapters 5 and 6 cover the evolution of the regulatory framework in the UK and the evolution of international standards.

Topics and International Standards are covered as follows:

Chapter 4	Accounting for inflation	IAS 29
Chapter S	Published accounts of companies	IAS I, IAS 14, IAS 37, IFRS I and IFRS 5
Chapter 9	Preparation of published accounts	IAS 1, IAS 8, IAS 24 and IAS 35
Chapter 11	Off balance sheet finance	IAS 37
Chapter 12	Financial instruments	IAS 32, IAS 39 and IFRS 7
Chapter 13	Employee benefits	IAS 19, IAS 26 and IFRS 2
Chapter 14	Taxation in company accounts	IAS 12
Chapter 15	Property, plant and equipment (PPE)	IAS 16, IAS 20, IAS 23, IAS 36, IAS 40 and IFRS 5
Chapter 16	Leasing	IAS 17
Chapter 17	R&D; goodwill and intangible assets; brands	IAS 38 and IFRS 3
Chapter 18	Inventories	IAS 2
Chapter 19	Construction contracts	IAS II
Chapters 20 to 25	Consolidation	IAS 21, IAS 27, IAS 28, IAS 31 and IFRS 3
Chapter 25	Earnings per share	IAS 33
Chapter 26	C jsh How statements	IAS 7
Chapter 30	Corporate governance	IFRS 2

Income and asset value measurement systems

Chapters 1 to 4 continue to cover accounting and reporting on a cash flow and accrual basis, the economic income approach and accounting for changing price levels.

The UK regulatory framework and analysis

UK listed companies will continue to be subject to national company law, and mandatory and best practice requirements such as the *Operating and Financial Review* and the *Combined Code.*

UK regulatory framework and analysis - twelfth edition changes

The following chapters have been retained and updated as appropriate:

Chapter 10 Share capital, distributable profits and reduction of capital
Chapter 11 Oft'balance sheet finance
Chapter 27 Review of financial ratio analysis
Chapter 2S Trend analysis and multivariate analysis

Copyrighted material

Chapter 29 Financial Reporting on the Internet
Chapter 30 Corporate governance
Chapter 31 Environmental and social reporting
Chapter 32 Ethics for accountants

Our emphasis has been on keeping the text current and responsive to constructive comments from reviewers.

Recent developments

In addition to the steps being taken towards the development of IFRSs that will receive broad consensus support* regulators have been active in developing further requirements concerning corporate governance. These have been prompted by the accounting scandals in the USA and, more recently, in Europe and by shareholder activism fuelled by the apparent lack of any relationship between increases in directors* remuneration and company performance.

The content of financial reports continues to be subjected to discussion with a tension between preparers, stakeholders, auditors, academic accountants and standard setters; this is mirrored in the tension that exists between theory and practice.

- Preparers favour reporting transactions on a historical cost basis which is reliable but docs not provide shareholders with relevant information to appraise past performance or to predict future earnings.
- Stakeholders favour forward-looking reports relevant in estimating future dividend and capital growth and in understanding environmental and social impacts.
- Auditors favour reports that are verifiable so that the figures can be substantiated to avoid them being proved wrong at a later date.
- Academic accountants favour reports that reflect economic reality and are relevant in appraising management performance and in assessing the capacity of the company to adapt.
- Standard setters lean towards the academic view and favour reporting according to the commercial substance of a transaction.

In order to understand the tensions that exist, students need:

- the skill to prepare financial statements in accordance with the historical cost and current cost conventions, both of which appear in annual financial reports;
- an understanding of the main thrust of mandatory and voluntary standards;
- an understanding of the degree of flexibility available to the preparers and the impact of this on reported earnings and the balance sheet figures;
- an understanding of the limitations of these financial reports in portraying economic reality; and
- an exposure to source material and other published material in so far as time permits.

Instructor's Manual

A separate Instructor's Manual has been written to accompany this text. It contains fully worked solutions to all the exercises and is of a quality that allows them to be used as over-

Copyrighted material

head transparencies. The Manual is available at no cost to lecturers on application to the publishers.

Website

An electronic version of the Manual is also available for download at www.pearsoned.co.uk/elliott-elliott.

Acknowledgements

Financial reporting is a dynamic area and we see it as extremely important that the text should reflect this and be kept current. Assistance has been generously given by colleagues and many others in the preparation and review of the text and assessment material. This twelfth edition is very much a result of the authors, colleagues, re\ieuers and Pearson editorial and production staff working as a team and we are grateful to all concerned for their assistance in achieving this.

We owe particular thanks to Ron Altshul of Leeds Metropolitan University, who has updated 'Taxation in company accounts' (Chapter 14); Charles Batchclor formerly of FTC Kaplan for 'Financial instruments' (Chapter 12) and "Employee benefits' (Chapter 13); Steve Dungworth of De Montfort University, for 'Ethics for accountants' (Chapter *?>2)*> which first appeared in the third edition; O/er Krman of Kingston University, for 'Share capital, distributable profits and reduction of share capital' (Chapter 10), which first appeared in the second edition; Mike O'Mcara of the Regents Business School for consolidation chapters; Paul Robins of the Financial Training Com pan) for 'Property, plant and equipment* (Chapter 15) and 'Construction contracts' (Chapter 1°-); Professor Garry Tibbits of the University of Western Sydney for Leasing (Chapter 16); 1 lendrika Tibbits of the University of Western Sydney for An Introduction to Financial Reporting on the Internet (Chapter 29); David Towers, formerly of Keele University, for R&D; Goodwill and intangible assets and 'Corporate governance* (Chapter 30); and Martin Howes for inputs to financial analysis.

The authors are grateful fur the constructive comments received from the following reviewers which have assisted us in making improvements: Iain Fleming of the University of Paisley, John Morley of the University of Brighton, John Forker of Queen's University, Belfast, Breda Sweeney of Cork University, Patricia McCourt I.arres of Queen's University, Belfast, and Dave Knight of Leeds Metropolitan University.

Thanks are owed to A.T. Benedict of the South Bank University, Keith Brown of De Montfort University, Kenneth N. Field of the University of Leeds, Sue McDermott of London Guildhall University, David Murphy of Manchester Metropolitan University, Bahadur Najak of the University of Durham, Graham Sara of Coventry University, Laura Spira of Oxford Brookes University, Ken TrunklickL formerly of the University of Derby, and Martin TuflTy of the University of Brighton.

Thanks are also due to the following organisations: the Accounting Standards Board, the International Accounting Standards Board, the Association of Chartered Certified Accountants, the Association of International Accountants, the Chartered Institute of Management Accountants, the Institute of Chartered Accountants of Scotland, Chartered Institute of Public Finance and Accountancy, Chartered Institute of Bankers and the Institute of Investment Management and Research.

We would also like to thank the authors of some of the end-of-chapter exercises. Some of these exercises have been inherited from a varietv of institutions with which we have been

Copyrighted material

associated, and we have unfortunately lost the identities of the originators of such material with the passage of time. Wc are sorry that wc cannot acknowledge them by name and hope that they will excuse us for using their material.

Wc arc indebted to Matthew Smith and Tim Parker of Pearson Education for active support in keeping us largely to schedule and the attractively produced and presented text.

Finally we thank our wives, Di and Jacklin, for their continued good humoured support during the period of writing and revisions, and Giles Elliott for his critical comment at the commencement of the project. We alone remain responsible for any errors and for the thoughts and views that are expressed.

Barry and Jamie Elliott

Publisher's acknowledgements

We are grateful to the Financial Times Limited for permission to reprint the following material:

Chapter 27, p.674 Ixx Column, *O Financial Times,* 17 November 2(100; Chapter 28, p.703 Earlv warning signals, *V. Financial Times,* 5 October 1999.

PART I

Income and asset value measurement systems

1.1 Introduction

Accountants arc communicators. Accountancy is the art of communicating financial information about a business entity to users such as shareholders and managers. The communication is generally in the form of financial statements that show in money terms the economic resources under the control of the management. The art lies in selecting the information that is relevant to the user and is reliable.

Shareholders require periodic information that the managers are accounting property for the resources under their control. This information helps the shareholders to evaluate the performance of the managers. The performance measured by the accountant shows the extent to which the economic resources of the business have grown or diminished during the year.

The shareholders also require information to predict future performance. At present companies are not required to publish forecast financial statements on a regular basis and the shareholders use the report of past performance when making their predictions.

Managers require information in order to control the business and make investment decisions.

In this chapter we will consider both categories of user, and the extent to which cash How accounting would satisfy their information needs, under the following headings:

- Shareholders
- What skills does an accountant require in respect of external reports?
- Managers
- What skills does an accountant require in respect of internal reports?
- PnKX'dural steps when reporting to internal users
- Agency costs
- Illustration of operating cash Hows
- Illustration continued with statement of financial position
- Treatment of non-current assets in the cash flow model
- What are the characteristics of these data that make them reliable?
- Reports to external users.

1.2 Shareholders

Shareholders are external users. As such, they are unable to obtain access to the same amount of detailed historical information as the managers, e.g. total administration costs are

disclosed in the published profit and loss account, but not an analysis lo show how the figure is made up. Shareholders are also unable to obtain associated information, e.g. budgeted sales and costs. Even though the shareholders own a company, their entitlement to information is restricted.

The information to which shareholders arc entitled is restricted to that specified by statute, e.g. the Companies Acts, or by professional regulation, e.g. Financial Reporting Standards, or by market regulations, e.g. Listing requirements. This means that there may be a tension between the amount of information that a shareholder would like to receive and the amount that the directors are prepared to provide. For example, shareholders might consider that forecasts of future cash flows would be helpful in predicting future dividends, but the directors might be concerned that such forecasts could help competitors or make directors open to criticism if forecasts are not met. As a result, this information is not disclosed.

There may also be a tension between the quality of information that shareholders would like to receive and that which directors are prepared to provide. For example, the shareholders might consider that judgements made by the directors in the valuation of long-term contracts should be fully explained, whereas the directors might prefer not to reveal this information given the high risk of error that often attaches to such estimates. In practice, companies tend to compromise: they do not reveal the judgements to the shareholders, but maintain confidence by relying on the auditor to give a clean audit report.

The financial reports presented to the shareholders are also used by other parties such as lenders and trade creditors, and they have come to be regarded as general -pur pose reports. However, it may be difficult or impossible to satisfy the needs of all users. For example, users may have different time-scales - shareholders may be interested in the long-term trend of earnings over three years, whereas creditors may be interested in the likelihood of receiving cash within the next three months.

The information needs of the shareholders are regarded as the primary concern. The government perceives shareholders to be important because they provide companies with their economic resources. It is shareholders* needs that take priority in deciding on the nature and detailed content of the general-purpose reports.[1]

1.3 What skills does an accountant require in respect of external reports?

For external reporting purposes the accountant has a two-fold obligation:

- an obligation to ensure that the financial statements comph with statutory, professional and Listing requirements; this requires the accountant to possess technical expertise;
- an obligation to ensure that the financial statements present the substance of the commercial transactions the company has entered into; this requires the accountant to have commercial awareness.[2]

1.4 Managers

Managers are internal users. As such, they have access to detailed financial statements showing the current results, the extent to which these vary from the budgeted results and the future budgeted results. Examples of internal users are sole traders, partners and, in a company context, directors and managers.

There is no statutory restriction on the amount of information that an internal user may receive; the only restriction would be that imposed by the company's own policy.

Copyrighted material

Frequently, companies operate a 'need to know' policy and only the directors sec all the financial statements; employees, for example, would be most unlikely to receive information that would assist them in claiming a salary increase - unless, of course, it happened to be a time of recession, when information would be more freely provided by management as a means of containing claims for an increase.

1.5 What skills does an accountant require in respect of internal reports?

For the internal user, the accountant is able to tailor his or her reports. The accountant is required to produce financial statements that are specifically relevant to the user requesting them.

The accountant needs to be skilled in identifying the information that is needed and conveying its implication and meaning to the user. The user needs to be confident thai the accountant understands the user's information needs and will satisfy them in a language that is understandable. The accountant must be a skilled communicator who is able to instil confidence in the user that the information is:

- relevant to the user's needs;
- measured objectively;
- presented within a time-scale that permits decisions to be made with appropriate information;
- verifiable, in that it can be confirmed that the report represents the transactions that have taken place;
- reliable, in that it is as free from bias as is possible;
- a complete picture of material items;
- a fair representation of the business transactions and events that have occurred or are being planned.

The accountant is a trained reporter of financial information. Just as for external reporting, the accountant needs commercial awareness. It is important, therefore, that he or she should not operate in isolation.

1.5.1 Accountant's reporting role

The accountant's role is to ensure that the information provided is useful for making decisions. For external users, the accountant achieves this by providing a general-purpose financial statement that complies with statute and is reliable. For internal users, this is done by interfacing with the user and establishing exactly what financial information is relevant to the decision that is to be made.

We now consider the steps required to provide relevant information for internal users.

1.6 Procedural steps when reporting to internal users

A number of user steps and accounting action steps can be identified within a financial decision model. These are shown in Figure 1.1.

Note that, although we refer to an accountant/user interface, this is not a single occurrence because the user and accountant interface at each of the user decision steps.

Copyrighted material

Figure I.I General financial decision model to illustrate the user/accountant interface

At step 1, the accountant attempts to ensure that the decision is based on the appropriate appraisal methodology. However, the accountant is providing a service to a user and, while the accountant may give guidance, the final decision about methodology rests with the user.

At step 2, the accountant needs to establish the information necessary to support the decision that is to be made.

At step 3, the accountant needs to ensure that the user understands the full impact and financial implications of the accountant's report taking into account the user's level of understanding and prior knowledge. This may be overlooked by the accountant, who feels that the task has been completed when the written report has been typed.

It is important to remember in following the model that the accountant is attempting to satisfy the information needs of the individual user rather than those of a 'user group'. It is tempting to divide users into groups with apparently common information needs, without recognising ihat -i group contains individual users with different information needs. We return to this later in the chapter, but for the moment we continue by studying a situation where the directors of a company are considering a proposed capital investment project.

Let us assume that there are three companies in the retail industry: Retail A Ltd, Retail B Ltd and Retail C Ltd. The directors of each company are considering the purchase of a warehouse. We could assume initially that, because the companies are operating in the same industrv and are faced with the same investment decision, thev have identical information needs. However, enquiry might establish that the directors of each company have a completely different attitude to, or perception of, the primary business objective.

For example, it might be established that Retail A Ltd is a large company and under the Fisher/Hirshlcifer separation theory the directors seek to maximise profits for the benefit of the equity investors; Retail B Ltd is a medium-sized company in which the directors seek to obtain a satisfactory return for the equity shareholders; and Retail C Ltd is a smaller company in which the directors seek to achieve a satisfactory return for a wider range of stakeholders, including, perhaps, the employees as well as the equity shareholders.

The accountant needs to be aware that these differences may have a significant effect on the information required. Let us consider this diagrammatically in the situation where a capital investment decision is to be made, referring particularly to user step 2: "Establish with the accountant the information necessary* for decision making'.

We can see from Figure 1.2 that the accountant has identified that:

Figure 1.2 Impact of different user attitudes on the information needed in relation to a capital investment proposal

- the relevant financial data are the same tor each of the users, i.e. cash flows; hut
- the appraisal methods selected, i.e. internal rate of return (IRR) and net present value (NPV), arc different; and
- the appraisal criteria employed by each user, i.e. higher IRR and NPV, arc different.

In practice, the user is likely to use more than one appraisal method, as each has advantages and disadvantages. However, we can see that, even when dealing with a single group of apparently homogeneous users, the accountant has first to identify the information needs of the particular user. Only then is the accountant able to identify the relevant financial data and the appropriate report. It is the user's needs that arc predominant.

If the accountant's view of the appropriate appraisal method or criterion differs from the user's view, the accountant might decide to report from both views. This approach affords the opportunity to improve the user's understanding and encourages good practice.

The diagrams can be combined (Figure 1.3) to illustrate the complete process. The user is assumed to be Retail A Ltd, a company that has directors who are profit maximiscrs.

The accountant is reactive when reporting to an internal user. We observe this characteristic in the Norman example set out in section 1.8. Because the cash flows are identified as relevant to the user, it is these flows that the accountant will record, measure and appraise.

The accountant can also be proactive, by giving the user advice and guidance in areas where the accountant has specific expertise, such as the appraisal method that is most appropriate to the circumstances.

Figure 1.3 User/accountant interface where the user is a profit maximiser

1.7 Agency costs

The information in Figure 1.2 assumes that the directors have made their investment decision based on the assumed preferences of the shareholders. However, in real life, the directors might also be influenced by how the decision impinges on their own position. If, for example, their remuneration is a fixed salary, they might select not the investment with the highest IRR, but the one that maintains their security of employment. The result might be suboptimal investment and financing decisions based on risk aversion and over-retention. To the extent that the potential cash flows have been reduced, there will be an agency cost to the shareholders. This agency cost is an opportunity cost - the amount that was forgone because the decision making was suboptimal - and, as such, it will not be recorded in the books of account and will not appear in the financial statements.

1.8 Illustration of periodic financial statements prepared under the cash flow concept to disclose realised operating cash flows

In the above example of Retail A, B and C, the investment decision for the acquisition of a warehouse was based on an appraisal of cash flows. This raises the question: *Why not continue with the cash flow concept and report the financial changes that occur after the investment has been undertaken using that same concept?'

To do this, the company will record the consequent cash flows through a number of subsequent accounting periods; report the cash flows that occur in each financial period; and produce a balance sheet at the end of each of the financial periods. For illustration we follow this procedure in sections 1.8.1 and 1.8.2 for transactions entered into by Mr S. Norman.

1.8.1 Appraisal of the initial investment decision

Mr Norman is considering whether to start up a retail business by acquiring the lease of a shop for five years at a cost of £80,000.

Our first task has been set out in Figure 1.1 above. It is to establish the information that Mr Norman needs, so that we can decide what data needs to be collected and measured. Let us assume that, as a result of a discussion with Mr Norman, it has been ascertained that he is a profit satishcer who is looking to achie\ e at least a KPo return, which represents the time value of money. This indicates thai, as illustrated in Figure 1.2:

- the relevant data to be measured are cash flows, represented by the outflow of cash invested in the lease and the inflow of cash represented by the realised operating cash flows;
- the appropriate appraisal method is NPV; and
- the appraisal criterion is a positive NPV using the discount rate of 10%.

Let us further assume that the cash to be invested in the lease is £80,000 and that the realised operating cash flows over the life of the investment in the shop are as shown in Figure 1.4. This shows that there is a forecast of £30,000 annually for five years and a final receipt of £29,000 in 20X6 when he proposes to cease trading.

We already know that Mr Norman's investment criterion is a positive NPV using a discount factor of 10%. A calculation (Figure 1.5) shows that the investment easily satisfies that criterion.

Figure 1.4 Forecast of realised operating cash flows

Figure 1.5 **NPV** calculation using discount **tables**

1.8.2 Preparation of periodic financial statements under the cash flow concept

lla\ing predicted the realised operating cash flows for the purpose of making the investment decision, we can assume that the owner of the business will wish to obtain feedback to evaluate the correctness of the investment decision. Me does this by reviewing the actual results on a regular timely basis and comparing these with the predicted forecast. Actual results should be reported quarterly, half-yearly or annually in the same format as used when making the decision in Figure 1.4. The actual results provide management with the feedback information required to audit the initial decision; it is a technique for achieving accountability. However, frequently companies do not provide a report of actual cash flows to compare with the forecast cash flows, and fail to carry out an audit review.

In some cases, the transactions relating to the investment cannot be readily separated from other transactions, and the information necessary for the audit review of the investment cannot be made available. In other cases, the routine accounting procedures fail to collect such cash flow information because the reporting systems have not been designed to provide financial reports on a cash flow basis; rather, they have been designed to produce reports prepared on an accrual basis.

What would financial reports look like if they were prepared on a cash flow basis?

To illustrate cash flow period accounts, we will prepare half-yearly accounts for Mr Norman. To facilitate a comparison with the forecast that underpinned the investment decision, we will redraft the forecast annual statement on a half-)earl) basis. The data for the first year given in Figure 1.4 have therefore been redrafted to provide a forecast for the half-year to 30June, as shown in Figure 1.6.

We assume that, haxing applied the net present value appraisal technique to the cash (lows and ascertained that the NPY was positive, Mr Norman proceeded to set up the business on 1 January 20X1. He introduced capital of £50,000, acquired a five-year lease for j£80,iHH) and paid £6,250 in advance as rent to occupy the property to *3*\ December 20X1. He has decided to prepare financial statements at half-ycarl) intervals. The information given in Figure 1.7 concerns his trading for the half-year to 30 June 20X1.

Mr Norman was naturally eager to determine whether the business was achieving its forecast cash flows for the first six months of trading, so he produced the statement of realised operating cash flows (Figure 1.8) from the information provided in Figure 1.7. From this

Figure 1.6 Forecast of realised operating cash flows

Figure 1.7 Monthly sales, purchases and expenses for six months ended 30 June 20X1

Figure 1.8 Monthly realised operating cash flows

Statement we can see thai the business generated positive cash flows after the end of February. These are, of course, only the cash flows relating to the trading transactions.

The information in the 'Total* row of Figure 1.7 can be extracted to provide the financial Statement lor the six months ended 30 June 20X1, as shown in Figure 1.9.

The figure of £15,650 needs lo be compared with the forecast cash Hows used in the investment appraisal. This is a form of auditing. It allows the assumptions made on the initial investment decision to be confirmed. The forecast/actual comparison (based on the information in Figures 1.6 and *1.[1])* is set out in Figure 1.10.

What are the characteristics of these data that make them relevant?

- The data are objective. There is no judgement invoked in deciding (he values to include in the financial statement, as each value or amount represents a verifiable cash transaction with a third party.

Figure 1.9 Realised operating cash flows for the six months ended 30 June 20X1

Figure 1.10 Forecast/actual comparison

- The data arc consistent. The statement incorporates the same cash flows within the periodic financial report of trading as the cash flows that were incorporated within the initial capital investment report. This permits a logical comparison and confirmation that the decision was realistic.
- The results have a confirmatory value by helping users confirm or correct their past assessments.
- The results have a **predictive** value, in that they provide a basis for revising the initial forecasts if necessary.[4]
- There is **no requirement for accounting standards** or disclosure of accounting policies that are necessary to regulate accrual accounting practices, e.g. depreciation methods.

1.9 Illustration of preparation of balance sheet under the cash flow concept

Although the information set out in Figure 1.10 permits us to compare and evaluate the initial decision, it does not provide a sufficiently sound basis for the following:

- assessing the stewardship over the total cash funds that have been employed within the business;
- signalling to management whether its working capital policies are appropriate.

1.9.1 Stewardship

To assess the stewardship over the total cash funds we need to:

(a) evaluate the effectiveness of the accounting system to make certain that all transactions are recorded;

(b) extend the cash flow statement to take account of the capital cash flows; and

(c) prepare a statement of financial position or balance sheet as at 30 June 20X1.

The additional information for (b) and (c) above is set out in Figures 1.11 and 1.12 respectively.

The cash flow statement and statement of financial position, taken together, are a means of assessing stewardship. They identify the movement of all cash and derive a net balance figure. These statements are a normal feature of a sound system of internal control, but they have not been made available to external users.

1.9.2 Working capital policies

By 'working capital[1] we mean the current assets and current liabilities of the business. In addition to providing a means of making management accountable, cash flows arc the raw data required by financial managers when making decisions on the management of working capital. One of the decisions would be to set the appropriate terms for credit policy. For example, Figure 1.11 shows that the business will have a £14,350 overdraft at 30 June 20X1. If this is not acceptable, management will review its working capital by reconsidering the

Figure I.I I Cash flow statement to calculate the net cash balance

Figure 1.12 Statement of financial position

credit given to customers, the credit taken from suppliers, stock-holding levels and the timing of capital cash inflows and outflows.

If, in the example, it were possible to obtain 45 days' credit from suppliers, then the creditors at 30 June would rise from £37,000 to a new total of £53,500. This increase in trade credit of £16,500 means that half of the May purchases (£33,000/2) would not be paid for until July, which would convert the overdraft of £14,350 into a positive balance of £2,150. As a new business it might not be possible to obtain credit from all of the suppliers. In that case, other steps would be considered, such as phasing the payment for the lease of the warehouse or introducing more capital.

An interesting research report[5] identified that for small firms survival and stability were the main objectives rather than profit maximisation. This, in turn, meant that cash flow indicators and managing cash flow were seen as crucial to survival. In addition, cash flow information was perceived as important to external bodies such as banks in evaluating performance.

I. I 0 Treatment of non-current assets in the cash flow model

The statement of financial position in Figure 1.12 does not take into account am unrealised cash flows. Such flows are deemed to occur as a result of anv rise or fall in the realisable value of the lease. This could rise if, for example, the annual rent payable under the lease were to be substantially lower than the rate payable under a new lease entered into on 30 June 20X1. It could also fall with the passing of time, with six months having expired by 30 June 20X1. We need to consider this further and examine the possible treatment of non-current assets in the cash flow model.

Using the cash (low approach, we require an independent verification of the realisable value of the lease at 30 June 20XI. If the lease has fallen in value, the difference between the original outlay and the net realisable figure could be treated as a negative unrealised operating cash flow.

For example, if the independent estimate was that the realisable \alue was £74,000, then the statemenl of financial position would be prepared as in Figure 1.13. The fall of £6,000 in realisable value is an unrealised cash flow and, while it does not affect the calculation of the net cash balance, it does affect the statement of financial position.

The additional benefit of the statement of financial position, as revised, is that the owner is able clearly to identify the following:

Figure 1.13 Statement of financial position as at 30 June 20X1 (assuming that there were unrealised operating cash flows)

- the operating cash inflows of £15,650 that have been realised from the business operations;
- the operating cash outflow of £6,000 that has not been realised, hut has arisen as a result of investing in the lease;
- the net cash balance of -£14,350;
- the statement provides a stewardship-orientated report: that is, it is a means of making the management accountable for the cash within its control.

I.I I What are the characteristics of these data that make them reliable?

We have already discussed some characteristics of cash flow reporting which indicate that the data in the financial statements are relevant, e.g. their predictive and confirmatory roles. We now introduce five more characteristics of cash flow statements which indicate that the information is also reliable, i.e. free from bias.'[1] These are prudence, neutrality completeness, faithful representation and substance over form.

I.I I.I Prudence characteristic

Revenue and profits are included in the cash flow statement only when they are realised. Realisation is deemed to occur when cash is reeeixed. In our Norman example, the £172.500 cash received from debtors represents the revenue for the halt-year ended 50 June 20X1. This policy is described as prudent because it does not anticipate cash flows: cash flows are recorded onh when thev actually occur and not when the\ arc rcasonabh certain to occur. This is one of the factors thai distinguishes cash flow from accrual accounting.

LI 1.2 Neutrality characteristic

financial statements are not neutral if, by their selection or presentation of information, they influence the making of a decision in order to achieve a predetermined result or outcome. With cash flow accounting, the information is not subject to management selection criteria.

Cash flow accounting avoids the tension that can arise between prudence and neutrality because, whilst neutrality involves freedom from deliberate or systematic bias, prudence is a potentially biased concept that seeks to ensure that, under conditions ol uncertainty, gains and assets are not o\erstated ami losses and liabilities are not understated.'

I.I 1.3 Completeness characteristic

The cash flows can be verified for completeness provided there are adequate internal control procedures in operation. In small and medium-sized enterprises there can be a weakness if one person, typically the owner, has control o\er the accounting system and is able to under-record cash receipts.

I.I 1.4 Faithful representation characteristic

Cash flows can be depended upon by users to represent faithfully what they purport to represent provided, of course, that the completeness characteristic has been satisfied.

Copyrighted material

1. 11.5 Substance over form

C!ash How accounting docs not necessarily possess this characteristic which requires that transactions should be accounted for and presented in accordance with their substance and economic reality and not merely their legal form.*[1]

1.12 Reports to external users

1. 12.1 Stewardship orientation

Cash flow accounting provides objective, consistent and prudent financial information about a businesses transactions. It is stewardship-orientated and oilers a means of achieving accountability over cash resources and investment decisions.

1.12.2 Prediction orientation

External users arc also interested in the ability of a company to pay dividends. It might be thought that the past and current cash (lows are the best indicators of future cash flows and dividends. I lowcvcr, the cash flow might be misleading, in that a declining company might sell non-current assets and have a better net cash position than a growing company that buys non-current assets for future use. There is also no matching of cash inflows and out-flows, in the sense that a benefit is matched with the sacrifice made to achieve it.

Consequently, it has been accepted accounting practice to view the income statement pre-pared on the accrual accounting concept as a better predictor of future cash flows to an investor than the cash flow statements that we have illustrated in this chapter.

However, the operating cash flows arising from trading and the cash flows arising from the introduction of capital and the acquisition of non-current assets can become significant to investors, e.g. they may threaten the company's ability to survive or may indicate growth.

In the next chapter, we revise the preparation of the same three statements using the accrual accounting model.

1 Explain why it is the user who should determine the information that the accountant collects. measures and reports, rather than the accountant who is the expert in financial information.

2 "Yuji Ijiri rejects decision usefulness as the mam purpose of accounting and puts in its place account-ability. Ijiri sees the accounting relationship as a tripartite one. involving the accountor. the accountee, and the accountant ... the decision useful approach is heavily biased in favour of the accountee ... with little concern for the accountor... in the central position Ijiri would put fair-ness.'" Discuss Ijin's view in the context of cash flow accounting.

3 Discuss the extent to which you consider that accounts for a small busmessperson who is carrying on business as a sole trader should be prepared on a cash flow basis.

and asset value measurement systems

4 Explain why your decision in question 3 might be different if the business entity were a medium-sized limited company.

5 'Realised operating cash flows are only of use for internal management purposes and are irrelevant to investors.' Discuss.

6 "While accountants may be free from bias in the measurement of economic information, they cannot be unbiased in identifying the economic information that they consider to be relevant* Discuss.

7 Explain the effect on the statement of financial position m Figure 1. 13 if the non-current asset consisted of expenditure on industry-specific machine tools rather than a lease.

8 'It is essential that the information in financial statements has a prudent characteristic if the financial statements are to be objective.' Discuss.

An extract from the solution is provided m the Appendix at the end of the text for exercises marked with an asterisk (*).

* Question I

Jane Parker is going to set up a new business on I January 20X1. She estimates that her first six months in business will be as follows:

(i) She will put £150.000 into a bank account for the firm on I January 20XI.

(ii) On I January 20X1 she will buy machinery £30,000, motor vehicles £24.000 and premises £75.000. paying for them immediately.

(lii) All purchases will be effected on credit. She will buy £30,000 goods on I January and will pay for these in February. Other purchases will be: rest of January £48.000: February, March, April. May and June £60,000 each month. Other than the £30.000 worth bought in January, all other purchases will be paid for two months after purchase.

(iv) Sales (all on credit) will be £60.000 for January and £75.000 for each month after. Customers will pay for the goods in the fourth month after purchase, i.e. £60.000 is received in May.

(v) She will make drawings of £ 1.200 per month.

(vi) Wages and salaries will be £2.250 per month and will be paid on the last day of each month.

(vii) General expenses will be £750 per month, payable in the month following that in which they are incurred.

(viii) Rates will be paid as follows: for the three months to 31 March 20XI by cheque on 28 February 20X1; for the 12 months ended 31 March 20X2 by cheque on 31 July 20X1. Rates are £4.800 per annum.

(tx) She will introduce new capital of £82.500 on I April 20X1.

(x) Insurance covering the 12 months of 20XI of £2.100 will be paid for by cheque on 30 June 20XI.

(xi) All receipts and payments will be by cheque.

(XII) Inventory on 30 June 20X1 will be £30.000.

(xiii) The net realisable value of the vehicles is £ 19.200. machinery £27.000 and premises £75.000.

Required: Cash flow accounting

(i) Draft a cash budget (includes bank) month by month for the period January to June, showing clearly the amount of bank balance or overdraft at the end of each month.

(ii) Draft an operating cash flow statement for the six-month period,

(iii) Assuming that Jane Parker sought your advice as to whether she should actually set up in business, state what further information you would require.

* Question 2

Mr Norman set up a new business on I January 20X8. He invested £50.000 in the new business on that date. The following information is available.

1 Gross profit was 20% of sales. Monthly sales were as follows:

Month	Sales £	Month	Sales £
January	15.000	May	40.000
February	20.000	June	45.000
March	35.000	July	50.000
April	40.000		

2 50% of sales were for cash. Credit customers (50% of sales) pay in month following sale.

3 The supplier allowed one month's credit.

4 Monthly payments were made for rent and rates £2.200 and wages £600.

5 On I January 20X8 the following payments were made: £80,000 for a five-year lease of business premises and £3.500 for insurances on the premises for the year. The realisable value of the lease was estimated to be £76.000 on 30 June 20X8 and £70.000 on 31 December 20X8.

6 Staff sales commission of *2%* of sales was paid m the month following the sale.

Required:

(a) A purchases budget for each of the first six months.

(b) A cash flow statement for the first six months.

(c) A statement of operating cash flows and financial position as at 30 June 20X8.

(d) Write a brief letter to the bank supporting a request for an overdraft.

Question 3

Fred and Sally own a profitable business that deals in windsurfing equipment. They are the only UK agents to import 'Dryiine' sails from Germany, and in addition to this they sell a variety of boards and miscellaneous equipment that they buy from other dealers in the UK.

Two years ago they diversified into custom-made boards built to individual customer requirements. each of which was supplied with a 'Dryiine' sail. In order to build the boards they have had to lake over larger premises, which consist of a shop front with a workshop at the rear, and employ two members of staff to help.

Demand is seasonal and Fred and Sally find that there is insufficient work during the winter months to pay rent for the increased accommodation and also wages to the extra two members of staff. The four of them could spend October to March in Lanzarote as wmdsurf instructors and close the UK operation down in this period. If they did. however, they would lose the 'Dryline' agency, as Dryiine insists on a retail outlet in the UK for 12 months of the year. Dryiine sails constitute *A0%* of their turnover and carry a 50% mark-up.

Copyrighted material

Trading has been static and the pattern is expected to continue as follows for I April 20X5 to 31 March 20X6:

Sales of boards and equipment (non-custom-built) with Dryline agency: I Apnl-30 September £120.000; of this 30% was paid by credit card, which involved one month's delay in receiving cash and 496 deduction at source.

Sixty custom-built boards I April-30 September £60.000; of this 15% of the sales price was for the sail (a 'Drylme' 6 m^2 sail costs Fred and Sally £ 100; the average price for a sail of the same size and quality is £ 150 (cost to them)).

Purchasers of custom-built boards take an average of two months to pay and none pays by credit card.

Sales I October-3l March of boards and equipment (non-custom-built) £12.000. 30% by credit card as above.

Six custom-built boards were sold for a total of £6,000 and customers took an unexplainable average of three months to pay in the winter.

Purchases were made monthly and paid for two months m arrears.

The average mark-up on goods for resale excluding 'Dryline' sails was 25%. If they lose the agency, they expect that they will continue to sell the same number of sails, but at their average mark-up of 25%. The variable material cost of each custom-made board (excluding the sail) was £500.

Other costs were:

Wages to employees £6,000 p.a. each (gross including insurance).

Rent for premises £6.000 p.a. (six-monthly renewable lease) payable on the first day of each month.

Other miscellaneous costs:

I April-30 September	£3.000
I October-31 March	£900.

Bank balance on I April was £100.

Salary earnable over whole period in Lanzarote:

Fred and Sally £ 1.500 each + living accommodation

Two employees £ 1.500 each + living accommodation

All costs and income accruing evenly over time.

Required:

(i) Prepare a cash budget for I April 20X5 to 31 March 20X6 assuming that
   (a) Fred and Sally close the business in the winter months.
   (b) They stay open all year.

(ii) What additional information would you require before you advised Fred and Sally of the best course of action to take?

References

1 *Framework for the Preparation ami Presentation of'Financial Statements** 1ASC, *\WK* para. 10.

2 *lbid.*$_t$ para. 35.

3 G. Whittrcd and I. Zimmcr, *Financial Accounting: Incentive Effects ami* ***Economic*** *Consequences** **Holt,** Rinchart & Winston. 1992, p. 27.

Copyrighted material

4 IASQ *op. cit.*$_t$ para. 27.
5 R. Jarvis, J. Kitching, J. Curran and G. I.ightfoot, *The Financial Management of Smalt Firms: An Alternative Perspective,* ACCA Research Report No. 49, 1996.
6 IASC, *op.* ***cit.y*** **para. 34.**
7 ***Ibid.,*** para. 37.
8 *I/ml.*, para. 35.
9 T.A. **Lcc,** *Income and I nine Measurement: Theory ami Practice* (3rd edition). Van Nostrand Reinhold(UK), 1985, p. **173.**
10 *Ibid.*
11 D. Solomons. *Making Accounting Policy,* Oxford University Press, 1986, p. 79.

Copyrighted material

Introduction

In this chapter we consider the following:

- Historical cost convention
- Accrual accounting concept
- Mechanics of accrual accounting - adjusting cash receipts and payments
- Subjective judgements required in accrual accounting
  1 Adjusting cash receipts in accordance with IAS 18
  2 Adjusting cash payments in accordance with the matching principle
- Mechanics of accrual accounting - the balance sheet
- Reformatting the statement of financial position into a balance sheet
- Accounting for the sacrifice of fixed assets
- Reconciliation of cash flow and accrual accounting data.

2.1.1 Objective of financial statements

The International Accounting Standards **Committee (IASC)** has stated that the objective of financial statements is **to** provide information afoul the financial position, performance and capability of an enterprise that is useful to a wide range of users in making economic decisions*[1]

Common information needs for decision making

The IASC recognises that all the information needs of all users cannot be met by financial statements, but it takes the view that some needs are common to **all** users: in particular, they have some interest in the financial position, performance and adaptability of the enterprise as a whole. This leaves open the question of which user is the primary target; the IASC states that, as investors arc providers of risk capital, financial statements that meet their needs would also meet the needs of other users.[2]

Stewardship role of financial statements

In addition to assisting in making economic decisions, financial statements also show the results of the stewardship of management: that is, the accountability of management for the resources entrusted to it. The 1ASC view[5] is that users who assess the stewardship do so in order to make economic decisions, e.g. whether to hold or sell shares in a particular company or change the management.

Decision makers need to assess ability to generate cash

The IASC considers that economic decisions also require an evaluation of an enterprise's abilitv to generate cash, and of the timing and certainty of its generation.'[1] It helie\es that users are better able to make the evaluation if they arc provided with information that focuses on the financial position, performance and cash How of an enterprise.

2.1.2 Financial information to evaluate the ability to generate cash differs from financial information on actual cash flows

The IASC approach differs from the cash How model used in Chapter I, in thai, in addition to the cash Hows and statement of financial position, it includes within its definition of performance a reference to profit. It states that this information is required to assess changes in the economic resources that the enterprise is likely to control in the future. This is useful in predicting the capacity of the enterprise to generate cash flow s from its existing resource base.*

2.1.3 Statements making up the financial statements published for external users

The IASH states'[1] that the financial statements published by a company for external users should consist of the following:

- a balance sheet,
- an income statement,
- a statement of changes in equity,
- a cash Mow statement.'
- notes comprising a suniman of significant accounting policies and other explanatory notes.

In this chapter we consider two of the conventions under which the income statement and balance sheet are prepared: the historical cost convention and the accrual accounting concept.

2.2 Historical cost convention

The historical cost convention results in an appropriate measure of the economic resource that has been withdrawn or replaced.

Under it, transactions are reported at the £ amount recorded at the date the transaction occurred. Financial statements produced under this convention provide a basis lor determining the outcome of agencv agreements with reasonable certain!) *Am* predictability because the data are relatively objective."

By this we mean thai various parties who deal with the enterprise, such as lenders, will know that the figures produced in am financial statements are objective and not manipulated bv subjective judgements made by the directors. A typical example occurs when a lender attaches a covenant to a loan that the enterprise shall not exceed a specified level ol gearing.

At an operational level, revenue and expense in the income statement are slated at the *£* amount that appears on **the** invoices. This amount is objective and verifiable. Because of this, the historical cost convention has strengths for stewardship purposes, but inflation-adjusted figures mav well be more appropriate for decision usefulness.

Copyrighted material

2.3 Accrual basis of accounting

The accrual basis dictates when transactions with third parties should be recognised and, in particular, determines the accounting periods in which they should be incorporated into the financial statements. Under this concept the cash receipts from customers and payments to creditors are replaced by revenue and expenses respectively.

Revenue and expenses are derived by adjusting the realised operating cash (lows to take account of business trading activity that has occurred during the accounting period, but has not been converted into cash receipts or payments by the end of the period.

2.3.1 Accrual accounting is a better indicator than cash flow accounting of ability to generate cash

The accounting profession generally supports the view expressed by the Financial Accounting Standards Board (FASB) in the USA that accrual accounting provides a better indication of an enterprise's present and continuing ability to generate favourable cash flows than information limited to the financial aspects of cash receipts and payments.**

The IASC supported the FASB view in 1989 when it stated that financial statements prepared on an accrual basis inform users not only of past transactions involving the payment and receipt of cash, but also of obligations to pay cash in the future and of resources that represent cash to be received in the future, and that they provide the type of information about past transactions and other events that is most useful in making economic decisions.'[a]

Having briefly considered why accrual accounting is more useful than cash flow accounting, we will briefly revise the preparation of financial statements under the accrual accounting convention.

2.4 Mechanics of accrual accounting - adjusting cash receipts and payments

We use the cash flows set out in Figure 1.7. The derivation of the revenue and expenses for this example is set out in Figures 2.1 and 2.2. We assume that the enterprise has incomplete

Figure **2.1 Derivation of revenue**

Figure 2.2 Derivation of expense

records, so that the revenue is arrived at by keeping a record of unpaid invoices and adding these lo the cash receipts. Clearly, if the invoices are not adequately controlled, there will be no assurance that the £22,500 figure is correct. This is a relatively straightforward process at a mechanistic level. The uncertainty is not how to adjust the cash flow figures, but when to adjust them. This decision requires managers to make subjective judgements. We now look briefly at the nature of such judgements.

2.5 Subjective judgements required in accrual accounting - adjusting cash receipts in accordance with IAS 18

In Figure 2.1 we assumed that revenue was derived simply by adding unpaid invoices to the cash receipts. In practice, however, this is influenced by the commercial facts underlying the transactions. For example, if the company is a milk producer, the point at which it should report the milk production as revenue will be influenced by the existence of a supply contract. If there is a contract with a buyer, the revenue might be recognised immediately on production.

So that financial statements are comparable, the IASC" has set out revenue recognition criteria in IAS 18 *Revenue* in an attempt to identify when performance was sufficient to warrant inclusion in the revenue for the period. It stated that:

> In a transaction involving the sale of goods, performance should be regarded as being achieved when the following conditions have been fulfilled:
> (a) the seller of the goods has transferred to the buyer the significant risks and rewards of ownership, in that all significant acts have been completed and the seller retains no continuing managerial involvement in, or effective control of, the goods transferred to a degree usually associated with ownership; and
> (b) no significant uncertainty exists regarding:
> (i) the consideration that will be derived from the sale of the goods;
> (ii) the associated costs incurred or to be incurred in producing or purchasing the goods;
> (iii) the extent to which the goods are returned.

The criteria arc simple in their intention, but difficult in their application. For instance, at what exact point in the sales cycle is there no significant uncertainty? The enterprise has to decide on the critical event that can support an assumption that revenue may be recognised.

To assist with these decisions, the standard provided an appendix with a number of examples. Figure 2.3 gives examples of critical events.

The amount of detail in the accounting policy for turnover will depend on the range of activities within a business and events occurring during the financial year. For example, the relevant section of the 2004 Annual Report of the Chloride Group, which tests and assembles electronic products, simply reads:

> Turnover represents the amounts, excluding VAT and similar sales-related taxes, receivable by the Group for goods and services supplied to customers in the ordinary course of business. Turnover is recognised when persuasive evidence of an arrangement with a customer exists, products have been delivered or services have been rendered and collectability is reasonably assured.

The Revenue recognition policy for Wolselcy pic in its 2005 Annual Report is more specific with reference to inter-company sales and sales returns as follows:

Copyrighted material

Figure 2.3 Extracts from IAS 18 *Revenue* illustrating critical events

Turnover

Turnover is the amount receivable tor the provision of goods and services falling within the Group's ordinary activities, excluding intra-Group sales, estimated and actual sales returns, trade and earl\ settlement discounts, \alue added tax and similar sales taxes.

Turnover from the provision of goods is recognised when the risks and rewards of ownership of goods have been transferred to the customer. The risks and rewards of ownership of goods are deemed to have been transferred when the goods are shipped to, or are picked up by, the customer.

Turnover from services, other than those that arise from construction service contracts (see below), is recognised when the service provided to the customer has been completed.

Turnover in respect of construction service contracts, where the Group is providing framing lumber installation services to residential proper!) companies, is recognised using the percentage of completion method, with the percentage completed being determined by comparing the percentage of costs incurred to date with the estimated total costs of the contract. Losses on these contracts, if any, are recognised in the period when such losses become probable and can be reasonably estimated.

Turnover from the provision of goods and all services is only recognised when the amounts to be recognised are fixed or determinable and collectibility is reasonably assured.

There can be some uncertainty over the treatment of items that are to be netted oflftO arrive at turnover. For example, the Novartis Group disclosed in its 2002 Annual Report that it had changed its treatment of discounts allowed to customers:

> Sales are recognised when the significant risks and rewards of ownership of the assets have been transferred to a third party and are reported net of sales taxes and rebates. ... Sales have been restated for all periods presented to treat certain sales incentives and

discounts to retailers as sales deductions instead of marketing and distribution expenses.

Note that this does not affect the bottom line but does have an impact on the sales and gross profit figures.

2.6 Subjective judgements required in accrual accounting - adjusting cash payments in accordance with the matching principle

We have seen that the enterprise needs to decide when to recognise the revenue. It then needs to decide when to include an item as an expense in the income statement. This decision is based on an application of the matching principle.

The matching principle means that financial statements must include costs related to the achievement of the reported revenue. These include the internal transfers required to ensure that reductions in the assets held by a business are recorded at the same time as the revenues.

The expense might be more or less than the cash paid. For example, in the Norman example, £37,000 was invoiced but not paid on materials, and £90(1 on services; £3,125 was prepaid on rent for the six months after June. The cash flow information therefore needs to be adjusted as in Figure 2.4.

2.7 Mechanics of accrual accounting - the balance sheet

The balance sheet or Statement of financial position, as set out in Figure 1.12, needs to be amended following the change from cash flow to accrual accounting. It needs to include the £ amounts that have arisen from trading but have not been converted to cash, and the £ amounts of cash that have been received or paid but relate to a subsequent period. The adjusted statement of financial position is set out in Figure 2.5.

Figure 2.4 Income statement for the six months ended 30 June 20X1

Figure **2.5 Statement of financial position adjusted to an accrual basis**

2.8 Reformatting the statement of financial position into a balance sheet

The item 'net amount of activities not converted to cash or relating to subsequent periods' is the net debtor/creditor balance. If we wished, the statement of financial position could be refrained into the customary balance sheet format, where items are classified as assets or liabilities. The IASC defines assets and liabilities in its *Framework*}**

- An asset is a resource:
  - controlled by the enterprise
  - as a result of past events
  - from which future economic benefits arc expected to flow
- A liability is a present obligation:
  - arising from past events
  - the settlement of which is expected to result in an outflow of resources.

The reframed balance sheet set out in Figure 2.6 is in accordance with these definitions. Note that the same amount of £3,375 results from calculating the difference in the opening and closing net assets in the balance sheets as from calculating the residual amount in the income statement. When the amount derived from both approaches is the same, the balance sheet and income statement are said to articulate. The income statement provides the detailed explanation for the difference in the net assets and the amount is the same because the same concepts have been applied to both statements.

2.9 Accounting for the sacrifice of non-current assets

The income statement and balance sheet have both been prepared using verifiable data that have arisen from transactions with third parties outside the business. However, in order to determine the full sacrifice of economic resources that a business has made to achieve its revenue, it is necessary also to take account of the use made of the non-current assets during the period in which the revenue arose.

In the Norman example, the non-current asset is the lease. The extent of the sacrifice is a matter of judgement by the management. This is influenced by the prudence principle,

Figure 2.6 Balance sheet as at 30 June

which regulates the matching principle. The prudence principle determines the extent to which transactions that have already been included in the accounting system should he recognised in the income statement.

2.9.1 Treatment of non-current assets in accrual accounting

Applying the matching principle, it is necessary to estimate how much of the initial outla\ should he assumed to have been revenue expenditure, i.e. used in achieving the revenue of the accounting period. The provisions of IAS 16 on depreciation assist by defining depreciation and stating the duty of allocation, as follows:

> Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life."
>
> Depreciable amount is the cost of an asset, or other amount substituted for cost in the financial statements, less its residual value."*
>
> The depreciation method used should reflect the pattern in which the asset's economic benefits are consumed by the enterprise.[17]

This sounds a rather complex requirement. It is therefore surprising, when one looks at the financial statements of a multinaiional company such as in the 2tM)5 Annual Report of UP pic, to find that depreciation on tangible assets other than mineral production is simply provided on a straight-line basis of an equal amount each year, calculated so as to write off the cost by equal instalments. In the LK, this treatment is recognised in FRS 15 which states that where the pattern of consumption of an asset's economic benefits is uncertain, a straight-line method of depreciation is usually adopted.[ls] The reason is that, in accrual

accounting, the depreciation charged to the income statement is a measure of the amount of the economic benefits that have been consumed, rather than a measure of the fall in realisable value. In estimating the amount of service potential expired, a business is following the going concern assumption.

2.9.2 Going concern assumption

The going concern assumption is that the business enterprise will continue in operational existence for the foreseeable future. This assumption introduces a constraint on the prudence concept by allowing the account balances to be reported on a depreciated cost basis rather than on a net realisable value basis.

It is more relevant to use the loss of service potential than the change in realisable value because there is no intention to cease trading and to sell the fixed assets at the end of the accounting period.

In our Norman example, the procedure would be to assume that, in the case of the lease, the economic resource that has been consumed can be measured by the amortisation that has occurred due to the effluxion of time, The time covered bv the accounts is half a vear: this means that one-tenth of the lease has expired during the half-year. As a result, £8,000 is treated as revenue expenditure in the half-)car to 30 June.

This additional revenue expenditure reduces the income in the income account and the asset figure in the balance sheet. The effects are incorporated into the two statements in Figures 2.7 and 2.8. The asset amounts and the income figure in the balance sheet are also affected by the exhaustion of part of the fixed assets, as set out in Figure 2.8.

It is current accounting practice to apply the same concepts to determining the entries in both the income statement and the balance sheet. The amortisation charged in the income statement at /.SJHMI is the same as the amount deducted from the fixed assets in the balance sheet. As a result, the two statements articulate: the income statement explains the reason for the reduction of £4,625 in the net assets.

Figure 2.7 Income statement for the six months ending 30 June

Figure 2.8 Balance sheet as at 30 June

How decision-useful to the management is the income figure that has been derived after deducting a depreciation charge?

The loss of £4,625 indicates that the distribution of any amount would further deplete the financial capital of £50,000 which was invested in the company by Mr Norman on setting up the business. This is referred to as capital maintenance; the particular capital maintenance concept that has been applied is the financial capital maintenance concept.

2.9.3 Financial capital maintenance concept

The financial capital maintenance concept recognises a profit only after the original monetary investment has been maintained. This means that, as long as the cost of the assets representing the initial monetary investment is recovered against the profit, by way of a depreciation charge, the initial monetary investment is maintained.

The concept has been described in the IASC. *Framework for the Presentation and Preparation oj Financial Statements:*

> a protit is earned only if the financial or mone\ amount of the net assets at the end of the period exceeds the hnancial or monc> amount of the net assets at the beginning of the period, after excluding any distributions to, and contributions from, owners during

the period. Financial capital maintenance can be measured in either nominal monetary units [as we are doing in this chapter] or in units of constant purchasing power [as we will be doing in Chapter 4].[w]

2.9.4 Summary of views on accrual accounting

Standard setters;
The profit (loss) is considered to be a guide when assessing the amount, timing and uncertainty of prospective cash flows as represented by future income amounts. The IASC, FASB in the USA and ASB in the UK clearly state that the accrual accounting concept is more useful in predicting future cash Hows than cash How accounting.

Academic researchers:
Academic research provides conflicting views. In 1986, research carried out in the USA indicated that the FASB view was inconsistent with its findings and that cash flow information was a better predictor of future operating cash flows;[2]" research carried out in the UK, however, indicated that accrual accounting using the historical cost convention was *a more relevant basis for decision making than cash flow measures[1].[21]

2.10 Reconciliation of cash flow and accrual accounting data

The accounting profession attempted to provide users of financial statements with the benefits of both types of data, by requiring a cash flow statement to be prepared as well as the income statement and balance sheet prepared on an accrual basis.

From the income statement prepared on an accrual basis (as in Figure 2.7) an investor is able to obtain an indication of a businesses present ability to generate favourable cash flows; from the balance sheet prepared on an accrual basis (as in Figure 2.8) an investor is able to obtain an indication of a business *s continuing ability to generate favourable cash flows; from the cash flow statement (as in Figure 2.9) an investor is able to reconcile the income figure with the change in net cash balance.

Figure 2.9 Reconciliation of income figure with net cash balance

Figure 2.[u] reconciles the information produced in Chapter 1 under the cash flow basis with the information produced under the accrual basis. It could be expanded to provide information more clearly, as in Figure 2.10. Mere we are using the information from Figures 1.9 and 1.12, but within a third statement rather than the income statement and balance sheet.

2,10.1 Published cash flow statement

IAS 7 *Cash Flow Statements"* specifies the standard headings under which cash flows should be classified. They are:

- cash flows from operating activities;
- cash flows from investing activities;
- cash flows from financing activities;
- net increase in cash and cash equivalents.

To comply with IAS 7, the cash flows from Figure 2.10 would be set out as in Figure 2.11. IAS 7 is mentioned at this stage only to illustrate that cash flows can be reconciled to the accrual accounting data. There is further discussion of IAS 7 in Chapter 26.

Figure 2.10 Cash flow statement netting amounts that have not been converted to cash

Figure 2.11 Cash flow statement in accordance with IAS 7 *Cash Flow Statements*

The *Framework for* the *Preparation and Presentation of Financial* Statements identified seven user groups: investors, employees, lenders, suppliers and other trade creditors, customers, government and the public

Discuss which of the financial statements illustrated in Chapters I and 2 would be most useful to each of these seven groups if they could only receive one statement.

2 'Accrual accounting is preferable to cash flow accounting because the information is more relevant to all users of financial statements." Discuss.

3 'Cash flow accounting and accrual accounting information are both required by a potential shareholder." Discuss.

4 'Information contained in a profit and loss account and a balance sheet prepared under accrual accounting concepts is factual and objective.' Discuss.

5 'The asset measurement basis applied in accrual accounting can lead to financial difficulties when assets are due for replacement' Discuss.

6 'Accountants preparing financial statements in the UK do not require a standard such as IAS 18 *Revenue'* Discuss.

7 Explain the revenue recognition principle and discuss the effect of alternative treatments on the reported results of a company,

8 The annual financial statements of companies are used by various parties for a wide variety of purposes. For each of the seven different 'user groups', explain their presumed interest with reference to the performance of the company and its financial position.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (*).

* Question I

Jane Parker is going to set up a new business m Bruges on I January 20XI. She estimates that her first six months in business will be as follows:

(i) She will put € 150.000 into the firm on I January 20XI.

(ii) On I January 20X1 she will buy machinery €30.000, motor vehicles €24,000 and premises €75.000. paying for them immediately.

(iii) All purchases will be effected on credit. She will buy €30.000 goods on I January and she will pay for these in February. Other purchases will be: rest of January €48,000; February, March, April. May and June €60.000 each month. Other than the €30.000 worth bought in January, all other purchases will be paid for two months after purchase, i.e. €48,000 m March.

(iv) Sales {all on credit) will be €60.000 for January and €75.000 for each month after that. Customers will pay for goods in the third month after purchase, i.e. €60.000 in April.

(v) Inventory on 30 June 20XI will be €30.000.

(vi) Wages and salaries will be €2.250 per month and will be paid on the last day of each month.

(vii) Genera! expenses will be €750 per month, payable in the month following that in which they are incurred.

(viii) She will introduce new capital of €75.000 on I June 20X1. This will be paid into the business bank account immediately.

(ix) Insurance covering the 12 months of 20X1 of €26.400 will be paid for by cheque on 30 June 20X1.

and asset value measurement systems

(x) Local taxes will be paid as follows: for the three months to 31 March 20X1 by cheque on 28 February 20X2, delay due to an oversight by Parker for the 12 months ended 31 March 20X2 by cheque on 31 July 20X1. Local taxes are €8,000 per annum.

(xi) She will make drawings of € 1.500 per month by cheque.

(xii) All receipts and payments are by cheque.

(xiii) Depreciate motor vehicles by 2096 per annum and machinery by 10% per annum, using the straight-line depreciation method.

(xiv) She has been informed by her bank manager that he is prepared to offer an overdraft facility of €30,000 for the first year.

Required:

(a) Draft a cash budget (for the firm) month by month for the period January to June, showing clearly the amount of bank balance at the end of each month.

(b) Draft the projected income statement for the first six months' trading, and a balance sheet as at 30 June 20X1.

(c) Advise Jane on the alternative courses of action that could be taken to cover any cash deficiency that exceeds the agreed overdraft limit.

* Question *2*

Mr Norman is going to set up a new business in Singapore on I January 20X8. He w.ll invest $ 150,000 in the business on that date and has made the following estimates and policy decisions:

1 Forecast sales (in units) made at a selling price of $50 per unit are:

Month	*Sales units*	*Month*	*Sales units*
January	1.650	May	4.400
February	2,200	June	4.950
March	3.850	July	5.5CO
April	4,400		

2 50% of sales are for cash. Credit terms are payment in the month following sale.

3 The units cost $40 each and the supplier is allowed one month's credit

4 It is intended to hold inventory at the end of each month sufficient to cover 25% of the following month's sales.

5 Administration $8,000 and wages $ 17.000 are paid monthly as they arise.

6 On I January 20X8. the following payments will be made: $80,000 for a five-year lease of the business premises and $350 for insurance for the year.

7 Staff sales commission of 2% of sales will be paid in the month following sale.

Required:

(a) A purchases budget for each of the first six months.

(b) A cash flow forecast for the first six months.

(c) A budgeted income statement for the first six months' trading and a budgeted balance sheet as at 30 June 20X8.

(d) Advise Mr Norman on the investment of any excess cash.

Copyrighted material

Question 3

The Piano Warehouse Company Limited was established in the UK on I January 20X7 for the purpose of making pianos. Jeremy Holmes, the managing director, had 20 years' experience in the manufacture of pianos and was an acknowledged technical expert in the field. He had invested his life's savings of £15.000 m the company, and his decision to launch the company reflected his desire for complete mdepercence.

Nevertheless, his commitment to the company represented a considerable financial gamble. He paid close attention to the management of its financial affairs and ensured that a careful record of all transactions was kept

The company's activities during the year ended 31 December 20X7 were as follows:

(i) Four pianos had been built and sold for a total sum of £8,000. Holmes calculated their cost of manufacture as follows:

Materials	£2.000
Labour	£2,800
Overhead costs	£800

(ii) Two pianos were 5096 completed at 31 December 20X7. Madrigal Music Limited had agreed to buy them for a total of £4.500 and had made a down-payment amounting to 20% of the agreed sale price. Holmes estimated their costs of manufacture to 31 December 20X7 as follows:

Materials	£900
Labour	£800
Overhead costs	£100

(ni) Two pianos had been rebuilt and sold for a total of £3,000. Holmes paid £ 1.800 for them at an auction and had spent a further £400 on rebuilding them. The sale of these two pianos was made under a hire purchase agreement under which The Piano Warehouse Company received £ 1.000 on delivery and two payments over the next two years plus interest of 15% on the outstanding balance.

At the end of the company's first financial year. Jeremy Holmes was anxious that the company's net profit to 31 December 20X7 should be represented in the most accurate manner. There appeared to be several alternative bases on which the transactions for the year could be interpreted. It was clear to him that in simple terms, the net profit for the year should be calculated by deducting expenses from revenues. As far as cash sales were concerned he saw no difficulty. But how should the pianos that were 50% completed be treated? Should the value of the work done up to 31 December 20X7 be included m the profit of that year, or should it be carried forward to the next year, when the work would be completed and the pianos sold? As regards the pianos sold under the hire purchase agreement should profit be taken in 20X7 or spread over the years m which a proportion of the revenue is received?

Required:

(a) Prepare an income statement for the year ended 31 December 20X7 on a basts that would reflect conventional accounting principles.

(b) Examine the problems implied in the timing of the recognition of revenues, illustrating your answer by the facts in the case of The Piano Warehouse.

(c) Discuss the significant accounting conventions that would be relevant to profit determination in this case, and discuss their limitations in this context.

(d) Advise the company on alternative accounting treatments that could increase the profit for the year.

Copyrighted material

and asset value measurement systems

Question 4

The following is an extract from the Financial Reporting Review Panel website (www.frrp.org.uk) relating to the Wiggins Group showing the restated financial results.

		1995	1996	1997	1998	1999	2000
Turnover	As published	6.4	6.9	**19.9**	17.8	26.7	49.8
(£m)	Adjustments	(1.5)	(2-6)	**(15.6)**	(6.7)	(21.6)	(42.5)
	Restated	4.9	4.3	4.3	1 l.l	5.1	7.3
Profit/(loss)	As published	0.7	1.0	4.9	5.1	**111**	**25.1**
before tax	Adjustments	(1.3)	(1.9)	(10.2)	(8.5)	(17.2)	(35.0)
(£m)	Restated	(0.6)	(0.9)	(5.3)	(3.4)	(5.1)	**(9.9)**
Basic EPS	As published	**0.14**	0.20	0.66	0.64	1.21	287
(pence)	Adjustments	(0.26)	(0.38)	**(1.67)**	(1.14)	(1.91)	(4.06)
	Restated	**(0.12)**	(0.18)	**(1.01)**	(0.50)	(0.70)	**(1.19)**
Net assets	As published	10.2	**11.4**	17.5	37.5	52.2	45.8
(£m)	Adjustments	(1.3)	(3-2)	(12.0)	(19.8)	(33.8)	(35.4)
	Restated	8.9	8.2	53	177	18.4	10.4

Revenue recognition

The 1999 accounts contained an accounting policy for turnover in the following terms:

> Commercial property sales are recognised at the date of exchange of contract, providing the Group is reasonably assured of the receipt of the sale proceeds.

The FRRP accepted that this wording was similar to that used by many other companies and was not on the face of it objectionable. In reviewing the company's 1999 accounts the FRRP noted that the turnover and profits recognised under this policy were not reflected m similar inflows of cash; indeed. operating cash flow was negative and the amount receivable within debtors of £46m represented more than the previous two years' turnover of £44m. As a result the FRRP enquired into the detailed application of the policy.

Required:
Refer to the website and discuss the significance of the revenue recognition criteria on the published results.

References

1 *Framework for the Preparation and Presentation of FinancialStatements,* IASC, 1989, para. 12.
2 *Ibid.,* para. 10.
3 *Ibid.*, para. 14.
4 *Ibid.*, para. 15.
5 *Ibid.,* para. 17.
(i IAS I *Presentation of Financial Statements,* lASli, revised 2005, para. 8.
7 *Framework for the Preparation and Presentation of Financial Statements,* IASC, 1989. para. 7.
8 **M.** Page, *British Accounting Review,* vol. 24(1), 1992, p. 80.
9 *Statement of Financial Accounting Concepts So. I, Objectives of Financial Reporting by Business Enterprises,* Financial Accounting Standards Hoard. 1978.
1(1 *Framework for the Preparation and Presentation of Financial Statements,* IASC, 1989, para. 20.

Copyrighted material

11 IAS IS *Revenue.* I \SC. revised 2005, para. 14.
12 */bid..* para. 11 of the Appendix.
13 *Ibid.,* para. 2 of the Appendix.
14 *Framework for the Preparation and Presentation of Financial Statements,* IASC, 1989, para. 49.
15 IAS In *Property. Plant and Equipment*$_y$ IASC, revised 2004, para. 6.
16 *Ibid.,* para. 6.
17 *Ibid.,* para. 60.
18 FRS 15 *Tangible Fixed Assets,* ASH. 1999, para. 81.
19 *Framework for the Preparation and Presentation of Financial Statements,* IASC, 19S9, para. 102.
20 R.M. Uowen, D. Hurgstahllcr and L.A. Dale), 'Evidence on the relationship between earnings and various measures of cash How', *Accounting Review,* October 1986, pp. 713-725.
21 J.I.Ci. Hoard and J.F.S. Day. 'The information content of cash flow figures', *Accounting and Business Research,* Winter 1989, pp. 3-11.
22 *Cash Flow Statements,* IASC, revised 2004.

Copyrighted material

3.1 Introduction

This chapter discusses the need for income measurement. It compares the methods of measurement adopted by the accountant with those of the economist, the reasons for the different approaches, the relationship of income to capital and the impact of the concept of value on these measures. The prime objective is to engender an understanding of the rule of income and capital within the commercial enterprise, and to prevent misunderstanding of what initially may appear to be a conflict of method between the two disciplines. Economic value- was initially perceived as an academic subject but we now see it being applied by the IASC within financial reporting, e.g. in IAS 36 *Impairment of Assets* where it is referred to as value in use. In this chapter we consider the following:

- Role and objective of income measurement
- Accountant's view of income, capital and value
- Critical comment on the accountant's measure
- Economist's view of income, capital and value
- Critical comment on the economist's measure
- Income, capital and changing price levels.

3.2 Role and objective of income measurement

Although accountancy has played a part in business reporting for centuries, it is only since the Companies Act 1929 that financial reporting has become income orientated. Prior to that Act an income statement was of minor importance. It was the balance sheet that mattered, providing a list of capital, assets and liabilities that revealed the financial soundness and solvency of the business.

According to some commentators,' this scenario may be attributed to the sources of capital funding. Until the late 1920s, as in present-day Germany, external capital finance- in the UK was mainly in the hands of bankers, other lenders and trade creditors. As the main users of published financial statements, they focused on the company's ability to pay trade creditors and the interest on loans, and to meet the scheduled dates of loan repayment: they were interested in the short-term liquidity and longer-term solvency of the entity.

Thus the balance sheet was the prime document of interest. Perhaps in recognition of this, the English balance sheet, until recent times, tended to show liabilities on the left-hand side, thus making them the **first** part of the balance sheet read.

The gradual evolution of a sophisticated investment market, embracing a range of financial institutions, together with the growth in the number of individual investors, caused a reorientation of priorities. Investor protection and investor decision-making needs started 10 dominate the financial reporting scene, and the revenue statement replaced the balance sheet as the sovereign reporting document.

Consequently, attention became fixed on the income statement and on concepts of accounting for profit. Moreover, investor protection assumed a new meaning. It changed from simply protecting the capital that had been invested to protecting the income information used by investors when making an investment decision.

However, the sight of major companies experiencing severe liquidity problems over the past decade has revived interest in the balance sheet; while its light is perhaps not of the same intensity as that of the profit and loss account, it cannot IK* said to be totally subordinate to its accompanying statement of income.

Tlie main objectives of income measurement are to provide:

- a means of control in a micro- and macroeconomic sense;
- a means of prediction;
- a basis for taxation.

We consider each of these below.

3.2.1 Income as a means of control

Assessment of stewardship performance

Managers are the stewards appointed by shareholders. Income, in the sense of net income or net profit, is the crystallisation of their accountability. Maximisation of income is seen as a major aim of the entrepreneurial entity, but the capacity of the business to pursue this aim may be subject to political and social constraints in the case of large public monopolies, and private semi-monopolies such as British Telecommunications pic.

Maximisation of net income is reflected in the earnings per share (EPS) figure, which is shown on the face of the published profit and loss account. The importance of this figure to the shareholders is evidenced by contracts that tie directors' remuneration to growth in EPS. A rising EPS may result in an increased salary or bonus for directors and upward movement in the market price of the underlying security. The effect on the market price is indicated by another extremely important statistic, which is influenced by the income statement: namely, the price/earnings (PE) ratio. The PE ratio reveals the numerical relationship between the share's current market price and the last reported EPS.

Actual performance versus predicted performance

This comparison enables the management and the investing public to use the lessons of the past to improve future performance. The public, as shareholders, may iniliate a change in the company directorate if circumstances necessitate it. This may be one reason why management is generally loath to give a clear, quantified estimate of projected results - such an estimate is a potential measure of efficiency. The comparison of actual with projected results identifies apparent undcrachicvcmcnt.

The macroeconomic concept

(J(H)d government is, of necessity, involved in managing the macroeconomic scene and as such is a user of the income measure. State policies need to be formulated concerning the allocation of economic resources and the regulation of firms and industries, as illustrated by

Copyrighted material

the measures taken by Oftel and Ofwat to regulate the size of earnings by British Telecom and the water companies.

3.2.2 Income as a means of prediction

Dividend and retention policy

The payment of a dividend, its scale and that of any residual income after such dividend has been paid are influenced by the profit generated for the financial year. Other influences are also active, including the availability of cash resources within the entin, the opportunities for further internal investment, the dividend policies of capital-competing entities with comparable shares, the contemporary cost of capital and the current tCUApO of the capital market.

However, some question the soundness of using the profit generated for the year when making a decision to invest in an enterprise. Their view is that such a practice misunderstands the nature of income data, and that the appropriate information is the prospective cash flows. They regard the use of income figures from past periods as defective because, even if the future accrual accounting income could be forecast accurately, 'it is no more than an imperfect surrogate for future cash flows*.[2]

The counter-argument is that there is considerable resistance by both managers and accountants to the publication of future operating flows and dividend payments.[3] This means that, in the absence of relevant information, an investor needs to rel> on a surrogate. The question then arises: which is the best surrogate?

In the short term, the best surrogate is the information that is currently available, i.e. income measured according to the accrual concept. In the longer term, management will be pressed by the shareholders to provide the actual forecast data on operating cash flows and dividend distribution, or to improve the surrogate information.

Suggestions for improving the surrogate information have included the provision of cash earnings per share. More fundamentally, Revsine has suggested that ideal information for investors would indicate the economic value of the business (and its assets) based on expected future cash flows. I Iowe\er, the Revsine suggestion itself requires information on future cash flows that it is not possible to obtain at this time.[4] Instead, he considered the use of replacement cost as a surrogate for the economic value of the business, and we return to this later in the chapter.

Future performance

While histurv is not a faultless indicator of future events and their financial results, it does have a role to play in assessing the level of future income. In this context, historic income is of assistance to existing investors, prospective investors and management.

Identifying maintainable profit by the analysis of matched costs

Subject to the requirement of enforced disclosure via the Companies Act 2006, as supplemented by various accounting standards, the measurement of income discloses items of income and expenditure necessarily of interest in assessing stewardship success and future prospects. In this respect, exceptional items, extraordinary items and other itemised costs and turnover are essential inlormation.

3.2.3 Basis for taxation

The contemporary taxation philosophy in spite of criticism from some economists, uses income measurement to measure the taxable capacity of a business entity.

Copyrighted material

However, the determination of income by the Inland Revenue is necessarily influenced by Socioeconomic fiscal factors, among others, and thus accounting profit is subject to adjustment in order to achieve taxable profit. As a lax base, il has been continually eroded as the difference between accounting income and taxable income has grown.

The Inland Revenue in the UK has tended to disallow expenses that arc particularly susceptible to management judgement. For example, a uniform capital allowance is substituted for the subjective depreciation charge that is made by management, and certain provisions thai appear as a charge in the income statement are not accepted as an expense for tax purposes until the loss crystallises, e.g. a charge to increase the doubtful debts provision may not be allowed until the debt is recognised as bad.

3.3 Accountant's view of income, capital and value

Variations between accountants and economists in measuring income, capital and value are caused by their different views of these measures. In this section, we introduce the accountant's view and, in the next, the economist's, in order to reconcile variations in methods of measurement.

3.3.1 The accountant's view

Income is an important part of accounting theory and practice, although until 1970, when a formal system of propagating standard accounting practice throughout ihe accountancy profession began, it received little attention in accountancy literature. The characteristics of measurement were basic and few, and tended to be of an intuitive, traditional nature, rather than being spelled out precisely and given mandator) status within the profession.

Accounting tradition of historical cost

The income statement is based on the actual costs of business transactions, i.e. the costs incurred in the currency and at the price levels pertaining at the time of the transactions.

Accounting income is said to be historical income, i.e. it is an *ex post* measure because it lakes place after the event. The traditional income statement is historical in two senses: because it concerns a past period, and because it utilises historical cost, being the cost of the transactions on which it is based. It follows that the balance sheet, being based on ihe resid uals of transactions not yet dealt with in the profit and loss account, is also based on historical cost.

In practice, certain amendments may be made to historical cost in both the income statement and balance sheet, but historical cost still predominates in both statements. It is justified on a number of counts which, in principle, guard against the manipulation of data.

The main characteristics of historical cost accounting are as follows:

- Objectivity. It is a predominantly objective system, although it does exhibit aspects of subjectivity. lis nature is generally understood and it is invariably supported b\ independent documentary evidence, e.g. an invoice, statement, cheque, cheque counterfoil, receipt or voucher.
- Factual. As a basis of fact (with exceptions such as when amended in furtherance of revaluation), it is verifiable and to that extent is beyond dispute.
- Profit or income concept. Profit as a concept is generally well understood in a capital market economy, even if its precise measurement may be problematic. It constitutes the

Copyrighted materia

difference between revenue and expenditure or, in the economic sense, between opening and closing net assets.

Unfortunately, historical cost is not without its weaknesses. It is not always objective, owing to alternative definitions of revenue and costs and the need for estimates.

We saw in the preceding chapter that revenue could be determined according to a choice of criteria. There is also a choice of criteria for defining costs. For example, although inventories are valued at the lower of cost or net realisable value, the cost will differ depending upon the definition adopted, e.g. first-in-first-out, last-in-first-out or standard cost.

Estimation is needed in the case of inventory valuation, assessing possible bad debts, accruing expenses, providing for depreciation and determining the profit attributable to long-term contracts. So, although it is transaction based, there are aspects of historical cost reporting that do not result from an independently verifiable business transaction. This means that profit is not always a unique figure.

Assets are often subjected to revaluation. In an economy of changing price levels, the historical cost system has been compromised by a perceived need to restate the carrying value of those assets that comprise a large proportion of a company's capital employed; e.g. land and buildings. This practice is controversial, not least because it is said to imply that a balance sheet is a list of assets at market valuation, rather than a statement of unamortised costs not yet charged against revenue.

However, despite conventional accountancy income being partly the result of subjectivity, it is largely the product of the historical cost concept. A typical accounting policy specified in the published accounts of companies now reads as follows:

> The financial statements are prepared under the historical cost conventions as modified by the revaluation of certain fixed assets.

Nature of accounting income

Accounting income is defined in terms of the business entity. It is the excess of revenue from sales over direct and allocated indirect costs incurred in the achievement of such sales. Its measure results in a net figure. It is the numerical result of the matching and accruals concepts discussed in the preceding chapter.

We saw in the preceding chapter that accounting income is transaction based and therefore can be said to be factual, in as much as the revenue and costs have been realised and will be reflected in cash inflow and outflow, although not necessarily within the financial year.

We also saw that, under accrual accounting, the sales for a financial period arc offset by the expenses incurred in generating such sales. Objectivity is a prime characteristic of accrual accounting, but the information cannot be entirely objective because of the need to break up the ongoing performance of the business entity into calendar periods or financial years for purposes of accountability reporting. The allocation of expenses between periods requires a prudent estimate of some costs, e.g. the provision for depreciation and bad debts attributable to each period.

Accounting income is presented in the form of the conventional profit and loss account or income statement. This income statement, in being based on actual transactions, is concerned with a past-defined period of time. Thus accounting profit is said to be historic income, i.e. an *ex post* measure because it is after the event.

Nature of accounting capital

The business enterprise requires the use of non-monetary assets, e.g. buildings, plant and machinery, office equipment, motor vehicles, stock of raw materials and work-in-progress.

Copyrighted material

Such assets arc not consumed in any one accounting period, but give service over a number of periods; therefore, the unconsumed portions of each asset are carried forward from period to period and appear in the balance sheet. This document itemises the unused asset balances at the date of the financial year-end. In addition to listing unexpired costs ol non-monetary assets, the balance sheet also displays monetary assets such as debtor and cash balances, together with monctar) liabilities, i.e. moneys owing lo trade creditors, other creditors and lenders. Funds supplied by shareholders and retained income following the distribution of dividend are also shown. Retained profits arc usually added to shareholders' capital, resulting in what is known as shareholders' funds. These represent the company's equity capital.

The net assets of the firm, i.e. that fund of unconsumed assets which exceeds moneys attributable to creditors and lenders, constitutes the company's net capital, which is the same as its equity capital. Thus the profit and loss account of a financial period can be seen as a linking statement between that period's opening and closing balance sheets: in other words, income may be linked with opening and closing capital. This linking may be expressed by formula, as follows:

$$Y_{u}. \ , = \text{A.}/, - X.4_{„} + D_{B_},$$

where $)_{0_}$, = income for the period of time /((to /,; $\backslash/t_0$ = net assets of the entity at point of time $L\backslash\ \backslash'A_{f}$ — net assets of the entity at point of time /,; $D_{((_}$, = dividends or distribution during period /„ ,.

Less formally: V = income of financial year; $SA_{f)}$ = net assets as shown in the balance-sheet at beginning of financial year; ;V.-$/_1$ = net assets as shown in the balance sheet at end of financial year; $/^{}_{()_|}$ = dividends paid and proposed for the financial year. We can illus-trate this as follows:

Income $)'_{t}$, . for the financial year L (as compiled by the accountant was £1,200

Dividend D_{tl} , for the financial year /„_, was £450

Net assets NA_0 at the beginning of the financial \ ear were £6,000

Net assets AM. at the end of the financial year were £6,750.

The income account can be linked with opening and closing balance sheets, namely:

$$V_{„_} = AM, - NA_{t} + D,,.,$$
$$= £6,750 - £6,000 + £450$$
$$= £1,200 =)'_{„_},$$

Thus V has been computed by using the opening and closing capitals for the period where capital equals net assets.

In practice, however, the accountant would compute income V'by compiling a profit and loss account. .So, of what use is this formula? For reasons lo be discussed later, the econo-mist finds use for the formula when it is amended to take account of what we call present values. Computed after the end of a financial year, it is the *ex post* measure of income.

Nature of traditional accounting value

As the values of assets still in service at the end of a financial period have been based on the unconsumed costs of such assets, they are the by-product of compiling the income financial statement. These values have been fixed not by direct measurement, but simply by an assessment of costs consumed in the process of generating period turnover. We can say, then, that the balance sheet figure of net assets is a residual valuation after meas-uring income.

Copyrighted materia

However, it is not a value in the sense of worth or market value as a buying price or selling price; it is merely a value of unconsumed costs of assets. This is an important point that will be encountered again later.

3.4 Critical comment on the accountant's measure

3.4.1 Virtues of the accountant's measure

As with the economist's, the accountant's measure is not without its virtues. These are invariably aspects of the historical cost concept, such as objectivity, being transaction based and being generally understood.

3.4.2 Faults of the accountant's measure

Principles of historical cost and profit realisation

The historical cost and profit realisation concepts are firmly entrenched in the transaction basis of accountancy. However, in practice, the two concepts are not free of adjustments. Because of such adjustments, some commentators argue that the system produces a heterogeneous mix of values and realised income items.[6]

For example, in the case of asset values, certain assets such as land and buildings may have a carrying figure in the balance sheet based on a revaluation to market value, while other assets such as motor vehicles mav still be based on a balance of unallocated cost. The balance sheet thus pretends on the one hand to be a list of resultant costs pending allocation over future periods, and on the other hand to be a statement of current values.

Prudence concept

This concept introduces caution into the recognition of assets and income for financial reporting purposes. The cardinal rule is that income should not be recorded or recognised within the system until it is realised, but unrealised losses should IK* recognised immediately.

However, not all unrealised profits arc excluded. For example, practice is that attributable profit on long-term contracts still in progress at the financial year-end may be taken into account. As with fixed assets, rules are not applied uniformly.

Unrealised capital profits

Capital profits are ignored as income until they are realised, w hen, in the accounting period of sale, they are acknowledged by the reporting system. However, all the profit is recognised in one financial period when, in truth, the surplus was generated over successive periods by gradual growth, albeit unrealised until disposal of the asset. Thus a portion of what are now realised profits applies to prior periods. Not all of this profit should be attributed to the period of sale.

Going concern

The going concern concept is fundamental to accountancy and operates on the assumption that the business entity has an indefinite life. It is used to justify basing the periodic reports of asset values on carrying forward figures that represent unallocated costs, i.e. to justify the non-recognition of the realisable or disposal values of non-monetary assets and, in so doing, the associated unrealised profits/losses. Although the life of an entity is deemed indefinite,

there is uncertainty, and accountants are reluctant to predict the future. When they are matching costs with revenue for the current accounting period, they follow the prudence-concept of reasonable certain!).

In the long term, economic income and accountancy income are reconciled. The unrealised profits of the economic measure are eventually realised and, at that point, they will be recognised by the accountant's measure. In the short term, however, they give different results for each period.

What if we cannot assume that a business will continue as a going concern?

There may be circumstances, as in the case of Gretag Imaging Moldings AG which in its 2001 Annual Report referred to (ailing sales and losses, which require a judgement to be made as to the validity of the going concern assumption. The assumption can be supported by showing that active steps are being taken such as restructuring, cost reduction and raising additional share capital which will ensure the survival of the business. If survival is not possible, the business will prepare its accounts using net realisable values, which are discussed in the next chapter.

The key considerations for shareholders arc whether there will be sufficient profits to support dividend distributions and whether the> will be able to continue to dispose of their shares in the open market. The key consideration for the directors is whether there will be sufficient cash to allow the business to trade profitably. \\ e can see all these considerations being addressed in the following extract from the 2003 Annual Report of Ro>al Numico N.V.

Going concern

The negative shareholders' cquil) ... results from the impairment ol intangible fixed assets ... Management remains confident that it will be able to sufficiently strengthen shareholders* equit\ and return to positive shareholders' equity through retained profits ... and that the negative shareholders' cquil) will not ha\e an impact on the group's operations, access to funding nor its stock exchange listing.

Based on the cash flow generating capacity of the company and its current financing structure, management is convinced that the compan) will continue as a going concern. Therefore the valuation principles for assets and liabilities applied are consistent with the prior \ear and are based on going concern.

3.5 Economist's view of income, capital and value

Let us now consider the economist's tradition of present value and the nature of economic income.

3.5.1 Economist's tradition of present value

Present value is a technique used in valuing a future money flow, or in measuring the money value of an existing capital stock in terms of a predicted cash flow *ad infinitum.*

Present value (PV) constitutes the nature of economic capital and, indirectly, economic income. Given the choice of receiving £100 now or £10** in one year's time, the rational person will opt to receive £100 now. This behaviour exhibits an intuitive appreciation of the fact that £100 today is worth more than £'"0" one year hence. Thus the mind has discounted the value of (he future sum: £100 today is worth £100; but compared with today, i.e. compared with present value, a similar sum receivable in

Copyrighted material

twelve months[1] time is worth less than £100. How much less is a mailer of subjective evaluation, but compensation for the time element may be found by reference to interest: a person forgoing the spending of £1 today and spending it one year later may earn interest of, say, 10% per annum in compensation for the sacrifice undergone by deferring consumption.

So £1 today invested at 10% p.a. will be worth £1.10 one year later, £1.21 two years later, £1.331 three years later, and so on. This is the concept of compound interest. It may be calculated by the formula (1 + /•)", where 1 — the sum invested; r = the rate of interest; *n* = the number of periods of investment (in our case years). So for £1 invested at 10% p.a. for four years;

$$(1 + r)' = (1 + 0.10)^4$$
$$= (1\text{-}D^4$$
$$= £1.4641$$

and for five years:

$$= (U)^5$$
$$= £1.6105, \text{ and so on.}$$

Notice how the **future value** increases because of the compound interest element - it varies over time - whereas the investment of £1 remains constant. So, conversely, the sum of £1.10 received at the end of year one has a PV of £1, as does £1.21 received at the end of year two and £1.331 at the end of year three.

It has been found convenient to construct tables to ease the task of calculating present values. These show the cash flow, i.e. the future values, at a constant figure of £1 and allow the investment to varv. So:

$$PV = \frac{CF}{(1 + if}$$

where *CF* = anticipated cash flow; *r* = the discount (i.e. interest) rate. So the PV of a cash flow of £1 receivable at the end of one year at 10% p.a. is:

$$(T\text{^}v = £0W91$$

and £1 at the end of two years:

and so on over successive years. The appropriate present values for years three, four and five would be £0.7513, £0.6830, £0.6209 respectively.

£0.9091 invested today at 10% p.a. will produce £1 at the end of one year. The PV of £1 receivable at the end of two years is £0.8264 and so on.

Tables presenting data in this way are called 'PV tables', while the earlier method compiles tables usually referred to as 'compound interest tables'. Both types of table are compound interest tables; only the presentation of the data has changed.

To illustrate the ease of computation using PV tables, we can compute the PV of £6,152 receivable at the end of year five, given a discount rate of 10%, as being £6,152 X £0.621*9 = £3,820. Thus £3,820 will total £6,152 in five years given an interest rate of 10% p.a. So the PV of that cash flow of £6,152 is £3,820, because £3,820 would generate interest of £2,332 (i.e. 6,152 — 3,820) as compensation for losing use of the principal sum for five years. Future flows must be discounted to take cognisance of the time element separating cash

Copyrighted material

flows. Only then arc we able to compare like with like by reducing all future flows to the comparable loss of present value.

This concept ofPV has a variety of applications in accountancy and \sill be encountered in many different areas requiring financial measurement, comparison and decision. It originated as an economist's device within the context of economic income and economic capital models, but in accountancy it assists in the making of valid comparisons and decisions. For example, two machines may each generate an income of £10,000 over three years. However, timing of the cash flows ma> vary between the machines. This is illustrated in Figure 3.1,

If we simply compare the profit-generating capacity of the machines over the ihree-year span, each produces a total profit of £10,000, Hut if we pay regard to the lime element of the money flows, the machines are not so equal.

However, the technique has its faults. Future money flows are invariably the subject of estimation and thus the actual flow experienced ma\ show variations from forecast. Also, the element of interest, which is crucial to the calculation of present values, is subjective. It may, for instance, IK- taken as the average prevailing rate operating within the economy or a rate peculiar to the firm and the element of risk involved in the particular decision. In this chapter we are concerned only with PV as a tool of the economist in evaluating economic income and economic capital.

3.5.2 Nature of economic income

Economics is concerned with the economy in general, raising questions such as: how does it function? how is wealth created? how is income generated? why is income generated? The cconomn as a whole is activated by income generation. The individual is motivated to generate income because of a need to satisfy personal wants by consuming goods and services. Thus the economist becomes concerned with the individual consumer's psychological state of personal enjoyment and satisfaction. This creates a need to treat the econoim as a behavioural entitv.

The behavioural aspect forms a substantial part of micro- and macrocconomic thought, emanating particularly from the microeconomic. We can say that the economist's version of income measurement is microeconomics orientated in contrast to the accountant's business entity orientation.

The origination of the economic measure of income commenced with Irving Fisher in 1930.' lie saw income in terms of consumption, and consumption in terms of individual perception of personal enjoyment and satisfaction. His difficult) in formulating a standard measure of this personal psychological concept of income was overcome by equating this individual experience with the consumption of goods and services and assuming that the cost of such goods and services formed the measure.

Figure 3.1 Dissimilar cash flows

Thus, he reasoned, consumption *((J)* equals income (*)');* so V = C He excluded savings from income because savings were not consumed. There was no satisfaction derived from savings; enjoyment necessitated consumption, he argued. Money was worthless until spent; so growth of capital was ignored, but reductions in capital became part of income because such reductions had to be spent.

In Fisher's model, capital was a stock of wealth existing at a point in time, and as a stock it generated income. Eventually, he reconciled the value of capital with the value of income by employing the concept of present value. He assessed the PV of a future flow of income by discounting future flows using the discounted cash flow (DCF) technique. Fisher's model adopted the prevailing average market rate of interest as the discount factor.

Economists since Fisher have introduced savings as part of income. Sir John 1 licks played a major role in this area.[1] He introduced the idea that income was the maximum consumption enjoyed b\ the individual without reducing the indi\idual's capital stock, i.e. the amount a person could consume during a period of time that still left him or her with the same value of capital stock at the end of the period as at the beginning. I licks also used the IX'F technique in the valuation ol capital.

If capital increases, the increase constitutes savings and grants the opportunity of consumption. The formula illustrating this was given in section 3.3, i.e. $V^*_{(}$, = V /, - .Y.-/$_0$ +

However, in the I licksian model, *SA.* - V.-i_0, given as £6,750 and £6,000 respectively in the aforementioned example, would have been discounted to achieve present values.

The same formula may be expressed in different forms. The economist is likely to show it as $Y - C + (K_t - A'_0)$ where C = consumption, having been substituted for dividend, and A', and A.'((have been substituted for A'.-/, and ,\A_Q respectively.

Hicks's income model is often spoken of as an *ex ante* model because it is usually used for the measurement of expected income in advance of the time period concerned. Of course, because it specifically introduces the present value concept, present values replace Unbalance sheet values of net assets adopted by the accountant. Measuring income before the event enables the individual to estimate the level of consumption that may be achieved without depleting capital stock. Before-the-event computations of income necessitate predictions of future cash flows.

Suppose that an individual proprietor of a business anticipated that his investment in the enterprise would generate earnings over the next four years as specified in Figure 3.2. Furthermore, such earnings would be retained by the business for the financing of new equipment with a view to increasing potential output.

We will assume that the expected rate of interest on capital employed in the business is 8% p.a.

The economic value of the business at AT- (i.e. at the beginning of year one) will be based on the discounted cash flow of the future four years. Figure 3.3 shows that k'_{tt} is £106,853,

Figure 3.2 Business cash flows for four years

calculated as the present value of anticipated earnings of £131,000 spread over a four-year term.

The economic value of the business at A', (i.e. at the end of year one, which is the same as saying the beginning of year two) is calculated in Figure 3.4. This shows that A'j is £115,403 calculated as the present value of anticipated earnings of £131,000 spread over a four-vear term.

Mr

From this information we are able to calculate V'for the period *Y*„ as in Figure 3.5. Note that *C* (consumption) is nil because, in this exercise, dividends representing consumption have not been payable for *Yy* In other words, income V, is entirely in the form of projected capital growth, i.e. savings.

By year-end A',, earnings of £26,000 will have been received; in projecting the capital at A', such earnings will have been reinvested and at the beginning of year A', will have a PV of £26,000. These earnings will no longer represent a predicted sum because they will have been realised and therefore will no longer be subjected to discounting.

Figure 3.3 Economic value at K_0

Figure 3.4 Economic value at K

and asset value measurement systems

Figure 3.5 Calculation of *Y* for the **period V,**

The income of £8,550 represents an anticipated return of 8% p.a. on the economic capital at K_Q of £106,853 (8°b of £106,853 is £8,548, the difference of £2 between this figure and (he figure calculated above being caused by rounding).

As long as the expectations of future cash flows and the chosen interest rate do not change, then V, will equal 8% of £106,853.

What will the anticipated income for the year Y_1 amount to?

Applying the principle explained above, the anticipated income for the year) , will equal 8% of the capital at the end of A', amounting to £115,403 = £9,233. This is proved in Figure 3.6, which shows that A, is £124,636 calculated as the present value of anticipated earnings of £131,000 spread over a four-year term.

From this information we arc able to calculate *Y* for the period V, as in Figure 3.7. Note that capital value attributable to the end of the year A', is being assessed at the beginning of A'_2. This means that the £26,000 due at the end of year A, will have been received and reinvested, earning interest of 8% p.a. Thus by the end of year A', it will be worth £28,080. The sum of £29,000 will be realised at the end of year A', so its present value at that time will be £29,000.

If the anticipated future cash flows change, the expected capital value at the successive points in time will also change. Accordingly, the actual value of capital may vary from that forecast bv the *ex ante* model.

Figure 3.6 Economic value at K,

Figure 3.7 Calculation of V for the **period V_2^***

3.6 Critical comment on the economist's measure

While I he income measure enables us to formulate theories regarding the behaviour of the economy, it has inherent shortcomings not onlv in the economic field, but particularly in the accountancy sphere.

- The calculation of economic capital, hence economic income, is subjective in terms of the present value factor, often referred to as the DO" element. The factor may be based on any one of a number of factors, such as opportunity cost, the current return on the firm's existing capital employed, the contemporary interest payable on a short-term loan such as a bank overdraft, the average going rate of interest payable in the economy at large, or a rate considered justified on the basis of the risk attached to a particular investment.
- Investors are not of one mind or one outlook. For example, they possess different risk and time preferences and will therefore employ different discount factors.
- The model constitutes a compound of unrealised and realised flows, i.e. profits. Because of the unrealised element, it has not been used as a base for computing tax or for declaring a dividend.
- The projected income is dependent upon the success of a planned financial strategy. Investment plans may change, or (ail to attain target.
- Windfall gains cannot be foreseen, so they cannot be accommodated in the *ex ante* model. Our prognostic cash flows may therefore vary from the actual flows generated, e.g. an unexpected price movement.
- It is difficult to construct a satisfactory, meaningful balance sheet detailing the unused stock of net assets by determining the present values of individual assets. Income is invariably the consequence of deploying a group of assets working in unison.

3.7 Income, capital and changing price levels

A primary concern of income measurement to both economist and accountant is the maintenance of the capital stock, i.e. the maintenance of capital values. The assumption is that income can only arise after the capital stock has been maintained at the same amount as at the beginning of the accounting period.

However, this raises the question of how we should define the capital that we are attempting to maintain. There are a number of possible definitions:

- Money capital. Should we concern ourselves with maintaining the fund of capital resources initially injected bv the entrepreneur into the new enterprise? This is indeed one of the aims of traditional, transaction-based accountancy.
- Potential consumption capital. Is it this that should be maintained, i.e. the econo mist's present value philosophy expressed via the discounted cash flow technique?
- Operating capacity capital. Should maintenance of productive capacity be the rule, i.e. capital measured in terms of tangible or physical assets? This measure would utilise the current cost accounting system.

Revsinc attempted to construct an analytical bridge between replacement cost accounting that maintains the operating capacity, and the economic concepts of income and value, bv demonstrating that the distributable operating flow component of economic income is equal to the current operating component of replacement cost income, and that the unexpected income component of economic income is equal to the unrealisable cost savings of replacement

Copyrighted materia

cost income/' This will become clearer when the replacement cost model is dealt with in the next chapter.

- Financial capital. Should capital be maintained in terms of a fund of general purchasing power (sometimes called 'real' capital)? In essence this is the consumer purchasing power (or general purchasing power) approach, but not in a strict sense as it can be measured in a variety of ways. The basic method uses a general price index. This concept is likely to satisfy the criteria of the proprietor/shareholders of the entity. The money capital and the financial capital concepts arc variations of the same theme, the former being founded on the historic cost principle and the latter appKing an adjustment mechanism to take account of changing price levels.

The money capital concept has remained the foundation stone of traditional accountancy reporting, but the operating and financial capital alternatives have played a controversial secondary role over the past twenty-five years.

Potential consumption capital is peculiar to economics in terms of measurement of the business entity's aggregate capital, although, as discussed on pages 49-52, it has a major role to play as a decision-making model in financial management.

3.7.1 Why are these varying methods of concern?

The problem tackled by these devices is that plague of the economy known as 'changing price levels*, particularly the upward spiralling referred to as inflation. Throughout this chapter we have assumed that there is a stable monetary unit and that income, capital and value changes over time have been in response to operational activity and the interaction of supply and demand or changes in expectations.

Following the historic cost convention, capital maintenance has involved a comparison of opening and closing capital in each accounting period. It has been assumed that the purchasing power of money has remained constant over time.

If we take into account moving price levels, particularly the fall in the purchasing power of the monetary unit due to inflation, then our measure of income is affected if we insist upon maintaining capital in real terms.

3.7.2 Is it necessary to maintain capital in real terms?

Undoubtedly it is necessary if we wish to prevent an erosion of the operating capacity of the entity and thus its ability to maintain real levels of income. If we do not maintain the capacity of capital to generate the current level of profit, then the income measure, being the difference between opening and closing capitals, will IK- overstated or overvalued. This is because the capital measure is being understated or undervalued. In other words, there is a danger of dividends being paid out of real capital rather than out of real income. It follows that, if the need to retain profits is overlooked, the physical assets will be depleted.

In accountancy there is no theoretical difficulty in measuring the impact of changing price levels. There are, however, two practical difficulties:

- There are a number of methods, or mixes of methods, available and it has proved impossible to obtain consensus support for one method or compound of methods.
- There is a high element of subjectivity, which detracts from the objectivity of the information.

In the next chapter we deal with inflation and analyse the methods formulated, together with the difficulties that they in turn introduce into the financial reporting system.

Copyrighted material

1 What is the purpose of measuring income?

2 Explain the nature of economic income.

3 The historical cost concept has withstood the test of time. Specify the reasons for this success, together wrth any aspects of historical cost that you consider *are* detrimental in the sphere of financial reporting.

4 What is meant by present value? Does it take account of inflation?

5 A company contemplates purchasing a machine that will generate an income of £25.000 per year over each of the next five years. A scrap value of £2,000 is anticipated on disposal. How much would you advise the company to pay for the asset?

6 Discuss the arguments for and against revaluing fixed assets and recognising the gain or loss.

7 To an accountant net income is essentially a historical record of the past To an economist net income is essentially a speculation about the future. Examine the relative merits of these two approaches for financial reporting purposes,

and asset value measurement systems

8 Examine and contrast the concepts of profit that you consider to be relevant to:

(a) an economist
(b) a speculator;
(c) a business executive;
(d) the managing director of a company;
(e) a shareholder in a private company;
(f) a shareholder in a large public company.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (").

Question I

(a) 'Measurement in financial statements'. Chapter 6 of the ASB's Statement *of* Principles. was published in 1999. Amongst the theoretical valuation systems considered is value in use - more commonly known as economic value.

Required:
Describe the Hicksian economic model of income and value, and assess its usefulness for financial reporting.

(b) Jim Bowater purchased a parcel of 30.000 ordinary shares in New Technologies pic for £36.000 on I January 20X5. Jim, an Australian on a four-year contract in the UK. has it in mind to sell the shares at the end of 20X7, just before he leaves for Australia, Based on the company's forecast growth and dividend policy, his broker has advised him that his shares are likely to fetch only £35.000 then.

In its annual report for the year ended 31 December 20X4 the company had forecast annual dividend pay-outs as follows;

Year ended: 31 December 20X5. 25p per share
31 December 20X6, 20p per share
31 December 20X7, 20p per share

Required:
Using the economic model of income:

(i) Compute Jim's economic income for each of the three years ending on the dates indicated above.
(ii) Show that Jim's economic capital will be preserved at I January 20X5 level. Jim's cost of capital is 20%.

* Question 2

(a) Describe briefly the theory underlying Hicks's economic model of income and capital. What are its practical limitations?

(b) Spock purchased a space invader entertainment machine at the beginning of year one for £ 1.000. He expects to receive at annual intervals the following receipts: at the end of year one £400; end of year two £500; end of year three £600. At the end of year three he expects to sell the machine for £400.

Spock could receive a return of 10% in the next best investment

The present value of £1 receivable at the end of a period discounted at 10% is as follows:

End of year one	£0.909
End of year two	£0.826
End of year three	£0.751

Required:

Calculate the ideal economic income, ignoring taxation and working to the nearest £.

Your answer should show that Spock's capital is maintained throughout the period **and that** his income is constant.

* Question 3

Jason commenced with £135.000 cash. He acquired an established shop on I January 20X1. He agreed to pay £ 130.000 for the fixed and current assets and the goodwill. The replacement cost of the shop premises was £100.000. stock £10.000 and debtors £4.00O. the balance of the purchase price was for the goodwill. He paid legal costs of £5.000. No liabilities were taken over. Jason could have resold the business immediately for £ 135.000. Legal costs are to be expensed in 20XI.

Jason expected to draw £25.000 per year from the business for three years and to sell the shop at the end of 20X3 for £150.000.

At 31 December 20X1 the books showed the following tangible assets and liabilities:

	Cost to the business before any drawings **by Jason:**	He estimated that **the** net realisable values **were:**
	£	£
Shop premises	100.000	85.000
Stock	15.500	20.000
Debtors	5.200	5.200
Cash	40.000	40.000
Creditors	5.000	5.000

Based on his experience of the first year's trading, he revised his estimates and expected to draw £35.000 per year for three years and sell the shop for £ 175.000 on 31 December 20X3.

Jason's opportunity cost of capital was 20%.

Required:

(a) Calculate the following income figures for 20X1:
   (i) accounting income;
   (ii) income based on net realisable values;
   (iii) economic income ex *onte:*
   (iv) economic income ex post.
   State any assumptions made.

(b) Evaluate each of the four income figures as indicators of performance in 20X1 and as a guide to decisions about the future.

References

1 T.A. Lee, *Income and I'alue Measurement: '/'henry an J Practice* (3rd edition). Van Nostrand Rcinhokl (UK), 1985, p. 20.
2 I). Solomons, *Mahnjt Accounting Policy,* Oxford University Press, 1986, p. 132.

Copyrighted material

3 R.W. Scapens, *Accounting in an Inflationary Environment* (2nd edition), Macmillan, 1981, p. 125.
4 *Ibid., p. Ml,*
5 D. Solomons, *op. cit.*, p. 132.
6 T.A. Lcc, *op. at.*, pp. 52-54.
7 I. Fisher, *The Theory of Interest,* Macmillan, 1930, pp. 171-181.
8 J.R. Hicks, *Value and Capital (2nd* edition), Clarendon Press, 1946.
9 R.W. Scapens, *up. cit.*, p. 127.

Bibliography

American Institute of Ortificd Public Accountants, *Objectives of Financial Statements,* Report of the Study Group, 1973.

The Corporate Report, ASC, 1975, pp. 28-31.

N. Kaldor,'The concept of income in economic theory', in R.II. Parker and (i.C. Harcourt (eils), *Readings in the Concept and Measurement of Income,* Cambridge University Press, 1969.

T.A. Ixe, "The accounting entity concept, accounting standards and inflation accounting*, *Accounting and liusiness Research,* Spring 1980, pp. 1-11.

J.R. Little, 'Income measurement: an introduction', *Student Sewsletter,* June 1988.

D. Solomons, 'Economic and accounting concepts of income", in R.H. Parker and G.C. 1 larcourt (cds.). *Readings in the Concept and Measurement of Income,* Cambridge University Press 1969.

R.R. Sterling, *Theory of the Measurement of Enterprise Income,* University of Kansas Press, 1970.

Copyrighted materia

4.1 Introduction

In this chapter we discuss (he impact of inflation on profit and capital measurement and the concepts that have been suggested to incorporate these movements into the financial reports. These concepts are still undergoing development and have not yet achieved general support among practitioners in the field. In this chapter we consider the following:

- A review ofthe problems of historical cost accounting (HCA)
- Inflation accounting
- The concepts in principle
- The concepts illustrated for one year's transactions - cash transations
- A critique of each model
- A comprehensive example of current cost accounts
- A critique of current cost accounting (CCA) financial statements
- The ASB approach
- The IASC/IASB approach
- Future developments.

4.2 Review ofthe problems of historical cost accounting (HCA)

The transaction-based historical cost concept was unchallenged in the UK until price levels started to hedge upwards at an ever-increasing pace during the 1950s and reached an annual rate of increase of 20% in the mid 1970s. The historical cost base for financial reporting witnessed growing criticism. The inherent faults of the system were discussed in Chapter 3, but inflation exacerbates the problem in the following ways:

- Profit is overstated when inflationary changes in the value of assets arc ignored.
- Comparability of business entities, which is so necessary in the assessment of performance and growth, becomes distorted.
- The decision-making process, the formulation of plans and the setting of targets may be suboptimal if financial base data are out of date.
- Financial reports become confusing at best, misleading at worst, because revenue is mismatched with differing historical cost levels as the monetary unit becomes unstable.
- Unrealised profits arising in individual accounting periods are increased as a result of inflation.

In order to combat these serious defects, current value accounting became the subject of research and controversy as to the most appropriate method to use for financial reporting.

4.3 Inflation accounting

A number of versions of current value accounting (CVA) were eventually identified, but the current value postulate was said to suffer from the following disadvantages:

- It destroys the factual nature of HCA, which is transaction based: the factual characteristic is to all intents and purposes lost as transaction-based historic values arc replaced by judgemental values.
- It is not as objective as HCA because it is less verifiable from auditable documentation.
- It entails recognition of unrealised profit, a practice that is anathema to the traditionalist.
- The claimed improvement in comparability between commercial entities is a myth because of the degree of subjectivity in measuring current \alue by each.
- The lack of a single accepted method of computing current values compounds the subjectivity aspect. One fault-laden system is being usurped by another that is also faulty.

In spite of these criticisms, the search for a system of financial reporting devoid of the defects of HCA and capable of coping with inflation has produced a number of CVA models.

4.4 The concepts in principle

Several current income and value models have been proposed to replace or operate in tandem with the historical cost convention. However, in terms of basic characteristics, they may be reduced to the following three models:

- current purchasing power (CPP) or general purchasing power (GPP);
- current entry cost or replacement cost (RC);
- current exit cost or net realisable value (NRV).

We discuss each of these models below.

4.4.1 Current purchasing power accounting (CPPA)

The CPP model measures income and value by adopting a price index system. Movements in price levels are gauged by reference to price changes in a group of goods and services in general use within the economy. The aggregate price \alue of this basket of commodities-Mini services is determined at a base point in time and indexed as 100. Subsequent changes in price are compared on a regular basis with this base period price and the change recorded. For example, the price level of our chosen range of goods and services may amount to £76 on 31 March 20X1, and show changes as follows:

£76 at 31 March 20X1
£79 at 30 April 20X1
£81 at 31 May 20X1
£84 at 30 June 20X1
and so on.

Copyrighted material

The change in price may be indexed with 31 March as the base:

20X1	*Calculation*	*Index*
31 March	i.e. £76	100
30 April	i.e. —• x 100	103.9
	76	
31 May	i.e. |j - X 100	106.6
	S4	
30 June	i.e. ~~ X 10(1	110.5
	/()	

In the L k, an index system similar in construction to this is known as the Retail Price Index (RPI). It is a barometer of fluctuating price levels covering a miscellany of goods and services as used by the average household. Thus it is a general price index. It is amended from lime to time to take account of new commodities entering the consumer's range of choice and needs. As a model, it is unique owing to the introduction of the concept of gains and losses in purchasing power.

4.4.2 Current entry or replacement cost accounting (RCA)

The replacement cost (RC) model assesses income and value by reference to entry costs or current replacement costs of materials and other assets utilised within the business entity. The valuation attempts to replace like with like and thus takes account of the quality and condition of the existing assets. A motor vehicle, tor instance, may have been purchased brand new for £25,000 w ith an expected life of five years, an anticipated residual value of nil and a straight-line depreciation policy. Its HCA carrying value in the balance sheet at the end of its first year would be £25,000 less £5,000 = £20,000.1 lowever, if a similar new replacement vehicle cost £30,000 at the end of year one, then its gross RC would be £30,000; depreciation for one year based on this sum would be £6,000 and the net RC would be £24,(MM). The increase of £4.(MM) is a holding gain and the vehicle with a 1ICA carrying value of £20,(MM) would l>e revalued at £24,(MM1.

4.4.3 Current exit cost or net realisable value accounting (NRVA)

The net realisable value (NRV) model is based on the economist's concept of opportunity cost. It is a model that has had strong academic support, must notably in Australia from Professor Ray Chambers who referred to this approach as Continuous Contemporary Accounting (Q)CoA). If an asset cost £25,0(M) at the beginning of year one and at the end of that \car it had a NRY of £21,000 after meeting selling expenses, it would be carried in the NRV balance sheet at £21,000. This amount represents the cash forgone by holding the asset, i.e. the opportunity of possessing cash of £21,(MX) lias been sacrificed in favour of the asset. Depreciation for the year would be £25,000 less £21,(MM) = £4.(NHI.

4.5 The four models illustrated for a company with cash purchases and sales

We will illustrate the effect on the profit and net assets of Entrepreneur Ltd.

Kntrepreneur I .id commenced business on 1 January 20X1 with a capital of £3,000 to buy and sell second-hand computers. The company purchased six computers on 1 January 20X1 for £500 each and sold three of the computers on 15 January for £*K)0 each.

Copyrighted material

The following data arc available for January 20X1:

	Retail Price Index	Replacement cost per computer	Net realizable value
		£	£
1 January	KM)		
15 January	112	610	
31 January	130	7(H)	<>() ()

The income statements and balance sheets arc set out in Figure 4.1 with the detailed workings in Figure 4.2.

4.5.1 Financial capital maintenance concept

I K-A and *i'.PP* are both transaction-based models that apply the financial capital maintenance concept. This means that profit is the difference between the opening and closing net assets (expressed in HC £) or the opening and closing net assets (expressed in IIC £ indexed for **RPI** changes) adjusted for any capital introduced or withdrawn during the month.

Figure 4.1 Trading account for the month ended 31 January 20XI

Copyrighted image

Copyrighted material

Figure 4.2 Workings (W)

CPP adjustments

- All historical cost values are adjusted to a common index level for the month. In theory this can be the index applicable to any day of the financial period concerned. I lowcvcr, in practice it has been deemed preferable to use the last day of the period; thus the financial statements show the latest price level appertaining to the period.
- The application of a general price index as an adjusting factor results in the creation of an alien currency of purchasing power, which is used in place of sterling. Note, particular!) , the impact on the entity's sales and capital compared \\ ith the other models. Actual sales shown on invoices will still read £2,700.
- Note the application of the concept of gain or loss on holding monetary items. In this example there is a monetary loss of CPP £434 as shown in Working 9.

4.5.2 Operating capital maintenance concept

Under this concept capital is only maintained if sufficient income is retained to maintain the business entity's physical operating capacity, i.e. its ability to produce the existing level of goods or services. Profit is, therefore, the residual after increasing the cost of sales to the cost applicable at the date of sale.

- Basically, only two adjustments are involved: the additional replacement cost of inventory consumed and holding gains on closing inventories. However, in a comprehensive exercise an adjustment will be necessary regarding fixed assets and you will also encounter a gearing adjustment.
- Notice the concept of holding gains. This model introduces, in effect, unrealised profits in respect of closing inventories. The holding gain concerning inventory consumed at the time of sale has been realised and deducted from what would have been a profit of £1.200. The statement discloses profits of £870.

4.5.3 Capacity to adapt concept

The IICA, CPP and RCA models have assumed that the business will continue as a going concern and only distribute realised profits after retaining sufficient profits to maintain either the financial or operating capital.

The NRVA concept is that a business has the capacity to realise its net assets at the end ol each financial period and reinvest the proceeds and that the NRV accounts provide management with this information.

- This produces the same initial profit as IICA, namelv £1,200, but a peculiarity of this system is that this realised profit is supplemented by unrealised profit generated by holding stocks. Under RCA accounting, such gains are shown in a separate account and are not treated as part of real income.
- This simple exercise has ignored the possibility of investment in fixed assets, thus depreciation is not involved. A reduction in the NRY of fixed assets at the end of a period compared with the beginning would be treated in a similar fashion to depreciation by being charged to the revenue account, and consequently profits would be reduced. An increase in the NRV" of such assets would be included as part of the profit.

Copyrighted material

4.5.4 The four models compared

Dividend distribution

We can see trnm Figure 4.1 thai it ilie business were to distribute the profit reported under HCA, CPP or NRVA the physical operating capacity of the business would be reduced and it would be paving dividends out of capital:

	MCA	**CPP**	RCA	NRVA
Realised profit:	1,200	1,184	870	1,200
Unrealised profit			—	1,200
Profit for month	1,200	**1,184**	870	2,400

Shareholder orientation

The CPP model is shareholder orientated in that it shows whether shareholders* funds are keeping pace with inflation by maintaining their purchasing power. Only CPP changes the value of the share capital.

Management orientation

The RCA model is management orientated in that it identities holding gains which represent the amounts required to be retained in order to simplv maintain the operating capital.

RCA measures the impact of inflation on the individual firm, in terms of the change in price levels of its raw materials and assets, i.e. inflation peculiar to the company, whereas CPP measures general inflation in the cconomv as a whole. CPP may be meaningless in the case of an individual company. Consider a firm that carries a constant volume of stock valued at £100 in HCA terms. Now suppose that price levels double when measured by a general price index (GPI), so that its inventory is restated to £200 in a CPP system. If, however, the cost of that particular inventory has sustained a price change consisting of a five-fold increase, then under the RCA model the value of the stock should IK £500.

In the mid 1970s, when the accountancy profession was debating the problem of changing price level measurement, the general price level had climbed by some 23% over a period during which petroleum-based products had risen bv **500%.**

4.6 Critique of each model

A critique of the various models may be formulated in terms of their characteristics and peculiarities as virtues and defects in application.

4.6.1 HCA

This model's virtues and defects have been discussed in Chapter 3 and earlier in this chapter.

4.6.2 CPP

Virtues

- It is an objective measure since it is still transaction based, as with HCA, and the possibility of subjectivity is constrained if a CiPI is used that has been constructed by a central agency such as a government department. This applies in the L'K., where the Retail Price Index is constructed by the Department for Employment and Learning.

Copyrighted materia

- It is a measure of shareholders' capital and that capital's maintenance in terms of purchasing power units. Profit is the residual value after maintaining the money value of capital funds, taking account of changing price levels. Thus it is a measure readily understood by the shareholder/user of the accounts. It can prevent payment of a dividend out of real capital as measured In GPPA.
- It introduces the concept of monetary items as distinct from non-monetary items and the attendant concepts of gains and losses in holding net monctan liabilities compared with holding net monetary assets. Such gains and losses are experienced on a disturbing seale in limes of inflation. They are real gains and losses. The basic RCA and NRY models do not recognise such 'surpluses[1] and 'deficits*.

Defects

- **It** is HCA based but adjusted to reflect general price movements. Thus it possesses the characteristics of HCA, good and bad, but with its values updated in the light of an arithmetic measure of general price changes. The major delect of becoming out of date is mitigated to a degree, but the impact of inflation on the entity's income and capital may be at variance with the rate of inflation affecting the economy in general.
- It mav be **wrongly** assumed that the CPP balance sheet is a current value statement. It is not a current value document because of the defects discussed above; in particular, asset values may be subject to a different rate of inflation than that reflected by the GPI.
- It creates an alien unit of measurement still labelled by the £ sign. Thus we have the I IC.A £ and the CPP £. They are different pounds: one is the bona tide pound, the other is a synthetic unit. This may not be fully appreciated or understood by the user when faced with the financial accounts for the recent accounting period.
- Its concept of profit is dangerous. It pretends to cater for changing prices, but at the same time it fails to provide for the additional costs of replacing stocks sold or additional depreciation due to the escalating replacement cost of assets. The inflation encountered bv the business entitv will not be the same as that encountered b\ the whole economy. Thus the maintenance of the CPP of shareholders* capital via this concept of profit is not the maintenance of the entity *s operating capital in physical terms, i.e. its capacity to produce the same volume of goods and services. The use of CPP profit as a basis for decision making without regard to RCA profit can have disastrous consequences.

4.6.3 RCA

Virtues

- Its unit of measurement is the monetary unit and consequently it is understood and accepted by the user of accountancy reports. In contrast, the CPP system employs an artificial unit based on arithmetic relationships, which is different and thus unfamiliar.
- It identifies and isolates holding gains from operating income. Thus it can prevent the inadvertent distribution of dividends in excess of operating profit. It satisfies the prudence criterion of the traditional accountant and maintains the physical operating capacity of the entity.
- It introduces realistic current values of assets in the balance sheet, thus making the balance sheet a 'value' statement and consequently more meaningful to the user. This contrasts sharplv with the balance sheet as a list of unallocated carrying costs in the IICA system.

Copyrighted material

Defects

- It is a subjective measure, in that replacement costs are often necessarily based on estimates or assessments. It does not possess the factual characteristics of HCA. It is open to manipulation within constraints. Often it is based on index numbers which themselves may be based on a compound of prices of a mixture of similar commodities used as raw material or operating assets. This subjectivity is exacerbated in circumstances where rapid technological advance and innovation are involved in the potential new replacement asset, e.g. computers, printers.
- It assumes replacement of assets b\ being based on their replacement cost. Difficulties arise if such assets are not to be replaced by similar assets. Presumably, it will then be assumed that a replacement of equivalent value to the original will be dcplo\ed, however differently, as capital within the firm.

4.6.4 NRVA

Virtues

- It is a concept readily understood by the user. The value of any item invariably has two measures - a buying price and a selling price - and the twain do not usually meet. However, when considering the value of an existing possession, the owner instinctively considers its *valuc' to be that in potential sale, i.e. NRV.
- It avoids the need to estimate depreciation and, in consequence, the attendant problems of assessing life-span and residual values. Depreciation is treated as the arithmetic difference between the NRV at the end of a financial period and the NRV at its beginning.
- It is based on opportunity cost and so can be said to be more meaningful. It is the sacrificial cost of possessing an asset, which, it can be argued, is more authentic in terms of being a true or real cost. If the asset were not possessed, its cash equivalent would exist instead and that cash would be deployed in other opportunities. Therefore, NRV = cash = opportunity = cost.

Defects

- It is a subjective measure and in this respect it possesses the same major fault as RCA. It can be said to be less prudent than RCA because NRV will tend to be higher in some cases than RCA. For example, when valuing finished inventories, a profit content will be involved.
- It is not a realistic measure as most assets, except finished goods, arc possessed in order to be utilised, not sold. Therefore, NRV is irrelevant.
- It is not always determinable. The assets concerned may be highly specialist and there may be no ready market by which a value can be easily assessed. Consequently, any particular value ma\ be fictitious or erroneous, containing ton high a holding gain or, indeed, too low a holding loss.
- It violates the concept of the going concern, which demands that the accounts arc-drafted on the basis that there is no intention to liquidate the entity. Admittedly, this concept was formulated with IICA in view, but the acceptance of NRV implies the possibility of a cessation of trading.
- It is less reliable and verifiable than I IC.

Copyrighted materia

- The income statement will report a more volatile profit if changes in NRY are taken to the income statement each vear.
- The profit arising from the changes in NRY may not ha\e been realised.

Operating capital maintenance - a comprehensive example

In Figure 4.1 we considered the effect of inflation on a cash business without lived assets, credit customers or credit suppliers. In the following example, Kconomica pic, we now consider the effect where there are non-current assets and credit transactions.

The HCA balance sheets as at 31 December 20X4 and 20X5 are set out in Figure 4.3 and index numbers required to restate the non-current assets, inventory and monetary items in Figure 4.4.

Figure 4.3 Economica pic **HCA** balance sheets

Copyrighted image

Copyrighted material

Figure 4.4 Index data relating to Economies **pic**

4.7.1 Restating the opening balance sheet to current cost

The non-current assets and inventorv arc restated to their current cost as at the date of the opening balance as shown in \V1 and \Y2 below. The increase from HC to CC represents an unrealised holding gain which is debited to the asset account and credited to a reserve account called a current cost reserve, as in W3 below.

The calculations are as follows. First we shall convert the HCA balance sheet in Figure 4.3, as at 31 December 20X4, to the CCA basis, using the index data in Figure 4.4.

The non-monetary items, comprising the non-current assets and inventory, are converted and the converted amounts are taken to the CC balance sheet and the increases taken to the current cost reserve, as follows.

(Wl) Property, Plant and Equipment

	HCA *£000*	*Index*		*CCA* *1000*	*Increase* *1000*
Cost	85,000	x $\frac{165}{100}$	-	140,250	55,250
Depreciation	25,500	x $\frac{165}{100}$	-	42,075	16,575
	59,500			98,175	38,675

The CCA valuation at 31 December 20X4 shows a net increase in terms of numbers of pounds sterling of £38,675,000. The £59,500,000 in the HCA balance sheet will be replaced in the CCA balance sheet by £98,175,000.

(W2) Inventories

HCA		*Index*		*CCA*		*Increase*
£000				£000		£000
17,000	X	| 2 |	a	17,708	=	708

Note that Figure 4.4 specifies that three months' inventories are held. Thus on average they will have been purchased on 15 November 20X4, on the assumption that they have been acquired and consumed evenlv throughout the calendar period. Hence the index at the time of purchase would have been 120. The £17,000,000 in the IICA balance sheet will IK* replaced in the CCA balance sheet by £17,708,000.

(W3) Current cost reserve

The total increase in CCA carrying values for non-monetary items is £39,383,000, which will be credited to CC reserves in the CC balance sheet. It comprises £38,675,000 on the fixed assets and £708,000 on the inventory.

Note that monetary items do not change by virtue of inflation. Purchasing power will be lost or gained, but the carrying values in the CCA balance sheet will be identical to those in its HCA counterpart. We can now compile the CCA balance sheet as at 3! December 20X4 - this will show net assets of £104,883,000.

4.7.2 Adjustments that affect the profit for the year

The income statement for the year ended 31 December 20X5 set out in Figure 4.5 discloses a profit before interest and tax of £26,350,000. We need to deduct realised holding gains from this profit to a\oid the distribution of dividends that would reduce the operating capital. These deductions are a cost of sales adjustment (COSA), a depreciation adjustment (DA) and a monetary working capital adjustment (MWCA). The accounting treatment is to debit the income statement and credit the current cost reserve.

The adjustments are calculated as follows.

(W4) Cost of sales adjustment (COSA) using the average method

We will compute the cost of sales adjustment by using the average method. The average purchase price index for 20X5 is 137.5. If price increases have moved at an even pace throughout the period, this implies that consumption occurred, on average, at 30 June, the mid-point of the financial year.

	HCA		*justmenl*		*CCA*	*Difference*
	£000				£000	**£000**
Opening inventory	17,(HK)		137.5 **120**	–	19,479	2,479
Purchases	-- 17,000				19,479	
Closing inventory	(25,5(H))	x	137.5 **145**	–	24,181	1,319
	(8>50O)				(4,702)	3,798

Copyrighted material

Figure 4.S Economic* **pic HCA income statement**

The impact of price changes on the cost of sales would be an increase of £3,798,000, causing a profit decrease of like amount and a current cost reserve increase of like amount.

(W5) Depreciation adjustment: average method

As assets arc consumed throughout the year, the CCA depreciation charge should be based on average current costs.

	HCI	.	***idjustment***	*CC.*	*4*	*Difference*
	£000			£000		#KM)
Depreciation	8,500	x	$\frac{X}{100}$	14,195	=	5.695
1						

(W6) Monetary working capital adjustment (MWCA)

The objective is to transfer from the income statement to CC reserve the amount by which the need for monetary working capital (MWC) has increased due to rising price levels. The change in MWC from one balance sheet to the next will be the consequence of a combination of changes in volume and escalating price movements. Volume change may be segregated Irom the price change by using an average index.

	20X5 £000	*20X4* £000		*Change* £000
Trade receivables	34,000	23,375		
Trade payables	25,500	**17,000**		
MWC =	8,500	6,375	Overall change =	2,12!

The MWC is now adjusted by the average index for the year.

This adjustment will reveal the change in volume.

8,500 x 150/137.5 = 125

= 7,792 - **7,012** = Volume change 780

So price change = **1,345**

The profit before interest and tax will be reduced as follows:

	£000	/:ooo
Profit before interest and tax		26,350
Less:		
COSA	(3,798)	
DA	(5,695)	
MWCA	(1,345)	
Current cost operating adjustments		(10,838)
Current cost operating profit		15,512

The adjustments will be credited to the current cost reserve.

Unrealised holding gains on non-monetary assets as at 31 December 20X5

The holding gains as at 31 December 20X4 were calculated in para 4.7.1 above for non-current assets and inventory. A similar calculation is required to restate these at 20X5 current costs for the closing balance sheet. The calculations are as in Working 7 below.

(W7) Non-monetary assets

(i) Holding gain on non-current assets £000

Revaluation at year-end

Non-current assets at 1 January 20X5 (as W1) at CCA revaluation 140,250

CCA value at 31 December 20X5 = 140.250 x 185/165 = **157,250**

Revaluation holding gain for 20X5 to CC reserve in \V8 **17,000**

This holding gain uf £17,000,000 is transferred to CC reserves.

(ii) I*k*\. kl<). • depreciation on non-current assets

CCA aggregate depreciation at 31 December 20X5 for CC balance sheet	£000
= £HCA **34,000,000** X 185/1(M) in CC balance sheet	62,900
Less: CCA aggregate depreciation at 1 January 20X5 (as per \V1 and balance sheet at 1 January 20X5)	42,075
Iking CCA depreciation as revealed between opening and closing balance sheets	20,825
Hut CCA depreciation charged in revenue accounts (i.e. £8,500,000 in £HCA plus additional depreciation of £5,695,000 per \V5) =	14,195
So total backlog depreciation to CC reserve in **VV8**	6,630

The CCA value of non-current assets at 31 December 20X5:	£000
Gross CCA value (above)	157,250
Depreciation (above)	62,900
Net CCA carrying value in the CC balance sheet in \V8	94,350

Being This £6,630,000 is backlog depreciation for 20X5. Total backlog depreciation is not expensed (i.e. charged to revenue accouni) as an adjustment of IICA profit, but is charged against CCA reserves. The net effect is that the CC reserve will increase by £10,370,000, i.e. £17,000,000- £6,630,000.

(iii) Inventory valuation at year-end

CCA valuation at 31 December 20X5

£HCA000		£CCA000		£CCA000
= 25,500	x	150/145 =	26,379 = increase of	879

CCA valuation at 1 January 20X5 (per \V2)

• 17,000	x	125/120=	17,708 = increase of	708
Inventory holding: gain occurring during 20X5 to **\V8**				]71

4.7.4 Current cost balance sheet as at 31 December 20X5

The current cost balance sheet as at 31 December 20X5 now discloses non-current assets and inventory adjusted by index to their current cost and the retained profits reduced by the current cost operating adjustments. It appears as in Working 8 below.

Copyrighted material

(W8) Economica pic: CCA balance sheet as at 31 December 20X5

			20X5		*20X4*
Non-current assets	£000		£000	£000	£000
Cost	157,250	(W7(i))		140,250 (Wl)	
Depreciation	62,900	(\V7(ii))		42,075 (Wl)	
			94.350	(W 7(ii))	98,175
Current assets					
Inventory	26,379	(\V7(iii))		17,708 (VV2)	
Trade receivables	34,000			23,375	
Cash	17,000			1,875	
	77,379			42,958	
Current liabilities					
Trade payables	25,500			17,000	
Income tax	8,500			4,250	
Dividend proposed	5,000			4.000	
	39,000			25,250	
Net current assets	38,379			17,708	
IA'SS: 8% debentures	11,000			11,000	
			27,379		6,708
			121,729		104.SS3
Financed by					
Share capital: authorised and issued £\ shares			50,000		50,000
Share premium			1,500		1,500
*CC reserve			55,067		39,383
[1] Retained profit			15,162		14,000
Shareholders' funds			121,729		104,883

*CC reserve	£000		X:0<>0	
Opening balance			39,383	(YY3)
f folding gains				
Non-current assets	17,000	(W7(i))		
Inventory	171	(W7(iii»		
			17,171	
COSA	3,798	(W4)		
MWCA	1,345	(W6)		
Less: backlog depreciation	(6,630)	(W7(ii))	(1,487)	
			55,067	

Copyrighted material

••Retained profit		
Opening balance		14,000 (Figure 4.5)
HCA profit for 20X5	12,000	
COS A	(3,798) (W 4)	
Extra depreciation	(5,695)(W5)	
MWCA	(1,345)(\V6)	
		1,162
CCA profit for 20X5		15,162

4.7.5 How to take the level of borrowings into account

VVc have assumed that the company will need to retain £10,838,000 from the current year's earnings in order to maintain the physical operating capacity of the company. However, if the business is pari financed by borrowings then pari of the amount required may be assumed to come from the lenders. One of the methods advocated is to make a gearing adjustment. The gearing adjustment that we illustrate here has the effect of reducing the impact of the adjustments on the profit after interest, i.e. it is based on the realised holding gains only.

The gearing adjustment will change the carrying figures of CC reserves and retained profit, but not the shareholders' funds, as the adjustment is compensating. The gearing adjustment cannot be computed before the determination of the shareholders[1] interest because that figure is necessary in order to complete the gearing calculation.

Gearing adjustment

The CC operating profit of the business is quantified after making such retentions from the historical profit as arc required in order to maintain the physical operating capacity of the entity. However, from a shareholder standpoint, there is no need to maintain in real terms the portion of the entity financed by loans that are fixed in monetary values. Thus, in calculating profit attributable to shareholders, that part of the CC adjustments relating to the proportion of the business financed by loans can be deducted:

(\V9) Clearing adjustment =

$$\left(\frac{\text{Avenge net borrowings for year}}{\text{Average net borrowings for year } J} \Big/ \frac{\text{Average shareholders' funds for year}}{\text{Average shareholders' funds for year}}\right) \text{Aggregate adjustments}$$

This formula is usually expressed as ' X *A*

where *L* = loans (i.e. net borrowings); *S* = shareholders' interest or funds;// = adjustments (i.e. extra depreciation + COSA + MWCA). Note that *L/(L + S)* is often expressed as a percentage of .-I (see example below where it is 6.31%).

Copyrighted material

Net borrowings

This is the sum of all liabilities less current assets, excluding items included in MWC or utilised in computing COSA. In this instance it is as follows:

	Closing balance	*Opening balance*
	£000	£000
Debentures	11,000	11,000
Income tax	8,500	4,250
Cash	(17,000)	(1,875)
Total net borrowings, the average of which equals *L*	2,500	13,375

* , u

Average net borrowings = $\frac{2{,}500{,}000+13{,}375{,}000}{2}$ = £7,937,500

Note: in some circumstances (e.g. new issue of debentures occurring during the year) a weighted average will be used.

Net borrowings plus shareholders* funds

	Closing balance	*Opening balance*
	£000	£000
Shareholders' funds in CC £ (inclusive of proposed dividends)	126,729	108,883
Add; net borrowings	2,500	13,375
	129,229	122,258

Or, alternatively:

	£000	£000
Non-current assets	94,350	98,175
Inventory	26,379	17,708
MWC	8,500	6,375
	129,229	122,258

Average *L* + *A* = $\frac{129{,}229{,}000+122{,}258{,}000}{2}$

= 125,743,500

So gearing = j—r, X *A*

£7,937,500 (COSA + MW'CA + Extra depreciation)

125,743,500 x (3,798,000+ 1,345,000+ 5,695,000)

= 6.31% of £10,838,000 = £683,877, say £684,000

Thus the CC adjustment of £10,838,000 charged against historical profit may be reduced by £684,000 due to a gain being derived from net borrowings during a period of inflation as shown in Figure 4.6. The £684,000 is shown as a deduction from interest payable.

Copyrighted material

Figure 4.6 Economica pic **CCA** income statement

4.7.6 The closing current cost balance sheet

The closing balance sheet with the non-current assets and inventory restated at current cost and the retained profit adjusted for current cost operating adjustments as reduced by the gearing adjustment is set out in Figure 4.7.

4.7.7 Real Terms System

The Real Terms System combines both CPP and current cost concepts. This requires a calculation of total unrealised holding gains and an inflation adjustment as calculated in Workings 10 and 11 below.

(WIO) Total unrealised holding gains to be used **in** Figure 4.8

[Closing balance sheet at CC - Closing balance sheet at MC) - [Opening balance sheet at CC - Opening balance sheet at HC]
= (£121,729,000 - £77,500,000) - (£104,883,000 - £65,500,000) = £4,846,000
(\V8) (Figure 4.30) (Working 8) (Figure 4.3)

(WI I) General price index numbers to be used to calculate the inflation adjustment in Figure 4.8

General price index at 1 January 20X5 = 317.2
General price index at 31 December 20X5 = 333.2

Figure 4.7 Economica pic CCA balance sheet

Figure **4.7** (cont.)

Opening shareholders* funds ai CC X Percentage change in GP1 during the year =

104,883,000 x $^{m'\backslash tfl^{li2}}$ = £5,290,435, sa> £5,290,000

The GPP (or CPP) real terms financial capital

The real terms financial capital maintenance concept may he incorporated within the CCA system as in Figure 4.8 by calculating an inflation adjustment.

4.8 Critique of CCA statements

Considerable effort and expense are involved in compiling and publishing CCA statements. Does their usefulness justify the cost? CCA statements have the following uses:

1 The operating capital maintenance statement reveals CCA profit. Such profit has removed inflationary price increases in raw materials and other inventories, and thus is more realistic than the alternative HCA profit.

2 Significant increases in a company's buying and selling prices will give the HCA profit a holding gains content. That is, the reported MCA profit will include gains consequent upon holding inventories during a period when the cost of buying such inventories increases. Con\crscly, if specific inventory prices fall, HCA profit will be reduced as it takes account of losses sustained by holding inventory while its price drops. Holding gains and losses are quite different from operating gains and losses. HCA profit does not distinguish between the two, whereas CCA profit does.

3 HCA profit might be adjusted to reflect the moving price level syndrome:

Figure 4.8 Economica pic real terms income statement

(a) by use of the operating capital maintenance approach, which regards only the CCA operating profit as the authentic result for the period and which treats any holding gain or loss as a movement on reserves;

(h) by adoption of the real terms financial capital maintenance approach, which applies a general inflation measure via the RPI, combined with CCA information regarding holding gains.

Thus the statement can reveal information to satisfy the demands of the management of the entity itself- as distinct from the shareholder/proprietor, whose awareness of inflation may centre on the **RPI.** In this way the concern of operating management can be accommodated with the different interest of the shareholder. The HCA profit would fail on both these counts.

4 CC profit is important because:

(a) it quantifies cost of sales and depreciation after allowing for changing price levels; hence trading results, free of inflationary elements, grant a clear picture of cntin activities and management performance;

(h) resources are maintained, having eliminated the possibility of paying dividend out ol real capital;

(c) yardsticks for management performance are more comparable as a time series within the one entity and between entities, the distortion caused by moving prices having been alleviated.

4.9 The ASB approach

The ASH has been wary of this topic. It is only too aware that standard setters in the past have been unsuccessful in obtaining a consensus on the price level adjusting model to be used in financial statements. The chronology in Figure 4.9 illustrates the previous attempts to deal with the topic. Consequently, the ASH has clearly decided to follow a gradualist approach and to require uniformity in the treatment of specific assets and liabilities where it is current practice to move away from historical costs.

The ASB view was set out in a Discussion Paper, *The Role of Valuation in Financial Reporting** issued in 1993.' The ASH had three options when considering the existing system of modified historic costs:

- to remove the right to modify cost in the balance sheet;
- to introduce a coherent current value system immediately;
- to make *ad hoc* improvements to the present modified historic cost system.

4.9.1 Remove the right to modify cost in the balance sheet

This would mean pruning the system back to one rigorously based on the principles of historical costs, with current values shown bv wav of note.

Figure 4.9 Standard setters' unsuccessful attempts to replace HCA

This option has strong support from the profession not only in the UK, e.g. 'in our view ... the most significant advantage of historical cost over current value accounting ... is (hat it is based on the actual transactions which the company has undertaken and the cash HOWS that it has generated ... this is an advantage not just in terms of reliability, but also in terms of relevance*,[2] but also in the USA, e.g. *a study showed that users were opposed to replacing the current historic cost based accounting model ... because it provides them with a stable and consistent benchmark that thev can relv on to establish historical trends'.[1]

Although this would ha\e brought UK practice into line with that of the USA and some of the EU countries, it has been rejected by the ASH. This is no doubt on the basis that the ASH wishes to see current values established in the UK in the longer term.

4.9.2 Introduce a coherent current value system immediately

This would mean developing the svstem into one more clearly founded on principles embracing current values. One such system, advocated by the ASH in Chapter 6 of its *Statement of Accounting Principles** is based on value to the business. The value to the business measurement model is eclectic in that it draws on various current \alue svstems. The approach to establishing the value to the business of a specific asset is quite logical:

- II an asset is worth replacing, then use replacement cost (RC-).
- If it is not worth replacing, then use:

  value in use (economic value) if it is worth keeping, or

  net realisable value (NRV) if it is not worth keeping.

However, the ASH did not see it as feasible to implement this system at that time because 'there is much work to be done to determine whether or not it is possible to de\ise a system that would be of economic relevance and acceptable to users and preparers of financial statements in terms of sufficient reliability without prohibitive cost'.[4]

Make *ad hoc* improvements to the present modified historical cost system

The Hoard favoured this option for removing anomalies, on the basis that practice should be evolutionary and should follow various ASH pronouncements (e.g. on the revaluation of properties and quoted investments) on an *ad hoc* basis. The *Statement of Accounting Principles* continues to en\ isage that a mixed measurement system will be used and it focuses on (he mix of historical cost and current value to be adopted/

It is influenced in choosing this option by the recognition that there are anxieties about the costs and benefits of moving to a full current value system, and by the belief thai a considerable period of experimentation and learning would be needed before such a major change could be successfully introduced."

Given the inability of the standard setters to implement a uniform current value system in the past, it seems a sensible, pragmatic approach for the ASH to recognise that it would fail if it made a similar attempt now.

This approach has been applied in FRS 3 with the requirement for a new primary financial statement, the statement of total recognised gains and losses (see Chapter 8 for further discussion) to report unrealised gains and losses arising from revaluation.

The historical cost based system and the current value based system have far more to commend them than the */(/ *hoc* option chosen by the ASH. However, as a short-term measure, it leaves the way open for the implementation in the longer term of its preferred value to the business model.

Copyrighted material

4.10 The IASC/IASB approach

The IASB has struggled in the same way as the ASH in the UK in deciding how to respond to inflation rates that have varied so widely over time. Theoretically there is a case for inflation-adjusting financial statements whatever the rate of inflation but standard setters need to carry the preparers and users of accounts with them this means that there has to be a consensus that the traditional HCA financial statements arc failing to give a true and fair view. Such a consensus is influenced by the current rate of inflation.

When the rates around the \\ orld were in double figures there was pressure for a mandatory standard so that financial statements were comparable. This led to the issue in 1983 of IAS 15 *Information Reflating the /{/feels of Changing Prices* which required companies to restate the HCA accounts using either a general price index or replacement costs with adjustments for depreciation, cost of sales and monetary items.

As the inflation rates fell below double figures there was less willingness by companies to prepare inflation-adjusted accounts and so, in 1989, the mandatory requirement was relaxed and the application of IAS 15 became optional.

In recent years the inflation rates in developed countries have ranged between 1% and 4% and so in 2003, twenty years after it was first issued, IAS 15 was withdrawn as part of the ASB Improvement Project.

These low rates have not been universal outside the developed world and there has remained a need to prepare inflation-adjusted financial statements where the rales are so high that MCA would be misleading.

4.10.1 The IASB position where there is hyperinflation

What do we mean by hyperinflation?

IAS 29 *Financial Reporting in Hyperinflatinnary Economies* states that hyperinflation occurs when money loses purchasing power at such a rate that comparison of amounts from transactions that have occurred at different times, even within the same accounting period, is misleading.

What rate indicates that hyperinflation exists?

IAS 29 does not specify an absolute rate - this is a matter of qualitative judgement - but it sets out certain pointers, such as people preferring to keep their wealth in non-monetary assets, people preferring prices to be stated in terms of an alternative stable currency rather than the domestic currency, wages and prices being linked to a price index, or the cumulative inflation rate over three years approaching 100%.

Countries where hyperinflation has occurred recently include Angola, Burma and Turkey.

How are financial statements adjusted?

The current year financial statements, whether HCA or CCA, must to be restated using the domestic measuring unit current at the balance sheet date; if the current year should be the first year that restatement takes place then the opening balance sheet also has to be restated.

Illustration of disclosures in IAS 29 adjusted accounts

The following is an extract from the 2002 accounts of Turkiye Petrol Rahnerileri.

> IAS 29 requires that financial statements prepared in the currency of a hyperinflationary economy be stated in terms of the measuring unit current at the balance sheet date and

Copyrighted material

the corresponding figures for previous periods be restated in the same terms. One characteristic that leads to the classification of an economy as hv perintlationary is a cumulative three-year intlaiion rate approaching 100%. Such cumulative rate in Turkey was 227°o for the three years ended 31 December 2002 based on the wholesale price index announced by the Turkish State Institute of Statistics. The restatement has been calculated bv means of conversion factors based on the Turkish eountrvwide wholesale price index (WPI).

The index and corresponding conversion factors for year-ends are as follows (1994 average = 100)

	Index	Conversion factor
Year ended 31 December 1999	1,979.5	3.2729
Year ended 31 December 2000	2,626.0	2.4672
Year ended 31 December 2001	4,951.7	1.3083
Year ended 31 December 2002	6,478.8	1.0000

- Monetary assets and liabilities are not restated.
- Non-monetary assets and liabilities are restated by applying to the initial acquisition cost and any accumulated depreciation for fixed assets the relevant conversion factors reflecting the increase in WPI from date of acquisition.
- All items in the statements of income arc restated.

4.1 I Future developments

A mixed picture emerges when we try to foresee the future of changing price levels and financial reporting. The accounting profession has been reluctant to abandon the IIC concept in favour of a 'valuation accounting' approach. In the UK and Australia many companies have stopped revaluing their non-current assets, with a large proportion opting instead to revert to the historical cost basis with the two main factors influencing management's decision being cost effectiveness and future reporting flexibility.[7]

The pragmatic approach is prevailing with each class of asset and liabilin being considered on an individual basis, e.g. fixed assets reported at depreciated replacement cost unless this is higher than the economic value we discussed in Chapter 3; financial assets being reported at market value (exit value in the NRY model); current assets reported at lower of HC and NRY. In each case the resulting changes, both realised and unrealised, in value will find their way into the financial performance statement(s).

Fair values

A number of II'R.Ss now require or allow the use of fair values e.g. 1FRS 3 *Business Combinations* in which fair value is defined as 'the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction'. This is equivalent to the NRYA model discussed above. It is defined as an exit value rather than a cost value but like NRYA it docs not imply a forced sale, i.e. it is the best value that could be obtained.

It is interesting to note that in the US there is a view that financial statements should be primarily decision-useful. This is a move away from the position adopted b\ the 1ASB in its conceptual framework in which it states that financial statements have two functions - one to provide investors with the means to assess stewardship and the other the means to make sound economic decisions.

Copyrighted material

How will financial statements be affected if fair values are adopted?

The financial statements will have the same virtues and defects as the NRVA model (para 4.6.4 above). Some concerns have been raised that reported annual income will become more volatile and the profit that is reported may contain a mix of realised and unrealised profits. Supporters of the use of fair values see the income and balance sheet as more relevant for decision making whilst accepting that the figures might be less reliable and not as effective as a means of assessing the stewardship by the directors.

The gradualist approach

It is very possible that the number of International Standards requiring or allowing fair values will increase over time and reflect the adoption on a piecemeal basis. In the meantime, efforts are in hand for the FASB and IASB to arrive at a common definition of fair value which can be applied to value assets and liabilities where there is no market value available. Agreeing a definition, however, is only a part of the exercise. If analysts are to be able to compare corporate performance across borders, then it is essential that both the FASB and the IASB agree that all companies should adopt fair value accounting - it has been proving difficult to gain acceptance for this in the US.

This means that in the future historical cost and realisation will IK* regarded as less relevant'* and investors, analysts and management will need to come to terms with increased volatility in reported annual performance.

1 (a) Explain the limitations of HCA when prices are rising.
(b) Why has the HCA model survived in spite of its shortcomings in times of inflation?

2 Explain the features of the CPP model in contrast with those of the CCA mode).

3 What factors should be taken into account when designing a system of accounting for inflation?

4 To what extent are CCA statements useful to an investor?

5 Compare the operating and financial capital maintenance concepts.

6 'Historical cost accounting is the worst possible accounting convention, until one considers the alternatives/ Discuss this statement in relation to CPP, CCA and NRVA

7 To be relevant to investors, the profit for the year should include both realised and unrealised gains/losses.' Discuss.

8 Discuss the effect on setting performance bonuses for staff if financial performance for a period contains both realised and unrealised gains/losses.

9 'The relevant financial performance figure for an investor is the amount available for distribution at the balance sheet date." Discuss.

10 'Financial statements should reflect realistically the performance and position of an organisation, but most of the accountant's rules conflict directly with the concept of realism.' Discuss.

11 Explain why financial reports prepared under the historical cost convention are subject to the following major limitations:
- inventory is undervalued
- the depreciation charge to the income statement is understated
- gams and losses on net monetary assets are undisclosed
- balance sheet values are understated
- periodic comparisons are invalidated.

12 Explain how each of the limitations in question I I could be overcome.

13 In April 2000 the G4 + I Group acknowledged that market exit value is generally regarded as the basis for fair value measurement of financial instruments and was discussing the use of the deprival value model for the measurement of non-financial assets or liabilities, especially in cases in which the item is highly specialised and not easily transferable in the market in its current condition. The deprival value model would require that an asset or liability be measured at its replacement cost net realisable value, or value in use. depending on the particular circumstances.
(a) Discuss reasons why financial and non-financial assets should be measured using different bases.
(b) Explain what is meant by 'depending on the particular circumstances'.

14 Explain the criteria for determining whether hyperinflation exists.

15 '...the lASB's failure to decide on a capital maintenance concept is regrettable as users have no idea as to whether total gains represent income or capital and are therefore unable to identify a meaningful "bottom line"'.'[0] Discuss.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (•).

* Question I

Shower Ltd was incorporated towards the end of 20X2. but it did not start trading until 20X3. Its historical cost balance sheet at I January 20X3 was as follows:

	L
Share capital, £1 shares	2.000
Loan (interest free)	8.000
	*C*10.000
Fixed assets, at cost	6.000
Inventory, at cost (4,000 units)	4.000
	.•-.10000

A summary of Shower Umited's bank account for 20X3 is given below.

		£	£
1)an 20X3	Opening balance		nil
30 Jun 20X3	Sales (8.000 units)		20.000
Less			
29 Jun 20X3	Purchase (6.000 units)	9.000	
	Sundry expenses	5.000	14.000
31 Dec 20X3	Closing balance		£6.000

All the company's transactions *are* on a cash basis.

The fixed assets are expected to last for five years and the company intends to depreciate its fixed assets on a straight-line basis. The fixed assets had a resale value of £2.000 at 31 December 20X3.

Notes

1 The closing inventory is 2.000 units and the inventory is sold on a first-m-first-out basis.

2 All prices remained constant from the date of incorporation to I January 20X3, but thereafter. various relevant price indices moved as follows:

		Specific indices	
	Genera/ price 'eve/	*Inventory*	fixed assets
1 January 20X3	**100**	100	**100**
30 June 20X3	120	150	140
31 December 20X3	240	255	200

Required:

Produce balance sheets as at December 20X3 and income statements for the year ended on that date on the basis of:

(i) historical cost;

(ii) current purchasing power (general price level);

(iii) replacement cost:

(iv) continuous contemporary accounting (NRVA).

Question 2

The finance director of Toy pic has been asked by a shareholder to explain items that appear in the current cost income statement for the year ended 31.8.20X9 and the balance sheet as at that date:

		I	*L*
Historical cost profit			143,000
Cost of sales adjustment	(")	10,000	
Additional depreciation	(2)	6,000	
Monetary working capital adjustment	(3)	2,500	18.500
Current cost operating profit before tax			124.500
Gearing adjustment	(4)		2.600
CCA operating profit			127.100
Non-current assets at gross replacement cost		428,250	
Accumulated current cost depreciation	(5)	(95,650)	332.600
Net current assets			121.400
1*1%* debentures			(58.000)
			396.000
Issued share capital			250.000
Current cost reserve	(6)		75.000
Retained earnings			71.000
			3Q6.CXX3

Required:

(a) Explain what each of the items numbered 1-6 represents and the purpose of each.

(b) What do you consider to be the benefits to users of providing current cost information?

Copyrighted material

* Question 3

The balance sheets of Parkway pic for 20X7 and 20X8 are given below, together with the profit and loss account for the year ended 30 June 20X8.

	So/once Sheet					
	20X8			*20X1*		
	£000	£000	£000	£000	£000	£000
Non-current assets	Cost	Depn	*NM*	Cost	Depn	*NBV*
Freehold land	60,000	^—	60.000	60.000	—	60.000
Buildings	40,000	8.000	32.000	40.000	7.200	32.800
Plant and machinery	30,000	16.000	14.000	30.000	10.000	20.000
Vehicles	40,000	20,000	20.0CO	40,000	12.000	28,000
	170.000	44,000	126.000	170.000	29,200	140.800
Current assets						
Inventory		80,000			70,000	
Trade receivables		60,000			40,000	
Short-term investments		50,000				
Cash at bank and in hand		5,000			5,000	
		95,000			115.000	
Current liabilities						
Trade payables		90,000			60.000	
Bank overdraft		S0.0O0			45.000	
Taxation		28.000			15.000	
Dividends		15.000			10,000	
		183.000			130,000	
Net current assets			12.000			{15.000?
			138.000			125.800
Financed by						
Ordinary share capital			80.000			80.000
Share premium			10.000			10.000
Retained profits			28.000			15.800
			118.000			105.800
Long-term loans			20.000			20.000
			I 38.000			125.800

Income statement *of Parkway pic for the year ended 30 June 20X8*	
	£000
Sales	738.000
Cost of sales	620.000
Gross profit	118.000

Copyrighted material

Notes

1 The freehold land and buildings were purchased on I July 20X0. The company policy is to depreciate buildings over 50 years and to provide no depreciation on land.

2 Depreciation on plant and machinery and motor vehicles is provided at the rate of 20% per annum on a straight-line basis.

3 Depreciation on buildings and plant and equipment has been included in administration expenses, while that on motor vehicles is included in distribution expenses.

4 The directors of Parkway pic have provided you with the following information relating to price rises:

	RPI	*Inventory*	*Land*	BwWings	*Plant*	*Vehicles*
I July 20X0	100	60	70	50	90	120
I July 20X7	170	140	290	145	135	180
30 June 20X8	190	180	310	175	165	175
Average for year ending 30 June 20X8	180	160	300	163	145	177

Required:

(a) Making and stating any assumptions that are necessary, and giving reasons for those assumptions, calculate the monetary working capital adjustment for Parkway pic.

(b) Critically evaluate the usefulness of the monetary working capital adjustment

* Question 4

Raiders pic prepares accounts annually to 31 March. The following figures, prepared on a conventional historical cost basis, are included in the company's accounts to 31 March 20X5.

I In the profit and loss account:

		£000	£000
(i)	Cost of goods sold:		
	Inventory at 1 April 20X4	9.600	
	Purchases	39.200	
		48.800	
	Inventory at 31 March 20X5	11.300	37.500
(ii)	Depreciation of equipment		8.640

2 In the balance sheet;

		£000	£000
(iii)	Equipment at cost	57.600	
	Less: Accumulated depreciation	16.440	41.160
(iv)	Inventory		11,300

The inventory held on 31 March 20X4 and 31 March 20X5 was in each case purchased evenly during the last six months of the company's accounting year.

Equipment is depreciated at a rate of 15% per annum, using the straight-line method. Equipment owned on 31 March 20X5 was purchased as follows: on I April 20X2 at a cost of £16 million; on I April 20X3 at a cost of £20 million; and on I April 20X4 at a cost of" £21.6 million.

Copyrighted material

The following indices are available:

	Current cost *of* inventory	Current cost *of equipment*	*Retail Price Index*
1 April 20X2	109	145	313
1 April 20X3	120	162	328
30 September 20X3	128	170	339
31 December 20X3	133	175	343
31 March/1 April 20X4	138	180	345
30 September 20X4	150	191	355
31 December 20X4	156	196	360
31 March 20X5	162	200	364

Required:

(a) Calculate the following current cost accounting figures:
   (i) The cost of goods sold of Raiders pic for the year ended 31 March 20X5.
   (ii) The balance sheet value of inventory at 31 March 20X5,
   (iii) The equipment depreciation charge for the year ended 31 March 20X5.
   (iv) The net balance sheet value of equipment at 31 March 20X5.

(b) Discuss the extent to which the figures you have calculated in (a) above (together with figures calculated on a similar basis for earlier years) provide information over and above that provided by the conventional historical cost income statement and balance sheet figures.

(c) Outline the main reasons why the standard setters have experienced so much difficulty in their attempts to develop an accounting standard on accounting for changing prices.

Question 5

The historical cost accounts of Smith pic are as follows:

Smith pic Income statement (or the year ended 31 December 20X8

	£000	£000
Safes		2,000
Cost of sales:		
Opening inventory I January 20X8	320	
Purchases	1,680	
	2,000	
Closing inventory at 31 December 20X8	280	
		1,720
Gross *profit*		280
Depreciation	20	
Administration expenses	'00	
		120
Net profit		160

Copyrighted material

and asset value measurement systems

Balance Sheet of Smith p/c *as at 31 December 20X8*

		20X7		*20X8*
Fixed assets		£000		£000
Land and buildings at cost		1.360		1.360
Less aggregate depreciation		(160)		(180)
		1.200		1.180
Current assets				
Inventory	320		280	
Trade receivables	80		160	
Cash at bank	40		Q0	
	440		560	
Trade payables	200		140	
		240		420
		1.440		1.600
Ordinary share capital		800		800
Retained profit		640		800
		1.440		1.600

Notes

1 Land and buildings were acquired in 20X0 wtth the buildings component costing £800,000 and depreciated over 40 years.

2 Share capital was issued in 20X0.

3 Closing inventories were acquired in the last quarter of the year.

4 RP! numbers were:

Average for 20X0	120
20X7 last quarter	216
At 31 December 20X7	220
20X8 last quarter	232
Average for 20X8	228
At 31 December 20X8	236

Required:

(i) Explain the basic concept of the CPP accounting system.

(ii) Prepare CPP accounts for Smith pic for the year ended 20X8.

The following steps will assist in preparing the CPP accounts:

(a) Restate the income statement for the current year in terms of £CPP at the year-end.

(b) Restate the closing balance sheet in £CPP at year-end. but excluding monetary items, i.e. trade receivables, trade payables, cash at bank.

(c) Restate the opening balance sheet in £CPP at year-end. but including monetary items, i.e. trade receivables, trade payables and cash at bank, and showing equity as the balancing figure.

(d) Compare the opening and closing equity figures derived in (b) and (c) above to arrive at the total profit/loss for the year in CPP terms. Compare this figure with the CPP profit calculated in (a) above to determine the monetary gain or monetary loss.

(e) Reconcile monetary gains/loss in (d) with the increase/decrease in net monetary items during the year expressed in £CPP compared with the increase/decrease expressed in £HC

Copyrighted material

* Question 6

Aspirations Ltd commenced trading as wholesale suppliers of office equipment on I January 20X1. issuing ordinary shares of £ I each at par in exchange for cash. The shares were fully paid on issue, the number issued being 1.500.000.

The following financial statements, based on the historical cost concept, were compiled for 20X1.

Aspirations Ltd

Income statement for the year ended 31 December 20X1

	.	£
Sales		868.425
Purchases	520.125	
Less: Inventory 31 December 20X1	24.250	
Cost of sales		495.875
Gross profit		372.550
Expenses	95.750	
Depreciation	25.250	
		121.000
Net profit		251.550

balance Sheet as at 31 December 20X1

	Cost	*Depreciation*	
Norxurrent assets	;	£	£
Freehold property	650.000	6.500	643.500
Office equipment	375.000	18.750	356.250
	1.025,000	25.250	999.750
Current assets			
Inventories		24.250	
Trade receivables		253.500	
Cis'i		1.090.300	
		1,368.050	
Current liabilities		116.250	
		1.251.800	
Non-current liabilities	500.000	751.800	
		1.751,550	
Issued shore *capital*		i : :. '•:	
1.500.000 £ I ordinary shares		251,550	
Retained earnings		1.751.550	

Copyrighted material

and asset value measurement systems

The year 20X1 witnessed a surge of inflation and m consequence the directors became concerned about the validity of the revenue account and balance sheet as income and capital statements. Index numbers reflecting price changes were:

Specific index numbers reflecting replacement costs

	/ January 20X1	*31 December 20X i*	*Average for 20X1*
Inventory	115	150	130
Freehold property	110	165	127
Office equipment	125	155	145
General price index numbers	135	170	155

Regarding current exit costs

Inventory is anticipated to sell at a profit of 7596 of cost.

The *value of assets at 31 December 20X1 was*

	L
Freehold property	640.000
Office equipment	350.000

Initial purchases of inventory were effected on I January 20X1 amounting to £34.375: the balance of purchases was evenly spread over the 12-month period. The non-current assets were acquired on I January 20X1 and. together with the initial inventory, were paid for in cash on that day.

Required:

Prepare the accounts adjusted for current values using each of the three proposed models of current value accounting: namely, the accounting methods known as replacement cost, general (or current) purchasing power and net realisable value.

Question 7

Antonio Rossi set up a part-Urne business on I November 2004 buying and selling second-hand sports cars. On I November 2004 he commenced business with $66,000 which he immediately used to purchase ten identical sports cars costing $6,600 each, paying in cash. On I May 2005 he sold seven of the sports cars for $8,800 each receiving the cash immediately. Antonio estimates that the net realisable value of each sports car remaining unsold was $8,640 as at 31 October 2005.

The replacement cost of similar sports cars was $6,800 as at I May 2005 and $7,000 as at 31 October 2005. and the value of a relevant general price index was 150 as at I November 2004. 155 as at I May 2005 and 159 as at 31 October 2005.

Antonio paid the proceeds from the sales on I May 2005 into a special bank account for the business and made no drawings and incurred no expenses over the year ending 31 October 2005.

Antonio's accountant has told him that there *are* different ways of calculating profit and financial position and has produced the following figures:

Copyrighted material

Current *purchasing* power *accounting Profit and Loss Account for the year ended* 3 / *October 2005*

	$
Sales	63.190
Jess Cost of sales	-18.972
	14.218
Loss on monetary item	(1.590)
CPP net income	12.628

Balance Sneer as *at 31 October 2005*

Assets	%
Inventory	20.988
Cash	61.600
	82.588
Financed by:	
Opening capital	69.960
Profit for the year	12.628
	82.588

Current cost accounting Profit and Loss Account for the year ended 31 October 2005

Historical cost profit	15.400
less Cost of sales adjustment	1.400
Current cost income	14.000

Balance Sheets as at 31 October 2005

Asset	$
Inventory	21.000
Cash	61.600
	82.600
Financed by:	
Opening capital	66.000
Current cost reserve	2.600
Profit for the year	14.000
	82.600

Required:

(a) Prepare Antonio's historical cost profit and loss account for the year ended 31 October 2005 and his balance sheet as at 31 October 2005.

(b) (i) Explain how the figures for Sales and Cost of sales were calculated for the current purchasing power profit and loss account You need not provide detailed calculations.

(ii) Explain what the 'loss on monetary item' means. In what circumstances would there be a profit on monetary items?

(c) (i) Explain how the 'cost of sales adjustment' was calculated and what it means. You need not provide detailed calculations.

(ii) Identify and explain the purpose of any three other adjustments which you might expect to see in a current cost profit and loss account prepared in this way.

(d) State, giving your reasons, which of the three bases gives the best measure of Antonio's financial performance and financial position.

(The *Association of International Accountants)*

Copyrighted material

References

1 *The Role oj I afuation in Financial Reporting,* ASB, I993.
2 Ernst & Young, *UK GAAP(Mh* edition), 1994, p. 91.
.» *The Information Seeds of Investors and Creditors** AICPA Special Committee on Financial Reporting.
4 *The Role of Valuation in Financial Reporting,* ASH, 1993, para. 31(u),
5 *Statement of Accounting Principles,* ASH, December [999, para. 6.4.
6 *The Role of Valuation in Financial Reporting,* ASH, 1993, para. 33.
7 Krnst & Young, 'Revaluation of non-current assets'. Accounting Standard, F.rnst & Young, January 2(X)2, www.cy.com/Global/gcr.nsf/Australia.
8 SFAS 157 *Fair value measurement,* FASB, 2006.
9 A. Wilson, 'IAS: the challenge for measurement*. *Accountancy,* December 2001, p. 90.
10 N. Fry and D. Hence, 'Capital or income?'. *Accountancy,* April 2007, p. 81.

Bibliography

Accounting for Changes in the Purchasing Power of Money, SSAP 7, ASC, 1974.
Accounting for Stewardship in a Period of Inflation, The Research Foundation of the ICAFAV, 1968.
\Y.T. Baxter, *Accounting \ allies and Inflation,* McGraw Mill, 1975.
W.T. Baxter, *Depreciation,* Sweet and Maxwell, 1971.
W.T. Baxter, *Inflation Accounting,* Philip Alan. 1984.
W.T. Baxter, *The Case for Depnval Accounting,* [CAS, 2003
R J. Chambers, *Accounting Evaluation and Economic Behaviour,* Prentice I lall, 1966.
R.J. Chambers, 'Second thoughts on continuous contemporary accounting', *Abacus,* September 1970.
K.O. Edwards and P.W. Hell, *The Theory and Measurement of Business Income,* University of California Press, 1961.
JR. I licks. / *alut and Capital* (2nd edition), OL'P, 1975.
R.A. Hill, 'Economic income and value: the price level problem', *ACCA Students' Sewsletter,* November 1987.
T.A. Lee, *Cash Flow Accounting,* Van Nostrand Reinhold, 1984.
T.A. Lee (cd.), *Developments in Financial Reporting,* Philip Alan, 1981.
T.A. Lee, *Income and I alue Measurement: Theory and Pratttce* (3rd edition), Van Nostrand Reinhold (UK), 1985, Chapters.
'A quickfall: the elementary arithmetic of measuring real profit*, *Management Accounting,* April 1980.
D.R. Mvddleton, *On a Cloth Untrue Inflation Accounting: The Hay Forward,* Woodhcad-Faulkncr, 1984.'
R.I I. Parker and G.C. 1 larcourt (eds.). *Readings in the Concept and Measurement of Income,* Cambridge University Press, 1969.
F. Sandilands (Chairman), *Inflation Accounting Report of the Inflation Accounting Committee,* HMSO Omul 6225, 1975, pp. 139-155 and Chapter 9.
D. Twecdie and G. Whittington, *Capital Maintenance Concepts,* ASC, 1985.
D. Twecdie and G. Whittington, *The Debate on Inflation in Accounting,* Cambridge University Press, 1985.
G. Whittington. inflation accounting: all the answers from Deloittc, Haskins and Sells', distinguished lecture scries, Cardiff*, 5 March 1981, reproduced in *Contemporary Issues in Accounting,* Pitman/Farringdon, 1984.

Copyrighted material

PART 2

Regulatory framework – an attempt to achieve uniformity

5*1 Introduction

There has been much discussion of the move to International Standards in 2005 for manv listed companies. I lowcvcr, we should not lose sight of the fact that ihere remain many UK-specific regulatory requirements. For example, there are UK. SSAPs and I'RSs for companies which choose not to apply International Standards, the FRSSF. for small companies. Stock Exchange listing requirements including compliance with the Combined Code, best practice statements such as the Operating and Financial Review, and ASH Statements of Best Practice such as that on interim reports.

In this chapter we will discuss:

- Mandator) regulations
- Arguments for and against standards
- The structure of the UK regulatory framework
- The Operating and Financial Review
- The FRRP and the FSA
- The Revised Combined Code
- Developments for small companies
- Interim reports following Cadbury
- Evaluation of mandatory regulations.

5.2 Mandatory regulations

Mandatory regulations take the form of Statements of Standard Accounting Practice (SSAPs) and Financial Reporting Standards (I'RSs) issued by the Accounting Standards Hoard. Such regulations are important because users of accounting numbers *n^i* to be able to have confidence that the numbers are a fair representation and ha\e not been manipulated by management.

5.2.1 Role of accounting numbers in defining contractual entitlements

Contracting parties frequently define the rights between themselves in terms of accounting numbers.[1] For example, the remuneration of directors and managers might be expressed in terms of a salary plus a bonus based on an agreed performance measure, e.g. Johnson Matthey's 2006 Annual Report states:

Annual Bonus - which is paid as a percentage of basic salary under the terms of the company's Executive Compensation Plan (which also applies to the group's 160 or so most senior executives). The executive directors' bonus award is based on consolidated profit before tax, impairment and restructuring costs (PBT) compared with the annual budget. The board of directors rigorous!) reviews the annual budget to ensure that the budgeted PBT is sufficiently stretching.

I Iowevcr, if there is a risk that earnings for the year will not grow at a rate that is attractive to the directors and managers, there could be a temptation to improve the earnings for the period by taking measures that might not be in the interest of the shareholders.

Typical measures include: deferring discretionary expenditure, e.g. research, advertising, training expenditure; deferring amortisation, e.g. in,iking optimistic sales projections in order to classify research as development expenditure which can be capitalised; and reclassifying deteriorating current assets as non-current assets to avoid the need to recognise a loss under the lower of cost and net realisable value rule applicable to current assets.

The introduction of a mandatory standard that changes management's ability to adopt such measures affects wealth distribution within the firm. For example, if managers art-unable to delay the amortisation of development expenditure, then bonuses related to profit will be lower and there will effectively have been a transfer of wealth from managers to shareholders.

This effect of changes in mandatory standards on wealth distribution is a major reason why standards are required, and also why it is difficult to obtain a consensus. Each party considers the economic consequences, real or imagined, on their personal position.

5.2.2 Need for mandatory standards

Mandatory standards are needed to define the way in which accounting numbers are presented in financial statements, so that their measurement and presentation are less subjective. It had been thought that the accountancy profession could obtain uniformity of disclosure by persuasion but, in reality, the profession found it difficult to resist management pressures.

During the l%0s the financial sector of the UK cconoim lost confidence in the accountancy profession when internationally known UK-based companies were seen to have published financial data that were materially incorrect. Shareholders are normally unaware that this occurs and it tends only to become public knowledge in restricted circumstances, e.g. when a third party has a vested interest in revealing adverse facts following a takeover, or when a company falls into the hands of an administrator, inspector or liquidator, whose duty it is to enquire and report on shortcomings in the management of a company.

Two scandals which disturbed the public at the time, GEC/AEI and Pergamon Press,[2] were both made public in the restricted circumstances referred to above, when financial reports prepared from the same basic information disclosed a materially different picture.

GEC takeover of AEI in 1967

The first calamity for the profession involved GEC Ltd in its takeover bid for AEI Ltd when the pre-takeover accounts prepared by the old AEI directors differed materially from the post-takeover accounts prepared by the new AEI directors.

AEI profit forecast for 1967 as determined by the old AEI directors

AEI Ltd produced a profit forecast of £10 million in November 1%7 and recommended its shareholders to reject the GEC bid. The forecast had the blessing of the auditors, in as

Copyrighted material

much as the\ said (hat it had been prepared on a fair and reasonable basis and in a manner consistent with the principles followed in preparing the annual accounts. The investing public would normally have been quite satisfied with the forecast figure and the process by which it was produced. Clearly, AEI would not subsequently have produced other information to show that the picture was materially different from that forecast.

However, GEC was successful with its bid and as a result it was GECs directors who had control over the preparation of the AMI accounts for 1967.

AEI profit for 1967 as determined by the new AEI directors

Under the control of the directors of GEC the accounts of AEI were produced for 1%7 showing a loss of *£4.5* million. Unfortunately, this was from basic information that was largely the same as that used by AEI when producing its profit forecast.

There can be two reasons for the difference between the figures produced. Either the facts have changed or the judgements made b\ the directors have changed. In this case, it seems there was a change in the facts to the extent of a post-acquisition closure of an AEI factory; this explained *£5* million of the £14.5 million difference between the forecast profit and the actual loss. The remaining *£[l).5* million arose because of differences in judgement. For example, the new directors took a different view of the value of stock and work-in-progress.

Pergamon Press

Audited accounts were produced by Pergamon Press Ltd for 1968 showing a profit of approximately *£2* million.

An independent investigation by Price Waterhouse suggested that this profit should be reduced by 75% because of a number of unacceptable valuations, e.g. there had been a failure to reduce certain stock lo the lower of cost and net realisable value, and there had been a change in policy on the capitalisation of printing costs of back issues of scientific journals - they were treated as a cost of closing stock in 1%8, but not as a cost of opening stock in 1968.

Public view of the accounting profession following these cases

It had long been recognised that accountancy is not an exact science, but it had not been appreciated just how much latitude there was for companies to produce vastly different results based on the same transactions. Given that the auditors were perfectly happy to sign that accounts showing either a *£\i)* million profit or a *£4.5* million loss were true and fair, the public felt the need for action if investors were to have any trust in the figures that were being published.

The difficulty was that each firm of accountants tended to rely on precedents within its own firm in deciding what was true and fair. This is fine until the public becomes aware that profits depend on the particular firm or partner who happens to be responsible for the audit. The auditors were also under pressure to agree to practices that the directors wanted because there were no professional mandatory standards.

This was the scenario that galvanised the City press and the investing public. An embarrassed, disturbed profession announced in 1%9, via the ICAEW, that there was a pressing need for the introduction of Statements of Standard Accounting Practice to supplement the legislation.

5.2.3 Creation of a standard-setting body

In this section we briefly consider the ASSC, the ASC, the Dearing Committee, the Dearing Report and the ASB.

Copyrighted material

The Accounting Standards Steering Committee (ASSC)

The Accounting Standards Steering Committee was formed by the ICAEW in 1970. The committee later increased its membership to include other professional accounting bodies. The objectives of the ASSC were as follows:

- Damage limitation b\ narrowing the areas of difference in accounting practice that had been bringing the profession into disrepute.
- The development of a consensus by encouraging wider exposure and discussion of proposals for standards. This was a vital step because failure to carry directors or the profession would lead to non-compliance or rejection, as happened when unsuccessful attempts were made to make either CPP or CCA inflation-adjusted financial statements compulsory.
- To encourage disclosure by requiring companies to disclose the accounting policies they have adopted, e.g. depreciation policy, and also to disclose if they change a policy.
- To improve standards by developing a continuing programme.

The Accounting Standards Committee (ASC)

By 1976 the procedure was for the ASSC (renamed the ASC) to prepare a draft standard; the draft was adopted if all six professional accountancy bodies were unanimous; each of the professional accounting bodies then issued the SSAP to its own members.

By 1982 it was felt that the professional accounting bodies had too great a control over the process. Consequently, the terms of reference of the ASC were widened, e.g. to consult representatives of finance, commerce, industry and government, and other persons concerned with financial reporting; the membership was reduced to twenty, including five users of financial reports who were not required to be accountants; and government officials, e.g. representatives from the Department of Trade and Industry, could be co-opted as non-voting members.

The process was also organised to give users full opportunity to make their inputs to the standard setting. The aims of the process were as follows:

- Topics that were to be the subject of a standard were made public.
- Consultation was encouraged by the issue of discussion documents.
- An exposure draft prepared by the ASC was published.
- A draft standard was prepared by the ASC, taking into account reactions to the discussion documents and exposure drafts.

The Dearing Committee[3]

Although the ASC had produced twenty-five standards by 1991, there was criticism that it was not adequately staffed, had no ground-plan and was reactive rather than proactive. However, it had operated as effectively as possible given its resources, and had indeed been ambitious in attempting to address areas where the profession was itself divided, e.g. inflation accounting.

The political climate changed in the 1980s with wider share ownership and the growing use of watchdog organisations to encourage self-regulation, e.g. Oftel in the telecommunications industry and Ofwat in the water industry. Changes in the way in which the accounting profession ensured conformity to universal standards were only to be expected and so the Dearing Committee was set up to review the standard-setting process in the light of future changes in the financial markets, i.e. recognising that financial statements are a prerequisite for a properly functioning capital market, and taking account of the current

Copyrighted material

attitude of the state and public to the regulation of companies. The committee reported in 1988.

The Dearing Report

The report recommended the creation of a conceptual framework by developing work that had already taken place, e.g. **PASB** statements produced in the USA. It is a noticeable feature of the evolution of a conceptual framework that the **ASB** has been eclectic in making use of material from a wide range of sources, e.g. the FASH statements and the IASC document *Framework far the Presentation and Preparation of Financial Statements*.[4]

It also recommended a structure b\ proposing setting up the following:

- a Financial Reporting Council with professional accountants and users to be responsible for giving the ASB guidance on priorities and advising it on areas of public concern;
- an Accounting Standards Board (ASB) with a salaried staff comprising accountants responsible for issuing standards which were to be founded on stated principles wherever possible so as to avoid standards becoming a cookbook of detailed, legalistic rules;
- an Urgent Issues Task Force to amend or expand on standards if the need suddenly arose;
- a Review Panel reporting to the Council to examine departures from standards by large companies. This would allow the auditor to make reference for guidance where the directors proposed to depart from a standard and where the auditor disagreed with their proposed treatment or agreed and considered that the standard needed to be amended.

Accounting Standards Board (ASB)

The ASC consequently ceased to exist on 1 August 1990 when it was replaced by the new Accounting Standards Board (ASB).

5.3 Arguments in support of standards

The setting of standards has both supporters and opponents. In this section we discuss comparability, credibility, influence and discipline.

Comparability

Financial statements should allow a user to make predictions of future cash Hows, make comparisons with other companies" and evaluate the management's performance.

In order to be able to make valid inter-company comparisons of performance and trends, investment decision makers must be supplied with relevant and reliable data that have been standardised. Such comparisons would be distorted and valueless if companies were permitted to select accounting policies at random or, even worse, with the intention of disguising changes in performance and trends.

Credibility

The accountancy profession would lose all credibility if it permitted companies experiencing similar events to produce financial reports that disclosed markedly different results simply because they could select different accounting policies. Uniformity is essential if financial reports are to disclose a true and fair view. However, the ASC had emphasised that the standards were not intended to be a comprehensive code of rigid rules - they did not want them to supersede the exercise of informed judgement in determining what constituted a true and (air view in each circumstance.

Copyrighted material

Influence

The process of formulating standards has encouraged a constructive appraisal of the policies being proposed for individual reporting problems and has stimulated the development of a conceptual framework. For example, the standard on leasing introduced the idea in UK standards of considering the commercial substance of a transaction rather than simply the legal position.

When the ASC was set up in the 1970s there was no clear statement of accounting principles other than that accounts should be prudent, be consistent, follow accrual accounting procedures and be based on the initial assumption that the business would remain a going concern.

The immediate task was to bring some order into accounting practice. The challenge of this task is illustrated by the ASC report *A Conceptual Framework for Financial Accounting and Reporting: The Possibilities for an Agreed Structure* by R. Macvc, published in 1981, which considered that the possibility of an agreed body of accounting principles was remote at that time.

However, the process of setting standards has stimulated accounting thought and literature to the point where, by 1994, the ASB had produced its exposure drafts *of Statement of Accounting Principles*^ which appeared in final form in December 1999.

Discipline

Companies left to their own devices without the need to observe standards will eventually be disciplined by the financial market: e.g. incorrect classification of research as development expenditure will eventually become apparent when sales growth is not as expected by the market. Mandatory standards will impose systematic ongoing regulation, which should prevent serious loss to the entity and those who rely on the annual accounts when making credit, loan and investment decisions.

There is a tension between the desire that standards should not be a comprehensive code of rigid rules and the desire to regulate accounting practices that are imaginatively devised by directors and their financial advisers to create a picture that they may consider true and fair - but which others may not. Directors are under pressure to maintain and improve the market valuation of their company's securities; they will attempt to influence any financial statistic that has an impact on the market valuation, such as the trend in the EPS figure, the net asset backing for the shares or the gearing ratios.

The Financial Reporting Council showed awareness of the need to impose discipline when it stated in its annual review, November 1991, para. 2.4, that the high level of company failures in the then recession, some of which were associated with obscure financial reporting, damaged confidence in the high standard of reporting by the majority of companies.

5.4 Arguments against standards

We have so far discussed the arguments in support of standard setting. However, there arc also arguments against.

Adverse allocative effects

Adverse allocative effects could occur if standard setters did not take account of the economic consequences flowing from the standards they issued.** For example, additional costs could be imposed on preparers, and suboptimal managerial decisions might be taken to avoid any reduction in reported earnings or net assets. Furthermore, the adverse effects

Copyrighted material

might be fell by people who did not actually use the accounts, eg. a leasing standard that caused a fall in the lessee's reported profits might, as a consequence, depress the leasing industry, leading to the loss of employment by start" engaged in manufacturing assets supplied under lease, or in servicing the leasing industry.

Consensus-seeking

Consensus-seeking can lead to the issuing of standards that are over-influenced by those with easiest access to the standard setters - particularly as the subject matter becomes more complex, as with e.g. capital instruments. It could be argued that the ASB is attempting to minimise such influences by basing its standards on the *Statement of Principles** but there is a counter-argument that the *Statement of Principles* is too general to fulfil this role effectively.

Overload

Standard overload is not a new charge. I lowevcr, it takes a number of conflicting forms, e.g.:

- There are too mam/too few standards.
- Standards arc too detailed/not sufficiently detailed.
- Standards are general-purpose and fail to recognise the differences between large and small entities and interim and final accounts.
- There are too many standard setters with differing requirements, e.g. FASB, IASB, ASB. national Stock Exchange listing requirements.

5.5 Structure of regulatory framework

Financial statements prepared in the UK are subject to regulation by a number of different regulatory bodies, e.g. the Financial Reporting Council, the Financial Services Authority and Company I .aw.

5.5.1 The Financial Reporting Council (FRC)

The FRC was set up in 1990 as an independent regulator to set and enforce accounting standards. It operated through the Accounting Standards Board (ASB) and the Financial Reporting Review Panel (FRRP) to encourage high-quality financial reporting. Due to its success in doing this, the government decided, following corporate disasters such as Enron in the USA, to give it a more proactive role from 2(M)4 onwards in the areas of corporate governance, compliance with statutes and accounting and auditing standards.

The FRC's new structure is shown in Figure 5.1.

5.5.2 The Accounting Standards Board

The ASB issues mandatory standards (SSAPs and FRSs), confirms that SORPs are not in conflict with its mandatory standards and issues statements of best practice (such as those on OFR and Interim Reports).

5.5.3 SSAPs and FRSs

Extant standards are shown in Figure 5.2. Breaks in the numerical sequence are a consequence of standards being withdrawn and/or renumbered on reissue. Note that FRSs 20-26 are based on I FRSs.

Copyrighted material

Figure 5.1 **The** Financial Reporting Council structure showing subsidiary boards

5.5.4 **Statements of** Recommended Practice **(SORPs)**

SORPs are produced for specialised industries or sectors lo supplement accounting standards and other regulatory requirements. SORPs are issued h\ SORP-making bodies that have satisfied criteria laid down by the ASB and developed their SORP in accordance with the ASITs code of practice. The ASM considers a proposed SORP through one of its two advisory committees, the Financial Sector and Other Special Industries Committee and the Public Sector and \ot-for-Proht Committee, to check that it is not in conflict with current accounting practice, current or future FRSs and does not override the legal provisions, FRSs or UITF Abstracts.

Each SORP-making body is required to satisfy the ASB that it has financial reporting problems that require ASB pronouncements to IK supplemented, and that the bod) represents a major part of the industry and shares the ASB commitment to maintaining standards.

Figure 5.3 gives a list of extant SORPs which indicates why there are special industry reporting requirements.

5.6 The Operating and Financial Review (OFR)

The *Operating and Financial Review* statement was issued by the ASB in l"-"o to encourage the development of best practice. It was intended to have persuasive rather than mandatory force. The format was not prescriptive and directors were encouraged to develop the presentation of their OFR in a way that best complements the format of their annual accounts.

Figure 5.2 Extant standards

It was not an accounting standard and was mainly for listed companies for which its use had been recommended by the Financial Reporting Council, the Hundred Group of Finance Directors and the London Stock Exchange.

The OFR was intended lo provide a discussion and interpretation of the main factors and uncertainties of the business and the structure of its financing. While it was not a forecast, it should bring out those aspects of the year under review that were relevant to an assessment of future prospects, to provide a more consistent foundation lor investment decisions. Companies were not required to disclose information that would allow competitors to damage their business.

Figure 5.3 Extant SORPs

Copyrighted image

Because the intention was to assist investors, the OFR should no! be merely a numerical analysis. The emphasis was on providing a readily understood discussion that dealt with both good and bad aspects of the business; that commented on trends, factors and uncertainties that had affected or would affect the results; and that explained the reasons for and the effect of changes in accounting policies.

The statement also offered detailed guidance to support these general principles. For example, a discussion of factors affecting future results could include capital expenditure and the likely benefits expected from it; a discussion of uncertainties affecting future results could include scarcity of raw materials, dependence on major suppliers, skill shortages and product liability. The user needs to know what steps a company has taken to counter such uncertainties. The following is an extract from the Bayer Annual Report 2003:

> To counter risks that could arise from the numerous tax, competition, patent, antitrust and environmental regulations and laws, we make our decisions and engineer our

Copyrighted material

business processes on the basis of comprehensive legal advice provided b) both our own experts and by acknowledged external specialists. We establish provisions in the balance sheet for risks resulting from new laws or legal judgments that apply retroactively.

The financial review part of the statement was intended to explain the capital structure of the business, its treasury policy and the dynamics of its financial position - its sources of liquidity and their application, including the implications of the financing requirements arising from its capital expenditure plans. The following is an extract from the HOC 2003 Annual Report:

> The Group has access to a diverse range of debt finance including commercial paper, public bonds and bank borrowings which, it believes, will be available to meet long-term financing needs. The Group has sufficient facilities to cover likely borrowing needs. Management anticipates that capital expenditure in 2004 will be at a slightly higher level than in 2003 and will be covered by cash inflow from operating activities.

5.6.1 How successful has the OFR been in encouraging companies to disclose risk?

The ASH recommended that companies identify their principal risks and comment on the approach to managing these risks and, in qualitative terms, the nature of the potential impact on results.

It is important, for example, to be aware of how a company manages financial risk. In the age of multinational accounting and economic cycles, important factors are the currencies in which borrowings are made, the use of financial instruments for hedging purposes and the current liquidity position. Risks relating to financial instruments have been the subject ofFRS 13 because of the perceived high risks attached to financial instruments. The following is a brief extract from the I.inde 2006 Annual Report (HOC is now part of this group):

> Our mandatory risk policy guidelines systematically control these financial risks. These set out the type of financial instruments that may be used, the limits for individual transactions and a list of banks with which we have agreements.
>
> To manage credit risk, we rel\ mainl) on the credit ratings of the counter-parties and we limit the extent and duration of anv commercial transactions to be concluded according!). ... Treasury operations are subject to regular reviews by our internal and external auditors, generally once a year. ... The basic risk strategies lor interest, currenc) and liquidity management are determined by the Treasury committee under the overall control of the Chief Financial Officer, which meets at least once a month.

5.6.2 How successful has the OFR been in informing investors of risk?

Although the reporting of risks attaching to financial instruments is being addressed, the reporting of business risks and how management is dealing with them has been woefully lacking. The OFR has, in general, been treated as a PR document, being bland, with little significant effort to highlight in advance the real sources of uncertainties that had the major impacts on returns. The previous OFR of every company that reports unexpected worsening of turnover, profits or liquidity should be examined to determine how these risks were presented in the annual report. Invariably there is little comment until alter the event.

Copyrighted material

5.6.3 How has the OFR been improved?

Mandatory status

In a 1994 research report *Operating and Financial Review: Views of Analysis and Institutional Investors** some analysts believed the OFR would contain useful information, but that market forces would not be sufficient to get companies to produce high-quality reports on a voluntary basis.

The view has been put forward by Zeff that whilst \>ne of the widely applauded leadership steps the ASB has taken is the recommendation that companies include an operating and financial review in their annual reports there is a need for the OFR to be made mandatory and thus subject to the true and fair view'.

The Final Report from The Company Law Review Steering Committee issued in July 2001 proposed in para. 3.34 that there should be a new mandatory OFR and in para. 8.32 that it should contain:

- a review by the directors of the company's operations and finances modelled on current ASH guidance and best practice;
- a discussion and analysis of the performance of the business and main trends and factors
  - underlying the results and financial position, and
  - likely to affect future performance.

Audited status

Some believed that an entirely new set of audit skills was needed to audit an OFR properly.[10] This has been addressed and the Final Report" recommends that the OFR should be subject to review by the company's auditors.

Disclosure of business risks

The profession

The ICAKW's Financial Reporting Committee produced a discussion paper in 1997, *Financial Reporting of Risk - Proposals for a Statement of Business Risk.*

This paper proposed that there should be an additional report in which directors identified key risks and explained how they measured them and how they proposed to deal with them. Such a report would allow investors to understand the uncertainties that their board faced, e.g. cheap foreign imports, difficulty in obtaining supplies of components and raw materials, effect of adverse publicity about products, expiry of patents for major products. There would, of course, need to be the normal relief from reporting commercially sensitive information, e.g. early negotiations to establish trading alliances where a company's major product is losing the protection of patents.

The government

The objective is to enable users to assess the strategies adopted by the business and the potential for successfully achieving them.

The Final Report proposed that the OFR should include as mandatory items:

- A fair review of the company's business over the year, operating performance, its position at the year-end and material post-year-end events with details of market changes, new-products, changes in market positioning, new and discontinued products and services, and acquisitions and disposals.
- The company's purpose, strategy and principal drivers to allow users to see the criteria

Copyrighted material

by reference to which its success is evaluated, the source from which it derives its success, segmental performance against objectives and competitive positioning.

The Report also proposes further disclosures of material for the following:

- An account of the company's key relationships with employees, customers, suppliers and others on which its success depends, with details of employment policies and practices .HRI policies on creditor payment.
- Corporate go\ernance - values and structures, with details of the company's structures for securing an effective working relationship between members, directors and senior management.
- Dynamics of business such as trends and uncertainties which may affect future performance or investment programmes with details of risks and opportunities, competition and customer/supplier dependency, technological change, financial risks, environmental costs and liabilities and investment in training, research and development, brands, intellectual property.
- Knvironmental policies and performance, including compliance with regulations.
- Policies and performance on community, social, ethical and reputational issues.
- Receipts from, and returns to, shareholders covering distributions and distribution policy and share repurchases.

The above appears detailed but the Report is careful to emphasise that a substantial measure of discretion has been left for directors to determine how usefully to analyse and assess their business and deliberately avoids overprescription, with the risk that involves of rigidity and a 'cookbook' approach.

The proposals appear to follow existing ASH guidelines and best practice and w ill be w elcomed by existing and potential investors.

5.6.4 The revised OFR

The ASH issued a re\ised statement *Operating and Financial Review* in January 2003 which reflected the main thrust of the Company Law Review with its added emphasis on providing information about the husiness objectives and strategy, the expected effect of known trends. the potential effect of risks facing the business and the key performance indicators used by management. The Statement also requires those accounting policies to be highlighted which entailed the particular exercise of judgement in their application and to which the results are most sensitive.

I lowcvcr, given the results of one research project[12] which analysed over 6.000 narrative disclosures in the food processing sector and revealed that only 1% were quantified and forward-looking, it was clear that companies would not provide decision-useful, forward-looking and quantified disclosures without a statutory requirement to do so.

5.6.5 OFR Reporting Standard RS I

The government initially required all listed companies to publish an OFR as from 1 April 2005 which complied with a standard to be issued by the ASH. The ASH published RS 1 in May 2005 which, in the main, followed the requirements discussed above. The intention was that directors should focus on the information needs specific to their company and its shareholders rather than follow a rigid list of items to be disclosed. RS 1 assisted directors in this approach by setting down certain principles and providing illustrations of key Performance Indicators.

Copyrighted material

The OFR's guiding principles

The seven principles were thai the OFR should:

1 retleet the directors' view of the business;

2 focus on matters that are relevant to investors in assessing the strategies adopted and the potential for those strategies to succeed. Whilst maintaining the primacy of meeting investors' needs, directors should take a 'broad view* in deciding what should be included in their OF*'R, on the grounds that the decisions and agendas of other stakeholders can influence the performance and value of a company;

3 have a forward-looking orientation with an anahsis of the main trends and factors which are likely to affect the entity's future development, performance and position;

4 complement as well as supplement the financial statements with additional explanations of amounts included in the financial statements;

5 IK comprehensive and understandable but avoid the inclusion of too much information that is not directly relevant;

6 be balanced and neutral - in this way the OFR can produce reliable information;

7 be comparable over time - the ability to compare with other entities in the same industry or sector is encouraged.

Key Performance Indicators (KPIs)

There has been a concern that OFR would lack quantifiable information. This was addressed with a list of potentially useful KPIs. These covered a wide range of interests including:

- F.conomic measures of ability to create value (with the terms defined)
  - Return on capital employed

    Capital employed defined as Intangible assets/property, plant and equipment + investments + accumulated goodwill amortisation + inventories + trade accounts receivable + other assets including prepaid expenses — non-interesting bearing provisions/liabilities
  - Economic profit type measures

    Economic profit = Profit after tax and minority interests, excluding goodwill amortisation - cost of capital
- Market positioning
  - **Market** position
  - **Market** share

    Market share, being company revenue over estimated market revenue
- Development, performance and position
  - A number of the measures used to monitor the development, performance and position of the company may be traditional financial measures
    - Cash conversion rate: rate at which profit is converted into cash
    - Asset turnover rates
  - Directors often supplement these with other measures common to their industry to monitor their progress towards stated objectives, e.g.
    - Average revenue per user (customer)

      Number of subscribers

Copyrighted material

- Sales per square foot
- Percentage of revenue from new products

  Number of products sold per customer
- Products in the development pipeline
- Cost per unit produced

• Persons with whom the entity has relations and which could have a significant impact
- Customers: how do they view the service provided?
- Measure customer retention
- Employees: how do they feel about the company:
- Employee satisfaction surveys
- Health and safetv measures
- Suppliers: how do they view the company?
- Regulators: how do they **\ie\v** the company?

• Environmental matters
- Quantified measures of water and **energ)** usage

• Social and community issues
- Public health issues, such as obesity, perceived safety issues related to high use of mobile phones
- Social risks existing in the supply chain such as the use of child labour and payment of fair wages
- Diversity in either the employee or customer base
- Impact on the local community, e.g. noise, pollution, transport congestion
- Indigenous and human rights issues relating to communities local to overseas operations

• Receipts from and payments to shareholders

• Other resources
- Brand strength
- Intellectual property

  Intangible assets.

5.6.6 Reporting Statement: Operating and Financial Review

In 2006 the ASH changed the status of RS 1 following the legal requirements for the OFR being repealed in the Companies Act 1985 (Operating and Financial Review) (Repeal) Regulations 2005 (SI 2005/3442). RS 1 was reissued as a Reporting Statement, providing best practice guidance rather than as a statutory requirement. The ASH position however still remains that whether or not the OFR is a statutory requirement, the publication of a narrative explanation of a company's development, performance, position and prospects should continue to be encouraged as an important element of best practice. The reporting statement gives companies clear guidance and a framework within which they can achieve transparent and open communication with their shareholders. Legislation remains in place requiring companies to prepare an enhanced review of their business (the Business Review) in the directors' report, in line with the provisions of the 2003 EU Accounts Modernisation Directive.

Copyrighted material

5.6.7 Business Review in the Directors' Report

The intention is that the Re\ie\v should provide a balanced and comprehensive analysis of the business including social and environmental aspects. The government is taking the view that matters required by the Reporting Statement such as 'Trends and factors affecting the development, performance and position of the business and KPIs' would be required lo he included in the Business Review *where necessary,* i.e. in those circumstances where it were thought to be necessary in order to provide a balanced and comprehensive analysis of the development, performance and position of the business, or to describe the principal risks and uncertainties facing the business. It could well be that in practice companies will satisfy ihe requirements of the Reporting Statement and include within the Business Re\ iew a cut-down version of that information.

5.6.8 ASB review of narrative reporting

In 2006 the ASB (hup://www.accountancyfoundation.com/asb/press/publ22.S-htnil) carried out reviews of narrative reporting by FTSK 100 companies. It identified that there was good reporting of descriptions of their business and markets, strategies and objectives and the current development and performance of the business and an increase in companies providing environmental and social information.

However, it also identified the need for improvement in identifying Key financial and turn-financial Performance Indicators, describing off balance sheet intangible assets such as reputation and brand strength and describing the principal risks with an explanation as to how these will be managed.

As far as forward-looking information was concerned, it might well be that the protection offered by the safe harhnur provisions in the Companies Act 2006 could encourage companies to avoid choosing to make bland statements that are of little use to shareholders. The safe harbour provisions protect directors from civil liability in respect ol omissions or statements made in the narrative reports unless the omissions were to dishonestlv conceal material information or the statements were untrue or misleading and made recklessly or in bad fflith,

5.7 The Financial Reporting Review Panel

The Financial Reporting Review Panel (FRRP) is completely independent of the ASB. It has a solicitor as chairman and the other members include accountants, bankers and lawyers. Its role is to review material departures from accounting standards and, where financial statements are defective, to require the company to take appropriate remedial action. It operates under section 45B of the Companies Act 2006, which has given the courts power to order a company to rectify defective accounts. However, it has to date made no such court application and has instead relied on its opinion to be persuasive.

The FRRP prefers to ileal w ith defects by agreement, although it has threatened applying to the courts. For example, in the accounts of Trafalgar House for the year ended 30 September 1991 certain fixed assets had been reclassified from current to fixed assets - these properties were then written down in value and the reduction charged to reserves, so avoiding the profit and loss account. The I'RRP disagreed with this treatment and, following an apparent reluctance by the directors of Trafalgar I louse to accept their opinion, informed the directors that they were 'minded to make an application to the court ... requiring the directors of the company to prepare revised accounts*. The directors then

Copyrighted material

agreed to make requisite changes to their 30 September 1992 accounts. As a result of the FRRP action the 1992 revised accounts saw a reported £122.5 million profit turned into a £30 million loss. This was clearly a significant intervention by the regulators and a warning to companies that the FRRP was not toothless.

The FRRP cannot create standards. If a company has used an inappropriate accounting policy that contravenes a standard, the FRRP can act. If there is no standard and a company chooses the most favourable from two or more accounting policies, the FRRP cannot act.

It has a policing role with responsibility for overseeing some 2,500 companies. Until 2003 it only became involved as a result of a complaint by an individual, a referral from the Stock Exchange, e.g. where accounts have been qualified by an auditor lor non-compliance, or following media comment.

FRRP public statements

The FRRP has made a number of public statements setting out its findings. Some of these are listed in Figure 5.4.

A research study" into companies that have been the subject of a public statement suggests that when a firm's performance comes under severe strain, even apparently well-governed firms can succumb to the pressure for creative accounting, and that good governance alone is not a sufficient condition for ensuring high-quality financial reporting. The researchers compared these companies with a control group and a further interesting finding was that there were fewer Big Five auditors in the FRRP population - the researchers commented that this could be interpreted in different ways, e.g. it could be an indication that the Panel prefers to avoid confrontation with the large audit firms because of an increased risk of losing the case or a reflection of the fact that these audit firms are better at managing the politics of the imestigation process and negotiating a resolution that does not lead to a public censure.

Criticism of the FRRP for being reactive

The FRRP has, since its establishment in 1988, been a reactive body responding to issues appearing in individual sets of accounts to which it is alerted by public or specific complaint. This led to the criticism that the FRRP was not addressing significant financial reporting issues and was simply dealing with disclosure matters that had readily been detected. The Panel consequent!) commissioned a pilot stud\ in 2(100 which reviewed selected companies

Figure 5.4 FRRP - public statements

for non-compliance. The pilot study revealed no major incidents of non-compliance and in November 2001 the FRRP decided that a proactive approach was unnecessary.

Investor pressure for a more proactive stance

However, regulatory bodies have to be responsive to a material change in investor attitudes and act if there is likely to be a loss of confidence in financial reports which could damage the capital markets. Such a loss of confidence anise following the US accounting scandals such as Enron. Regulators could no longer be simply reactive even though there had been no evidence in the UK of material non-compliance.

Proactive stance - European initiative

The (Committee of European Securities Regulators (CESR), at the request of the European Commission, has de\eloped proposals which would require enforcement bodies to take a proactive approach. In its *Proposal Statement of Principles of Enforcement of Accounting, Standards in Europe* issued in 2002, it proposed that there should be a selection of companies and documents to be examined using a risk-based approach or a mixed model where a risk-based approach is combined with a rotation and/or a sampling approach - a pure rotation approach or a pure reactive approach would not be acceptable.[14]

Proactive stance - UK initiative

The Coordinating Group on Accounting and Auditing Issues recommended in its Final Report in 2003 that the FRRP should press ahead urgently with developing a proactive element to its work.[1']

The FRRP response to the new requirement for a proactive approach

The Panel proposed that there should be:

- a stepped implementation with a minimum of 300 accounts being reviewed from 2004;
- the development of a risk-based approach to the selection of published accounts taking account of the risk that a particular set of accounts will not give a true and fair view of market stability and investor confidence.

Reviews should comprise an initial desk-check of selected risk areas or whole sets of accounts followed, where appropriate, with correspondence to chairpersons.

Whilst adopting a proactive approach, the FRRP has raised concerns that stakeholders might have a false expectation that the Panel is providing a guarantee that financial statements are true and fair, stressing that no system of enforcement can or should guarantee the integrity of a financial reporting regime.

The Financial Reporting Review Panel Activity Report

Following a review of 284 sets of accounts in 2006 the Financial Reporting Review Panel reported (FRRP PN 97) that it had found no evidence of systemic weakness. The Panel reiterated its belief that the best regulation is by agreement and reported that its consensual approach to enforcement continued to attract the support of the companies whose accounts it regulates.

The Financial Reporting Review Panel has announced *that* in selecting companv accounts for review in 2007 it has followed a risk-based assessment in prioritising sectors and will focus on:

- the travel, telccoms and media sectors; and

Copyrighted material

- it will continue to monitor retail and utility companies; and
- it will continue to monitor IFRS compliance.

The KRR1* has been active and in 2(1(16 had reviewed the accounts of 2S4 companies and required 49 of these to make changes to the financial reporting policies when preparing future accounts.

5.8 The Financial Services Authority

The Stock Exchange was probabh the earliest promulgator of rules and regulations governing financial statements. Many of its requirements have been incorporated into statute and standards, although there are still additional demands that are not yet in either.

The role of L'K listing authority was transferred to the Financial Services Authority (FSA)on I May 2(100.

Any public company wishing to have its shares bought and sold on the Stock Exchange must first secure what is called a quotation or listing on the Exchange. Securing such a listing is not a formality. The protection of prospective shareholders is the prime objecti\e of the Exchange and in furtherance of this objective a company wishing to be listed is subjected to a prolonged and deep investigation. The investigation looks at its history, the Calibre of its management, its financial condition, its future prospects and its constitution. A successful applicant must then conform with the rules of the Stock Exchange. These rules are incorporated in the *Stock Exchange (Listing) Regulations and its Admission of Securities to Listing.*

The rules cover a wide range ol information, e.g.:

- from the short term objective of maintaining fair trading conditions with the requirement that price-sensitive information must be released in a way that ensures all users ha\e simultaneous access to the same information;
- to the longer-term objective ol enforcing good corporate governance with the requirement for companies to state how they have applied the principles set out in the Combined Code.

The Combined Code is having an increasingly significant influence and we briefly discuss its development and structure below.

5.9 The Revised Combined Code (June 2006)

The Financial Reporting Council has revised the original Combined Code'" which was issued in 1998. The original Code was largely based on the Cadbury Report (1992) supplemented by additional requirements such as those arising from the Cireenbury Report (1995) which dealt with directors' remuneration and the llampel Report (1998) which dealt with directors' contracts (see Chapter *M)* for more detailed discussion of these reports). A few changes have been made to the 2003 revised version of the Combined Code to adopt changes that had been supported in the public consultation exercise. These changes allow shareholders \oting by proxy the option of withholding their vote on a resolution, encourage companies to publish the details of proxies lodged on resolutions where votes are taken on a show of hands and allow the company chairman to sit on the remuneration committee if considered independent on appointment. The current revision is, therefore, part of an evolving process.

Copyrighted material

5.9.1 The Cadbury Committee Report[17]

The process started in 1991 with the setting up by the Financial Reporting Council, the London Stock Exchange and the accounting profession of the Cadbury Committee to report on the financial aspects of corporate governance. A year later the committee produced the Cadbury Committee Report, which set out a voluntary Code of Best Practice based on openness, integrity and accountability.

Although the Code was voluntary, boards of directors were responsible for applying its provisions, stating whether the accounts comply with the Code, and explaining if they did not.

The Code made proposals in four areas relating to (1) the board of directors, (2) non-executive directors, (3) executive directors and (4) controls and reporting. The general thrust of the proposals was that there should be key safeguards. These were as follows:

- The board should retain control over important decisions such as major capital expenditure programmes, bank borrowings and material loans.
- Non-executive directors should be able to exert significant influence bv virtue of number anil experience.
- Audit committees consisting of non-executive directors should have clear terms of reference.
- The position of chairman should be separate from that of chief executive.
- Financial reporting and auditing systems should provide full disclosure at an appropriate time to affect decisions.

5.9.2 The structure of the original Combined Code

The original Code made an interesting development by separating its proposals into two parts:

- Part 1 containing Principles of Good Governance relating to

  A: Directors

  I J: Directors[1] Remuneration

  C: Relations with Shareholders

  D: Accountabilitv and Audit
- Part 2 containing Codes of Best Practice with procedures to make the Principles operational.

5.9.3 The Revised Combined Code

When revising the Code in 2003, the FRC continued to distinguish between broad principles (which companies are largely free to choose their own method of implementing) and detailed code provisions {which companies are required to say whether they have complied with and, where the\ have not complied, to explain why not). The intention was to combine flexibility over detailed implementation with clarity where there was non-compliance.

The Revised Code separates the Principles into Main Principles and Supporting Principles with detailed Code Provisions. The six Principles that relate to Directors coxer:

AI The Bo aril
A2 Chairman and Chief Executive
A3 Hoard balance and independence

Copyrighted material

A4 Appointments to the Hoard
AS Information and professional development
Aft Performance evaluation

As an illustration of the level of detail specified in the Revised Code, the Principles (Al) and Provisions (Al.l to AI.5) relating to The Hoard are set out below.

A J The Board

Main Principle

Even* company should be headed by an effecthe board, which is collectixely responsible for the success of the company.

Supporting Principles

- The board's role is to provide entrepreneurial leadership of the company within a framework of prudent and effective controls which enables risk to be assessed and managed.
- The board should
  - set the company's strategic aims;
  - ensure thai the necessary financial and human resources are in place for the company to meet its objectives; and
  - review management performance.
- The board should
  - set the company's values and standards; and
  - ensure that its obligations to its shareholders and others are understood and met.
- All directors must take decisions objectively in the interests of the company.
- As part of their role as members of a unitary board, non-executive directors should
  - constructively challenge and help develop proposals on strategy;
  - scrutinise the performance of management in meeting agreed goals and objectives and monitor the reporting of performance;
  - satisfy themsehes on the integrity of financial information and that financial controls and systems of risk management are robust and defensible.
- As non-executive directors they
  - are responsible for determining appropriate levels of remuneration of executive directors; and
  - have a prime role in appointing, and where necessary removing, executive directors, and in succession planning.

Code Provisions

A. 1.1 The board should meet sufficientlv reirularlv to discharge its duties effectively. There should be a formal schedule of matters specifically reserved for its decision. The annual report should include a statement of how the board operates, including a high level statement of which types of decisions are to be taken by the board and which are to be delegated to management.

A. 1.2 The annual report should identify the chairman, the deputy chairman (where there is one), the chief executive, the senior independent director and the chairmen and members of the nomination, audit and remuneration committees. It should also set

Copyrighted material

out the number of meetings of the board and those committees, and individual attendance by directors.

A. 1.3 The chairman should hold meetings with the non-executive directors without the executives present. Led by the senior independent director, the non-executive directors should meet without the chairman present at least annually to appraise the chairman's performance (as described in A.6.1) and on such other occasions as are deemed appropriate.

A. 1.4 Where directors have concerns which cannot be resolved about the running of the company or a proposed action, they should ensure that their concerns are recorded in the board minutes. On resignation, a non-executive director should provide a written statement to the chairman, for circulation to the board, if they have any such concerns.

A. 1.5 The company should arrange appropriate insurance cover in respect of legal action against its directors.

5.9.4 Revised Combined Code

The Financial Reporting Council published an updated version of the Combined Code on Corporate Governance in 2006 which made a small number of changes to the previous version which was published in 2003. These changes allow the company chairman to sit on the remuneration committee provided he is considered independent on appointment and makes the use of proxies more transparent. Transparency was improved by allowing shareholders who vote by proxy the option of withholding their vote on a resolution and encouraging companies to publish details of proxies where votes are taken on a show of hands.

5.10 Interim reports following Cadbury

The Cadbun Committee recommended in 1992 that the ASli, in conjunction with the London Stock Exchange, should clarify the accounting principles that companies should follow in preparing Interim Reports. At the request of the ASM. the Financial Reporting Committee of the ICAKW published a consultative paper in 1993 which formed the basis for the ASITs 1996 Exposure Draft. The Exposure Draft was developed in consultation with the London Stock Exchange, The Hundred Group of Finance Directors, the Institute of Investment Management and Research, the National Association of Pension Funds, the Big Six accounting firms and the Auditing Practices Hoard.

There has also been significant academic research, for example by I lussey and Woolfc.[1]*

As Sir David Tweed ie commented, 'Producing the ASH Statement has been very much a co-operative effort. It carries the commendation of the Financial Reporting Council, the Hundred Group and both the London and Irish Stock Exchanges. The authoritative backing of these bodies gives the Statement the best possible start in life and we greatly appreciate their support.'

In 1998 the ASH published its 'best practice* Statement on *Interim Reports}"* Like the Operating and Financial Review it is non-mandatory.

What is best practice?

- A shorter period for publishing.

Copyrighted materia

The London Stock Exchange allowed four months to publish. The ASB propose that this should be reduced to two months.

- Use of the discrete method.
  The ASB does not support the integral approach which is sometimes followed. Under this approach the interim report is merely a proportion of the estimate of the full year's results.

  Instead, it favours the discrete method which uses the same measurement and recognition bases and accounting policies as used in the annual accounts. Consequently, the interim report should show what actually happened in the period; e.g. seasonal businesses will disclose results which differ markedly between the first half and second half of the vear.

What does the ASB recommend to appear in interim reports?

The Statement recommends that interim reports should contain:

(i) A management commentary to highlight and explain significant events and trends as required already by the London Stock Kxchange but, in addition, to follow the end-of-ycar practice by disclosing turnover and profit by segment and the turnover and profits of discontinued operations and acquisitions.

(ii) A summarised profit and loss account and balance sheet with classifications consistent with the \ear-end accounts and supported by a Statement of Total Recognised Gains and Losses.

(iii) A summarised cash flow statement using FRS 1 *Cash Flow Statements* headings and reconciling operating profit to Operating cash Mow and cash in period to movement in net debt.

The Statement was much needed. Current practice varied widely and did not always show what aetualh happened in the period and did not provide investors with information that was either timeh or relevant. The Statement should go a long way towards securing a general improvement in consistency, comparability and quality of interim reporting. It reflects a welcome and fruitful collaborative exercise.'"

As a result of the Statement, companies are encouraged to highlight and explain the most relevant and appropriate figures in their interim reports, to give a succinct but balanced picture with an emphasis on reporting trends and the impact of events and activities since the last lull annual report.

The ASB has also addressed preliminary announcements and issued a 'best practice' Statement on *Preliminary Announcements* in 1W7 aimed at improving the timeliness, quality, relevance and consistency of preliminary announcements whilst complying with the need for reliability.

Will there be further developments?

The US Securities and Exchange Commission requires listed companies to publish quarterly reports and UK companies with a US listing are already complying.[21] A similar requirement will no doubt be made for UK listed companies to keep London abreast of best international practice. Although preliminary and interim results are highly price-sensitive, there has been no requirement for them to be audited or reviewed. In the USA there is a suggestion that the quarterly reports should be reviewed and, il" this is adopted, a review by the auditors of UK companies would seem to he a natural sequel.

Copyrighted material

European requirements

A Directive on the harmonisation of transparency requirements for security issuers was issued in 2004 (http://eurie\.europa.eu/IxxUriServ/siie/en/oj/2(HH/l_.V)0/lJ9020041231cnOO380O57.pdf) aimed at raising the quality of information available to investors on companies* performance and financial position in order to provide better investor protection, increase investor trust, enhance investor confidence and create better functioning European capital markets.

There was an initial proposal that there should be quarterly reports similar in content to half-yearly reports. However, there was a contrary view that such quarterly reporting had not prevented Knron occurring and that it encourages short-termism, e.g. Porsche ACJ has refused to provide quarterly reports, arguing that such a requirement was a significant cause of high volatility of share prices on the stock market."

In taking account of such resistance the Directive has set minimum requirements, namely, that there should be quarterly financial information to include those key data currently required under existing Community law for half-yearly reporting, i.e. net turnover, profit and loss before or after deduction of tax, supplemented by trend information on the future company development - thus enabling investors to judge achie\ed results and also to take due account of am long-term strategy.

Whilst recognising the arguments that were made against quarterly reporting in formulating the Directives minimum approach, it should be noted there are already higher requirements set in some jurisdictions, e.g. the UK, and by some stock exchanges, e.g. Euronext.

Impact on UK practice

The Directive must IK* implemented by Member Stales by 2007 and both IIM Treasury and the ESA arc working out a timetable for consultation and implementation of the Directive in the UK,

Has the Cad bury Report resolved the problems of corporate governance?

Critics could argue with some justification that it is futile to rel\ on non-executive directors to monitor executive directors. Executive and non-executive directors are perceived to be playing musical chairs at each other's boards, with little time or facility for am detailed rule. For example, a minister of the Crown who acted as non-executive director for a company in the defence industry has gone on record saying that he was unaware of major business decisions made by the company. This only adds force to the view thai they are engaged onl\ for their contacts and not for any major corporate governance role. Even executive directors question whether it is feasible for part-time directors to make am \alid comment on 1 he-work of the full-time professional directors, and successful entrepreneurs have been known to see them simply as a waste of money. I low ever, there is clearly important progress being made by the ASH in developing voluntary 'best practice[1] statements such as *Interim Reports.*

An indication that the ASB's best practice statement is taking effect is proxided by a survey of interim reports comparing 1995 with 1999 which showed that 7S°i> of companies now give cash flow information (1995: 61%) and there has been an increase in explanatory narrative sections, with 38% of companies exceeding 1,000 words (1995: 14%).**

5.11 Developments for small companies

Small firms play a major role in the L'K. economy and are seen to be the main job creators. Statistics published by the DTI *(Small and Medium Enterprise (SME) Statistics for the*

Copyrighted material

United Kingdom, 1997, URN 98/92, July 1998) showed thai in 1997 there were around 3.7 million businesses in the UK. Of these, 2.5 million were sole traders or partners without employees. There were 1.2 million companies on the Companies House register and, of these, around 12,000 (1°«) were public companies *(Companies in* /°'V7/'/V (The Companies Annual Report 1997-199S), The Stationery Office) with only about 2,450 listed on the Stock Exchange. Of the companies on the register, around 7,000 had more than 250 employees, 26,000 had between 50 and 250 employees, and around 1.01 million had nine or fewer employees.

Certain companies are relieved of statutory and mandatory requirements on account of their size.

5.1 I.I Statutory requirements

Every year the directors are required to submit accounts to the shareholders and file a copy with the Registrar of Companies. In recognition of the cost implications and need for different levels of privacy, there is provision for small and medium-sized companies to file abbreviated accounts,

A small company satislies two or more of the following conditions:

- Turnover does not exceed j£5.6 million.
- Assets do not exceed £2.8 million.
- Average number of employees does not exceed 50.

The company is excused from tiling a profit and loss account, and the directors' report and balance sheet need only be an abbreviated version disclosing major asset and liability headings. Its privacy is protected by excusing disclosure of directors' emoluments.

A medium-sized company satisfies two or more of the following conditions:

- Turnover does not exceed £22.8 million.
- Assets do not exceed £11.4 million.
- Average number of employees does not exceed 250.

It is excused far less than a small company: the major concession is that it need not disclose sales turnover and cost of sales, and the profit and loss account starts with the gross profit figure. This is to protect its competitive position.

5.11.2 Mandatory requirements

The approach by the standard setters has generally been to require all companies to comply with SSAPs and FRSs. This can be justified on the grounds that compliance is necessary in order to present a true and fair view. Critics maintain that small companies might well never enter into transactions that tall within a standard, e.g. finance leasing, and that they should therefore be excused from compliance with the majority of standards. This is a weak position to take. After all, if a company actually does enter into a transaction for which a standard exists, it is difficult lo see how it could l>e permitted to account for it in a non-standard wav.

However, there is a legitimate interest in deregulation and a working party was set up by the CCAB at the request of the ASB to carry out a consultation exercise to assess whether companies should be excused from complying on the grounds of size or public interest.

From the consultations[-'1] there was clear support for some relief from accounting standards to be based on size or a combination of size and public interest. The ASB accepted the

Copyrighted material

recommendations of the CCAB Working Party and issued the FRSSE[2]* in November 1997. Recognising thai there was concern as to the legality of setting different measurement and disclosure requirements, the ASB took legal advice which confirmed that smaller entities can properly be allowed exemptions or differing treatments in standards and UlTFs provided such differences were justified on rational grounds.

How can rational grounds be established?

The test as to whether a decision is rational is based on obtaining answers to nine questions. If there are more negative responses than positive, there are rational grounds for a different treatment. The nine questions can be classified as follows:

Generic relevance

1. Is the standard essential practice for all entities?
2. Is the standard likelv to IK widelv relevant to small entities?

Proprietary relevance

3. Would the treatment required by the standard IK readily recognised by the proprietor or manager as corresponding to their understanding ot the transaction?

Relevant measurement requirements

4. Is the treatment compatible with that used by the Inland Revenue in computing tax?
5. Are the measurement methods in a standard reasonabh practical for small entities?
6. Is the accounting treatment the least cumbersome?

User relevance

7. Is the standard likely to meet information needs and legitimate expectations of the users?
8. Is the disclosure likely to be meaningful and comprehensible to users?

Expanding statutory provision

9. Do the requirements of the standard significantly augment the treatment required by statute?

How are individual standards dealt with in the FRSSE?

Standards have been dealt with in seven ways as explained in (a) *to* (g) below:

(a) Adopted without change

FRSSK adopted certain standards and L'lTFs without change.

(b) Not addressed

Certain standards were not addressed in the FRSSK, e.g. FRS 22 Earnings per share.

(c) Statements relating to groups are cross-referenced

If group accounts are to be prepared the FRSSK contains the cross-references required, e.g to FRS 2 *Accounting for Subsidiary Vndcrta kings.*

(d) Disclosure requirements removed

Certain standards apply but the disclosure requirement is removed, e.g. FRS 10 *Goodwill and Intangible Assets.*

Copyrighted material

(e) Disclosure requirements reduced

Certain standards apply but there is a reduced disclosure requirement, e.g. SSAP 9 *Stocks and Long- Term Contracts* applies but there is no requirement to sub-classify stock nor to disclose the accounting policy.

(0 Increased requirements

Certain standards are included with certain of the requirements reduced and other requirements increased, e.g. under FRS 8 *Related Party Disclosures* a new paragraph has been added, clarifying that the standard requires the disclosure of directors' personal guarantees for their company's borrowings.

(g) Main requirements included

Certain standards have their main requirements included, e.g. FRS 16 *Current Tax,* FRS 18 *Accounting Policies,* FRS 19 *Deferred Tax.*

How unanimous was the response to the consultation exercise?

As one would expect, reactions were mixed with supporters both for excluding and for retaining a particular standard. For example, some commentators who represented the main users suggested that the cash How statement should also be required from smaller entities. Their argument was that the management of cash is crucial in small, as well as large, businesses and that n cash flow statement provided a useful focus for discussions with management as well as a reference point for subsequent more detailed analysis.

The CC AH Working Part), however, accepted the arguments of those commentators who supported the exclusion of cash flow statements. Their arguments were:

- FRS 1 already exempts small entities from preparing a statement.
- For many small businesses in which transactions are straightforward, the cash (low statement adds little to what was already apparent from the balance sheet and profit and loss account.
- The gap between the period-end and the date of finalising the financial statements may be of such a length (up to ten months) as to limit the usefulness of any cash flow information.
- Managers in small businesses are well aware of the need to manage cash effectively. Their mechanisms for doing so may be informal but little would be added by a requirement for a cash flow statement in annual accounts prepared some months after period-end.

The ASH itself, whilst recognising that cash flow statements were not mandatory under FRS I for smaller entities, believed that a cash flow statement is an important aid to the understanding of an entity's financial position and performance and therefore included in the FRSSK a Voluntary Disclosures section which recommended that smaller entities present a simplified cash flow statement using the indirect method.

Does the FRSSE improve the information provided to users?

It would seem reasonable to assume that the ASH exists primarily to regulate the financial reporting of the 2,450 or so companies listed on the London Stock Exchange and has had little time to consider the million other companies that prepare and file accounts.

There are two clear adverse effects of this;

- The lack of adequate research by the ASH into the information needs of the users of accounts of smaller and medium-sized companies means, according to some researchers/[6] that the FRSSK has been produced without proper regard to those needs.

Copyrighted material

- The exercise started from the wrong end of the scale, according to the .Small Practitioners Association,-' in that it started with the standards designed for large public companies and then went through the nine questions approach to decide which of these to include in the FRSSK. A more logical approach would have been to have carried out the research suggested by Dugdale, Hussey and Jarvis'[H] and developed positive standards that satis-tied identilied user needs.

However, given the pressure to establish appropriate FRSs for listed companies and to maintain a presence in the international standard-setting scene, there seems little prospect that ASH resources could be stretched lo embrace the needs of the one million non-listed companies.

One could reasonably ask questions such as:

- Why should non-listed companies require ten months to prepare and tile accounts?
- Why should this be accepted by the CCAB working party as actual justification for not requiring a cash flow statement?
- Is it feasible, or indeed even desirable, to expect the ASB to be concerned with non-listed company reporting given that almost 100% of the time since it was set up has been devoted to the reporting requirements of listed companies?

How will the FRSSE be kept up to date?

The ASH has set up an advisory committee, the Qmimittee on Accounting for Smaller Entities, chaired by Professor Whittington, to assist in updating and revising the FRSSK periodically but any change in the FRSSE as a result of new standards, e.g. FRS 10, will be the subject of public consultation.

In December 2001 the ASB issued a revised FRSSK which came into effect in June 2002. Although the FRSSK is revised annually it does lag behind the issue of individual FRSs. It has been suggested that one way to overcome this would be to insert a note in each new FRS as to its applicability to small enterprises.[29]

In February 2001 the ASB published for comment a Discussion Paper reviewing its FRSSK. The objective of the paper was to seek respondents[1] views on whether, in its present form, the FRSSE best met users' needs and whether any fundamental changes should be considered to the way in which it was prepared and presented. The response was that it was widely used and generally valued by practitioners. There is the view that accounts prepared in accordance with the FRSSK can provide information that is more meaningful and understandable to owner-managers than accounts complying with Big GAAP. I lowever, there is a contrary view'" that whilst external accountants may consider and adopt the FRSSK, it is questionable whether directors have been involved in such consideration as they are too busy running their businesses and surviving.

The Companies Act 2006

The major business benefits for private companies include:

- Simpler model Articles of Association for private companies, reflecting the way small companies operate.
- A separate, comprehensive •code* of accounting and reporting requirements for small companies.
- Private companies will not be required to have a company secretan.
- Private companies will not *IM:*^\ to hold an annual general meeting unless they positively opt to do so.

Copyrighted materia

- It will be easier for companies to take decisions bv written resolutions.
- Private companies will no longer be prohibited from providing financial assistance for the purchase til their own shares.
- There will be simpler rules on share capital, removing provisions thai are largely irrelevant to the vast majority of private companies and their creditors.

5.11.3 ASB's one stop shop approach

A Discussion Paper, ./ *'Oue Stop Shop' Financial Reporting Standard fir Smaller Entities {FRSSF),* was issued by the ASH in March 2004 which proposed that the accounting requirements of the Companies Act 1'W5 should be included within the FR.SSF. to provide a single source lor Inrth legislation and accounting standards. This was followed by an Exposure Draft *Intendment to the FRSSF.* which adopted the one-slop approach as well as including updating amendments relating to FRS 5 *Application Sole G {revenue recognition)* and FRS 21 *Events [Iter the Balance Sheet Date,* Responses to the Discussion Paper indicated strung support for the one stop approach.

The revised FRSSE

The revised FRSSF. was effective from January 2005 and, following consultation through the *One-Hop shop* Discussion Paper, now reflects the accounting requirements in com pan) law for small companies. A further revision has been made effective from 2007.

5.11.4 How does the UK approach compare with that in the developing world?

The United Nations Conference on Trade and Development (UMTAD) has a working group of experts on international standards of accounting and reporting (ISAR) which continued to discuss the accounting needs of small and medium-sized enterprises in 2001.[3'] In 2003 ISAR produced as guidance for member governments a condensed set of standards based on International Accounting Standards (IFRSs) for entities in which there was no public interest. This initiative was in part responsible for the I ASH giving SMKs more attention leading to the issue in 2004 of a Discussion Paper, *Preliminary Views on Accounting Standards fir Small and Medium-sized Entities (SMEs).* This is because such enterprises are regarded by governments in developing countries as important generators of employment and economic growth. Many countries have many businesses that keep no records and pa\ no taxes, but when the) want to grow the) come within regulations and are subject to additional costs and regulator) requirements.'[2] As far as accounting requirements are concerned, it is suggested that a way forward would be to follow the system being developed in West Africa where the micro-business starts with simple cash accounting, and then progresses to accrual accounting and finall) compliance with International Accounting Standards. In the developing world, it is fell that accounting hurdles are too high and a progressive system of accounting is required as seen in West Africa. Man) small and medium-sized enterprises in the UK are halfwa\ along the spectrum with accrual accounting and audited accounts but, as we have seen above, there are still calls in the UK for a reduction in the regulatory burden and man) small enterprises are operating outside the formal system, keeping no records and paying no tax.

Copyrighted material

5.11.5 What is the IASB position?

The **IASIJ** issued a Discussion Paper, *Preliminary I tews on Accounting Standards for Small ami Medium-sized Entities,* in June 21MH. The proposal is to move away from the si/c tests towards a definition based on qualitative factors such as public accountability whereby an SMK would be a business that does not ha\e public accountability. Public accountability is implied if outside stakeholders have a high decree of either investment, commercial or social interest and if the majority of stakeholders have no alternative to the external financial report for financial information. Suggested criteria that indicate that public accountability exists include the provision of a public service, the holding of funds in a fiduciary capacity and the intention to raise funds public!}.

Given the move from a si/e test to a qualitative test it is proposed to describe companies that satisf) the criteria for adopting SMK standards with a different term to SMK.

The decision whether a business should IK* permitted to adopt IASB SMK standards will be left to national jurisdictions subject to the right of any of the owners to require compli-ance with the full II'RSs.

It is interesting to note some of the responses to the Discussion Paper - these showed that:

- an overwhelming majority of respondents believed that full IFRS was not suitable for all entities;
- a majority agreed that the IASH should complete the S.MK project b\ starting with full IFRS and working back to SMK standards; there was very little support for starting from scratch;
- a majority of respondents agreed that a 'characteristics' approach was a better method of defining SMKs, rather than issuing quantitative guidelines;
- a clear majority agreed that it was likelv that disclosure and presentation modifications to full IFRS would be needed in respect of SMKs having taken into account user needs and cost/benefit analvses.

Taking account of user needs and cost/benefit can be a complex task[il] and requires judge-ments to IK- made. For example:

User needs

Non-publicl} accountable companies ha\e a narrower range of users of their financial state-ments than publicly accountable companies which frequently have a detailed knowledge of the company with the facility to obtain information beyond the financial statements. This means that they ma\ have less need to rely on the published financial statements.

However, whereas with publicly accountable companies there is a clear understanding that the primary user is the equii) investor, the question remains for SMKs as to (a) the primary user, e.g. is it the non-managing owner, the long-term lender, the trade creditor or the tax authorities, and (b) what are the primary user's needs, e.g. maximising long-term growth, medium term viability or short-term liquidity. (Questions remain such as whether the financial statements need to be a stewardship report or decision-useful and. then, how are the characteristics such as relevance, reliability and comparability to be ranked and pri-oritised.

The approach to SMK reporting has varied around the world. For example, in the USA there has not been an SMK reporting regime in the sense of compliance with I'RSs and IFRSs but SMKs have been permitted to prepare financial statements that are tax com-pliant; the IASB has onh recently addressed the topic of SMK reporting; in the UK the

Copyrighted material

ASH has produced I'RSSK, in drafting which il has taken a pragmatic approach when deciding which FRS provisions need not he applied by SMEs.

There is now a general awareness that the users of non-publicly-accountable companies are extreme!) diverse and steps are being taken to in\o!\c them in the standard-setting process, e.g. in Canada the Accounting Standards Hoard (AcSH) established a Differential Reporting Advisory Committee (DRAQ in 2000 as a standing committee to provide input to the standard-setting process by acting as a communication conduit for users, preparers and auditors of SMEs. In its response to the I ASH Discussion Paper, *Preliminary Views on Accounting Standards for Small and Medium-sized Entities (SMEs)*, the AcSH restated that the approach taken by DRAC was to make a decision based on a cost/benefit approach making the interesting point that, as there were often fewer users of the financial statements, the cost per user could be excessive.

However, it appears that the research necessary to provide a rationale and conceptual approach to user needs is still some way off and the pragmatic approach taken by the ASH will inform financial reporting standards for SMEs for some time to come.

Cost/benefit analyses

The benefit versus cost test is particularly relevant for non-publicly-accountable companies and will be an important consideration when deciding on the appropriate reporting disclosure and measurement standards. However, just as it is difficult to identify user needs, so there is a problem identifying the relevant costs and benefits.

First, the costs have to be identified, e.g. those incurred in preparation, review and audit; then quantified and a judgement made as to whether these can be considered high, moderate or low; then the benefits have to be identified, quantified and a similar judgement made as to the level of benefits. This might give a simple rationale for non-compliance with standards if the costs are high and benefits are low but leaves a grey area if there other combinations such as costs low and benefits moderate.

It can be seen from this that there is a large element of estimation involved in identifying the users and their needs, quantifying their benefits, identifying costs and quantifying them and finally agreeing on respective levels and determining what impact this should ha\e on (he reporting standards applied by publicly accountable companies. However, this does provide a framework for input by users, preparers and auditors and transparency in the standard-setting process.

ED for small and medium-sized entities

This ED, issued by the IASB in February 2007, was developed by (a) extracting the fundamental concepts from the IASB *Framework* and the principles and related mandatory guidance from IFRSs and (b) considering the modifications that are appropriate on the basis of users' needs and cost/benefit considerations.

The approach follows that adopted by the ASH with (a) some topics omitted e.g. earnings per share and segment reports, (b) simpler options allowed e.g. expensing rather than capitalising borrowing costs, (c) simpler recognition e.g. following an indicator approach rather than an annual impairment review for goodwill and (d) simpler measurement e.g. using the cost method for associates rather than the equity method. SMKs are not prevented from adopting other options available under full IFRS and may elect to do this if they so decide.

However, there is a pragmatic case for even further simplification such as allowing goodwill to be amortised rather than reviewed for impairment, removing the requirement for consolidated accounts and treating all leases as operating leases with appropriate disclosure of the lease commitment. It will be interesting to see if further simplification is achieved after consultation if not, SMFs in the UK might prefer to continue applying FRSSE.

Copyrighted material

5.12 Evaluation of effectiveness of mandatory regulations

The events in the Skcichlcx pic takeover in 1990 suggest char mandator) regulations will not be effective,*[1]

- In November 1**S° Skctchlc\ reported a tall in pre-tax profits for the half-year ended *M)* December 1989 from *£1.2* million to *£SA* million.
- In Fcbruan IWO Godfre) l)a\is Holdings made a bid to take over Sketchley.
- In March 1990 Sketchley issued a defence document forecasting pre-tax profits for the year ended 31 March 1990 of £6 million. Godfrey Davis Holdings withdrew in the light of these poor results.
- In March 1990, one week later, the Compass Group made a bid. Sketchle> appointed a new management team and this second bid was defeated.

The new management team decided that the company had not made a profit of *£d* million for the year ended 31 March 1990 after all - they had made a loss of *£2* million.

This has a familiar ring. It is ven like the AE1 situation of 1967, almost twentv-hve vears before. The adjustments made are shown in Figure 5.5.

Of course, it is not too diOicult to visualise the motixation of the old and new management teams. The old team would take as favourable a view as possible of the asset values in order to resist a bid. The new team would take as unfavourable a view as possible, so that their performance would appear that much better in the future. It is clear, however, that the adjustments onl> arose on the change of management control, and without such a change we would have been basing investment decisions on a set of accounts that showed a *£fi* million profit rather than a *£2* million loss.

There is often mention oJ the expectation gap, whereby shareholders appear to have lost faith in financial statements. The situation just discussed does little to persuade them that they are wrong. After all, what is the point of a regulator) system that ensures that the accounts present a fair view until the very moment when such a requirement is really necessary?

The area of provisioning and the exercise of judgement has linall\ been addressed by the regulators with the issue of national and international standards dealing with provisions.

Figure 5.5 Sketchley pic 1990 preliminary results

5.12.1 Has the need for standards and effective enforcement fallen since 1990?

We onlv need to look at the unfortunate events with Knron and Ahold to arrive at an answer.

Enron

This is a company that was formed in the mid 1980s and became by the end of the 1990s the seventh-largest company in revenue terms in the USA. However, this concealed the fact that it had off balance sheet debts and that it had overstated its profits by more than S500 million - falling into bankruptcy (the largest in US corporate history) in 2001.

Ahold

In 2003 Ahold, the world's third-largest grocer, reported that its earnings for the past two years were overstated by more than S500 million as a result of local managers recording promotional allowances provided by suppliers to promote their goods at a figure greater than the cash received. This may reflect on the pressure to inflate profits when there are option schemes for managers.

The need for standards and effective enforcement remains.

1 Why is it necessary for financial reporting to be subject to (a) mandatory control and (b) statutory control?

2 How is it possible to make shareholders aware of the significance of the exercise of judgement by directors which can turn profits of £6m into losses of £2m?

3 Discuss the main arguments for dispensing with all SSAPs and FRSs.

4 'The effective working of the financial aspects of a market economy rests on the validity of the underlying premises of integrity in the conduct of business and reliability in the provision of information. Even though in the great majority of cases that presumption is wholly justified, there needs to be strong institutional underpinning.

That institutional framework has been shown to be inadequate. The last two to three years have accordingly seen a series of measures by the financial and business community to strengthen it Amongst these has been the creation of the Financial Reporting Council and the bodies which it m turn established/[3]

Discuss the above statement with particular reference to one of the following institutions: Accounting Standards Board. Financial Reporting Review Panel, Urgent Issues Task Force. Illustrate with reference to publications or decisions from the institution you have chosen to discuss.

5 To what extent do you think FRSs should take economic consequences into account?

6 (a) Name four companies that have been the subject of FRRP pronouncements and explain the reason for FRRP involvement

(b) 'Shorter accounting standards are not a realistic option until both companies and the accountancy profession can be trusted to "fully honour an approach limited to basic principles".' Discuss why companies and the profession cannot be so trusted.

7 Explain the main changes to interim reports following the ASB Statement of Best Practice.

8 The most favoured way to reduce information overload was to have the company filter the available information set based on users' specifications of their needs.'[3]* Discuss how this can be achieved.

9 Review a SORP and discuss the reasons why existing FRSs need to be supplemented.

10 'Quarterly reporting is essential m the interest of transparency and can. therefore, onty be beneficial for investors/ Discuss.

11 'Every European company should be required to prepare their financial reports in accordance with an IFRSSE similar in content to the UK's FRSSE/ Discuss.

12 'Measurement criteria are more important than disclosure requirements for small entities/ Discuss.

Question I

Constructive review of the regulators.

Required:

(a) Obtain a copy of the Financial Reporting Council's Annual Review.
(b) Prepare a profile of the members of the Financial Reporting Council, the ASB and the Financial Reporting Review Panel.
(c) Comment on the strengths and weaknesses revealed by the profile.
(d) Advise (with reasons) on changes that you consider would strengthen one or more of these bodies,

References

1 G. Whittred and I. Zimmer, *Financial Recounting Incentive Effects and Economic Consequences** Holt, Rinchart & Winston, 1992, p. 8.
2 E.R. Farmer, .*Making Sense of Company Reports,* Van Nostrand Rcinhold, 1986, p. 16.
3 Hearing Report, *The .Making of Accounting Standards,* CCAB, 1988.
4 *Framework for the Presentation and Preparation of Financial Statements,* IASC, 1989.
5 *lbid.*$_t$ para. 40.
6 M. Rromwich, *The Economics of Accounting Standard Setting,* Prentice Hall, 1985, p. 78.
7 *Operating and Financial Review,* ASB, 1993.
8 P. Weetman, Rill Collins and K. Davie, *Operating and Financial Review: Views of Analysts and Institutional Investors,* ICAS, 1994.
9 S. ZclT, 'Good so far but difficult decisions ahead'. *Accountancy,* October 1995, p. 96.
10 P. Weetman *et ai, op. cit.*
11 *Modern Company hi w for a Competitive Economy - The Final Report,* Company LtH Review Steering Committee, July 2001, para. 8.63.
12 V. Beanie. B. Mclnnes and S. Fearnlcy, *Through the Eyes of .Management: A Study of Sanative Disclosures.* Centre for Business Performance, ICAKW, June 2002.
13 K. Peasnell, P. Pope and S. Young. 'Breaking the rules'. *Accountancy International,* February 2000, p. 76.
14 CESR, *Proposed Statement of Principles of Enforcement of Accounting Standards in Europe,* CESR02-188b Principle 13, October 2002.
15 Coordinating Group on Accounting and Auditing Issues, *Final Report,* January 2003, para. 4.22.
16 *Committee on Corporate Governance: The Combined Code,* Gee, 1998.
17 *Report of the Committee on the Financial Aspects of Corporate Governance,* Gee, 1992.
18 R. Huney and S. Woolfc, *Interim Statements and Preliminary Profit Announcements,* ICAEW Research Roard, 1994.
19 *Interim Reports,* ASB, 1998.
20 Hannah King, 'What's the latest on interim reports?*. *Accountancy,* October 1997, p. 88.
21 K. Bagshaw, *Preliminary Announcements: A Guide to Best Practice and Interim Financial Reporting: A Guide to Best Practice,* Accountancy Rooks, 1999.
22 *The Times,* 'Porsche tiles lawsuit against Deutsche Bourse", 8 April 2003, p. 21.
23 *Progress in the Interim: Surveying Corporate Half Yearly Reporting,* Arthur Andersen, 1999.
24 A consultative document *Exemptions from Standards on Grounds of Size or Public Interest,* CCAB, November 1994; and a paper *Designed to Fit - A Financial Reporting Standard for Smaller Entities,* CCAB, December 1995.
25 *Financial Reporting Standard for Smaller Entities,* ASR, 1997.
26 D. Dugdale, J. I lussey and R. Jams. 'Can less mean more?'. *Certified Accountant,* November 1997, pp. 32-33.
27 'FRSSE: OK, not perfect'. *Accountancy,* December 1997, p. 11.
28 D. Dugdale *et al.. Inc. cit.*
29 N. Sleigh-Johnson, in defence of the FRSSF.', *Accountancy,* I)ecember 2001, p. 92.
30 J. Morley. 'Who wants a FRSSE?', *Accountancy,* September 2001, p. 104.
31 ISAR, *Accounting by SMEs,* United Nations Conference on Trade and Development (UNCTAD). 13 July 2001.
32 P. Walton, [4]UN research into the accounting needs of SMEs', *Accounting and Business,* February 2000, p. 34.
33 G. Edwards, 'Performance measures', *CA Magazine,* October 2004.
34 *Student Financial Reporting,* ICAEW, 1991/2, p. 17.
35 *The State of Financial Reporting,* Financial Reporting Council Second Annual Review, November 1992.
36 V. Reattic, *Business Reporting: The Inevitable Change?,* ICAS. 1999, p. 53.

Copyrighted material

6.1 Introduction

The importance of regulating financial reporting to ensure all companies in a country account for similar transactions in a consistent fashion has been established in Chapter 5. The pace of internationalisation of trade and investment has accelerated in recent years. This has been accompanied by calls for financial reports to be comparable internationally. This chapter describes the evolution of international standards by examining the following:

- National differences
- Reasons for differences in financial reporting
- Classification of national accounting systems
- Attempts to reduce national differences
- The work of international standard setters
- US GAAP.

6.2 National differences

We are all familiar with national differences that have become almost stereotypes. Consider the French, for example, who are described as:

> proud, patriotic, sardonic people driven by a clear sense of their own greatness .., social interactions arc profoundly affected by social stereotypes ... status depends to a great degree on family origins ... outward signs of social status are the individual's level of education, a tasteful house or flat, and knowledge of literature and fine arts. Hut the all important structure within which the system operates depends on each individual's family origins.'

It is natural that such strongly felt influences as family origin should be reflected in the way business is structured. This can be seen in the extent of family firms in France, with a large proportion of all businesses family owned, run, or dominated through major shareholdings, and in the strongly autocratic style of management.

On the other hand, it is pointed out that:

> maximising profitability is not always the German's first priority. As in the case of many other Europeans, Germans often feel that the firm has a responsibility to society and the environment.[2]

6.2.1 How do national differences affect financial reporting?

The French business structure indicates that the owners are also frequently the managers. This is different from the UK where there is separation of ownership and management. Consequently, in France, there is far less need for regulations to ensure that financial reports present a true and fair view; the emphasis is not so much on attempting to compensate for potential conflicts of interest between owners and managers as ensuring that the financial reports are accurate.

I lowc\cr, this is only one aspect. There arc many other differences in economic and cultural conditions, which have led to an arrav of different financial reporting practices around the world. An understanding of this improves the awareness of potential misinterpretation when appraising financial statements prepared in other countries. It is useful to appreciate the reasons for these variations in order to improve understanding of the business activities represented by the accounts. Even with increasingly international regulations, these differences remain important because they influence the way people in different countries interpret and apply international rules.

6.3 Reasons for differences in financial reporting

A number of attempts have been made to identify reasons for differences in financial reporting.[1] The issue is far from clear but most writers agree that the following are among the main factors influencing the development of financial reporting:

- the character of the national legal system,
- the way in which industry is financed,
- the relationship of the tax and reporting systems,
- the influence and status of the accounting profession,
- the extent to which accounting theon is developed,
- accidents of history,
- language.

We will consider the effect of each of these.

6.3.1 The character of the national legal system

There are two major legal systems, that based on common law and that based on Roman law. It is important to recognise this because the legal systems influence the way in which behaviour in a country, including accounting and financial reporting, is regulated.

Countries with a legal system based on common law include England and Wales, Ireland, the USA, Australia, Canada and New Zealand. These countries rely on the application of equity to specific cases rather than a set of detailed rules to be applied in all cases. The effect in the UK, as far as financial reporting was concerned, was that there was limited legislation regulating the form and content of financial statements until the government was required to implement the EC Fourth Directive. The Directive was implemented in the UK by the passing of the Companies Act 1 *>S1 and this can be seen as a watershed because it was the first time that the layout of company accounts had been prescribed bv statute in England and Wales.

English common law heritage was accommodated within the legislation by the provision that the detailed regulations of the Act should not be applied if, in the judgement of the

Copyrighted material

directors, strict adherence to the Act would result in financial statements that did not present a true and fair view.

Countries with a legal system based on Roman law include France, Germany and Japan. These countries rely on the codification of detailed rules, which are often included within their companies legislation. The result is that there is less flexibility in the preparation of financial reports in those countries. They arc less inclined to look to fine distinctions to justify different reporting treatments, which is inherent in the common law approach.

However, it is not just that common law countries have fewer codified laws than Roman law countries. There is a fundamental difference in the way in which the reporting of commercial transactions is approached. In the common law countries there is an established practice of creative compliance. By this we mean that the spirit of the law is elusive[4] and management is more inclined to act with creative compliance in order to escape effective legal control. By creative compliance we mean that management complies with the form of the regulation but in a way that might be against its spirit, e.g. structuring leasing agreements in the most acceptable way for financial reporting purposes.

6.3.2 The way in which industry is financed

Accountancy is the art of communicating relevant financial information about a business entity to users. One of the considerations to take into account when deciding what is relevant is the way in which the business has been financed, e.g. the information needs of equity investors will be different from those of loan creditors. This is one factor responsible for international financial reporting differences because the predominant provider of capital is different in different countries.[5] Figure 6.1 makes a simple comparison between domestic equity market capitalisation and Gross Domestic Product (GDP).[6] The higher the ratio, the greater the importance of the equity market compared with loan finance.

Figure 6.1 Domestic equity market capitalisation/gross domestic product

We see that in the USA companies rely more heavily on individual investors to provide finance than in Europe or Japan. An active stock exchange has developed to allow shareholders to liquidate their investments. A system of financial reporting has evolved to satisfy a stewardship need where prudence and conservatism predominate, and to meet the capital market need for fair information' whieh allows interested parties to deal on an equal footing where the accruals coneept and the doctrine of substance over form predominate. It is important to note that whilst equity has gained importance in all areas over the past ten years European statistics arc *averages* that do not fully reflect the variation in sources of finance used between, say, the UK (equity investment is ver> important) and Germany (lending is more important). These could be important factors in the development of accounting.

In I'"ranee and Germany, as well as equity investment having a lower profile historically, there is also a signifieant diflerenee in the way in whieh shares are registered and transferred. In the UK, individual shareholders are entered onto the company's Register of Members. In France and Germany, many shares are bearer shares, which means that they are not registered in the individual investor's name but are deposited with a bank that has the authority to exercise a proxy. It could perhaps appear at first glance that the banks have undue influence, but they state that, in the case of proxy votes, shareholders are at liberty to cast their votes as they see fit and not to follow the recommendations of the bank.[8] In addition to their control over proxy votes, the Big Three German banks, the Deutsche Bank, the Dresdner Bank and the Commer/bank, also have significant direct equity holdings, e.g. in 1992 the Deutsche Bank had a direct holding of 28°o in Daimler Benz/'

There was an investigation carried out in the 1970s by the Gessler Commission into the ties between the Big Three and large West German manufacturing companies. The Commission established that the banks' power lay in the combination of the proxy votes, the tradition of the house hank which kept a company linked to one principal lender, the size of the banks' direct equity holdings and their representation on company supervisory boards.

In practice, therefore, the banks are effectivch both principal lenders and shareholders in Germany. As principal lenders they receive internal information such as cash flow forecasts which, as a result, is also available to them in their role as nominee shareholders. We are not concerned here with questions such as conflict of interest and criticisms that the banks are able to exert undue influence. Our interest is purely in the financial reporting implications, which are that the banks have sufficient power to obtain all of the information they require without reliance on the annual accounts. Published disclosures are far less relevant than in, say, the UK.

During the 1990s there was a growth in the UK and the USA of institutional investors, such as pension funds, which form an ever-increasing proportion of registered shareholders. In theory, the information needs of these institutional investors should be the same as those of individual investors. However, in practice, they might lie in a position to obtain information by direct access to management and the directors. One effect of this might be that they will become less interested in seeking disclosures in the financial statements - they will have already picked up the significant information at an informal level.

6.3.3 The relationship of the tax and reporting systems

In the UK separate rules have evolved for computing profit for tax and computing profit for financial reporting purposes in a number of areas. The legislation for tax purposes tends to be more prescriptive, e.g. there is a defined rate for capital allowances on fixed assets, which means that the reduction in value of fixed assets for tax purposes is decided by the government. The financial reporting environment is less prescriptive but this is compensated for

Copyrighted material

by requiring greater disclosure. For example, there is no defined rate for depreciating fixed assets but there is a requirement for companies to stale their depreciation accounting policy. Similar systems have evolved in the USA and the Netherlands.

I lowcver, certain countries give primacy to taxation rules and will only allow expenditure for tax purposes if it is given the same treatment in the financial accounts. In France and Germany, the tax rules effectively become the accounting rules for the accounts of individual companies, although the tax influence might be less apparent in consolidated financial statements.

This can lead to difficulties of interpretation, particular!) when capital allowances, i.e. depreciation for tax purposes, are changed to secure public policy objectives such as encouraging investment in fixed assets bv permitting accelerated write-off when assessing taxable profits. In fact, the depreciation charge against profit would be said by a UK accountant not to be fair, even though it could certainly be legal or correct."

Depreciation has been discussed to illustrate the possibility of misinterpretation because of the different status and effect of tax rules on annual accounts. Other items that require careful consideration include inventory valuations, bad debt provisions, development expenditure and revaluation of non-current assets. There might also be public policy arrangements that are unique to a single country, e.g. the existence of special reserves to reduce taxable profits was common in Scandinavia. It has recently been suggested that level of connection between tax and financial reporting follows a predictable pattern.[12]

6.3.4 The influence and status of the accounting profession

The development of a capital market for dealing in shares created a need for reliable, relevant and timeh financial information. Legislation was introduced in many countries requiring companies to prepare annual accounts and have them audited. This resulted in i In-growth of an established and respected accounting profession able to produce relevant reports and attest to their reliability by performing an audit.

In turn, the existence of a strong profession had an impact on the development of accounting regulations. It is the profession that has been responsible for the promulgation of accounting standards and recommendations in a number of countries, such as the UK, the USA, Australia, Canada and the Netherlands.

In countries where there has not been the same need to provide market-sensitive information, e.g. in Hastern Kurope in the 1980s, accountants have been seen purch as bookkeepers and have been accorded a low status. This explains the lack of expertise among financial accountants. There was also a lack of demand for financial management skills because production targets were set ccntrallv without the emphasis for maximising the use of scarce resources at the business entity level. The attributes that are valued in a market econom) such as the exercise of judgement and the determination of relevant information were not required. This position has changed rapidly and there has been a growth in the training, professionalism and contribution for both financial and management accountants as these economies become market economies.

6.3.5 The extent to which accounting theory is developed

Accounting theory can inthiencc accounting practice. Theory can be developed at both an academic and professional level, but for it to take root it must be accepted by the profession. For example, in the UK, theories such as current purchasing power and current cost accounting first surfaced in the academic world and there were many practising accountants who regarded them then, and still regard them now, as academic.

Copyrighted materia

in the Netherlands, professional accountants receive an academic accountancy training as well as the vocational accountancy training that is typical in the UK. Perhaps as a result of that, there is less reluctance on the part of the profession to view academics as isolated from the real world. This might go some way to explaining why it was in the Netherlands that we saw general acceptance by the profession for the idea that for information to be relevant it needed to be based on current value accounting. Largely as a result of pressure from the Netherlands, the Fourth Directive contained provisions that allowed member states to introduce inflation accounting systems."

Attempts have been made to formulate a conceptual framework for financial reporting in countries such as the UK, the USA, Canada and Australia,[14] and the International Standards Committee has also contributed to this field. One of the results has been the closer collaboration between the regulatory bodies, which might assist in reducing differences in underlying principles in the longer term.

6.3.6 Accidents of history

The development of accounting systems is often allied to the political history of a country. Scandals surrounding company failures, notably in the USA in the 1920s and 1930s and in the UK in the 1960s and 1980s, had a marked impact on financial reporting in those countries. In the USA the Securities and Exchange Commission was established to control listed companies, with responsibility to ensure adequate disclosure in annual accounts. F.ver-increasing control over the form and content of financial statements through improvements in the accounting standard-setting process has evolved from the difficulties that arose in the UK.

International boundaries have also been crossed in the evolution of accounting. In some instances it has been a question of pooling of resources to avoid repeating work already carried out elsewhere, e.g. the Norwegians studied the repori of the Dearing Committee in the UK before setting up their new accounting standard-setting system in the 1980s.[J>] Other changes in nations' accounting practices have been a result of external pressure, e.g. Spain's membership of the European Community led to radical changes in accounting,[1'*] while the Germans influenced accounting in the countries they occupied during the Second World War.[17] Such accidents of history have changed the course of accounting and reduced the claritv of distinctions between countries.

6.3.7 Language

Language has often played an important role in the development of different methods of accounting for similar items. Certain nationalities are notorious for speaking only their own language, which has prevented them from benefiting from the wisdom of other nations, There is also the difficulty of translating concepts as well as phrases, where one country lias influenced another.

6.4 Classification of national accounting systems

A number of attempts have been made to classify national accounting systems in much the same way that biologists attempt to classify flora and fauna.[Is] I lowever, as can be seen from the reasons for different systems described above, national differences are far from straightforward. Any classifications need to be constant!) updated as accounting is such a dynamic activity. There are constant changes as a result of events taking place both within and

Copyrighted material

beyond the accounting profession. Such classifications are chercfore useful in gaining a greater understanding of particular features of accounting in a country at a particular time, but do need to be treated with a degree of caution.

6.5 Attempts to reduce national differences

Differences between accounting in different countries have real economic consequences. Following the acquisition of British car maker Rover in 1994 by the German company BMW, performance was measured in accordance with the generally more conservative German accounting principles. This information was used for making management decisions. The publication of the £620 million loss for 1998 led to a wave of speculation about possible closure of production plants with consequent redundancies. However, it has been pointed out that results under UK accounting rules (which were published later) would not have been quite so dramatic. Figure 6.2 shows a comparison of the company's results under British and German rules.[19]

Nevertheless, the danger of making assumptions about a particular country's measurement rules was highlighted in 1993 when Daimler Benz became the first German company to be listed on the New York Stock Exchange. Figure 6.3 summarises the company's results under German and US rules.[20] In the year of listing (1993) there was a large difference between the two sets of figures, which created the impression that US and German accounting principles were very different and that US rules were more prudent. With hindsight, it is easy to see that 1993 was atypical and most of the differences could be attributed to permitted treatments of provisions that vary between the two countries. However the

Figure 6.2 Rover results under UK and German rules

Figure 6.3 Daimler Benz results under US and German rules

financial markets did not have the benefit of hindsight and responded to the information available at the time.

Given the increasing numbers of transnational users of accounts, many attempts have been made to reduce the differences between reports prepared in different countries. Towards the end of the twentieth century there were, in essence, two approaches: standardisation and harmonization. These terms have become technical terms in the studv of international accounting. *Standardisation* advocates the setting out of rules for accounting for similar items in all countries. *Harmonisation* is less radical in that it allows for some different national approaches but provides a common framework so that major issues will be dealt with in similar ways across national borders. Gradually, as efforts to improve comparability of financial statements have increased, these two approaches have come closer together. In the twenty-first century there is much talk of convergence, which involves bringing regulations prepared by different countries or organisations in line with each other. It is not entirely clear whether this change in terminology really represents a major change in approach.

Attempts have been made to develop financial reporting to satisfy the needs of a number of different groups. Users of accounts need clear and comparable information to assess a company's past or potential investment performance. Government agencies such as tax and customs authorities also have an interest in greater compatibility of information between countries to trace transactions. International accountancy firms deal with large numbers of multinational clients, whose accounts frequently need to be adjusted to common accounting principles before consolidations can be prepared. A reduction in national accounting differences would reduce the training costs of these firms and increase staff mobility (however, it would ultimately limit the fees they could charge!). Companies seeking capital through cross-border listings may currently need to prepare financial statements under more than one set of regulations to meet the needs of different stock exchanges. This is both costly and time-consuming.

A number of international bodies arc involved in the processes of harmonisation or standardisation. These have included organisations that may not immediately be associated with accounting, such as the United Nations and the Organization for Economic Cooperation and Development (OECD). However, the most influential have probably been the International Accounting Standards Committee and the European Union. Their contribution is described below.

6.6 The work of international bodies in harmonising and standardising financial reporting

The major international bodies have accelerated their programmes of work and have sought greater cooperation in recent years. This section sets out something of their histories and structures before relating the latest developments in their strategies and the effect this is likely to have on the annual reports of companies.

6.6.1 The International Accounting Standards Committee

The International Accounting Standards Committee (IASC) was established in 1973 by the professional accounting bodies of Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the UK, Ireland and the USA.

The IASC was restructured, following a review between 1998 and 2000, to give an improved balance between geographical representation, technical competence and independence.[21] The nineteen trustees of the IASC represent a range of geographical and

Copyrighted material

professional interests and are responsible for raising the organisation's funds and appointing the members of the Hoard and the Standing Interpretations (Committee (SIC). The International Accounting Standards Hoard (IASH) has responsibility for all technical matters including the preparation and implementation of standards. The IASH website (www.iasb.org.uk) explains that

> The IASB is committed to developing, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements. In addition, the IASH co-operates with national accounting standard-setters to achieve convergence in accounting standards around the world.

The IASH adopted all current IASs and began issuing its own standards. International Financial Reporting Standards (IFRSs). The body of IASs, IFRSs and associated interpretations are referred to collectively as [4]IFRS\

The process of producing a new IFRS is similar to the processes of some national accounting standard setters. Once a need for a new (or revised) standard has been identified, a steering committee is set up to identify the relevant issues and draft the standard. Drafts are produced at varying stages and are exposed to public scrutiny. Subsequent drafts take account of comments obtained during the exposure period. The final standard is approved by the Hoard and an effective date agreed. IFRS currently in effect are referred Co throughout the rest of this book. The IASC also issued a *Framework Jhr the Preparation ami Presentation of Financial Statements.*[21] This continues to assist in the development of accounting standards and improve harmonisation by providing a basis for reducing the number of accounting treatments permitted by IFRS. Translations of IFRS have been prepared and published, making the standards a\ailable to a wide audience, and the IASH has a mechanism to issue interpretations of the standards.

IFRS may be applied in one of the following ways:

- An IFRS may be adopted as a national accounting standard. This can be useful where there are limited resources and an 'off the peg' solution is required. This is the practice in countries such as Armenia and Tanzania. The disadvantage is that the standard may not meet specific local needs, due to the influence of the larger industrialised nations on the IASB.
- An II'RS may be used as a national requirement, but adapted for local purposes. This approach is used in Singapore, for example.
- National requirements ma\ IK derived independent!), but adapted to conform with II'RS. This is currently the procedure in the UK, although recently the programmes of the IASH and ASH have converged. For example, IAS 37 and FRS 12 were developed jointly.

It is important to note that if a company wishes to describe its financial statements as complying with IFRS, IAS 1 requires the financial statements to comph with all the requirements of each applicable standard and each applicable interpretation. This clearly outlaws the practice of MAS-lite' reporting, observed in the 1990s, where companies claimed compliance with IASS while neglecting some of their more onerous requirements.

6.6.2 The European Union[23]

The Treaty of Rome was signed in 1957 to establish a European Economic Community. The objectives of the Community were set out in Article 2 of the Treaty:

Copyrighted material

> The Community shall have as its task, by establishing a common market and progressively approximating the economic policies of member slates, to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increase in stability, an accelerated raising of the standard of living and closer relations between the States belonging to it.

In order to achieve these objectives, the Treaty set out specific provisions for the free movement of goods, services, people and capital. The single Kuropean currency (the euro) in operation in a number of Kuropean countries (and some of their trading partners) since Januan 2IHM) (with notes and coins in circulation from January 2002) has removed yet another barrier to trade and will link the economies of members more closely.

It was envisaged that the Treaty would be supported by action in other spheres developing common legislation where necessary. The harmonisation of company law across the Community has been part of this process. To date, the most important KC Directives adopted in respect of financial reporting are the Fourth (company accounts), Seventh (consolidated accounts) and Kighth (auditing).

Member states are required to incorporate these Directives into their national legislation within an agreed lime-scale. This has succeeded in achieving greater comparability between financial statements prepared in different member states, although a number of cultural differences remain. The Directives ha\e also had an impact on financial reporting in countries seeking membership or imolved in trade with existing members of the EU (e.g. Norway implemented the Directives as a condition of membership of the Kuropean Economic Area anil Latvia based its accounting legislation on the Danish implementation of the Directives before becoming a full member of the EU).

Although they have had a major impact on accounting in some countries, e.g. Greece and Spain, the Directives still only provide a framework for financial reporting and provide a range of options. This framework has to be supported by national legislation or accounting standards to provide the detailed regulation that leads to comparability within countries. Consequently, these national practices can then counteract the harmonisation efforts of the Directi\cs. One solution would be to have a Kuropean Accounting Standards Board. However, the practicalities of setting up such an organisation and reaching agreement on accounting issues within a reasonable time ha\e meant that such a board has not been established. At the end of 1995, it was decided that the EU could play a more active role in the IASC with a view to using IASs to support the Directives. As a first step, the Contact Committee on the Accounting Directives prepared a report entitled 'An examination of the conformity between the international accounting standards and the Kuropean accounting Directives[1] in 1996. This established that there were few major differences between the lASs and the Directives.

6.6.3 IASC and the International Organisation of Securities Commissions (IOSCO)

The 1ASC and IOSCO have been cooperating on the accounting problems of multinational companies involved in foreign listings since 1987.'* In July 1995 it was agreed that if the IASC was to produce a set of core standards that were acceptable to the technical committee of IOSCO, am com pain would be able to use IAS financial statements to obtain listings of its securities on any foreign stock exchange. This would be particularly useful for companies seeking listing on the US stock exchange, which currently requires companies to present financial statements in accordance with US Gcncralb Accepted Accounting Principles (US GAAP) or reconcile domestic accounts to US GAAP. The ramifications of this for preparers

Copyrighted material

and users of financial statements of multinational companies arc tremendous: considerable time and effort would be saved. The IASC completed its core standards in December 1998. In May 2000, IOSCO recommended that its members permit the use of lASs by multinational issuers for cross-border offerings and listings, supplemented where necessary to address outstanding substantive issues at a national or regional le\el. This was clearly a major step towards the acceptance of IASs and the elimination of the necessity for multiple reporting. Nevertheless, there could still be extensive demands on preparers to provide supplementary information. The US Securities and F.xchangc Commision (SEC) is seen as being a potential stumbling block. This is perhaps unsurprising given the remaining differences between IFRS and US GAAP-[5] and the SKC's requirement for strict application of US GAAP. Nevertheless, in October 2002 the IASB and the SEC jointly published details of what is known as the Nonvalk agreement. This included an undertaking to make their financial reporting standards fully compatible as soon as possible and to coordinate future work programmes to maintain that compatibility.

6.6.4 The EU and IFRS

In a communication from the Commission of the European Communities to the Council and the European Parliament *(EL' Financial Reporting Strategy: The Way Forward)* in June 2000,[u] it was proposed that all listed companies be required to prepare their consolidated financial statements in accordance with international accounting standards from 2005 onwards. In February 2001 the European Commission published a proposal for a regulation on the application of international accounting standards in the EU that aimed to harmonise financial reporting in the EU on the basis of globally agreed accounting standards by 2005 and to enhance EU companies' access to international capital markets. This proposal became a regulation in July 2002 with immediate effect in all member states.[27] Member states arc allowed to extend the application of IFRS to unlisted companies and to individual accounts. So far, no member state has prohibited companies from using IFRS. In the UK unlisted and individual companies are permitted to use IFRS instead of SSAPs and FRSs, if they prefer. This will clearly be helpful for the increasing numbers of companies that have juggled to meet the requirements of international investors without falling foul of national regulations.

The proposals followed changes in legislation in a number of member stales to permit certain companies to use international standards. This could be seen as having led to a reduction in comparability as companies took different approaches. For example, in 1999 reports in Finland, Stora Enso (listed in Helsinki and Stockholm) and Nokia (listed in Helsinki, Stockholm. London, Frankfurt and New York) used IASs but UPM Kymmcnc (listed in Helsinki and New York) used Finnish accounting practice. The proposals also reflect companies' perceptions of market demands. For example, the Danish company Berendsen changed its accounting policies on goodwill and restructuring provisions in 1999. The annual report explained that the changes were made 'in order to come more into line with international accounting standards, thus making comparisons with foreign company accounts easier'.

I low-ever, it is important to note that the EU has not simply handed over its powers to the IASC. There is an endorsement mechanism in the EU, which is to ensure that IFRS meet the needs of EU listed companies. This may limit the number of options available to EU companies or require additional disclosures. In 2004 there was controversy when the EU only partially endorsed IAS 39.

Copyrighted material

6.6.5 The wider reach of IFRS

At the same time as listed EL* companies are making the transition to IFRS, similar developments are taking place in other important markets, such as those in the Asian Pacific Region. While the IFRS label is being widely used, the following examples demonstrate that not all financial statements will be directly comparable. This is a concern, because it might lead to a false sense of securit\ among users of annual reports. Large firms of accountants have prepared detailed comparisons between different national 'editions' of IFRS and the original IFRS. These can be obtained from websites, such as www.iasplus.com.

In Australia the Financial Reporting Council announced in 2002 that Australia would adopt IFRS in 2(X)5. This transition applies to groups, individual companies and organisations such as not for profit entities. As in the F.L, this process has involved some complex political moves. Australian companies will not be using IFRS as such, but what have become known as Australian equivalents to IFRS (AIFRS). The Australian Accounting Standards Hoard (AASB) has issued new standards that arc fully compliant with IFRS, but are not identical to IFRS. Some AIFRS remove options a\ailable in IFRS and some AIFRS require additional disclosures on top of what is required by IFRS. For example, Australian companies will not have the option of recognising assets net of a government grant (they w ill have to show the full cost of the asset and the associated grant); and they may account for extractive activities differently Irom their international counterparts (there is presently no IFRS on this area). This means that Australian companies' accounts will be compliant with IFRS, but foreign companies following IFRS will not necessarily be compliant with AIFRS.

In New Zealand the Accounting Standards Review Board (ASRB) announced that reporting entities would have to apply IFRS from 2007, with the possibility of adoption from 2005. Like Australia, the New Zealand transition applies to entities beyond groups of limited companies. Similar!), IFRS are being introduced through new New Zealand standards (NZ IFRS), which will introduce specific additional requirements considered appropriate to the New Zealand environment.

At first glance, Singapore seems to have adopted IFRS verbatim in its local standards, but closer examination reveals some important differences. For example, there are some amendments to recognition and measurement issues; nevertheless the differences in treatment of investment properties have been eliminated in a standard effective in 2007 (with early adoption encouraged). The relationship between Singapore Financial Reporting Standards and IFRS is not always apparent from looking at a company's financial statements. In Asia Pacific Breweries Ltd's annual report for 2005 it merely states:

> The financial statements are prepared under the historical cost com cut inn as modified b\ the revaluation of certain fixed assets and imestments. The financial statements are prepared in aeeordanee with Singapore Financial Reporting Standards ('FRS*) as required by the Companies Act, Cap. 50.

6.6.6 The impact of changing to IFRS

Making the transition to IFRS is no trivial task for companies, as comparative figures must also be restated as if IFRS had always been used and it may not be easy to backtrack to obtain all the information necessary to record earlier transactions in accordance with IFRS. National and international regulators have issued recommendations (or requirements) to ensure users of financial statements are kept informed of arrangements for the transition and the likely effect on reported figures. As the date of transition approaches many companies have published restatements reconciling previously published figures with figures computed

Copyrighted material

and presented in accordance with IFRS. These reconciliations have proved a fertile ground for surveys by firms of accountants and academics. In some instances the changes have a dramatic effect on headline figures, e.g. the Dutch company, Wcssancn, reported an increase of over 400% in its net income figure when the Dutch GAAP accounts were restated under IFRS. In other cases, there may be some large adjustments to individual balances, but the net effect may be less obvious. The European hotel group, Accor, reported a reduction in total assets of only 1% when its 2004 balance sheet was restated from French GAAP to IFRS, but within this, 'other receivables and accruals* had fallen by €294 million, a reduction of over 30% of the previously reported balance.

In most countries the use of IFRS will mean that earnings and balance sheet values will be more volatile than in the past. This will be quite a culture shock for analysts and others used to examining trends that follow a fairly predictable straight line. In certain countries there w ill be major changes in specific components of equity in the year of transition as particular assets or liabilities fall to be recognised (differently) from in the past. For example, in the UK many companies have made increased provisions for deferred tax liabilities on revalued properties and Australian companies have made large adjustments to their balance sheets through the de-recognition of intangible assets. Accounting for financial instruments has proved particularly challenging for companies in a number of countries. This extract from the New Zealand company. Port of Tauranga Ltd's 2005 annual report gives an indication of both the financial reporting and strategic issues involved.

> Under NZ IAS 39, derivatives must be fair valued and recognised on the balance sheet. Movements in the fair value of such instruments must be recorded either through the income statement or equity depending on hedging documentation and effectiveness.
>
> The Company will IK* restructuring its debt funding during the current year to ensure it will lie able to comply with hedge criteria for interest rate NZ IFRS derivatives. Under NZ GAAP the Company records the impact of derivatives on a cash settlement basis.

In the short term, these changes in reported figures can have important consequences for companies' contractual obligations (e.g. they may not be able to maintain the level of liquidity required by their loan agreements) and their ability to pay dividends. There may be motivational issues to consider where staff bonuses have traditional!) been based on reported accounting profit. As a result, companies may find that they need to adjust their management accounting system to align it more closely with IFRS.

While the change to IFRS has been covered in the professional and the more general press, it is not clear whether users of financial statements fully appreciate the effect of the change in accounting regulations, although surveys by KPM(i (www.kpmg.co.uk/pubs/215748.pdf) and PricewatcrhouscCoopers (www.pwchk.com/home/eng/ifrs_euro_investors_view_fcb2006.html) indicated that most analysts and investors were confident that they understood the implications of the change.

6.6.7 Current convergence and improvement projects

In 2001 the IASB announced a project to improve twelve IASB standards. The objective of this project was to improve the quality of financial reporting under IFRS by converging on best practice around the world and reducing choice in the application of the standards. The project dealt with standards that are not the subject of separate projects and, therefore, changes to individual standards could be considered to be relatively minor. The IASB was responding to suggestions from IOSCO, the EL", national standard setters, accounting firms and the SEC. The date for compliance with IFRS by EU listed companies of 2005 gave

Copyrighted materia

added impetus to this project. The IASB issued fifteen improved standards in December 2003 as a result of this project-

Other improvements involved clarification of key terms (such as 'present fairly*), removing duplication of regulations between standards and transferring material between standards to make them easier to follow.

Convergence is a two-way process. At the same time as the IASB was making changes to bring its standards in line with global best practice, national standard setters have been working to align their standards with IFRS. In the UK, the ASB's FRKDs 24 to 30 were part of its 'convergence project'. The ASB was also taking account of any changes to the IFRS expected as a result of the IASB's improvements project.

Figure 6.4 highlights the differences that remain between UK accounting standard and IFRS.

In March 2005 the Accounting Standards Board of Japan (ASBJ) and the IASB launched a joint project to establish convergence between Japanese GAAP and IFRS. On 27 and 28 March 2(M)7 in Tokyo, the Accounting Standards Board of Japan (ASBJ) and the International Accounting Standards Board (IASB) held their fifth joint meeting towards the final goal of achieving convergence of Japanese generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRSs).

The approach taken in China has been extremely ambitious. Unlike the United Kingdom and Japan where there is a phased convergence, China converged in one big bang. Starting with discussions in 2005, Chinese Accounting Standards ('CAS') will converge with International Financial Reporting Standards in January 2007. In today's global economy investors now demand transparent financial reporting which is seen as one of the strengths of adopting IFRSs. The scale of the change can be seen when we realise that CAS will move from one Basic Standard and 16 Sepcific Standards to the integration of IFRS principles into CAS, which led to the amendment of all existing standards and the issuance of an additional 22 Specific Standards. This has been an enormous achievement reflecting the positive collaboration of the Ministry of Finance in Beijing and the IASB representatives.

6.6.8 The future

Financial reporting is clearly in a period of transition. When the US energy giant F.nron collapsed in 2001, a number of important issues were raised regarding the conduct of directors and auditors. More importantly in the context of this chapter, the collapse of Enron highlighted a number of deficiencies in financial reporting. The application of US GAAP had led to a lack of transparency regarding matters including revenue recognition, valuation of intangible assets, so-called Special Purpose F.ntities and oft" balance sheet finance, and derivatives.

Figure **6.4 Table of comparison between IASs/IFRSs and UK accounting standards**

Copyrighted image

Copyrighted material

Figure 6.4 (cont.)

Figure 6.4 (cont.)

Figure 6.4 (cont.)

Copyrighted image

Copyrighted material

Figure 6.4 (com.)

This has demonstrated that, in spite of (or perhaps because of) its detailed regulations, US GAAP is not without its faults. The broader debate has been opened as to whether detailed regulations or broader regulations based on principles (as applied by the UK's ASB and the IASIJ) are a more appropriate wa> forward.

The use of IFRS will become more widespread in the FX" and it seems set to become the standard for cross-border listings on a global basis. The new structure of the IASC has been designed to ensure that the IASB will continue to produce high-quality standards to provide comparable information to users. However, before true comparability can be achieved, a more effective mechanism is necessary to ensure consistent interpretation and application of IFRS. Surveys of companies purporting to follow IASs[2s] in the past demonstrated that many companies disclosed exceptions from full compliance. While IAS I (revised) bans this practice (i.e. companies arc required to follow all IFRS if they wish to claim that their financial statements comph with IFRS), it is difficult to see how it can be enforced without a more rigid enforcement structure. At present enforcement is the responsibility of national regulators with auditors the first line of defence. Early in 2004, *Company Reporting* identified the Austrian company Miba as the first company reporting under IAS to receive a qualified audit report as a result of its inappropriate recognition of an intangible asset.

There have been requests for more detailed explanations of the standards. It is generally agreed that any interpretations need to be carried out at an international level to ensure consistency between countries is not lost. The work of the International Financial Reporting Interpretations Committee will contribute to ensuring consistent interpretations of IFRS. Increased interest in IFRS has led to an increase in the number of textbooks referring to their use. As auditors and regulatory bodies become more familiar with IFRS it is likely that they will be enforced more rigorously. Nevertheless, in the light of the different ways in which IFRS ha\e been implemented in different countries (discussed above) there remains

the risk that we are still some distance from achieving a single global set of accounting regulations. Careful reading of accounting policy notes will still be required.

The increase in the use of IFRS will be significant for the largest companies in the EL\ but what will happen to financial reporting in non-listed companies? These companies will probably continue to use national accounting standards, but eventually it seems likely that national requirements will move closer to IFRS, thus reducing differences further. This will be necessary to allow an easier transition to listed status. As the lASB continues its project on reporting by small and medium sized entities, this ma> lead to further dispensations for the smallest companies.

The move towards IFRS will also be significant for national standard setters. In the short to medium term they will still be needed to support the transition to IFRS and/or convergence with IFRS and possibly to provide accounting standards for unlisted companies and to provide the expertise to support the IASB. The 2005-06 business plan of the Australian Accounting Standards Hoard (www.aasb.com.au/about/AASB_Business_PIan_2(M)5-2006.pdf) highlights the importance of taking an active role in the lASB's work to ensure Australia contributes to high-qualitv international standards both because of its technical competence and experience (e.g. in the extractive industries) and also to ensure Australian interests are not ignored. IASB members have pointed out that drawing on the resources of national standard setters produces better standards for everyone. Nevertheless, it is possible that when IFRS become more established national standard setters mav start to wind dow n their activities and some countries may dispense with the cost of running such bodies altogether.

6.7 US GAAP

Given that it will take some time for the convergence efforts described above to take effect, it is important to IK aware of the structures that determine financial reporting in other countries, to have an awareness of areas of potential difference in the recognition or measurement of financial statement items and areas where practice might change in future. The USA has the largest economy in the world and is also an attractive source of capital for foreign companies. In the light of the apparent competition for international supremacy between US GAAP and IFRS, it seems appropriate to spend some time considering the US regulatory environment.

Given the historical links between the UK and the USA, it is unsurprising that the two systems of financial reporting have much in common. However, there are more rules in the USA than in the UK (or perhaps even than anvwhere else in the world), and this has resulted in greater standardisation and disclosure of information.

6.7.1 Legislation

There is no direct equivalent of the UK Companies Act in the USA. The main federal regulation of trade in shares comprises the Securities Act 1933 and the Securities Exchange Act 1934. Neither of these includes any detailed prov isions for the form and content of financial statements. The Securities and Exchange Commission (SEC) was born out of this legislation. This bod> is responsible for requiring the publication of financial information for the benefit of shareholders. It has the power to dictate the form and content of these reports. The largest companies whose shares are listed must register with the SEC and comply with its regulations. The SEC monitors financial reports filed in great detail and makes useful information available to the public via its website (vvvvvv.sec.gov).

Copyrighted material

However, it is important to note that the majority of companies fail outside of the SEC's jurisdiction, although shareholders or lenders may require publication of equivalent information and a full audit. Individual states have the power to introduce their own legislation to control businesses and even set taxes. They are also responsible for conferring the right to practise as a public accountant.

6.7.2 Standard-setting body and other sources of GAAP

The Financial Accounting Standards Hoard (FASH) is responsible for setting accounting standards in the USA. FASH is financed by a compulsory levy on public companies, which should ensure its independence- (The previous system of voluntary contributions ran the risk of major donors trying to exert undue iniluence on the Hoard.) FASH issues the following documents:

- Statements of Financial Accounting Standards, which deal w ith specific issues,
- Statements of Concepts, which give general information,
- Interpretations, which clarify existing standards.

A subcommittee of the FASH is the Emerging Issues Task Force, which provided the inspiration for the UK Urgent Issues Task Force. The Accounting Principles Hoard (APB) also publishes Opinions and the American Institute of Certified Public Accountants (AICPA) also publishes Accounting Practice Bulletins and Opinions. These pronouncements should all be regarded as mandatory. An audit report on the financial statements of a US listed company must express an opinion on whether the accounts 'present fairly in conformity with generally accepted accounting principles'. In trying to determine GAAP, if companies encounter an issue that is not covered by the mandatory pronouncements described above, then the} should refer to the FASH Technical Hulletins, AICPA Industry Audit and Accounting Guidelines cleared by FASH and AICPA Statements of Position. Other AICPA interpretations and implementation guidelines published b\ FASH staff may also be relevant. Finally, companies should refer to practices that are widely recognised and prevalent, either generally or in the industry. Given the large number of sources of authoritative literature, it is perhaps unsurprising that textbooks such as *Hi Icy GAAP* include an entire chapter on 'researching GAAP problems'.

6.7.3 Foreign companies listed in the USA

Within the KU there has been mutual recognition of member states* accounting principles, so, before all listed companies were required to comply with IFRS, it was possible for, say, a Helgian company to have its shares listed on the Paris Bourse without needing to make any amendments to its financial statements. The London Stock Exchange has recognised that investors need financial information in a form they can understand, so has permitted foreign companies to use IFRS for reporting purposes for many years. Foreign companies wishing to list on the US stock exchange need to provide detailed reconciliations and explanations about the dilTerences between the accounting convention used and US GAAP. Companies have to file Form 20-F at the end of the year, which includes the annual financial statements. However, following the Xorwalk agreement and further discussions between the IASH and FASH the US will accept IFRS without reconciliations by 200'). Examination of the length and complexity of such reconciliations demonstrates the benefits that would be gained from the success of this project. Helow is an extract from Id's 2005 Annual Report:

Copyrighted material

Under US GAAP the net income in 2005 was £208m (2004 £105m net income) compared with net income of £390m (2004 £474m) under IFRS. Under US GAAP, shareholders' equity at 31 December 2005 was £2.010m (at 31 December 2004 was £2.010m) compared with £613m deficit (2004 **£332m** deficit) under IFRS.

This demonstrates that there is still some way to go in the convergence process.

1 How does the regulatory framework for financial reporting in the UK differ from that in the USA? Which is better for particular interest groups and why?

2 'Standardisation is the only way forward for European financial reporting.' Discuss this statement in the light of efforts that have already been made in the harmonisation of company law and the current requirement for listed companies to follow IFRS.

3 Suggest criteria that could be used to classify systems of financial reporting employed in different countries. What difficulties are there in performing an exercise of this nature?

4 Consider the role of scandal in the development of accounting regulation. Compare the reaction to the Enron financial statements in the early part of the twenty-first century with the reaction to the financial statements of AEI and Pergamon Press m the 1960s. (We discussed these UK scandals m Chapter 5.)

5 The current differences between lASs and US GAAP are extensive and the recent pairing of the US Financial Accounting Standards Board and IASB to align IAS and US GAAP will probably result m IAS moving further from current UK GAAP.'[29]

Discuss the implication of this on any choice that non-listed UK companies might make regarding complying with IFRS rather than UK GAAP after 2005.

Question I

Obtain the financial statements of two companies based in different countries. Review the accounting policies notes. Analyse what the policies tell you about the regulatory environment in which the two companies *are* operating.

Question 2

Use the EDGAR service (via the SEC website) to identify four European companies listed on the US Stock Exchange. From the Form 20-F identify which items feature in the reconciliation from net income under IFRS (or domestic GAAP) to net income under US GAAP. What does your analysis allow you to conclude about regulations or underlying princip'es in different countries?

Question 3

Consider the interest of the tax authorities in financial reporting regulations. Explain why national tax authorities might be concerned about the transition from domestic accounting standards to IFRS in companies' annual reports.

References

1 R.T. Moran, *Cultural Guide to Doing Business in Europe* (2nd edition), Butterworth-Heinemann Ltd, 1992. p. 51.
2 *Ibid.,* p. 60.
3 C Nobcs and R. Parker, *Comparative International Accounting* (7th edition), Pearson Education, 2002, pp. 17-33.
4 J. Frccdman and M. Power, *Law and Accountancy: Conflict and Cooperation in the l(')90s,* Paul Chapman Publishing Ltd, 1992, p. 105.
5 For more detailed discussion sec C. Nobes, 'Towards a general model of the reasons for international differences in financial reporting*. *Abacus,* vol. 3, no. 2, 1998, pp. 162-187.
6 Source: www.eurocapitalmarkets.org/files/images/equity_capGDP_col.jpg
7 C. **Nobes,** *Towards 1992,* Buttcrworths, 1989, p. 15.
8 C. Randlesome, *Business Cultures in Europe* (2nd edition), Heinemann Professional Publishing, **1993, p.** 27.
9 **J.I).** Daniels and L.H. Radebaugh, *International Business* (8th edition), Addison Wcslev, 1998, p. 818.
10 Randlcsomc, *op. cit.,* p. 25.
11 Nobes, *op. cit.,* p. 8.
12 C. Nobes and I I.R. Schwencke, 'Modelling the links between tax and financial reporting: a longitudinal examination of Norway over 30 years up to IFRS adoption', *European Accounting Review,* vol. 15, no. I, 2006, pp. 63-87.
13 Nobes and Parker, *op. cit.,* pp. 73-75.
14 See S.P. Agrawal. P.H. Jensen, A.L. **Meader** and K. Sellers, 'An international comparison of conceptual frameworks of accounting'. *The International Journal of Accounting,* vol. 24, 1989, pp. 237-249.
15 *Accountancy,* June 1989, p. 1(1.
16 See, e.g., B. Chauvcau, 'The Spanish *Plan Generalde Contabilidad:* Agent of development and innovation?*, *European Accounting Review,* vol. 4, no. 1, 1995, pp. 125-138.
17 See, e.g., P.E.M. Standish, 'Origins of the *Plan Comptable General:* a study in cultural intrusion and reaction', *Accounting and Business Research,* vol. 20, no. 80, **1990,** pp. 337-351.
18 Sec Nobcs and Parker, *op. at.,* pp. 52-71.
19 C Quick and D. Wild, 'Rover trouhle was avoidable'. *Accountancy Age,* 18 February 1999, p. 7.
20 Source: Daimler Ben/, Form 20-F 1995; L.H. Radebaugh, G. Gebhardt and S.J. Gray, **'Foreign** stock exchange listings: a case study of Daimler Ben/', *Journal of International Financial Management and Accounting,* vol. 6, no. 2, 1995, pp. 158-192.
JI For further details see *Acuminata y.* International Edition, December 1999, p. 5.
22 *Framework far the Preparation and Presentation of Financial Statements,* IASC, 1989, adopted bv IASB2001.

Copyrighted material

23 The European Economic Communit) established by the Treaty of Rome in 1957 became known as the European Community in 1985 and the European Union in November 1993 following the Maastricht Treaty,

24 Tor further details see D. Cairns, 'The future of the IASC and the implications for UK companies' in ICAEW, *Financial repelling today: current andemerging issues.* Accountancy Books, 1998 edition, pp. 115-152.

25 A comprehensive analysts of the differences around the time of the IOSCO recommendation is prov ided in C. Bloomer (cd.). *The I. ISC-U.S. Comparison Project: A Report on the Similarities and Differences between IASC Standards and U.S. GAAP* (2nd edition), Financial Accounting Standards Board, 1999.

26 Commission of the European Communities, *EL' Financial Reporting Strategy: The Hay Forward,* CO\I(2000) 359 final, 2000.

27 EL\ *Regulation of the European Parliament and of the Council on the Application of International Accounting Standards,* Brussels, 2002.

28 See, e.g., 1). ('aims, *Financial Times International Accounting Standards Survey 199*),* FT Business, 1999.

29 Y. Dimvoodic and P. Holgate, 'Singing from the same sonusheet?'. *Accountancy,* Mav 211(13, pp. 94-95.

Copyrighted material

In this chapter we will discuss the rationale underlying standards and consider the developments that have occurred in the search for a conceptual framework for financial reporting. We also consider:

- Historical overview of the evolution of financial accounting theory
- 1ASC *Framework for the Presentation and Preparation of Financial Statements - 1989*
- UK *Statement of Principles for Financial Reporting 1999*
- AICPA *Improving Business Reporting - A Customer Focus: Meeting the Information Xeeds of Investors and Creditors - 1994*
- ICAS *Making Corporate Reports I aluahle - 1988*

Financial reporting under the spotlight

Financial statements have been, and continue to be, subject to an array of accounting standards produced by international bodies such as EL* Directives and IASs and by national standard setters such as FASH in the USA and the various standard-setting bodies around the world.

Consistency to protect the auditors

The early standards were set to achieve consistency in the treatment of the major items, e.g. IAS 2 *Inventories,* and were seen as a mechanism to avoid conflicting rules and practices.

Transparency

Later the emphasis evolved to the provision of information useful for making economic decisions. How reliable this is can often, however, only be assessed after some sort of crisis when the internal affairs of the company arc subject to investigation.

Financial reporting under the spotlight

Financial reporting docs not exist in a vacuum and it is put under the spotlight when events call its fairness into question. This has been seen **in** recent times with the financial crisis in the global markets.

The implication for standard setting is set out by the International Forum on Accountancy Development (IFAD), a body set up to harness the resources of the accounting profession and international financial institutions. IFAD, whose first meeting was in June 19W, comments:[1]

Lessons from the crisis

... the Asian crisis showed that under the forces of financial globalisation it is essential tor countries to improve ... the supervision, regulation and transparency of financial systems ... Efficient') of markets requires reliable financial information from issuers. With hindsight, ii was clear lhat local accounting standards used to prepare financial statements did not meet international standards. Investors, both domestic and foreign, did not full) understand the weak financial position of the companies in which they were investing.

This assessment has at various times also been made in other countries around the world and has been the initial force driving the standard-setting process.

Rationale for accounting standards

It is interesting to take a historical overview of the evolution of the financial accounting theorv underpinning standards and guiding standard setters to see how it has moved through three phases from the empirical inductive to the deductive to a formalised conceptual framework.

7.2 Historical overview of the evolution of financial accounting theory

Financial accounting practices have not evolved in a vacuum. They are dynamic responses to changing macro and micro conditions which may involve political, fiscal, economic and commercial changes, e.g.:

- **I** low **to** take account of changing prices?
  - Ignore because unmodified historical cost accounting is applied as in Germany.
  - Ignore if inflation is low as is the present situation in many European countries.

    1 lave a modified historical cost system where tangible fixed assets are revalued which has been the norm in the UK.
  - Appl) a government inflation rate to tangible fixed assets as in Turkev.
  - Have a coherent current cost system as implemented in the I()70s in the Netherlands.
- 1 low to deal with changing commercial practices?

  Ignore if not a material commercial practice, e.g. leasing in the carl) 1970s.
  - Apply objective, tightly defined, legalistic-based criteria, e.g. to define finance and operating leases.
  - Appl) subjective criteria, e.g. assess the economic substance of a leasing transaction to see if a finance lease !>ecause the risks and rewards have substantially been passed to the lessee.
  - Accept that it is not possible to effectively regulate companies to achieve consistent treatment of similar economic transactions and require same reporting treatment for all lease transactions.

It is clear from considering just these two questions that there could be a varielv of accounting treatments for similar transactions and, if annual financial reports are to lie useful in making economic decisions, there is a need for uniformity and consistency in reporting.

Attempts to achieve consistency have varied over time.

Copyrighted material

- An empirical inductive approach was followed h> the accounting profession prior to 1970.
  This resulted in standards or reporting practices that were based on rationalising what happened in practice, i.e. it established best current practice as the norm. Under this approach there was a general disclosure standard, e.g. IAS 1 *Disclosure of Accounting Policies** and standards for major specific items, e.g. IAS 2 *Inventories.*
- A deductive approach followed in the l°70s.
  This resulted in standards based on principles deduced from assumptions, e.g. that price-adjusted financial statements would be more relevant than historical accounting statements. This was not based on existing practice in the real world in fact, it challenged current reporting practice.
- A conceptual framework approach was promoted in the l°S0s.
  It was recognised that standards needed to be decision-useful, that they should satisfy cost/benefit criteria and that their implementation could only be achieved by consensus. Consensus was generally only achievable where there was a clearly perceived rationale underprinning a standard and, even so, alternative treatments were required in order to gain support.
- A conceptual framework approach in the twenty-first century - the mandatory model.
  Under this approach there is less regard for the provision of alternative treatments.

7.2.1 Empirical inductive approach

The empirical inductive approach looked at the practices that existed and attempted to generalise from them.

This tended to be how the technical departments of accounting firms operated. By rationalising what they did, they ensured that the firm avoided accepting different financial reporting practices for similar transactions, e.g. accepting unrealised profit appearing in the income statement of one client and not in another. The technical department's role was to advise partners and staff, i.e. it was a defensive role to avoid any potential charge from a user of the accounts that they had been misled.

Initially a technical circular was regarded as a private good and distribution was restricted to the firm's own staff. However, it then became recognised that it could benefit the firm if its practices were accepted as the industry benchmark, so that in the event of litigation it could relv on this fact.

When the technical advice ceased to be a private good, there was a perceived additional benefit to the firm if the nature of the practice could be changed from being a positive statement, i.e. this is how we report profits on uncompleted contracts, to a normative statement, i.e. this is how we report **inJ* this is how all other financial reporters *uugftt* to report.

ConSCcjuentI), there has been a growing trend since the IWiOs for firms to publish rationalisations for their financial reporting practices. It has been commercially prudent for them to do so. It has also been extremely helpful to academic accountants and their students.

Typical illustrations of the result of such empirical induction are the wide acceptance of the historical cost model and various concepts such as matching and realisation that we discussed in Chapter *2.* In terms of standards, we have already mentioned that IAS 1 anil IAS 2 evolved under this regime.

This approach has played an important role in the exolution of financial reporting practices and will continue to do so. After all, it is the preparers of the financial statements and

Copyrighted material

their auditors who are first exposed to change, whether economic, political or commercial. They are the ones who have to think their way through each new problem that surfaces. This means that a financial reporting practice already exists by the time the problem comes to the attention of theoreticians.

The major reasons that it has been felt necessary to try other approaches are both pragmatic and theoretical.

Pragmatic reason

The main pragmatic reason is that the past procedure, whereby deduction was dependent upon generalisation from existing practice, has become untenable. The accelerating rate of economic, political and commercial change leaves too little time for effective and uniform practices lo evolve.

Theoretical reasons

The theoretical reasons relate to the acceptahilit) of the income determined under the traditional historical cost model. There are three principal reasons:

- True income. We have seen that economists had a view that financial reports should report a true income, which differed from the accountants' view.
- User-defined income public. There is a view that there may be a number of relevant incomes depending upon differing user needs which may be regarded as public goods.
- User-defined income - private. There is n view that there may be a number of relevant incomes depending upon differing user needs which may be regarded as private rather than public goods.

It was thought thai the limitations implicit in the empirical inductive approach could be overcome by the deductive approach.

7.2.2 Deductive approach

The deductive approach is not dependent on existing practice, which is often perceived as having been tainted because it has been determined by finance directors and auditors. However, the problem remains: from whose viewpoint is the deduction to be made?

Possible alternatives to the preparers and auditors of the accounts are economists and users. However, economists are wide)} perceived as promoting unrealistic models and users as having needs so diverse that they cannot be realistically satisfied in a single set of accounts. Consider the attempts made to define income. Kconomists have supported the concept of a true income, while users have indicated the need for a range of relevant incomes.

True income

We have already seen in Chapter 3 that there is a significant difference between the accountant's income and the economist's income applying the ideas of Fisher and Hicks.

User needs and multiple incomes

Multiple measures of income, derived from the general price level adjusted accounting model, the replacement cost accounting model and the exit price accounting model, were considered in Chapter 4. Kach model provides information that is relevant for different purposes, e.g. replacement cost accounting produces an income figure that indicates how

Copyrighted material

much is available for distribution while still maintaining the operating capacity of the entity.

These income figures were regarded as a public good, i.e. cost-free to the user. Latterly, it lias been recognised that there is a cost implication to the production of information, i.e. that it is not a public good; that standards should he capable of being empirically tested; and that consideration should be given to the economic consequences of standards. This lias resulted in a concern that standards should deal with economic substance rather than form, e.g. the treatment of leases in IAS 17/

it could be argued that the deductive approach to income, w hether an economist's defined income or a theoretician's multiple income, has a basic weakness in that it gives priority to the information needs of only one user group - the investors. In the LK the ASH is quite explicit about this. The *Framework* is less clear about the priman focus, stating that financial statements are prepared to provide information that is useful in making economic decisions. The ASB has been supported b\ other academics[4] who have stated:

> As we have already noted that the needs of investors, creditors, employees and customers are not fundamentally different, it seems safe to look to the needs of present and potential investors as a guide ...

There is little independent evidence put forward to support this view.

Where do we stand now?

We have seen that accounting theory was initially founded on generalisations from the accounting practices followed b\ practitioners. Then came the deductive approach of economists and theoreticians. The latter were not perceived to be realistic and empirical testing, e.g. examination of their economic consequence on share prices, is relied on to gi\c them credibility

The practitioners have now staked their claim to create accounting theory or a conceptual framework through the IASB. The advantage of this is that the conceptual framework will be based on consensus.

7.3 IASC *Framework for the Presentation and Preparation of Financial Statements*

The Framework differs from the International Financial Reporting Standard (IFRS) in that it does not define standards for the recognition, measurement and disclosure of financial information nor does it override any specific IFRS. However, if there is o MRS for a particular situation, managers should consider the principles set out in the Framework when developing an accounting policy, which should aim at providing the most useful information to users of the cntitv's financial statements.

This exposure draft deals with the following:

- The objective of financial statements.
  The objective of financial statements is that the) should provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of potential users in making economic decisions.
- The qualitative characteristics that determine the usefulness of information in financial statements.
  The qualitative characteristics that determine the usefulness of information are relevance and reliability. Comparability is a qualitative characteristic that interacts with

Copyrighted materia

both relevance and reliability Materiality provides a threshold or cut-off point rather than being a primary qualitative characteristic. The balance between cost and benefit is a persuasive constraint rather than a qualitative characteristic.

- The definition, recognition and measurement of elements from which financial statements are constructed.

  The definition of an element is given in paragraph 46:

  > Financial statements portray the financial effects of transactions and other events by grouping the effects into broad classes according to their economic characteristics. These broad classes are termed the elements of financial statements. The elements directly related to the measurement of financial position in the balance sheet are assets, liabilities and equity. The elements directly related to the measurement of performance in the profit and loss account are income and expense.

The exposure draft defines each of the elements. For example, an asset is defined in paragraph 53:[4] Thc future economic benefit embodied in an asset is the potential to contribute, directly or indirectly, to the How of cash and cash equivalents to the enterprise.*

It defines when an element is to be recognised. For example, in paragraph 87 it states: 'An asset is recognised in the balance sheet when it is probable that the future economic benefits will flow to the enterprise and the asset has an attribute that can be measured reliably.'

Regarding measurement, it comments in paragraph 99:

> The measurement attribute most eommonlv adopted h\ enterprises in preparing their financial statements is historical cost. This is usuallv combined with other measurement attributes, such as realisable value. For example, inventories are usually carried at the lower of cost and net realisable value, and marketable securities ma\ be carried at market value, that is, their realisable value. Furthermore, many enterprises combine historical costs and current costs as a response to the inability of the historical cost model to deal with the effects of changing prices of non-monetary assets.

The document deals in a similar stvle with the other elements.

- The concepts of capital, capital maintenance and profit.

  Finally, regarding the concepts of capital, capital maintenance and profit, the IASC comments:

  > At the present time, it is not the intention of the Hoard of the I ASCI to prescribe a particular measurement model (i.e. historical cost, current cost, realisable value, present \alue) ... This intention will, however, be reviewed in the light of world developments.

An ii[>propria It' capital maintenance model is not specified but the Framework mentions historical cost accounting, current cost accounting, net realisable \alue (as discussed in Chapter 4) and present value models (as discussed in Chapter 3).

The Framework has initiated the development of conceptual frameworks bv other national standard setters for both private sector and public sector financial statements. Since then and up to the present day other jurisdictions have been influenced when drafting their own national conceptual frameworks, e.g. the Swedish National Financial Management Authority in 2002 (www.esv.se) and the South African Accounting Standards Board in 2003 (www.asb.co./a).

One of the earliest conceptual frameworks developed subsequent! J was that developed by the ASB in the UK. as the *Statement of Principles* - this expanded on the ideas underlying the Framework and the ASB deserves praise for this.

Copyrighted material

7.4 ASB *Statement of Principles 1999*[s]

The *Statement* fleshes out the ideas contained in (he Framework.

As Sir David Tweedie, Chairman of the ASB, commented, 'The Board has developed its *Statement of Principles* in parallel with its development of accounting standards ... It is in effect the Hoard's compass for when we navigate uncharted waters in the years ahead. This is essential reading for those who want to know where the Hoard is coming from, and where it is aiming to go/

The Statement contains eight chapters dealing with key issues. Each of the chapters is commented on below.

7.4.1 Chapter I: 'The objective of financial statements'

The *Statement of Principles* follows the IASC *Framework* in the identification of user groups.

The statement identities the investor group as the primary group tor whom the financial statements are being prepared. It then states the information needs of each group as follows:

- Investors. These need information to:
  - assess the stewardship of management, e.g. in safeguarding the entity's resources and using them properly, efficiently and profitably;
  - lake decisions about management, e.g. assessing need for new management;
  - take decisions about their investment or potential investment, e.g. deciding whether to hold, buy or sell shares and assessing the ability to pay dividends.
- Lenders. These need information to:
  - determine whether their loans and interest will be paid on time;
  - decide whether to lend and on what terms.
- Suppliers. These need information to:
  - decide whether to sell to the entity;
  - determine whether they will be paid on time;
  - determine longer-term stability if the company is a major customer.
- Employees. These need information to:
  - assess the stability and profitability of the company;
  - assess the ability to provide remuneration, retirement benefits and employment opportunities.
- Customers. These need information to:
  - assess the probability of the continued existence of the company taking account of their own degree of dependence on the company, e.g. for future provision of specialised replacement parts and servicing product warranties.
- Government and other agencies. These need information to:
  - be aw arc of the commercial activities of the company;
  - regulate these activities;
  - raise revenue;
  - produce national statistics.
- Public. Members of the public need information to:
  - determine the effect on the local economy of the company's activities, e.g. employment opportunities, use of local suppliers;
  - assess recent developments in the company's prosperity and changes in its activities.

Copyrighted material

The information needs of which group are to be dominant?

Seven groups are identified, but there is only one set of financial statements. Although they arc described as general-purpose statements, a decision has to be made about which group's needs take precedence.

The *Statement of Principles* identities the investor group as the defining class of user, i.e. the primary group for whom the financial statements are being prepared.

It takes the view that financial statements 'are able to focus on the common interest of users'. The common interest is described thus: 'all potential users are interested, to a varying degree, in the financial performance and financial position of the entity as a whole'. This means that it is a prerequisite that the information must be relevant to the investor group. This suggests that any need of the other groups that is not also a need of the investors will not be met bv the financial statements.

The 1995 Exposure Draft stated: 'Awarding primacy to investors docs not imply that other users are to be ignored. The information prepared for investors is useful as a frame of reference for other users, against which they can evaluate more specific information that they may obtain in their dealings with the enterprise.'

It is important, therefore, for all of the other users to be aware that this is one of the principles. If they require specific disclosures that might be relevant to them, they will need to take their own steps to obtain them, particularly where there is a conflict of interest. For example, if a closure is being planned by the directors, it may be in the investors* interest for the news to he delayed as long as possible to minimise the cost to the company; employees, suppliers, customers and the public must not expect any assistance from the financial statements - their information needs arc not the primary concern.

What information should be provided to satisfy the information needs?

The *Stan-mat* proposes that information is required in tour areas: financial performance, financial position, generation and use of cash, and financial adaptability.

Financial performance

Financial performance is defined as the return an entity obtains from the resources it controls. This return is available from the profit and loss account and pro\ides a means to assess past management performance, how effectively resources have been utilised and the capacity to generate cash flows.

Financial position

Financial position is available from an examination of the balance sheet and includes:

- the economic resources controlled bv an entity, i.e. assets and liabilities;
- financial structure, i.e. capital gearing indicating how profits will be divided between the different sources of finance and the capacity for raising additional finance in the future;
- liquidity and solvency, i.e. current and liquid ratios;
- capacity to adapt to changes - sec below under Financial adaptability.

Generation and use of cash

Information is available from the cash flow statement which shows cash flows from operating, investment and financing activities providing a perspective that is largely free from allocation and valuation issues. This information is useful in assessing and reviewing previous assessments of cash flows.

Copyrighted material

Financial adaptability

This is an entity's ability to alter the amount and timing of its cash flows. It is desirable in order to be able to cope with difficult periods, e.g. when losses are incurred and to take advantage of unexpected investment opportunities. It is dependent on factors such as the ability, at short notice, to:

- raise new capital;
- repay capital or debt;
- obtain cash from disposal of assets without disrupting continuing business, i.e. realise readily marketable securities that might have been built up as a liquid reserve;
- achieve a rapid improvement in net cash Hows from operations.

7.4.2 Chapter 2: 'The reporting entity'

This chapter focuses on identifying when an entity should report and which activities to include in the report.

When an entity should report

The principle is that an entity should prepare and publish financial statements if:

- there is a legitimate demand for the information, i.e. it is the case both that it is decision-useful and that benefits exceed the cost of producing the information; and
- it is a cohesive economic unit, i.e. a unit under a central control that can be held accountable for its activities.

Which activities to include

The principle is that those activities should be included that are within the direct control of the entity, e.g. assets and liabilities which arc reported in its own balance sheet, or indirect control, e.g. assets and liabilities of a subsidiary of the cntit\ which are reported in the consolidated balance sheet.

Control is defined as (a) the ability to deploy the resources and (b) the ability to benefit (or to suffer) from their deployment. Indirect control by an investor can be difficult to determine. The test is not to apply a theoretical level of influence such as holding .v% of shares but to review the relationship that exists between the investor and investee in practice, such as the investor having the power to veto the investcc's financial and operating policies and benefit from its net assets.

7.4.3 Chapter 3: 'The qualitative characteristics of financial information'

The *Statement of Principles* is based on the IASC *Framework* and contains the same four principal qualitative characteristics relating to the content of information and how the information is presented. The two primarv characteristics relating to content arc the need to be relevant and reliable; the two relating to presentation are the need to be understandable and comparable. The characteristics appear diagrammatically as follows:

From the diagram we can see that for information content to be relevant it must have:

- the ability to influence the economic decisions of users;
- predictive value, i.e. help users to evaluate or assess past, present or future events; or
- confirmatory value, i.e. help users to confirm their past evaluations.

Copyrighted material

For information to be reliable it must be:

- free from material error, i.e. transactions have been accurately recorded and reported;
- a faithful representation, i.e. reflecting the commercial substance of transactions;
- neutral, i.e. not presented in a way to achieve a predetermined result;
- prudent, i.e. not creating hidden resencs or excessive provisions, deliberately understating assets or gains, or deliberately overstating liabilities or losses;
- complete, i.e. the information is complete subject to a materiality test.

To be useful, the linancial information also needs to be comparable over time and between companies and understandable.

It satisfies the criteria for understandability if it is capable of being understood by a user with a reasonable know ledge of business activities and accounting, and a w illingness to study the information with reasonable diligence. However, the trade-off between relevance and reliability comes into pla\ with the requirement that complex information that is relevant to economic decision making should not be omitted because some users find it loo difficult to understand. There is no absolute answer where there is the possibility of a trade-oil and it is recognised by the ASH that the relative importance of the characteristics in different cases is a matter of judgement.

The chapter also introduces the idea of materiality as a threshold quality and any item that is not material does not require to be considered further. The statement recognises that no information can be useful if it is not also material b\ introducing the idea of a threshold quality which it describes as follows: 'An item of information is material to the financial statements if its misstatement or omission might reasonably be expected to influence the economic decisions of users of those financial statements, including their assessment of management's stewardship."[1]

First, this means that it is justified not to report immaterial items which would impose unnecessary costs on preparers and impede decision makers by obscuring material information with excessive detail.

Secondly, it means that the important consideration is not user expectation (e.g. users might expect turnover to be accurate to within l°o) but the effect on decision making (e.g. there might only be an effect if turnover were to be more that 10% over- or understated in which case, only errors exceeding 10% are material).

It also states that'Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement*. The need to exercise judgement means that the preparer needs to have a benchmark.

A discussion paper issued in January 1995 by the Financial Reporting & Auditing Group of the ICAEW entitled 'Materiality in Financial Reporting FRAG 1/95* identified that there are few instances where an actual figure is given by statute or by standard setters, e.g. FRS 6," para. 76 refers to a material minority and indicates that this is defined as 10%.

The paper also referred to a rule of thumb used in the USA:

> The Staff of the US Securities and Exchange Commission have an informal rule of thumb that errors of more than 10% are material, those between 5% and 10% may be material and those under 5% are usually not material. These percentages are applied to gross profit, net income, equity and any specific line in the financial statements that is potentially misstated.

The ASB has mo\cd away from setting percentage benchmarks and there is now a need for more explicit guidance on the application of the materiality threshold.

Unresolved trade-offs

There are a number of characteristics where there is no guidance given as to the trade-off. For example, is relevance more important than reliability? Does being neutral conflict with prudence? Does relevance require a faithful representation and docs a faithful representation require the information to be verifiable?

Unresolved relative importance

The approach taken has to be to regard decision usefulness as paramount. It is not clear where this leaves accountability and stewardship. There are unresolved questions such as, for example, whether comparability is as important as relevance or reliability.

7.4.4 Chapter 4: 'The elements of financial statements'

This chapter gives guidance on the items that *could appear* in financial statements. These are described as elements and have the following essential features:

- Assets. These arc rights to future economic benefits controlled by an entity as a result of past transactions or events.
- Liabilities. These arc obligations of an entity to transfer future economic benefits as a result of past transactions or events, i.e. ownership is not essential.
- Ownership interest. This is the residual amount found by deducting all liabilities from assets which belong to the owners of the entity.
- Gains. These are increases in ownership interest not resulting from contributions by the owners,
- Losses. These are decreases in ownership interest not resulting from distributions to the owners.
- Contributions by the owners. These are increases in ownership interest resulting from transfers from owners in their capacity as owners.

Copyrighted material

- Distributions to owners. These are decreases in ownership interest resulting from transfers to owners in their capacity as owners.

These definitions have been used as the basis for developing standards, e.g. assessing the substance of a transaction means identifying whether the transaction has given rise to new assets or liabilities, defined as above.

7.4.5 Chapter 5: 'Recognition in financial statements[1]

The objective of financial statements is to disclose in the balance sheet and the profit and loss account the effect on the assets and liabilities of transactions, e.g. purchase of stock on credit and the effect of events, e.g. accidental destruction of a vehicle by lire. This implies that transactions are recorded under the double entrv principle with an appropriate debit and credit made to the element that has been affected, e.g. the asset element (stock) and the liability element (creditors) are debited and credited to recognise stock bought on credit. Kvcnts are also recorded under the double entry principle, e.g. the asset element (vehicle) is dcrccognised and credited because it is no longer able to provide future economic benefits and the loss element resulting from the fire damage is debited to the profit and loss account. The emphasis is on determining the effect on the assets and liabilities, e.g. the increase in the asset element (stock), the increase in the liability element (creditors) and the reduction in the asset element (vehicle).

This emphasis has a particular significance for application of the matching concept in preparing the profit and loss account. The traditional approach to allocating expenditure across accounting periods has been to identify the costs that should be matched against the revenue in the profit and loss account and carry the balance into the balance sheet, i.e. the allocation is driven by the need to match costs to revenue. The *Statement of Principles* approach is different in that it identifies the amount of the expenditure to be recognised as an asset and the balance is transferred to the profit and loss account, i.e. the question is 'Should this expenditure be recognised as an asset (capitalised) and, if so, should any part of it be derecognised (written off as a loss element)."

This means that the allocation process now requires an assessment as to whether an asset exists at the balance sheet date by applying the following test:

1 If the future economic benefits are eliminated at a single point in time, it is at that point that the loss is recognised and the expenditure derecognised, i.e. the debit balance is transferred to the profit and loss account.

2 If the future economic benefits are eliminated over sexeral accounting periods - typically because they are being consumed over a period of time - the cost of the asset that comprises the future economic benefits will be recognised as a loss in the performance statement over those accounting periods, i.e. written off as a loss element as their future economic benefit reduces.

The result of this approach should not lead to changes in the accounts as currently prepared but it does emphasise that matching cost and revenue is not the main driver of recognition, i.e. the question is not 'How much expenditure should we match with the revenue reported in the profit and loss account?' but rather 'Are there future economic benefits arising from the expenditure to justify inclusion in the balance sheet?' and, if not, derecognise it, i.e. write it off.

Dealing with uncertainty

There is almost always some uncertainty as to when to recognise an event or transaction, e.g. when is the asset element of raw material stock to be disclosed as the asset element

Copyrighted material

WOrk-in-progressr Is it when a slock requisition is issued, when the storekeeper isolates it in the stock to be issued bay, when it is issued onto the workshop floor, when it begins to be worked on?

The *Statement of Principles* stales that the principle to be applied if a transaction has created or added to an existing asset or liability is to recognise it if:

1 sufficient evidence exists thai the new asset or liability has been created or that there has been an addition lo an existing asset or liability; and

2 the new asset or liabilily or the addition to the existing asset or liability can be measured at a monetary amount with sufficient reliability.

The use of the word sufficient reflects the uncertainty that surrounds the decision when to recognise and the *Statement* stales: 'In the business environment, uncertainty usually exists in a continuum, so the recognition process involves selecting the point on the continuum at which uncertainly becomes acceptable*.[8]

Before thai point it may, for example, be appropriate to disclose by wa\ of note to the accounts a contingent liability that is possible (less than 50% chance of crystallising into a liability) but not probable (more than 50"<» chance of crystallising).

Sufficient reliability

Prudence requires more persuasive evidence of the measurement for the recognition of items that resuli in an increase in ownership interest than for the recognition of items that do not. However, the exercise of prudence does not allow tor the omission of assets or gains where there is sufficient evidence of occurrence and reliability of measurement, or for the inclusion of liabilities or losses where there is not. This would amount to the deliberate understatement of assets or gains, or the deliberate overstatement of liabilities or losses.

Reporting gains and losses

Chapter 5 docs not address the disclosure treatment of gains and losses. A change in assets or liabilities might arise from three classes of past event: transactions, contracts for future performance and other events such as a change in market price.

II the change in an asset is offset by a change in liabilily, there will be no gain or loss. If the change in asset is not offset by a change in liability, there will be a gain or loss. If there is a gain or loss a decision is required as to whether it should be recognised in the profit and loss account or in the statement of total recognised gains and losses.

Recognition in profit and loss account

For a gain to be recognised in ihe profit and loss account, it must have been earned and realised. Earned means that no material transaction, contract or other event must occur before the change in the assets or liabilities will have occurred; realised means that the conversion into cash or cash equivalents must either have occurred or be reasonably assured.

Profit, as staled in the profit and loss account, is used as a prime measure of performance. Consequently, prudence requires particular!) good evidence for the recognition of gains.

Il is important to note that in this chapter the ASH is following a balance sheet orientated approach to measuring gains and losses. The comcniional profit and loss account approach would identify the transactions that had been undertaken and allocate these to financial accounting periods.

Copyrighted material

7.4.6 Chapter 6: 'Measurement in financial statements*

The majority of listed companies in the UK use the mixed measurement system whereby some assets and liabilities are measured using historical cost and some are measured using a current value basis. The *Statement of Principles* envisages that this will continue to be the practice and states that the aim is to select the basis that;

- provides information about financial performance and financial position that is useful in evaluating the reporting entity's cash-generation abilities and in assessing its financial adaptability;
- carries values which are sufficicntlv reliable: if the historical cost and current value are equally reliable, the better measure is the one that is the most relevant; current values may frequently be no less reliable than historical cost figures given the level of estimation that is required in historical cost figures, e.g. determining provisions for bad debts, stock provisions, product warranties;
- reflects what the asset and liability represents: e.g. the relevance of short-term investments to an entity will be the specific future cash flows and these are best represented by current \alues.

ASB view on need for a current value basis of measurement

The *Statement* makes the distinction" between return *on* capital - i.e. requiring the calculation of accounting profit - and return ©/capital - i.e. requiring the measurement of capital and testing for capital maintenance. The *Statement* makes the point that the financial capital maintenance concept is not satisfactory when *significant* general or specific price changes have occurred.

ASB gradualist approach

The underlying support of the ASH for a gradualist move towards the use of current values is reflected in 'Although the objective of financial statements and the qualitative characteristics of financial information, in particular relevance and reliability may not change ... as markets develop, measurement bases that were once thought unreliable may become reliable. Similarly, as access to markets develops, so a measurement basis that was once thought insufficient!v relevant mav become the most relevant measure available'.[10]

Determining current value

Current value systems could be defined as replacement cost (entry value), net realisable value (exit value) or value in use (discounted present value of future cash flows). The approach of the *Statement* is to identify the value to the business by selecting from these three alternatives the measure that is most relevant in the circumstances. This measure is referred to as deprival value and represents the loss that the entity would sufler if it were deprived of the asset.

The value to the business is determined by considering whether the company would replace the asset. If the answer \^*yes*> then use replacement cose; if the answer is *no* hut the asset is worth keeping, then use value in use; and if *no* and the asset is not worth keeping, then use net realisable value.

Copyrighted material

This can he shown diagrammalically as follows:

Value to the husiness
= lower of

Replacement cost and Recoverable amount
= higher of

r——————i——————1

Value in use and Net realisahle value

How will value to the business be implemented?

The ASB is being pragmatic by following an incremental approach to the question of measurement stating that 'practice should develop by evolving in the direction of greater use of current \ alues consistent with the constraints of reliability and cost'. This seems a sensible position for the ASB to take. Its underlying views were clear when it stated that 'a real terms capital maintenance system improves the relevance of information because it shows current operating margins as well as the extent to w hich In tiding gains and losses reflect the effect of general inflation, so that use rsof real terms fmancial statements arc able to select the particular information they require'.[11]

Policing the mixed measurement system

Many companies have adopted the modified historical cost basis and revalued their fixed assets on a selective basis. However, this piecemeal approach allowed companies to cherry-pick the assets they wish to revalue on a selective basis at times when market values have risen. The ASB have adopted the same approach as IAS 16.'-

The fair value measurement system

A value to the business approach (often referred to as deprival value) was presented as a logical approach to selecting a value to be recognised in financial statements. Standard setters, e.g. the FASB are currently considering requiring (air values to be the most relevant values for stakeholders.[15]

Does the fair value measurement system make current cost and deprival value redundant?

It is interesting to consider the analysis set out in the Discussion Paper *Measurement Bases for Financial Reporting - Measurement on Initial Recognition}** This is a Discussion Paper prepared by the staff at the Canadian Accounting Standards Board which was issued (but not adopted) by the IASB in March 2006 for comment. The Discussion Paper proposes a four-level measurement hierarchy for assets and liabilities when they are initially recognised. The four levels start with two levels where there is a market (fair) value available, i.e. Level 1 - where there are observable market prices and Level 2 where there are accepted valuation models or techniques. The third and fourth levels deal with transactions where a substitute has to be found for market value - this takes us back to the bases discussed in Chapter 4. For example, when an asset cannot be reliably measured under Level 1 or 2 then the deprival value approach is proposed.

7.4.7 Chapter 7: 'Presentation of financial information'

Chapter 7 states that the objective of the presentation adopted is to communicate clearly and effectively and in as simple and straightforward manner as is possible without loss of rel-

Copyrighted material

evancc or rcliabilin and without significantly increasing the length of the financial statements.

The point about length is well made given the length of current annual reports and accounts. Recent examples include Jcnoptik AG extending to eighty-one pages. Sea Containers Ltd seventy-six pages and Hugo Boss over one hundred pages.

The Statement analyses the way in which information should he presented in financial statements to meet the objectives set out in Chapter I. It covers the requirement for items to be aggregated and classified and outlines good presentation practices in the statement of financial performance, balance sheet, cash How statement and accompanying information, e.g.:

Statement of financial performance

Good presentation invokes:

- Recognising only gains and losses.
- Classifying items by function, e.g. production, selling, administrative and nature, e.g. interest payable.
- Showing separately amounts that are affected in different ways by economic or commercial conditions, e.g. continuing, acquired and discontinued operations, segmental geographical information.
- Showing separately:
  - items unusual in amount or incidence
  - expenses that are not operating expenses, e.g. financing costs and taxation
  - expenses that relate primarily to future periods, e.g. research expenditure.

Balance sheet

Good presentation involves:

- Recognising only assets, liabilities and ownership interest.
- Classifying assets so that users can assess the nature, amounts and liquidity of available resources.
- Classifying assets and liabilities so that users can assess the nature, amounts and timing of obligations that require or may require liquid resources for settlement.
- Classifying assets b\ function, e.g. show fixed assets and current assets separately.

Accompanying information

Typical information includes chairman's statement, directors' report, operating and financial review, highlights and summary indicators.

The *Statement* states that the more complex an entity and its transactions become, the more users need an objective and comprehensive analysis and explanation of the main features underlying the entity's financial performance and financial position.

Good presentation involves discussion of:

- The main factors underlying financial performance, including the principal risks, uncertainties and trends in main business areas and how the entity is responding.
- The strategies adopted for capital structure and treasury policy.
- The activities and expenditure (other than capital expenditure) that are investment in the future.

It is interesting to note the *Statement* view that highlights and summan indicators, such as amounts and ratios that attempt to distil key information, cannot on their own adequately

Copyrighted material

describe or provide a basis for meaningful analysis or prudent decision making. Ii does, however, state: 'That having been said, well-presented highlights and summary indicators are useful to users who require only very basic information, such as the amount of sales or dividends.* The ASH will be giving further consideration to this view that there is a need for a really brief report.

7.4.8 Chapter 8: 'Accounting for interests in other entities'

Interests in other entities can have a material effect on the company's own financial performance and financial position and need to be fully reflected in the financial statements. As an example, an extract from the 2006 Annual Report and Accounts of Stagecoach pic shows:

	Company balance sheet	*Consolidated balance sheet*
Tangible assets	£0.1 m	/:893.4m
Investments	£964.9m	-

In deciding whether to include the assets in the consolidated balance sheet a key factor is the degree of influence exerted over the activities and resources of the investee:

- If the degree of influence allows control of the operating and financial policies, the financial statements are aggregated.
- If the investor has joint control or significant influence, the investor's share of the gains and losses are recognised in the consolidated income statement and reflected in the carrying value of the investment.

However, there is no clear agreement on the treatment of interests in other entities, and further developments can be expected.

7.5 AICPA *Improving Business Reporting — A Customer Focus: Meeting the Information Needs of Investors and Creditors*

This was a study carried out by AICPA in the USA over a three-year period and published in 1994.[b] It resulted in a number of interesting recommendations to improve business reporting. A major recommendation was that standard setters should develop a comprehensive model of business reporting, focusing on factors that create longer-term value and including financial and non-financial measures to cope with rapid changes, e.g. in technology and competition.

The committee identified that users had a high interest in being able to identify:

- trends, e.g. from five-year summaries of key statistics, separate reporting of segments and core and non-core assets and liabilities information;
- substance of transactions, e.g. accounting for off balance sheet transactions, complex capital instruments and investments in unconsolidated entities;
- significant risks arising from uncertainties over the valuation of assets and liabilities.

The committee identified that the users had a lower interest in:

- the variety of income theories;
- the valuation of intangible assets;
- accounting for combinations.

Copyrighted material

The committee identified user interest in a number of non-financial areas:

- the corporate strategy in general terms;
- the strengths, weaknesses, opportunities and threats (SWOTs) to the company;
- performance measures that management use with an explanation of reasons for changes and trends;
- management plans and degree to which achieved;
- information about the directors and management and their remuneration packages.

A review of the recommendations broadly supports the stance being taken bv the 1ASC, with mandatory standards being introduced for the financial statements and voluntary disclosures for non-financial areas, e.g. management reports. Auditors check that the comments made in the management reports do not give a picture that conflicts with the financial statements. The following is an extract from the audit report of KPMG Austria Gmbh on the 20(H) Annual Report of EVN AG (an IAS compliant company}:

> \\ e confirm that the Management Report complies with the consolidated statements and that the legal requirements are met to exempt KVN AG from the obligation to compile financial statements in accordance with the Austrian commercial code.

7.6 ICAS *Making Corporate Reports Valuable*

In 1°NN, following a major research project by its Research Committee, the Institute of Chartered Accountants of Scotland (ICAS) published the *Making Corporate Reports I a/uahle (MCRI)*'" report. The general objective ofMCRV was to stimulate discussion that would lead to improvements in corporate reporting. The long-term purpose was that reports should be produced that would be better able to assist the user in gauging management performance and assessing an entity's prospects; reports that were more understandable, less daunting in presentation, more readable and with as little technical jargon as possible.

In pursuit of this goal *MCRI* formulated the Research Committee's views on meeting the needs of management and investors. It considered company strategy and planning, the need for clear financial statements covering such areas as entity objectives, present financial wealth, changes in financial wealth, operations, distributable wealth, cash flow and segmental information.

The report criticised historical cost accounting and supported the use of a current value system. It also advocated the publication of projected results so that the user would have available the preceding year's figures, the current year's and the subsequent year's.

To iis credit, ihe Research Committee demonstrated that its proposals could be applied in practice by preparing the financial statements of Melody pic and obtaining feedback from the preparers of the accounts. These were published in 19°0 and are perhaps a prototype of what financial statements might look like in the future.

The balance sheet was described as a statement of assets and liabilities and was a value statement. Assets, including stock, were revalued in current terms, thus breaking away from the historical cost philosophy. The net assets at the end of the period were the financial wealth generated by operations plus am increase in the realisable value of financial wealth.

The profit and loss account was described as an operations statement and, bv including stock at market value, produced a residual figure called financial wealth generated bv operations.

Copyrighted material

The annual report also contained a statement of cash flow, a value added statement* a chairman[1]* review, a directors* report and a document referred to as 'Management's discussions and analysis of financial conditions and results of operations' for the year under review, supplemented by the financial plans for the following year.

The auditors' report appears as the * Report of the independent assessors'. It is addressed to the members, creditors and employees of Melody pic and is more informative than the traditional short-form report favoured in the UK.

Another statement that makes its debut spells out 'responsibility for the financial statements'. It informs the user that the ultimate responsibility lies with the directors, and in doing so it also explains the role of the independent assessors and the nature of their report.

\l(!Rl is a useful addition to our experience of financial reporting and its influence will no doubt be felt as the standard setters move towards dealing with the problem of an appropriate measurement base.

It might be useful at this point to list some of the key thoughts in *MCRI* :

Representation of position

- Accounts should aim to portray economic reality.
- Substance over form is emphasised.
- The investors need the same information as the management.

Income

- It is against excessive emphasis on the bottom line with a single earnings figure.
- It emphasises the balance sheet rather than accruals-based income. Income is seen as a reconciliation between consecutive balance sheets expressed in current values.

Capital maintenance

- It takes a proprietary view in seeking to maintain the owners' purchasing power using a consumer price index.

Measurement base

- It supports the use of net realisable values.

7.7 Conceptual Framework developments

The FASB in America and the EASB have been collaborating on revising the IASB Framework and the FASB Q»ncepts Statements (e.g. Statement 1: Objectives of financial reporting by business enterprise). The intention is to adopt a principles-based approach. This is also supported also by a report[17] from the Institute of Chartered Accountants of Scotland which concludes that the glottal convergence of accounting standards cannot be achieved by a *tick-box' rules-driven approach but should rely on judgement-based principles.

A principles-based approach allows companies the flexibility to deal with new situations.

A rules-based approach provides the auditor with protection against litigious claims because it can be shown that other auditors would have adopted the same accounting treatment. However, following the Enron disaster, the rules-based approach was heavilv criticised in

Copyrighted material

America and it was felt that a principles-based approach would have been more effective in preventing it.

A rules-based approach means that financial statements are more comparable. Recognising that a principles-based approach could lead to different professional judgements for the same commercial activity, it is important that there should he full disclosure and transparency.

Copyrighted material

1 (a) Name the user groups and information needs of the user groups identified by the IASC *Framework for the Presentation and Preparation of Financial* Statements.

(b) Discuss the effect of the Framework on current financial reporting practice.

2 Give a brief synopsis of the ICAS *Making Corporate Reports Valuable.*

3 R. MacVe in A *Conceptual Framework for Financial Accounting and Reporting: The Possibilities for an Agreed* Structure suggested that the search for a conceptual framework was a political process. Discuss the effect that this thinking has had and will have on standard setting.

4 (a) In 1999 in the UK. the ASB published the *Statement of Principles.* Explain what you consider to be the purpose and status of the Statement.

(b) Chapter 4 of the Statement identifies and defines what the ASB believes to be the elements that make up financial statements. Define any four of the elements and explain how. in your opinion, the identification and definition of the elements of financial statements would enhance financial reporting.

(c) Chapter 5 of the *Statement* states that matching is not regarded as the driver of the recognition process. Explain what is meant by this and its probable effect in practice.

5 The replacement of accrual accounting with cash flow accounting would avoid the need for a conceptual framework.'[34] Discuss.

6 Financial accounting theory has accumulated a vast literature. A cynic might be inclined to say that the vastness of the literature is m sharp contrast to its impact on practice.

(a) Describe the different approaches that have evolved m the development of accounting theory.

(b) Assess its impact on standard setting.

(c) Discuss the contribution of accounting theory to the understanding of accounting practice. and suggest contributions that it might make in the future.

7 The President of the ICAEW has proposed that regulators from developed and developing countries start talking to agree a set of principles for universal application that could underpin the regulation of accounting and auditing. Discuss the extent to which the IASC Framework provides such a set of principles.

8 Explain the different ways in which future economic benefits may arise.

9 As fair values may be unreliable and mislead users into thinking that the balance sheet shows the net worth of an entity, historical costs are preferable for reporting assets and liabilities in the balance sheet. Discuss.

10 Rules-based accounting adds unnecessary complexity, encourages financial engineering and does not necessarily lead to a "true and fair view' or a "fair presentation'. Discuss.

11 The key qualitative characteristics in the Framework are relevance and reliability. Preparers of financial statements may face a dilemma in satisfying both criteria at once. Discuss.

12 An asset is defined in the Framework as a resource which an entity controls as a result of past events and from which future economic benefits are expected to flow to the entity. Discuss whether property, plant and equipment automatically qualify as assets.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (*).

* Question I

The following information is available in relation to MCRV Ltd (based on the ICAS Report) for the *year* ending 31 December 20X8:

(a) Statement of assets and liabilities as at 31 December. This statement at the start of the year is assumed to contain valuations at net realisable value throughout
   (i) Fixed assets are estimated by the directors on the basis of an orderly disposal in a second-hand market
   (ii) The NRV of raw materials was assumed by the directors to be the same as their purchase price.
   (iii) The NRV of finished goods was estimated as selling price less the estimated costs of disposal in the normal course of business.

(b) A summary of the cash book.

(c) The non-cash transactions during the year are as shown in the journal entries.

Statement of assets and liabilities as at 31 December

Statement *of assets and liabilities as at 31 December*

	10X7		*20X8*	
	L		*L*	
Fixed assets	200		270	
Current assets				
Stock	SO		66	
Debtors	30		40	
Cash	JO		76	
	290		452	
Less-				
Current liabilities				
Creditors	35		30	
Long-term loans	_60_		^70	
		95		100
		195		352

Cosh *transactions during* (he *year ended 31 December 20X8*

Cash received during 20X8:	£	*L*
Credit customers		90
Long-term loans		*J^*
		220
Cash paid during 20X8;		
Credit suppliers	85	
Fixed assets	30	
Salaries	30	
Loan interest	9	
		154
		66

journal entries for non<ash transactions for the year ended 31 December 20X8

	Dr *L*	*O* *L*
Debtors	200	
Sales		200
Credit sales for 20X8		
Stock	80	
Creditors		80
Credit purchases for 20X8		
Cost of goods sold	70	
Stock		70
Goods used for sale		
Stock	6	
Cost of goods sold - being uplift in closing stock from cost to net realisable value		6

Required:

(a) Prepare an operations statement for the year ended 31 December 20X8 to show wealth created by operations.

(b) Prepare a statement of changes in wealth, in the following format:

Increase in wealth due to operations	
Increase in value of fixed assets	
Decrease in value of long-term loans	^ ^ ^ _ _ _
Realisable increase in net assets	^ ^ ^ ^ ^ ^ —

(c) Explain circumstances in which there can be a decrease in the value of long-term loans.

(d) Explain how the percentage return on capital employed, current ratio and acid test ratio based on the historical cost concept would differ from those calculated using the concept applied in the above question.

(Adopted *from extract in Melody pic annual report (ICAS))*

Copyrighted material

Question 2

The following extract is from Conceptual framework *for Financial Accounting and Reporting.* £/ements of *Financial Statements and Their Measurement* FASB 3. December 1976.

> The benefits of achieving agreement on a conceptual framework for financial accounting and reporting manifest themselves in several ways. Among other things, a conceptual framework can (I) guide the body responsible for establishing accounting standards. (2) provide a frame of reference for resolving accounting questions in the absence of a specific promulgated standard. (3) determine bounds for judgement in preparing financial statements. (4) increase financial statement users' understanding of and confidence in financial statements, and (5) enhance comparability.

Required:

(a) Define a conceptual framework.

(b) Critically examine why the benefits provided in the above statements are likely to flow from the development of a conceptual framework for accounting.

Question 3

The following extract is from 'Comments of Leonard Spacek", in R.T. Sprouse and M. Moonitz, A *Tentative* Set of Brood *Accounting Principles for* Business Enterprises. Accounting Research Study No. 3. AICPA. New York, 1962. reproduced in A Belkaoui. *Accounting Theory,* Harcourt Brace Jovanovich.

> A discussion of assets, liabilities, revenue and costs is premature and meaningless until the basic principles that will result in a fair presentation of the facts in the form of financial accounting and financial reporting are determined. This fairness of accounting and reporting must be for and to people, and these people represent the various segments of our society.

Required:

(a) Explain the term 'fair*.

(b) Discuss the extent to which the IASC conceptual framework satisfies the above definition.

Question 4

The following is an extract from Accountancy *Age.* 25 January 2001.

> A powerful and 'shadowy" group of senior partners from the seven largest firms has emerged to move closer to edging control of accounting standards from the world's accountancy regulators . .. they form the Global Steering Committee ... The GSC has worked on plans to improve standards for the last two years after scathing criticism from investors that firms produced varying standards of audit in different countries.

Discuss the effect on standard setting if control were to be edged from the world's accountancy regulators.

References

1 For IFAD refer to www.iasplus.com/rcsuurcc/ifad.htm.
2 *Framework for the Preparation and Presentation of Financial Statements,* IASC 1989, Preface.
3 IAS 17 revised, *Leases,* IASC, 1994.
4 D. Solomons. *Guidelines fir Financial Reporting Standards,* ICAKW, 1989, p. 32.
5 *Statement of Principles for Financial Reporting* ASH, 1999.
6 *Ibid.,* para. 3.27.

Copyrighted material

7 FRS 6 *Acquisition and Mergers,* ASH. 1994.
8 *Statement of Principles fir Financial Re parting,* ASH, 1999, para. 5.10.
9 //-/</., para. 6.42.
HI //»,/.. para. 6.25.
11 *Statement of Principles for Financial Reporting,* ASH, 1995, para. 5.37.
12 IAS 16 *Property, Plant and Equipment,* IASC, revised 1998, para. 34.
13 SFAS No 157 /*<»> /'(//«« *Measurements,* FASH, October 2IM>5.
14 Discussion Paper *Measurement liases for Financial Reporting - Measurement on Initial Recognition,* ACSB, www.acslxMnada.org/index.cfiu/cUd/185/la_itl/1.htm
15 *Improving Business Reporting A Customer Focus: Meeting the Information Seeds of Investors and Creditors]* AICPA, 1994.
16 *Making Corporate Reports I aluabte,* [CAS, 19X8.
17 ICAS, *Principles not rules a question of judgement,* www.icas.orp.uL/site/cms/coiuentView Art icle.asp'"article=4597.
18 A. Leonard, 'The peg on which standards hang'. *Accountancy,* January 1996, p. 80.
19 S. Fcarnk) and M. Page, 'Why the ASH has lost its bearings'. *Accountancy,* April 1996, p. 94.
20 D. Solomons, *op. at.*
21 J. Arnold *et aL, The Future Shape of Financial Reports,* ICAKW/ICAS, 1991.
22 *Making Corporate Reports Valuable,* ICAS, 198S, p. 35.
23 S. Fearnley and M. Page, *he. tit.*
24 R. Skinner, *Accountancy,* January 1990, p. 25.

Copyrighted material

Introduction

Each company sends an annual report and accounts to its shareholders. It is the means by which the directors are accountable for their stewardship of the assets and their handling of the company's affairs for the past year. It consists of financial data which may have been audited and narrative comment which mav be reviewed bv the auditors to check that it does not present a picture that differs from the financial data (i.e. that the narrative is not misleading).

The financial data consist of four financial statements. These are the income statement, balance sheet, cash flow statement and statement of changes in equity - supported by appropriate explanatory notes, e.g. showing the make-up of inventories and the movement in non-current assets. In addition, public listed companies are required to provide segmental reports.

The narrative report from the directors satisfies two needs: (a) to explain what has been achieved in the current year and (b) to assist existing and potential investors to make their own predictions of cash flows of future years.

The current year

The directors* report or management report might contain items such as:

- investor data, e.g. market conditions, share issues, share splits, buybacks, company's share price movements, highs/lows and price relative to the market, dividend per share and dividend cover;
- macro data, e.g. the economic climate, currency fluctuations;
- company data such as:
  - key figures/financial highlights, e.g. incoming orders, turnover, KBIT, EBT, net income, employees
  - key ratios, e.g. sales growth, operating margins, return on equity
  - sales performance in key markets
  - explanations of unusual movements in financial data, e.g. why receivables have increased significantly.

Future cash flows

Investors need information to form their view on future cash flows which will be the basis for dividend payouts and capital gains. Directors provide selective information which they see as significant and relevant on items such as:

- capital investment programme;
- changes in production capacity, e.g. new facilities coming on stream, relocation to lower cost areas;
- research and development plans, e.g. new development agreements and alliances;
- prognosis, e.g. directors expect to increase sales In 5"o to 7% in the current financial year, with even stronger growth in earnings, provided no unforeseen events occur;
- corporate strategy, e.g. how to deal with any low profitability segments, possible divestments or acquisitions.

In this chapter we consider public listed companies, i.e. companies that have their shares traded on a recognised stock exchange. We use extracts from the Annual Reports and Notes on Accounts of the Nestle Group and Findel pic as main illustrations. We will consider the following:

- a company's financial calendar;
- the income statement:
  - criteria for the information that is published
  - format of the income statement under format 1 and format 2 of IAS 1
  - classification of costs in the income statement - does it matter under which heading a cost is classified provided it is not omitted?
  - treatment of discontinuing operations;
- the balance sheet:
  - format of the balance sheet
  - accounting rules for asset valuation;
- the statement of changes in equity:
  - rationale and format;
- segment reporting;
  - effect of IAS 14 *Segment Reporting* on presentation;
  - impact of IFRS 8 *Operating Segments;*
- accounting policies:
  - disclosure requirements
  - effect of different policies on analysis of the accounts;
- additional information in annual reports:
  - directors'/management reports;
- IFRS 1 First-time Adoption of International Accounting Standards.

8.2 A public company's financial calendar

The ownership and management of a public company whose shares are listed on a stock exchange are separate. The owners or shareholders are provided with regular information for stewardship accountability and to allow them to make investment decisions. Kach company follows its own financial calendar, often published as a financial calendar or key dates.

Events calendar for the Nestle Group (as published on the Nestle website)

Copyrighted material

April 6, 2006	13(>th Ordinary General Meeting, Lausanne
April 12, 2006	Dividend Payment date (and ex-dividend date)
April 25, 2006	2006 first quarter sales (press release and conference call)
August 23, 2006	2006 half-year results (press release and conference call)
October 19, 2006	2006 nine month sales (press release and conference call)
February 22, 2007	2006 full year results (press release and conference call)

Note;

- The above key dates arc for a Swiss company, and therefore at each event Swiss legal requirements must be followed. Different countries do have different legal requirements, but the principle of issuing a financial calendar remains across companies in other countries.
- The planned programme of communication with institutional investors and analysts is in recognition of the fact that the market hates surprises and share price is strengthened by regular communication.

8.3 Criteria for information appearing in a published income statement and balance sheet

There arc four criteria to consider:

- the format complies with IAS 1 and/or any national statutory requirements;
- the accounting policies comply with appropriate IFRSs or any national statutory requirements;
- there are appropriate notes;
- the financial statements present a fair view of the profits and of (he assets and liabilities.

We comment on each of these in turn.

8.4 The prescribed formats — the income statement

IAS **1** is not prescriptive in how an income statement is presented. The IASB appreciate that different layouts may be needed by different businesses in order for them to present fairly their results. For example, the 2005 GKN Annual Report stated that IFRS was not prescriptive as to the format of the income statement and then went on to explain the format used by the Group, e.g. noting that operating profit was the pre-fmance profit of continuing subsidiary" companies and, in order to achieve consistency and comparability, was analysed to show separately the results of normal trading performance and individually significant charges and credits, such items arising because of their si/e or nature. Having said this, there-are requirements for items that must be presented on the face of the income statement, and also for the structure of expenses within the income statements.

The minimum information content on the face of the income statement is:

(i) revenue;

(ii) finance costs;

(iii) share of the profit or loss of associates and joint ventures accounted for using the equity method;

(iv) tax expense;

Copyrighted material

(v) a single amount comprising the total of (a) the post-tax profit or loss of discontinued operations and (b) the post-tax gain or loss recognised on the measurement to fair value less costs to sell, or on the disposal of assets ur disposal group(s) constituting the discontinued operation; and

(vi) profit or loss.

The following must also be disclosed on the face of the income statement as allocations of profit or loss for the period:

(i) profit or loss attributable to minority interest; and

(ii) profit or loss attributable to equity holders of the parent.

The minimum information does not contain the detail of income and expenses, but this information must be presented in the notes to the accounts at least. Most businesses are likely to put some detail of these on the face of the income statement.

IAS 1 allows a company to choose between two formats for detailing income and expenses. The two choices allow for the analysis of costs in different ways: according to function, e.g. cost of sales, distribution costs and administration expenses, or according to nature, e.g. raw materials, wages and depreciation. The formats' are as follows:

Format 1: Vertical with costs analysed according to function.
Format 2: Vertical with costs analysed according to nature.

Many companies use Format 1 (unless there is any national requirement to use Format 2) with the costs analysed according to function. If this format is used the information regarding the nature of expenditure (e.g. raw materials, wages and depreciation) must be disclosed in a note to the accounts.

8.5 What information is required to be disclosed in Format I and Format 2?

An illustration of an income statement using the two IAS 1 formats is set out in Figure 8.1. Note that in both formats the same amount is disclosed for profit from operations. The description of profit from operations is permitted but not required.

8.5.1 Classification of operating expenses and other income by function as in Format I

In order to arrive at its operating profit (a measure of profit often recognised by many companies), a company needs to classify all of the operating expenses of the business into one of four categories:

- cost of sales
- distribution and selling costs
- administrative expenses
- other operating income or expense.

We comment briefly on each to explain how a company might classify its trading transactions. This will also indicate how the same transaction might be classified differently by different companies and so result in a different gross profit figure. It docs not affect intcr-period comparisons but it is important to remember when making inter-company comparisons.

Copyrighted material

Figure 8.1 Illustration of Formats I and 2

Copyrighted image

8.6 Cost of sales

Expenditure classified under cost of sales will typically include direct costs, overheads, depreciation and amortisation expense and adjustments. The items thai might appear under each heading arc:

- Direct costs:
  direct materials purchased; direct labour; other external charges that comprise production costs from external sources, e.g. equipment rental and subcontracting costs.

Copyrighted material

- Overheads:
  variable production overheads; fixed production overheads.
- Depreciation and amortisation:
  depreciation of fixed assets used in production; impairment expense; exceptional amounts written off inventory; research costs and development costs.
- Adjustments:
  - Change between the opening and closing inventory. If closing inventory is less than opening inventory, the reduction must have been sold and the cost of sales will be increased by the amount that the inventory has fallen. Converse!}, if closing inventory is more than opening inventory, the amount by which it has increased will not be included as a cost of the current period's sales.
  - Capitalisation of own work as a non-current asset. Any amount of the costs listed above that have been incurred in the construction of non-current assets for retention by the company will not appear as an expense in the income statement: it will be capitalised. Any amount capitalised in this way would be treated for accounting purposes as a non-current asset and depreciated.
  - Capitalisation of own work as a deferred asset. Any amount of the costs listed above that needs to be deferred to a future accounting period because the benefits of the expenditure can be reasonably matched with revenue expected in a future period, e.g. development expenditure capitalised under IAS 38, would be treated for accounting purposes as a deferred asset and expensed b\ matching with the revenue as it arises in the future accounting periods. IAS 38 is considered in detail in Chapter 17.
  - Treatment of variances from standard. Where a company uses a standard costing system, the variances can either be transferred in total to the income statement or be allocated to the cost of sales and the inventorv. Any variance allocated to the inventory will have an impact on the results of a subsequent period. (This aspect is considered in Chapter 18.)

8.6.1 Why cost of sales figures may not be comparable between companies

The cost of sales figure is derived under the accrual accounting concept. This means that (a) the cash flows have been adjusted by the management in order to arrive at the expense that management considers to IK associated with the sales achieved; and (b) additional adjustments may have been made to increase the cost of sales if the net realisable value of the closing inventory is less than cost. Clearly, when management adjust the cash How figures they are exercising their judgement, and it is impossible to ensure that the management of two companies faced with the same economic activity would arrive at the same adjustment. We will now consider the following reasons for differences in calculating the cost of sales: treatment of direct costs; choice of depreciation policy; management attitudes; and the accounting system capability.

8.6.2 Differences arising from the treatment of direct costs

Different companies may assume different physical flows when calculating the cost of direct materials used in production. This will affect the inventory valuation. One company may assume a first-in-first-out (FIFO) flow, where the cost of sales is charged for raw materials used in production as if the first items purchased were the first items used in production. Another company may use a weighted average basis. This is illustrated in Figure 8.2 for a

Copyrighted material

Figure 8.2 Effect on cost of sales of using FIFO and weighted average

company that started trading on I January 20X1 without any Opening inventory and sold 40,000 items on 31 March 20X1 for *£4* per item.

FIFO inventory is 20,000 items at a cost of *£}* per item, assuming that the purchases made on 1 January 20X1 and 1 February 20X1 were sold first. Weighted average inventory is 20,000 items at a cost of £2 per item, being the total cost of £120,000 divided b\ 60,000, the total number of items at the date of the sale.

The effect on the gross profit percentage would be as shown in Figure 8.3. This demonstrates that, even from a single difference in accounting treatment, the gross profit for the same transaction could be materially different in both absolute and percentage terms.

How can the investor determine the effect of different assumptions?

Although companies arc required to disclose their inventory valuation policy, the level of detail provided varies and we are not able to quantify the effect of different inventory valuation policies. For example, compare the accounting policy of AstraZcneca in Figure 8.4 with that of Findel pic in Figure 8.5. In the latter case, we are not even aware of the definition of cost that the company is actually using.

While we can carry out academic exercises as in Figure 8.3 and we arc aware of the effect of different inventory valuation policies on the level of profits, there is no way in real life that we can be certain of being able to carry out such an exercise.

Figure 8.3 Effect of physical stock flow assumptions on the percentage gross profit

Figure 8.4 AstraZeneca accounting policy for inventory valuation (2005 annual report)

Figure 8.5 Findel pic accounting policy **for inventories (2006 annual report)**

8.6.3 Differences arising from the choice of depreciation policy

The charge made for depreciation might vary because of different approaches:

- methods, e.g. straight-line or reducing balance;
- assumptions on productive use, e.g. different assessments of the economic life of an asset;
- carrying values, e.g. at cost or at revaluation;
- assumptions of total cost to be expensed, e.g. different assumptions about the residual value of an asset.

8.6.4 Differences arising from management attitudes

Losses might be anticipated and measured at a different rate. For example, when assessing the likelihood of the net realisable value of inventory falling below the cost figure, the management decision will be influenced by the optimism with which it views the future of the economy, the industry and the company. There could also be other influences, e.g. remuneration packages based on net income or preparation of the company for a buy-out In management.

8.6.5 Differences arising from the capability of the accounting system to provide data

Accounting systems within companies differ, e.g. costs that are collected b\ one company may well not be collected by another company. For example, the costs of some activities may be spread across a number of departments and different expenditure types, e.g. the cost of researching, sourcing and testing new materials for use in a production process. If it is not practicable to collect the information, consistency of presentation of this type of expenditure may not be possible. This could also affect assessment and comparison of segment performance.

8.7 Distribution costs

These are costs incurred after the production of the finished article and up 10 and including transfer of the goods to the customer. Expenditure classified under this heading will typically include the following:

- warehousing costs associated with the operation of the premises, e.g. rent, rates, insurance, utilities, depreciation, repairs and maintenance; wage costs, e.g. gross wages and pension contributions of warehouse staff;
- promotion costs, e.g. advertising, trade shows;
- selling costs, e.g. salaries, commissions and pension contributions of sales staff; costs associated with the premises, e.g. rent, rates; cash discounts on sales; travelling and entertainment;
- transport costs, e.g. gross wages and pension contributions of transport staff, vehicle costs, e.g. running, maintenance, depreciation.

8.8 Administrative expenses

These arc the costs of running the business that have not been classified as either cost of sales or distribution costs. Expenditure classified under this heading *will* typically include:

- administration, e.g. salaries, commissions, and pension contributions of administration staff; costs associated with the premises, e.g. rent, rates; amounts written off the receivables that appear in the balance sheet under current assets; professional fees.

8.9 Other operating income or expense

Under this heading a company discloses material income or expenses derived from ordinary activities of the business that have not been included elsewhere. If the amounts are not material, they would not be separately disclosed but included within the other captions. Items classified under these headings may typically include the following:

- income derived from intangible assets, e.g. royalties, commissions;
- income derived from third-party use of property, plant and equipment that is surplus to the current productive needs of the company;
- income received from employees, e.g. canteen, recreation fees;
- payments for rights to use intangible assets not directly related to operations, e.g. licences.

8.10 What costs and income are brought into account after calculating the trading profit in order to arrive at the profit on ordinary activities before tax?

We have explained the four categories of cost and other income that are taken into account when calculating the trading profit. In order to arrive at the profit before tax, income from investments and loans is required to be disclosed separately and not included with the other income - unless, of course, the investment or loan income is not material and is included within the other operating income for convenience.

Copyrighted material

8.1 I Does it really matter under which heading a cost is classified in the income statement provided it is not omitted?

This depends on how readers of the aeeounts use the gross profit and trading profit figures. An examination of annual reports indicates that directors usual!) make less reference to the gross profit figure and instead draw attention to the operating profit (or trading profit) figure. Operating profit is used to calculate the return on capital employed, as illustrated by the extract from the HOC! Group annual report for 2004 where the return on capital tor 2004 was 14.9°o defined as operating profit, as a percentage of average capital employed.

8.12 Discontinued operations disclosure in the income statement

Il'RS 5 *Son-Current Assets Held for Sale and Discontinued Operations* is one of the outcomes of the joint short-term project to reduce differences between II'RSs and US GAAP. It follows the lASB's consideration of FASH Statement No. 144 *Accounting for the impairment or Disposal of Long-Lived Assets* (SI'AS 144) which deals with the classification and presentation of discontinued operations.

The objective is[2] to help users evaluate the financial effects of discontinued operations, e.g. when making projections of future cash flows, earnings-generating capacity and the financial position.

IFRS 5 replaced IAS 35 *Discontinuing Operations* and provides that:

- an operation is classified as discontinued at the date the operation meets the criteria to be classified as held for sale or when the entry has disposed of the operation;
- the results of discontinued operations are to be shown separately on the face of the income statement; and
- an operation cannot be retrospectively classified as discontinued it the criteria for that classification are not met until after the balance sheet date.

8.1 2.1 Definition of discontinued operations

A discontinued operation[3] is a component of an cntit) that either has been disposed of, or is classified as held for sale, and

(a) represents a separate major line of business or geographical area of operations as reported in accordance with IAS 14,

(b) is part of a single co-ordinated plan lo dispose of a separate major line of business or geographical area of operations, or

(c) is a subsidiary acquired exclusively with a view to resale.

Definition of a component

The Il'RS defines a component as one which comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity, e.g. a cash-generating unit or a group of cash-generating units, while being held for use.

Definition of held for sale

It would be attractive for managers to be able to separate out loss-making operations in the Annual Report to present a better picture to shareholders, whilst taking cost reduction

Copyrighted material

measures to bring a division or segment back to profitability. In order to stop enterprises classifying activities as held for resale when it is not appropriate, **IFRS** 5 defines a disposal group as held for sale if its earning amount will be recovered principally through a sale transaction rather than through continuing use. It further provides that the disposal group must be available for immediate sale in its present condition and its sale must he highly probable.

For the sale to be highly probable requires that:

- the appropriate level of management must be committed to a plan to sell the disposal group;
- an active programme to locate a buyer and complete the plan must ha\e been initiated;
- the disposal group must be actively marketed for sale at a price that is reasonable in relation to its current fair value;
- the sale should be expected to qualify for recognition as a completed sale within one year from the date of classification;
- actions required to complete the plan should indicate that it is unlikely that significant changes to the plan will be made or that the plan will IK* withdrawn.

There is a pragmatic recognition that there may be events outside the control of the enterprise which prevent completion within one year. In such a case the held for sale classification is retained, provided there is sufficient evidence that the entity remains committed to its plan to sell the disposal group and has taken all reasonable steps to resolve the delay.

8.12.2 Disclosure of activities

Disclosure in the year of disposal

The financial statements should disclose[4] the following:

(a) a single amount on the face of the income statement comprising the total of:

  (i) the post-tax profit or loss of discontinued operations; and

  (ii) the post-tax gain or loss recognised on the measurement to fair value less cost to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation.

(b) an analysis of the single amount in (a) into:

  (i) the revenue, expenses and pre-tax profit or loss of discontinued operations;

  (ii) the related income tax expense as required by IAS 12;

  (iii) the gain or loss recognised on the measurement to fair value less costs to sell or on the disposal of the assets or disposal group(s) constituting the discontinued operation; and

  (iv) the related income tax expense as required by IAS 12.

(c) the net cash flows attributable to the operating, investing and financing activities of discontinued operations.

The disclosures required bv (b) and (c) mav be given in the notes to the accounts.

If the criteria for defining as held for sale are met after the balance sheet date but before the authorisation of the financial statements for issue, disclosures are also required in the notes.

Copyrighted material

Disclosures in subsequent years

Any adjustments made in the current period to amounts previously presented in discontinued operations arc required to be classified separately in discontinued operations. Such adjustments may arise as a result of:

(a) the resolution of uncertainties arising subsequent to the disposal, e.g. adjustments to the purchase price;

(b) the resolution of uncertainties existing prior to the disposal, e.g. environmental and product warranty obligations retained by the seller;

(c) the settlement of employee benefit plan obligations directly related to the disposal transaction.

An example of the type of disclosure for discontinued operations can be seen in Figure 8.6.

8.13 Items requiring separate disclosure

When making their future predictions investors need to be able to identify that part of the net income that is likely to be maintained in the future. IAS 1 provides assistance to users in this by requiring that certain items are separately disclosed. These are items within the ordinary activities of the enterprise which are of such size, nature or incidence that their separate disclosure is required in the financial statements in order for the financial statements to show a fair view.

These items arc not extraordinary and must therefore be presented above the tax line. It is usual to disclose the nature and amount of these items in a note to the financial statements, with no separate mention on the face of the income statement; however, if sufficiently material, they can be disclosed on the face.

Examples of the type of items" that may give rise to separate disclosures are:

Figure 8.6 Extract from notes of SSL International pic (2005 annual report)

- the write-down of assets to realisable value or recoverable amount,
- the restructuring of activities of the enterprise, and the reversal of provisions for restructuring,
- disposals of items of property, plant and equipment,
- disposals of long-term investments,
- discontinued operations,
- litigation settlements,
- other reversals of provisions.

8.14 The prescribed formats - the balance sheet

We now explain the prescribed formats for balance sheet presentation, the accounting rules that govern the values at which the various assets are included in the balance sheet and the explanatory notes that are required to accompany the balance sheet.

8.14.1 The prescribed format

IAS 1 specifies which items are to be included on the face of the balance sheet but it docs not prescribe the order and presentation that is to be followed. It would be acceptable to present the balance sheet as assets less liabilities equalling equity, or total assets equalling total equity and liabilities. The example given in IAS I follows the approach of total assets equalling total equity and liabilities.

The information that must be presented on the face is:

(a) Property, plant and equipment;

(b) Investment property;

(c) Intangible assets;

(d) Financial assets (excluding amounts shown under (e), (h) and (i));

(c) Investments accounted for using the equity method;

(0 Biological assets;

(g) Inventories;

(h) Trade and other receivables;

(i) Cash and cash equivalents;

(j) Trade and other payables;

(k) Provisions;

(I) Financial liabilities (excluding amounts shown under (j) and (k));

(m)Liabilities and assets for current tax, as defined in IAS 12 *Income Taxes;*

(n) Deferred tax liabilities and deferred tax assets, as defined in IAS 12;

(o) Minority interests, presented within equity; and

(p) Issued capital and reserves attributable to equity holders of the parent.

In addition to the above, the balance sheet should separately disclose on the face any assets and liabilities held for sale in accordance with IFRS 5 *Son-current Assets Held for Sale and Discontinued Operations.* Additional line items may need to be presented if required by another IAS.

Copyrighted material

IAS 1 docs not absolutely prescribe that enterprises need to split assets and liabilities into current and non-current. I lowcvcr, it docs stale that this split would need to be done if the nature of the business indicates that it is appropriate. In almost all cases it would be appropriate to split items into current and non-current. If an enterprise decides that it is more relevant and reliable not to split the assets and liabilities into current and non-current on the face of the balance sheet, they should be presented broadly in order of their liquidity.

If a liquidity presentation is used, the enterprise must still indicate the amount of all items that is payable or recoverable after more than twelve months.'[1]

8.14.2 The accounting rules for asset valuation

International standards provide different valuation rules and some choice exists as to which rules to use. Many of the items in the financial statements arc held at historical cost, but variations to this principle may be required by different accounting standards. Some of the different bases are:

Property, plant and equipment	Can be presented at either historical cost or market value depending upon accounting policy chosen from IAS I6.[7]
Financial assets	Certain classes of financial asset are required to be recognised at fair value per IAS 39.[s]
Inventor)'	[AS 2 requires that this is included at the lower of cost and net realisable value."
Provisions	IAS 37 requires the discounting to present value of some provisions.[1"]

8.14.3 What are the explanatory notes that accompany a balance sheet?

We will consider four types. These are (a) notes giving greater detail of the make-up of items that appear in the balance sheet, (b) notes providing additional information, (c) notes drawing attention to the existence of related party transactions and (d) notes giving information of interest to other stakeholders.

Notes giving greater detail of the make-up of balance sheet figures

Each of the alpha headings may have additional detail disclosed by way of a note to the accounts. Some items may have a note of their detailed make-up. For example, inventor) of £38.6 million in the balance sheet may have a note as follows:

Raw materials	11.2
Work-in-progress	1.5
Finished goods	25.9
	38.6

Property, plant and equipment normally has a schedule as shown in Figure 8.7. From this the net book value is read off the total column for inclusion in the balance sheet.

Notes giving additional information

These are notes intended to assist in predicting future cash flows. They give information on matters such as capital commitments that have been contracted for but not provided in the accounts, and capital commitments that have been authorised but not contracted for; future

Copyrighted material

Copyrighted material

is required of the person controlling the reporting entity and of related party transactions such as purchase or sale of goods, property or other assets; rendering or receiving services; agency arrangements; leasing arrangements; transfer ol research and development; licence agreements; provision of finance and management contracts.

IAS 24 defines such a related parly relationship as existing where one party has direct or indirect control of the other part), or the parties are subject to common control, or one party has such influence over the financial and operating policies of the other party that the other party might be inhibited from pursuing its own separate interests, or the parties entering into a transaction are subject to such influence from the same source that one party has sub-ordinated its own separate interests.

Although related parties include companies in the same group and associated companies, these are subject to specific IASs, e.g. IAS 22, IAS 27 and IAS 28. The principal impact will, therefore, be on directors and their close families, pension funds, key management and those controlling 20% or more of the voting rights.

Notes giving information that is of interest to other stakeholders

We could place the disclosure relating to staff into this category. It is common for enter-prises to provide a disclosure of the average number of employees in the period or the number of employees at the end of the period. IAS I does not require this information but it is likely that most businesses would provide and categorise the information. The cat-egories could follow the primary segments as in IAS 14, or could follow functions in the business such as production, sales, administration, etc. Suggested forms of presentation arc-shown in Figure 8.8.

This information is useful in the context of reporting to employees. However, there is no standard form of presenting it, and it is not completely adequate for the prediction of cash Hows. Start"cost information is not analysed into the expense headings that are used in the income statement so, although the total cost is given, this is not necessarily broken down into COSl of sales, distribution costs and administrative expenses.

8.15 Statement of changes in equity

A primary statement called Statement of changes in equity* should be presented" with the same prominence as the other primary statements. The components should be the gains and

Figure 8.8 Staff costs

losses that are recognised in the period in so far as they are attributable to shareholders. This will take the profit for the year and adjust it for unrealised gains and losses, currency translation differences and prior period adjustments (sec Figure 8.9).

When IAS 1 had a major revision in 1997 it placed greater emphasis on the components of income rather than the bottom line. The statement was introduced largely to put the reporting of financial performance on the all-inclusive basis favoured by users, who were concerned that gains and losses were sometimes masked or obscured by reserve accounting, which permits items to bypass the income statement. Not all items in Figure 8.9 will of course always appear for every company.

Figure 8.10 shows an alternative presentation that can be adopted. Instead of showing the statements of changes in equity, enterprises may show a statement of recognised income and expense. The items to be included in both statements are the same and no particular benefits arise from producing one as opposed to the other. If this formal is followed the reconciliation of opening and closing balances of share capital, reserves and accumulated profit is given in the notes to the financial statements.

8.15.1 Why have a statement of changes in equity?

The reason for the statement is that a number of gains and losses are either permitted or required by law or accounting standards to be dealt with directly through reserves. This means that financial statements would be incomplete if they stopped at the profit for the year figure without giving the shareholders information about other changes in their equity. The statement includes all gains and losses for the period and not just those that have passed through the income statement.

8.16 Reporting performance

In March 2006 the IASIJ published an exposure draft of proposed amendments to IAS 1 *Presentation ofFinancial Statements.* This exposure draft is the result ot work performed by the IASB and the FASB (the US standard setter) in revising the way that companies present performance. The ideas proposed will change the names and structure of the primary statements.

Primary statements

Under the new proposals a complete set of financial statements will comprise:

- a statement of financial position as at the beginning of the period;
- a statement of financial position as at the end of the period;
- a statement of recognised income and expense for the period;
- a statement of changes in equit> for the period;
- a statement of cash flows for the period; and
- notes, comprising a summary of significant accounting policies and other explanatory information.

The most significant changes in the structure of the primary statements come with the statement of recognised income and expense and the equity statement. The statement of financial position is a new name for the balance sheet, and a statement of cash flows is a new name for the cash flow statement.

Copyrighted material

Figure 8*9 Illustration of the statement of changes in equity

A comparative statement, not shown here, is also required in the financial statements

Figure 8.10 Illustration of statement of recognised income and expense

Copyrighted image

Statement of recognised income and expense

An entity shall prcsetll all components of income and expense recognised in a period:

- in a single statement ol recognised income and expense; or
- in two statements; a statement displaying components of profit or loss and a second statement beginning with profit or loss and displaying components ol other recognised income and expense.

The minimum information that must he included on the face of the statement of recognised income and expense (whichever of the aho\e presentation methods is adopted) is;

(a) revenue;
(b) finance costs
(c) share of profit or loss of associates and joint ventures accounted for using the equity method;
(d) tax expense;
(e) a single amount comprising the total of:
  (i) the post-tax profit or loss of discontinued operations, aiul

Copyrighted material

(ii) the post-lax gains or loss recognised on the measurement to fair value less costs to sell, or on the disposal of assets or disposal group(s) constituting the discontinued operation;

(f) profit or loss;*

(g) each component of other recognised income and expense classified by nature (excluding amounts in (h));

(h) share of other recognised income and expense of associates and joint ventures accounted for using the equity methods; and

(i) total recognised income and expense.*

*For these items an appropriation between the share attributable to minority interests and the group is required on the face of the statement.

Figure 8.11 shows the suggested pro forma for a statement of recognised income and expense as a single statement.

Statement of changes in equity

The proposed statement of changes in equity will show the following items on the face of the statement:

- total recognised income and expense for the period, showing separately the total amounts attributable to equity holders of the parent and to minority interests;
- for each component of equity, the effects of changes in accounting policies and corrections of errors recognised in accordance with IAS 8;
- the amounts of transactions with equity holders in their capacity as equity holders, showing separately contributions by and distributions to equity holders; and
- for each component of equity, a reconciliation between the carrying amount at the beginning and end of the period, separately disclosing each change.

It is proposed that the choice for presentation existing in the current IAS I will be removed.

8.16.1 US comprehensive income reporting

In the USA the Statement of Financial Accounting Standards No. 130 (SFAS 130) 1997, *Reporting Comprehensive Income*,, requires the disclosure of both net income and other comprehensive income (OCI). The OCI statement includes four adjustments, being for unrealised gains and losses on marketable securities, foreign currency translation adjustments, minimum required pension liability adjustments and changes in the market values of certain future contracts used as hedges. Figure 8.12 is an extract from the Annual Report 2005 of Vossloh AG showing such information in the balance sheet.

8.16.2 Why have both a net income and net income adjusted for OCI?

Some commentators[12] argue that there is no decision-usefulness in providing the comprehensive net income figure for investors whereas others[11] take the opposite view. Intuitively, one might take a view that investors are interested in the total movement in equity regardless of the cause which would lead to support for the comprehensive income figure. I lowever, gi\en that there is this difference of opinion and research findings, this would seem to be an area open to further empirical research to further test the decision-usefulness of each measure to analysts.

Whilst acknowledging the particular interest of analysts in obtaining an income measure that best predicts future cash flows for investment purposes, there is a growing interest

Copyrighted material

204 - Regulate

Copyrighted material

Figure 8.11 (cont)

Figure 8.12 Extracts from the 2005 Annual Report of Vossloh AG - OIC statement

among stakeholders in the income measure that is decision-useful when setting compensation plans for directors with the possibility that net income might be more controllable by the directors and therefore a more appropriate measure.

Interesting research[14] has since been carried out which supports the view that Net Income and Comprehensive Income are both decision-useful. The findings revealed comprehensive income as defined in SFAS 130 to be more decision-relevant for share returns, and traditional net income to be more decision-relevant for executive compensation contracting.

8.17 Segment reporting

The objective of segment reporting is to assist users of accounts to evaluate the different business segments and geographical regions of a group and how they affect the overall results of that group. IAS 14 sets out how these different segments should be defined and the information which should be disclosed.

IAS 14 gives guidance[15] on the sorts of factors that directors should take into account when defining segments, e.g. the nature of the products or services, or how the group's activities are organised. These factors help to determine whether a segment is distinguishable, but it must also be a significant segment to require disclosure and a significance test[16] will measure if any of the turnover, results or assets account for more than I0°b of the group's total.

l'or periods beginning on or after 1 January 200° segment reporting will be go\crncd by IFRS 8 *Operating Segments,* issued as part of the convergence process with US GAAP. IFRS 8 requires companies to disclose the make-up of operating segments, and information on the results and assets of operating segments as it is presented to the chief operating decision maker. The information disclosed should generally be consistent with the internal information that is used to determine how to allocate resources and monitor performance.

IFRS 8 will not give the same prominence to business and geographical segment information that is currently required by IAS 14, but will provide very relevant information based on internal reporting decisions.

8.18 The fundamental accounting principles underlying the published income statement and balance sheet

IAS 1 (paras. 23-31) requires compliance with the fundamental accounting principles of accruals, materiality and aggregation, going concern and consistency of presentation.

A concept not specilically stated in IAS 1 is prudence, which is an important principle in the preparation of financial statements. The *Framework* states that reliable information in the financial statements must be prudeni[1'] and this implies that a degree of caution should be exercised in making judgements or estimates. Prudence does not allow the making of excessive or unnecessary provisions that would deliberately understate net assets and therefore render the financial statements unreliable.

8.19 Disclosure of accounting policies

The accounting policies adopted can make a significant difTerence to the financial statements, e.g. valuing contracts using the percentage completion method or completed contract method. It is important for investors to be aware of the policies and to be confident that management will not change them on an *ad hoc* basis to influence the results. IAS 1 (para. 8) therefore requires a company to state the accounting policies adopted by the company in determining the amounts shown in the income statement and balance sheet of the company and to apply them consistently.

8.19.1 What is the difference between accounting principles, accounting bases and accounting policies?

Accounting principles

All companies arc required to comply with the broad accounting principles of going concern, consistency, accrual accounting, materiality and aggregation. If they fail to comply, they must disclose, quantify and justify the departure from the principle.

Accounting bases

These are the methods that have been developed for applying the accounting principles. They arc intended to restrict the subjectivity by identifying a range of acceptable methods. For example, assets may be valued according to the historical cost convention or the alternative accounting rules. Bases have been established for a number of assets, e.g. goodwill, depreciation, consolidation methods.

Copyrighted material

Accounting policies

Accounting policies are chosen by a company as being the most appropriate to the company's circumstances and best able to produce a fair view. They typically disclose the accounting policies followed for the basis of accounting, i.e. historical or alternative accounting rules, and asset valuation, e.g. of inventory, stating whether it uses FIFO or other methods; property, plant and equipment, stating whether depreciation is straight-line or other methods; and borrowing costs, stating whether they have been capitalised or not. An example from the accounts of Nestle group is shown in Figure 8.13.

8.19.2 How do users know the effect of changes in accounting policy?

Accounting policies are required by IAS 1 to be applied consistently from one financial period to another. It is only permissible to change an accounting policy if the directors consider that there arc special reasons for a change. When a change occurs IAS 8 requires:

- the comparative figures of the previous financial period to be amended if possible;
- the disclosure of the reason for the change, the effect of the adjustment in the income statement of the period and the effect on all other periods presented with the current period financial statements.

This has significantly reduced the opportunity for management to confuse users when making accounting changes with the effect on both the previous year and the current year being disclosed.

Figure 8.13 Extracts from the financial statements of the Nestle Group

8.19.3 IFRS I First-Time Adoption of International Financial Reporting Standards

One issue that will involve significant changes in accounting policy and have corresponding disclosure issues is the rules on first-time adoption of IFRS. Many companies are starting to transfer their financial statements from a previous GAAP into IFRS and are therefore having to restate those accounts. IFRS I addresses the issues in doing this conversion.

The IASB issued IFRS 1 *First-Time Adoption of International Financial Reporting Standards* on 19 June 2003. The IFRS applies to an entity's first IFRS accounts, and all interim financial statements presented under IAS 34 *Interim Financial Reporting* for part of the period covered by its first IFRS accounts.

Transition to IFRSs involves a number of different activities:

- selecting accounting policies that comply with IFRSs;
- preparing an opening balance sheet at the date of transition to IFRSs;
- making estimates under IFRSs for both the opening IFRS balance sheet and other periods presented; and
- making appropriate disclosures in the first IFRS accounts.

This overview shows the key activities involved in the project to convert to IFRSs. The most difficult aspect of this conversion is the selection of accounting policies to comply with IFRSs. The international accounting standards give policy choices in some areas, and also further choices must be made by businesses when producing the first IFRS financial statements.

Accounting policies

Accounting policies in line with IFRSs effective at its first IFRS reporting date should be used for opening, comparative and reporting date balance sheets (full retrospective application). There are some exceptions to this that are noted below.

This means that all accounting standards applicable at an entity's first IFRS accounting date (e.g. 31 December 2005) will have to be followed from the opening balance sheet date of the compactive period (e.g. at I January 2004).

Exemptions from full retrospective application

Certain exemptions arc permitted to avoid excessive costs but are not required. Some of these exemptions are optional and some are mandatory.

The optional exemptions concern:

- Property, plant and equipment
- Business combinations
- Defined benefit pension funds
- Cumulative translation differences
- Financial instruments - presentation of comparatives
- Share-based payments.

The main mandator}- exemptions concern:

- Financial instruments - derecognition and hedging
- Non-current assets held for sale.

Copyrighted material

Property, plant and equipment

The IFRS gives examples of where it may be difficult for entities to establish the historic cost of previously revalued assets and permits previous revaluations to be carried forward as deemed cost if this approximates to fair value.

This applies to entities whose previous GAAP allowed assets to be recorded at a 'frozen* revalued amount. If the fro/en rexaluations are comparable to fair value at the date of the revaluation, then they may be carried forward as deemed cost when adopting II'RSs.

Business *combinations*

An entity need not apply IFRS 3 *Business Combinations* retrospectively to business combinations recognised under previous GAAP.

However, the entity may apply IFRSs retrospectively if it wishes. If it restates any business combination, it must restate all subsequent business combinations as well. For example, if a first-time adopter decides to restate a business combination that occurred on 30 June 2002, it must restate all business combinations that occurred on or after 30 June 2002.

For business combinations which are not restated, some adjustments will still be required, the main one regarding goodwill. Any goodwill on the balance sheet at the transition date (start of the earliest IFRS comparative period) should, if positive, be frozen and subject to annual impairment reviews, and, if negative, be written back to retained earnings.

Defined benefit pension funds

At the transition date recognise all actuarial gains or losses and only spread any that arise after the transition date.

Cumulative translation differences

Cumulative exchange differences on foreign entities should be presented under IFRS rules as a separate reserve. On transition it is acceptable not to separate historic amounts from retained earnings,andonl\ separateexchangedifferences arisingafter the transition date. This would also mean that the exchange differences would not be recycled on the disposal of the foreign entity.

Share-Doseo* *payments*

First-time adopters are encouraged but not required to apply IFRS 2 retrospectively to share-based payment transactions, however only if the fair value of the equity instruments has been previously disclosed. For equity-settled share-based payments granted after 7 November 2002 that had not vested before the transition date to IFRS (or I January 2005 if later), the application of 1FRS 2 is required. If IFRS 2 is not retrospectively applied on first-time adoption, disclosures are still required from IFRS 2.

Financial instruments

The transitional rules for financial instruments are very complex; however the main optional exemption is as follows:

- For 2005 adopters it was not necessary to apply IAS 32 and IAS 39 in the comparative financial statements. Instead a company was able to produce a reconciliation of the position at the end of the comparative year (without IAS 32/39) to the beginning of the first reporting year (following IAS 32/39). This option was only available to 2005 adopters.

  Two significant mandatory exemptions relating to financial instruments are as follows:

- IAS 39's derecognition rules are only applied to transactions that have occurred since 1 January 2004. This would mean, for example, that if a company had derecognised a

Copyrighted material

liability before that date which should not be derecognised under IAS 39, it would not need to be restated onto the balance sheet. If this had occurred after that date the balance-sheet would need to be adjusted to add back the liability.

- On transition to IFRS all derivatives (except certain embedded derivatives) must be recognised on the balance sheet. If a derivative is designated as a fair value hedge at transition the corresponding entry is to retained earnings, and the hedged item is recognised at fair value with an adjustment to retained earnings. If a deri\ative is designated as a cash flow hedge then the corresponding entry is to a separate reserve in equity. If hedge accounting cannot be applied the derivative is recognised on the balance sheet with the opposite entry against opening resencs.

Non<urrent assets held for sale and discontinued operations

The requirements on IFRS 5 are applied prospectively to non-current assets (or disposal groups) that meet the criteria to be classified as held for side. Retrospective application is only allowed if valuations were done and other information needed to apply IFRS 5 was obtained at the time the criteria were originally met.

Opening IFRS balance sheet at transition date

This should IK restated using recognition and measurement criteria in IFRSs. This means that the entity will potentially need to:

- recognise all assets and liabilities required b\ II'RSs;
- cease to recognise some assets and liabilities that cannot be recognised per IFRSs;
- reclassify items as different types of assets, liabilities and equity under II'RSs;
- apply II'RSs in measuring recognised assets and liabilities.

Any adjustment to the opening net assets should be recognised against retained earnings.

Estimates

F-stimates should be consistent with estimates made at the same date under previous GAAP (after any adjustments to reflect difference in accounting policies) unless there is objective evidence that estimates were in error.

This does not prohibit new estimates being made as required bj IFRSs, e.g. where no amount was recognised under previous GAAP.

Disclosure

Disclosure requirements of all effective IFRSs at the reporting date must IK followed.

Disclosure is required of how transition from previous GAAP to IFRS has affected financial position, financial performance and cash flows. This requires:

- a reconciliation of entity's equity under previous GAAP to IFRS for
  - date of transition to IFRSs and
  - end of last period presented in the most recent financial statements under previous GAAP;
- a reconciliation of the profit or loss reported under previous GAAP to IFRSs for latest period presented under previous GAAP.

Examples of the reconciliations are provided in the implementation guidance for IFRS I.

Copyrighted material

Effect of IFRS on individual companies

The effect is still uncertain and will depend on the industry, e.g. companies with large property portfolios will he able to account for increased properly values as profits, and on the nature of their liabilities, e.g. companies with share schemes and employee benefits obligations may be adversely affected. The effects will therefore vary, with some companies like AstraZeneca reporting minor differences on converting from UK GAAP to IFRS and others like Shell who advised that it would reduce the company's opening balance sheet as of 1 January 2(M)4 by almost S5 billion. An important consideration for investors will IK* the potential economic impact and Shell addressed this in stressing that converting would have no impact on strategy, financial framework or cash flow.

Differences between IFRS and national standards

This will vary according to the accounting principles followed by individual countries. The following extract from the 2003 Annual Report of Palfinger AG is an example:

> Main differences between IFRS and Austrian Accounting Standards
> Different principles
> The goals of IFRS and IAS are exclusively international compared with Austrian accounting provisions. The dominant aim of the IFRS and IAS is to provide investors with the business-oriented information required in decision-making processes, whereas Austrian accounting standards are based on the principle of prudence and are directed at the protection of creditors. Thus, higher significance is placed on comparability of financial statements under the IFRS than under Austrian commercial law.

UK research findings[18] on impact of IFRS on FTSE 100 non-financial companies

This research looked at the IFRS 1 reconciliations prepared by 50 FTSK companies. It indicated that group profit after tax was inflated by 39% and equity was reduced by 23%. The principal standards affecting the profit figure were IFRS 3 *Goodwill* +24% and IAS 40 *Investment Properties* +13% and the principal standard affecting the equity was IAS \(t *Employee Benefits* —26%.

8.20 Fair view treatment

IAS I provisions

IAS 1 requires financial statements to give a fair presentation of the financial position, financial performance and cash flows of an enterprise.[19] In para. 15 it states that:

> In virtually all circumstances, a fair presentation is achieved by compliance with applicable IFRSs. A fair presentation also requires an entity:
>
> (a) to select and apply accounting policies in accordance with IAS 8 *Accounting Polities, Changes in Accounting Estimates and Errors.* IAS 8 sets out a hierarchy of authoritative guidance that management considers in the absence of a Standard or an Interpretation that specifically applies to an item;
> (b) to present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
> (c) to provide additional disclosures when compliance with the specific requirements in IFRSs is insufficient to enable users to understand the impact of particular

Copyrighted material

transactions, other events and conditions on the entity's financial position and financial performance.

The Framework provisions

The *Framework for the Preparation and Presentation of Financial Statements* considers[-0] that a fair presentation would mean that the financial statements must show a true and fair view.

Legal opinions

True and fair is a legal concept and can he authoritatively decided onh by a court. 1 lowever, the courts have never attempted to define 'true and fair'. In the UK the Accounting Standards Committee (ASC) obtained a legal opinion which included the following statement:

It is however important to observe that the application of the concept involves

- judgement in questions of degree. The information contained in the accounts must be accurate and comprehensive to within acceptable limits. What is acceptable and how is this to be achieved?
- Reasonable businessmen and accountants may differ over the degree of RCCUIUCy or comprehensiveness which in particular cases the accounts should attain.
- Equally, there may sometimes be room for differences over the method to adopt in order to give a true and fair view, cases in which there may be more than one true and fair view of the same financial position.
- Again, because true and fair involves questions of degree, we think that cost effectiveness must play a part in deciding the amount of information which is sufficient to make accounts true and fair.
- Accounts will not he true and fair unless the information they contain is sufficient in quantity and quality to satisfy the reasonable expectations of the readers to whom thev arc addressed.[21]

A further counsel's opinion was attained by the Accounting Standards Hoard (ASH) in 1991" and published in its foreword to Accounting Standards. It advised that accounting standards are an authoritative source of accounting practice and it is now the norm for financial statements to comply with them. In consequence the court may take accounting standards into consideration when forming an opinion on whether the financial statements give a true and fair view.

Fair override

IAS 1 recognises that there may be occasions when application of an IAS might be misleading and departure from IAS treatment is permitted. This is referred to as the fair override provision. If a company makes use of the override it is required to explain why compliance with IASs would be misleading and also give sufficient information to enable the user to calculate the adjustments required to comply with the standard.

The true and fair concept is familiar to the UK and Netherlands accounting professions. Many countries, however, view the concept of the true and fair view with suspicion since it runs counter to their legal systems. In Germany the fair override provision has not been directly implemented and laws arc interpreted according to their function and objectives. It appears that the role of true and fair in the European context is to act as a protection against over-regulation. Since the wider acceptance of IASs has been occurring in recent years, the financial statements of many more companies and countries are fulfilling the principle of a true and fair view.

Copyrighted material

Although IAS 1 docs not refer to true and fair, the International Accounting Standards Regulation 1606/2002 (para. 9) states that; 'To adopt an international accounting standard for application in the Community, it is necessary ... that its application results in a true and fair view of the financial position and performance of an enterprise*.

When do companies use the fair override?
It can occur for a number of reasons:[2]**

1 Accounting standards may prescribe one method* which contradicts company law and thus requires an override, e.g. providing no depreciation on investment properties.

2 Accounting standards may offer a choice between accounting procedures, at least one of which contradicts company law. If that particular choice is adopted, the override should be invoked, e.g. grants and contributions not shown as deferred income.

An example of this is shown in the extract from the 2005 Annual Report of Severn Trent:

Grants and contributions
Grants and contributions received in respect of non infrastructure assets are treated as deferred income and are recognised in the profit and loss account over the useful economic life of those assets.

In accordance with industry practice, grants and contributions relating to infrastructure assets have been deducted from the cost of lived assets.

This is not in accordance with Schedule 4 to the Act, which requires assets to be shown al their purchase price or production cost and hence grants and contributions to be presented as deferred income. This departure from the requirements of the Act is, in the opinion of the Directors, necessary to give a true and fair view as, while a provision is made lor depreciation of infrastructure assets, finite lives have not been determined for these assets, and therefore no basis exists on which to recognise grants or contributions as deferred income. The effect of this departure is that the cost of fixed assets is £398.5 million lower than n would otherwise have been (2004: £362.6 million).

Those grants and contributions relating to the maintenance of the operating capability of the infrastructure network are taken into account in determining the depreciation charged for infrastructure assets.

3 Accounting standards may allow some choice but prefer a particular method which is consistent with company law, but the alternative may not IK* consistent, e.g. not amortising goodwill (prior to IAS requirement for impairment review).

4 There ma\ be a legal requirement but no accounting standard. Failure to comply with the law would require a True and Fair override, e.g. current assets being reported at market value rather than at cost.

5 There may be an accounting standards requirement which is overridden, e.g. not providing depreciation on non-current assets.

Fair override can be challenged

Although companies may decide to adopt a policy that is not in accordance with II'RS and rely on the fair override provision, this may be challenged by the Financial Reporting Review Panel and the company's decision overturned, e.g. although F.urovestech had adopted an accounting policy in its 2005 and 2006 accounts not to consolidate two of its subsidiaries because its directors considered that to do so would not give a true and fair view, the FRRP decision was that this was unacceptable because the company was unable to

Copyrighted material

demonstrate special circumstances warranting a departure from the requirements of the consolidation accounting standard.

8.21 Additional information in the annual report

Legislation such as the (Companies Act 2006 in the UK. requires that additional information is included in the annual report such as a directors* report. As well as statutory information man) companies choose to give additional information with reports such as operating and financial reviews, chairperson's statements or business summaries. Around the world the names and formats of the additional information does change, but the actual information included is often of a similar nature.

8.21.1 Information appearing in board or directors' reports

The typical type of information that appears in board or directors' reports might be as follows:

- Information about the business activities which includes:
  - details about principal activities during the year and any significant changes
  - a lair review of the development of the business of the company during the year and of its position at the end of the year,[24] e.g. comment on the development of new markets, comment on any significant rationalisation involving discontinuing segments of the business, etc.
  - likely future developments
  - research and development activity undertaken during the year
  - significant changes in the non-current assets of the company during the year
  - any important events affecting the company which have occurred since the end of the financial year;
- Information allowing shareholders to assess asset backing which includes:
  - a note of the amount if the market value of land and buildings differs materially from **the** book values (this gives shareholders a view of the asset backing in determining the value of their shares);
- Information making shareholders aware of material movements in the ownership of the issued share capital which includes:
  - share interests that exceed 3% of the nominal capital of the company (3% is UK disclosure guidance); the purchase of own shares; shares of the company in which directors have an interest;
- Information indicating the company's activities in the community which includes:
  - political and charitable donations; policy in respect of applications for employment by disabled applicants; actions taken in respect of employee reports and consultation.

The information in the report requires a number of judgements to be made, e.g. a fair review, significant changes and any important events. Because it involves judgement and opinion (which is not easily verified), the director's report is not usually audited but may be reviewed by the auditor to ensure it does not conflict with the financial data.

Copyrighted material

8.21.2 What does a directors' report look like?

The paragraph headings from I'indcl pie's 2006 annual report are set out in Figure 8.14 as an illustration of the type of information eontained in a published set of accounts. The extract in Figure 8.15 indicates the culture of a company in respect of employee and commercial issues, and illustrates how the report has become almost an index for other sources of financial information. Pindel pic is a UK group and therefore the report follows UK requirements.

8.21.3 Chief Executive's Report

The directors' report was supported by a statement from the Chairman. A brief extract from Pindcl pic's 2(M)6 annual report illustrates the type of information provided.

> Home Shopping
>
> In common with retailers generally our Home Shopping division had a difficult year with sales reduced by 4.6% to £228.0m (2005: £239.lm) and operating profit also down to £31.9m (2005: £40.2m). As reported in December, our recruitment and marketing campaign for our main Christmas trading season coincided with one of the weakest consumer environments for many years. Recruitment from this campaign was 27°<> down on the previous year. The lower sales to new customers were not the only factor impacting on operating profit. Lower response rates meant that marketing expenditure increased by £3.8m and lower product sales resulted in less financial services income. Additional!) the company informed the market in December that it was taking a prudent approach to bad debt and as a result the charge increased by £2.4m.
>
> Sales to established customers were 3.5% ahead of previous year ...

8.22 What information do companies provide to assist comparison between companies reporting under different reporting regimes?

Companies may provide reconciliation statements between their national standards and either *US* or IASC standards. The following statement shows the type of reconciliations necessary for listing purposes in some countries. These reconciliations highlight and explain the different accounting treatments that can be adopted and the impact on the figures in the financial statements.

Figure 8.14 Directors' report headings

Figure 8.15 Extracts from Findel pic 2006 Directors' Report

Figure 8.16 shows an example of the reconciliation between IFRS and US GAAP for Astra Zeneca as disclosed in their 2006 Annual Report.

8.22.1 Impact of differing accounting practice on interpretation of performance

The differing accounting methods that can be adopted around the world have an effect on the apparent performance of companies and make global inter-company comparison difficult. Reconciliations between different versions of GAAP improve the comparability but real comparability will only be achieved if accounting treatments are unified.

To illustrate the impact that different versions of GAAP can have on the performance* consider the impact on the key ratios of the Incentive Group in 1999 when they restated Danish GAAP to IAS.

Figure 8.16 Principal differences between IAS and US GAAP

The extract from which the financial ratios are calculated is shown below.

Incentive Group - changes in accounting policy to IAS

	Before change in accounting policies	KtTect of change in accounting policies	After change in accounting policies
Effect on the consolidated income statement			
1999 (DKKm)			
Net sales	3,451		3,451
Gross margin	1,357	(236)	1,121
Operating profit before amortisation of goodwill, etc.	1	15	14
Operating income	17	(61)	(44)
Ordinary income before tax	(68)	(61)	(129)
Net income	(98)	6	(92)
Effect on the consolidated balance sheet			
1999 (DKKm)			
Financial fixed assets	7	1,486	1,493
Property, plant and equipment	676		676
Investments	147		147
Inventories, etc.	624	34	658
Receivables	818	206	1,024
Cash and cash equivalents	220		220
Total asset	2,492	1,726	4,218
Stockholders* equity	(57)	1,659	1,602
Provisions	186	67	*2^*
Long-term and short-term debt*	2,363		2,363
Total liabilities and shareholders' equity	2,492	1,726	4,218
Effect 1998-1999 for the Group	1999	1998	
DKKm			
Net income before change in accounting policies	(98)	152	
- Production overheads	0	0	
- Amortisation of goodwill	(74)	(43)	
- Development costs	13	(2)	
- Warranty and pension allowances	0	(5)	
- Tax	67	(19)	
Net effect of the change in accounting policies		(69)	
Net income after change in accounting policies	(92)	83	
	1999	1998	

* The short- and long-term debt induces short-term debt of DKK 1,227m and long-term debt of DKK 1,136m

Copyrighted material

Total assets before change in accounting policies	2,492	2,248
- Production overheads	34	31
- Goodwill	1,405	686
- Development costs	81	61
- Tax assets	21 If)	92
Net effect of the change in accounting policies	1,726	870
Total assets after change in accounting policies	4,218	3,118
Total liabilities before change in accounting policies	2,492	2,248
Stockholders' equity before change	(57)	930
- Production overheads	34	31
- Goodwill	1,405	686
- Development costs	81	61
- Warranty and pension allowances	(28)	(28)
- Tax	167	<°)
Net effect on stockholders* equity	1,659	741
Allowances and debt before change	2,549	1,318
- Warranty and pension allowances	28	28
-Tax	39	101
Net effect on allowances and debt	67	129
Total liabilities after change in accounting policies	4,218	3,118

Ratio	Danish GAAP	IAS GAAP
Return on capital employed		
Operating income/Total assets less current liabilities	1.3%	(1.5%)
Operating profit margin		
Operating profit/Sales	0.5%	(1.3%)
Current ratio		
Current assets/Current liabilities	1.35	1.55
Gearing		
Long-term debt/Total assets less current liabilities	89.8%	38°/o
Earnings per share		
Net income/Number of shares	DKK(18.1)	DKK(17)

The alterations in the above ratios have been caused by the following accounting policy changes that were necessary to restate the financial statements from Danish GAAP to IAS:

Goodwill
Under IAS goodwill is capitalised and amortised over its useful life which cannot exceed twenty years. [Note that this treatment changed with the introduction of DFRS 3 Business Combinations.]

Copyrighted material

Development costs
Development costs have been capitalised and amortised under IAS over a life not exceeding five years.

Inventory measurement
Production overheads arc included in the measurement of inventories and allocated on a pro rata basis to cost of goods sold.

Deferred tax
Deferred tax assets related to tax loss earn-forwards are capitalised or set off against deferred tax liabilities provided that the losses arc likely to be utilised in the future.

1 Explain why two companies carrying out identical trading transactions could produce different gross profit figures.

2 An income statement might contain the following profrt figures:

Gross profit
Profit from operations
Profit before tax
Net profit from ordinary activities
Net profit for the period.

Explain when you would use each profit figure for analysis purposes, e.g. profit from operations may be used m the percentage return on capital employed.

3 Oassify the following items into cost of sales, distribution costs, administrative expenses, other operating income or item to be disclosed after trading profit:

(a) Personnel department costs
(b) Computer department costs
(c) Cost accounting department costs
(d) Financial accounting department costs
(e) Bad debts
(f) Provisions for warranty claims
(g) Interest on funds borrowed to finance an increase in working capital
(h) Interest on funds borrowed to finance an increase in property plant and equipment

4 'Companies should begin to move to greater disclosure of:

- Days training per year for categories of staff.
- Expenditure on training, both in total and differentiated between categories of employees. This could be supplemented with information regarding the spread of expenditure during the year. This is most likely to be best presented m diagrammatic form.
- Career and development policy, both vertically and horizontally. A short statement setting out the relevance of the approach to the future of the company and how management plan to deal with it should be provided and could, over time, be extended to include information on staff turnover rates, average length of service, costs of recruitment voluntary payments on termination of employment and number of professionally qualified staff'.[25]

(a) Discuss the extent to which this information would assist the investor to:
  (i) assess stewardship performance:
  (ii) predict future cash flows.
(b) Discuss the extent to which the annual report should contain the information suggested in the GMA publication and the reasons for its inclusion.

5 What are the fundamental objectives of corporate reports?[26]

6 'A single set of multi-purpose financial statements is unable to satisfy the needs of shareholders for both a stewardship report and a report to assist the prediction of future cash flows.' Discuss,

7 Discuss the relevance of the information in the Statement of Recognised Income and Expense to an investor. Explain the advantages and disadvantages of combining the income statement and this statement into a single report.

8 Describe the content of an OFR statement in UK financial statements and discuss whether it should be made mandatory, more prescriptive and audited.

9 The SEC have objected to the use of the fair override on the grounds that fair is achieved by compliance with standards and that the override could lead to companies concealing poor performance and weakening balance sheets- An opposing view is that the SEC stance leads to companies seeking ways to report that do not infringe standards but are not fair. Discuss whether the override results in less transparency and financial statements which are less informative,

Copyrighted material

An extract from the solution is provided in the Appendix at the end of the text for exercises marked wtth an asterisk (").

* Question I

The following trial balance was extracted from the books of Old NV on 31 December 20X1.

	€000	€000
Sales		12.050
Returns outwards		313
Provision for depreciation		
plant		738
vehicles		375
Rent receivable		100
Trade payables		738
Debentures		250
Issued share capital - ordinary €1 shares		3.125
- preference shares (treated as equity)		625
Share premium		250
Retained earnings		875
Inventory	825	
Purchases	6.263	
Returns inwards	350	
Carriage inwards	13	
Carnage outwards	125	
Salesmen's salaries	800	
Administrative wages and salaries	738	
Plant (includes €362,000 acquired in 20X1)	1.562	
Motor vehicles	**1.125**	
Goodwill	1.062	
Distribution expenses	290	
Administrative expenses	286	
Directors' remuneration	375	
Trade receivables	3.875	
Cash at bank and in hand	1.750	
	19.439	19.439

Note of information not taken into the trial balance data:

(a) Provide for
  (i) An audit fee of €38.000.
  (ii) Depreciation of plant at 20% straight-line.
  (iii) Depreciation of vehicles at 2596 reducing balance.
  (iv) The goodwill suffered an impairment in the year of €177.000.
  (v) Income tax of €562.000.
  (vi) Debenture interest of €25.000.

(b) Closing inventory was valued at € 1, 125,000 at the lower of cost and net realisable value.

(c) Administrative expenses were prepaid by € 12.000.

Required:

(a) Prepare an income statement for internal use for the year ended 31 December 20X1.

(b) Prepare an income statement for the year ended 31 December 20X1 and a balance sheet as at that date in Format I style of presentation.

(c) Explain how the income statement and balance sheet in (b) above would be changed to comply with the Phase A changes proposed for a revised IFRS I.

* Question 2

HK Ltd has prepared its draft trial balance to 30 June 20X1. which is shown opposite.

The authorised share capital is 4.000.000 *9%* preference shares of $ I each and 18.000,000 ordinary shares of 50c each.

The following information is available:

1 The depreciation policy of the company is to provide depreciation at the following rates:

Plant and machinery	20% on cost
Fixtures and fittings	*10%* on cost
Buildings	*2%* on cost

In addition, it has been decided to create a reserve of 10% on the cost of plant and machinery to allow for the increased cost of replacement. (Depreciation for 20XI has not been provided in the draft trial balance.) Charge all depreciation to cost of sales.

2 Acquisitions of property, plant and equipment during the year were:

Rant	$173,000	Fixtures	$144,000

3 Government grants of $85,000 have been received in respect of plant purchased during the year and *are* shown in the trial balance.

4 During the year freehold land which cost $720,000 was sold for $2,036,000. It was valued in last year's balance sheet at $1,500,000. The revaluation surplus had been credited to revaluation reserve.

5 Inventory shown in the trial balance ($ 11.794.000) consists of:

Raw materials	$1,872,000
Work-in-progress	$6,660,000
Finished goods	$3,262,000

6 Trade receivables and payables are all payable and due within the next financial year. The loan is unsecured and repayable m ten years' time.

Copyrighted material

Trial balance at 30 June 20X1	$000	$000
Freehold land	2.880	
Freehold buildings (cost $4,680)	4.126	
Rant and machinery (cost $3,096)	1.858	
Fixtures and fittings (cost $864)	691	
Goodwill	480	
Trade receivables	7.263	
Trade payables		2,591
Inventory	1 1.794	
Bank balance	11.561	
Income tax on loan interest	151	
Development grant received		85
Profit on sale of freehold land		536
Sales		381,600
Cost of sales	318,979	
Administration expenses	9.000	
Distribution costs	35.100	
Directors' emoluments	562	
Bad debts	157	
Auditors' remuneration	112	
Hire of plant and machinery	2.400	
Loan interest paid net	454	
Dividends paid during the year - preference	162	
- ordinary	426	
9% loan		7.200
Share capital - preference shares (treated as equity)		3,600
- ordinary shares		5,400
Retained earnings		6,364
Revaluation account		780
	•108.1 56	408.156

7 During the year a fire took place at one of the company's depots, involving losses of $200,000. These losses have been written off to cost of sales shown in the trial balance. Since the end of the financial year a settlement of $150,000 has been agreed with the company's insurers.

8 It is agreed that $500,000 of the finished goods inventory is obsolete and should be written off. However, since the end of the financial year an offer has been received from another company to buy this inventory for $300,000, subject to certain modifications being made at an estimated cost to HK Ltd of $50,000. This has now been agreed.

9 A contract has been entered into, with a building contractor, to extend the company's premises. The contract price is $5,000,000 and the work is scheduled to start in December 20X1.

10 A final ordinary dividend of 3c per share is declared and was an obligation before the year-end, together with the balance of the preference dividend. Neither dividend was paid at the year-end.

11 The income tax charge in the income statement is to be that based on the net profit for the year, at a rate of 35%.

Copyrighted material

12 The goodwill has not been impaired.

I 3 The loan was raised during the year and there is no outstanding interest accrued at the year-end.

Required:

(a) Prepare the company's income **statement for the year to** 30 June 20XI and **a balance** sheet as at that date, complying with the relevant accounting standards in so far as the information given permits.
(All calculations to nearest $000.)

(b) Prepare the property, plant and equipment schedule for the notes to the accounts.

(c) Explain the usefulness of the schedule prepared in (b).

Question 3

Basalt pic is a wholesaler. The following is its trial balance as at 31 December 20X0.

	Dr	*O*
	£000	£000
Ordinary share capital: *L*I shares		300
Share premium		20
General reserve		16
Retained earnings as at I January 20X0		55
Inventory as at I January 20X0	66	
Sales		962
Purchases	500	
Administrative expenses	10	
Distribution expenses	6	
Plant and machinery - cost	220	
Plant and machinery - provision for depreciation		49
Returns outwards		25
Returns inwards	27	
Carriage inwards	9	
Warehouse wages	101	
Salesmen's salaries	64	
Administrative wages and salaries	60	
Hire of motor vehicles	9	
Directors' remuneration	30	
Rent receivable		7
Trade receivables	326	
Cash at bank	62	
Trade payables		66
	1.500	1.500

Copyrighted material

The following additional information is supplied:

(i) Depreciate plant and machinery 20% on straight-line basis.
(ii) Inventory at 31 December 20X0 is £90.000.
(iii) Accrue auditors' remuneration £2.000.
(iv) Income tax for the year will be £58.000 payable October 20XI.
(v) It is estimated that 7/11 of the plant and machinery is used m connection with distribution, with the remainder for administration. The motor vehicle costs should be assigned to distribution.

Required:

(a) Prepare an income statement and balance sheet in a form that complies with IAS I. No notes to the accounts are required.
(b) Briefly explain what you would expect to find in the following sections of a UK company annual report:
(i) Directors' report. (ii) Chairman's report. (iii) Auditors' report.

Question 4

Raffles Ltd trades as a wine wholesaler with a large warehouse in Asia. The trainee accountant at Raffles Ltd has produced the following draft accounts for the year ended 31 December 20X6.

Income Statement

	$
Sales	1.628.000
Less; Cost of sales	1,100.000
Gross profit	526.000
Debenture interest paid	9.000
Distribution costs	32.800
Audit fees	7.000
Impairment of goodwill	2.500
Income tax liability on profits	165.000
Interim dividend	18.000
Dividend received from Diat P*or pic	(6.000)
Bank interest	3.000
Over provision of income tax in prior years	(4.250)
Depreciation	
Land and buildings	3.000
Plant and machinery	10.000
Fixtures and fittings	6.750
Administrative expenses	206.300
Net profit	74.900

Copyrighted material

Draft balance sheet at 31 December 20X6

	$		I
Bank balance	12.700	Inventory	156.350
10% debentures 20X9	180.000	Receivables	179.830
Ordinary share capital		Land and buildings	238,000
50c nominal va'ue	250,000	Plant and machinery	74.000
Trade payables	32.830	Fixtures and fittings	20,250
Income tax			
creditor	165.000	Goodwill	40.000
Retained earnings	172,900	Investments at cost	130.000
Revaluation reserve	25.000		
	838.-130		838.430

The following information is relevant

f The directors maintain that the investments in Diat P'or pic will be held by the company on a continuing basis and that the current market value of the investments at the balance sheet date was $135.000. However, since the balance sheet date there has been a substantial fall in market prices and these investments are now valued at $90,000.

2 The authorised share capital of Raffles Ltd is 600.000 ordinary shares.

3 During the year the company paid shareholders the proposed 20X5 final dividend of $30,000. This transaction has already been recorded in the accounts.

A The company incurred $ 150.000 in restructuring costs during the year. These have been debited to the administrative expenses account. The trainee accountant subsequently informs you that tax relief of $45,000 will be given on these costs and that this relief has not yet been accounted for in the records.

5 The company employs an average of ten staff, 60% of whom work in the wine purchasing and importing department 30% in the distribution department and the remainder in the accounts department Staff costs total $75,000.

6 The company has three directors. The managing director earns $ 18,000 while the purchasing and distribution directors earn $14,000 each. In addition the directors receive bonuses and pensions of $1,800 each. All staff costs have been debited to the income statement

7 The directors propose to decrease the bad debt provision by $1,500 as a result of the improved credit control in the company in recent months.

8 Depreciation policy is as follows:

Land and buildings:	No depreciation on land. Buildings are depreciated over 25 years on a straight-line basis. This is to be charged to cost of sales.
Plant and machinery:	10% on cost charge to cost of sales
Fixtures and fittings:	25% reducing balance, charge to administration.

The directors have provided information on a potential lawsuit A customer is suing them for allegedly tampering with the imported wine by injecting an illegal substance to improve the colour of the wine. The managing director informs you that this lawsuit is just 'sour grapes' by a jealous customer and provides evidence from the company solicitor which indicates that there is only a small possibility that the claim for $8,000 will succeed.

Copyrighted material

10 Purchased goodwill was acquired in 20X3 for $50,000. The annual impairment test revealed an impairment of $2,500 in the current year.

11 Plant and machinery of $80,000 was purchased during the year to add to the $20,000 plant already owned. Fixtures and fittings acquired two years ago with a net book value of $ 13,500 were disposed of. Accumulated depreciation of fixtures and fittings at I January 20X6 was $37,500.

12 Land was revalued by $25,000 by Messrs Moneybags, Chartered Surveyors, on an open market value basis, to $175,000. The revaluation surplus was credited to the revaluation reserve- There is no change in the value of the buildings.

13 Gross profit is stated after charging $ 15,000 relating to obsolete cases of wine that have 'gone off'. Since that time an offer has been received by the company for its obsolete wine stock of $8,000. provided the company does additional vinification on the wine at a cost of $2,000 to bring it up to the buyer's requirements. A cash discount of 5% is allowed for early settlement and it is anticipated that the buyer will take advantage of this discount

14 Costs of $10,000 relating to special plant and machinery have been included in cost of sales in error. This was not spotted until after the production of the draft accounts.

Required:

(a) Prepare an income statement for the year ended 31 December 20X6 and a balance sheet at that date for presentation to the members of Raffles Ltd in accordance with relevant accounting standards.

(b) Produce detailed notes to the income statement and balance sheet of Raffles Ltd for the year ended 31 December 20X6.

Question 5

Phoenix pic trial balance at 30 June 20X7 was as follows:

	£CC0	£000
Freehold premises	2.400	
Plant and machinery	1,800	540
Furniture and fittings	620	360
Inventory at 30 June 20X7	1.468	
Sales		6.465
Administrative expenses	1.126	
Ordinary shares of *L*1 each		4.500
Trade investments	365	
Revaluation reserve		600
Development cost	415	
Share premium		500
Personal ledger balances	947	566
Cost of goods sold	4,165	
Distribution costs	669	
Overprovision for tax		26
Dividend received		80
Interim dividend paid	200	
Retained earnings		488
Disposal of warehouse		225
Cash and bank balances	175	

Copyrighted material

The following information is available:

1 Freehold premises acquired for £1.8 million were revalued in 20X4, recognising a gain of £600.000. These include a warehouse, which cost £120.000. was revalued at £150.000 and was sold m June 20X7 for £225,000. Phoenix does not depreciate freehold premises.

2 Phoenix wishes to report Plant and Machinery at open market value which is estimated to be £1,960.000 on I July 20X6.

3 Company policy is to depreciate its assets on the straight-line method at annual rates as follows:

Rant and mach<nery	10%
Furniture and fittings	596

4 Until this year the company's policy has been to capitalise development costs, to the extent permitted by relevant accounting standards. The company must now write off the development costs, including £124.000 incurred in the year, as the project no longer meets the capitalisation criteria.

5 During the year the company has issued one million shares of £ I at £ 1.20 each.

6 Included within administrative expenses are the following:

Staff salary (including £ 125.000 to directors)	£468.000
Directors' fees	£96.000
Audrt fees and expenses	£86.000

7 Income tax for the year is estimated at £ 122.000.

B Directors propose a final dividend of 4p per share declared and an obligation, but not paid at the year-end.

Required:

(a) In respect of the year ended 30 June 20X7:
The income statement
(b) The balance **sheet as** at 30 June 20X7.
(c) The statement of movement of property, plant and equipment.
(d) The statement of recognised income and expense.
(e) Explain how the financial statements prepared above would be changed to comply with the Phase A changes proposed for a revised IFRS I.

References

1 IAS 1. *Presentation of Financial Statements,* December 2004.
2 IFRS 5 *Son-Current Assets Held for Sale and Discontinued Operations** para. 30.
3 */hid.,* para. *H.*
4 *Ibid.y* para. 33.
5 IAS 1, para. 86.
6 IAS 1, para. 52.
7 IAS 16 *Property, Plant and Equipment,* IASC, revised 1998, paras. 28-29.
8 IAS 39 *Financial Instruments: Recognition and Measurement,* IASC, 1998, para. 69.
9 IAS 2 *Inventories,* IASC, revised 1993, para. 6.
10 IAS 37 *Provisions, Contingent Liabilities and Contingent Assets,* IASC, 1998, para. 45.
11 IAS 1. paras96, 97.
12 D. Dhaliwal, K. Subramnayam and R. Trezcvant, *Is comprehensive income superior to net income as a measure of firm performance?*. *Journal of Accounting and Economics** 26:1, 1999, pp. 43-67.

Copyrighted material

13 D. Hirst and I*. Hopkins, 'Comprehensive income reporting and analysts' valuation judgments*, ***Journal** of **Accounting** Research*, 36 (Supplement), 1998, pp. **47-74.**
14 G.C. Biddies and Jong-Hag Choi, 'Is comprehensive income irrelevant?', 12 June, 2002. Available at SSRN: http://ssrn.com/abstract=316703.
15 IAS 14 *Segment Reporting* **IASC,** revised 1997, para. 9.
16 */hid.*, para. 33.
17 *Framework for the Preparation and Presentation of Financial Statements,* IASC, 1989, para. 37.
18 P. Ormrod and P. Taylor, 'Surprise surprise'. *Accountancy magazine,* December 2006, pp. 82-83.
19 **IAS** 1 *Presentation of Financial Statements,* IASB, revised 2004, para. 13.
20 *Framework for the Preparation an J Presentation of Financial Statements,* IASC, 1989, para. 46.
21 K. Wild and A. Guida, *Tnuche Ross Financial Reporting Manual* (3rd edition), Buttcrworth, 1990, p. **433.**
22 *K.* Wild and C. Goodhead, *Touche Ross Financial Reporting Manual* (4th edition), Huttcrworth, 1994, p. 5.
23 I.BS Accounting Subject Area Working Paper No 031 *An Empirical Investigation of the True and Fair Override,* Gilad I.ivne and .Maureen McN'ichois (http://www.bm.ust.hk/acct/acsymp2(>04/Papers/I.ivne.pdf)
24 Companies Act 1985, section 235.
25 CIMA, Corporate Reporting - *The Management Interface,* CIMA, 1990, p. 27.
26 V. Bean;, and M.Jones, 'Company reporting: the *US* leads the way', *Certified Accountant,* March 1994, p. 50.

Copyrighted material

9.1 Introduction

In this chapter we illustrate the preparation of an income statement and balance sheet using format 1 of IAS 1 from trial balance to published accounts. We then take into account the effects of other international accounting standards. We follow a progressive stage approach to the problem.

Stage 1 is the preparation of the internal income statement from the trial balance data. Stage 2 is the preparation of an income statement in format I. Stage 3 is the preparation of a balance sheet. The aim is that you should be able to prepare a set of accounts that conform to the prescribed formats and that you should also understand how a company arrives at the figures that appear in the published financial statements that it presents to its shareholders.

9.2 Stage I: preparation of the internal income statement from a trial balance

In this chapter ue use format I, i.e. costs analysed according to function.[1]

The data given in Figure 9.1 are available for Illustrious SpA for the year ended 31 December 20X1. The following information has not yet been taken into account in the amounts shown in the trial balance:

- Inventory at cost at 31 December 20X1 was €22,875,000. Inventory at net realisable value at 31 December 20X1 was €3,000,000. The cost of this inventory was €4,000,000. The reduction to net realisable value was necessitated because the customer who would normall\ have taken the products assembled from these inventory items had gone into liquidation.
- Depreciation is to be provided as follows:
  2°o on freehold buildings using the straight-line method;
  10% on equipment using the reducing balance method;
  25°o on motor vehicles using reducing balance.
- €2,300,000 was prepaid for repairs and €5,175,000 has accrued for wages.

An income statement prepared for internal purposes is set out in Figure 9.2. We have arranged the expenses in the income statement in descending monctan value. This is not a prescribed method and companies may organise the items in a number of ways, such as alphabetical sequence or grouping by function, e.g. establishment, administration, selling, distribution and financial expenses.

Figure 9.1 Trial balance of Illustrious SpA as at 31 December 20XI

9.3 Stage 2: preparation of the income statement of Illustrious SpA in Format I style

The information contained in the internal income statement in Figure 9.2 needs to be redrafted into the format illustrated by IAS 1. In addition, specific information that would not necessarily appear within the format information needs to be disclosed. First we redraft using Format 1 with its costs analysed according to function, as set out in Figure 9.3.

Figure 9.2 Income statement of Illustrious SpA for the year ended 31 December 20X1

I How did we arrive at the figures for cost of sales, distribution costs and administrative expenses?

In order to analyse the costs, we need to consider each item in the detailed income statement. Each item will be allocated to a classification or apportioned if it relates to more than one of the classifications. This requires the company to make a number of assumptions about the basis for allocating and apportioning. The process is illustrated in Figure 9.4.

From the assumptions that have been made, it is clear that the figures appearing under each of the cost classifications may be apportioned differently in different companies.

Figure 9.3 Illustrious SpA income statement redrafted into Format I style

Copyrighted image

Copyrighted material

Figure 9.4 Assumptions made in analysing the costs

Copyrighted imagj

9.3.2 What information would be disclosed by way of note to the income statement?

We have mentioned that sensitive information is required to be disclosed in the notes to the income statement. The usual practice is to have a note referenced to the profit on ordinary activities before tax. For Illustrious SpA the note would read as in Figure 9.5| with additional information regarding the loss on the inventory. This treatment - the inclusion of the expense in its cost type heading with more detail in the notes - complies with IAS 1, which does not allow for the highlighting of extraordinary items. Exceptional or unusual items should be disclosed separately either by way of note or on the face of the income statement only if that degree of prominence is necessary in order to give a fair view.[2]

Copyrighted material

Figure 9.S Illustrious SpA disclosure note accompanying the income statement

9.4 Stage 3: preparation of the balance sheet

The balance sheet in Figure 9.6 follows the headings set out in section 8.14.1 above.

9.5 Preparation of accounts in Format I following IAS 8 and IFRS 5

By way of illustration, assume you are the chief accountant of Lewes Road Wines pic, a UK wholesale distributor currently operating from a single warehouse/office complex in London. Until June 20X2 the company had a plant at Dover, where wine that was imported in bulk was bottled prior to its sale to retail outlets. The profitability of this activity had declined and the plant had closed.

One of your unqualified assistants has prepared the following draft for the published income statement for the year to 31 December 20X2, which he has given to you together with his notes and workings as shown in Figure 9.7.

You need now to redraft the income statement so that it complies with IAS 1 and generally accepted accounting principles. Income tax is 30%. In approaching this task you need

Figure 9.6 Illustrious SpA balance sheet and disclosure notes

Figure 9.6 (com.)

to consider the provisions of IFRS 5 relating to the treatment of discontinued operations, IAS 1 regarding unusual items, and IAS 8 regarding errors.

Discontinued operations

Applying the layered treatment of IFRS 5, which requires the results of continuing and discontinued operations to be disclosed separately, it is necessary to identify the revenue, cost of sales and expenses that relate to the discontinuing bottling operation in arriving at the operating profit.

Unusual activities

Paragraph 86 of IAS 1 states that, when items of income and expense are material, their nature and amount shall be disclosed separately - such disclosure is relevant to explain the performance of the enterprise for the period. These items may include losses on termination

Figure 9.7 Lewes Road Wines pic Income statement (I)

Figure 9.7 (com.)

of operations and profits or losses on the sale of non-current assets. IAS 1 paragraph 81 docs requires profits or losses on disposal of assets and liabilities of a discontinued operation to be shown on the face of the income statement.

Revaluation

The revaluation surplus, being unrealised, cannot appear in the income statement. It should, however, appear in the statement of changes in equity or the statement of recognised gains and losses.

Errors

IAS 8 requires errors of prior years to be accounted for by restating the comparative figures and adjusting the opening balance of reserves for the cumulative effect. Note that this means that it is also necessary to take the tax effect Into account.

The detailed workings and income statement arc given in Figure 9.8.

Statement of recognised income and expense

Profit for the financial year	154	[Figure 9,8 Profit for the year)
Unrealised surplus on revaluation	100	[Figure 9.7 Note 5 premises revalued]
Total recognised gains	254	
Prior year adjustment	70	[Figure 9.8 adjusting profit brought
	324	forward]

Figure 9.8 Lewes Road Wines pic income statement (2)

Figure 9.8 (cont.)

9.6 Additional information value of IFRS 5

Changes in the operation

The additional disclosure of the effect of discontinuing operations is intended to assist the user to assess more readily the current performance and to predict future maintainable profits. However, care is required when comparing current performance with that of previous vears.

Newly acquired activities

In the international accounting standards there is no requirement for information to be separately disclosed in the income statement about the performance of newly acquired activities. As a result the current year's performance may include the results of activities that were not in the previous periods and therefore any comparison will be invalid. In some accounting regimes, such as that in the UK, information about newly acquired activities is required. As always therefore when interpreting financial information care must be taken when concluding about the results.

9.7 Additional information value of IAS 24

Related party relationships for the purposes of IAS 24[1] could be any of the following:

- enterprises that directly, or indirectly through one or more intermediaries, control, or are controlled by, or are under common control with, the reporting enterprise (this includes holding companies, subsidiaries and fellow subsidiaries);
- associates;
- individuals owning, directly or indirectly, an interest in the voting power of the reporting enterprise that gives them significant influence over the enterprise, and close members of the familv of such an individual (close familv members of an individual are those that may be expected to influence, or be influenced by, that person in their dealings with the enterprise);
- key management personnel, that is, those persons having authority and responsibility for planning, directing and controlling the activities of the reporting enterprise, including directors and officers of companies and close members of the families of such individuals;
- enterprises in which a substantial interest in the voting power is owned, directly or indirectly, by any person described above or over which such a person is able to exercise significant influence. This includes enterprises owned by the directors or major shareholders of the reporting enterprise and enterprises that have a member of key management in common with the reporting enterprise.

Parties deemed not to be related parties

IAS 24 sets out a number of parties[4] who arc not deemed related and for whom no disclosure is therefore required:

- two companies simply because they have a director in common (but it is necessary to consider the possibility, and to assess the likelihood, that the director would be able to affect the policies of both companies in their mutual dealings);
- providers of finance, trade unions, public utilities or government departments in the course of their normal dealings with the enterprise;
- a single customer, supplier, franchisor, distributor or general agent with whom an enterprise transacts a significant volume of business merely by virtue of the resulting economic dependence;
- two ventures simply because they share joint control over a joint venture.

Related party transactions

A related party transaction is a transfer of resources or obligations between related parlies, regardless of whether a price is charged. Examples' of transactions that may give rise to related party disclosures are:

- purchases or sales of goods; purchases or sales of property and other assets; providing or receiving of services;
- agency arrangements; leasing arrangements; transfer of research and development; licence agreements;
- finance (including loans and equity contributions in cash or in kind); guarantees and collaterals;
- management contracts.

Copyrighted material

Related party disclosures

Related party relationships where control exists should be disclosed irrespective of whether there have been transaetions between the related parties. If there have been transactions between related parties the disclosures required[6] are:

- the amount of the transactions;
- the amount of the outstanding balances and:
  - their terms and conditions, including whether they arc secured, and the nature of the consideration to be provided in settlement; and
  - details of any guarantees given or received;
- provisions for doubtful debts related to the amount of outstanding balances; and
- the expense recognised during the period in respect of bad or doubtful debts due from related parties;
- key management personnel compensation in total and for each of the following categories:
  - short-term emplovee benefits;
  - post-employment benefits;
  - other long-term benefits;
  - termination benefits; and
  - equity compensation benefits.

9.7.1 Illustration of related party disclosures

The following illustration from the 2005 financial statements of Nokia, shows the type of disclosures that should be made under IAS 24.

Related party transactions

Nokia Pension Foundation is a separate legal entity that manages and holds in trust the assets for the Group's Finnish employee benefit plans; these assets include 0.009% of Nokia shares.

At December 31, 2005, the Group had borrowings amounting to EUR 62 million (EUR 62 million in 2004) from Nokia Untcrstutzungskassc GmbH, the Group's German pension fund, which is a separate legal entity.

The Group recorded net rental expense of EUR 2 million in 2005 (EUR 2 million in 2004 and EUR 2 million in 2003) pertaining to a salc-leaseback transaction with the Nokia Pension Foundation involving certain buildings and a lease of the underlying land.

There were no loans granted to the members of the Group Executive F3oard and Board of Directors at December 31, 2005 or 2004.

EURm	*2005*	*2004*	*2003*
Transactions with associated companies			
Share of results of associated companies	10	—26	—18
Dividend income	1	2	3
Share of shareholders' equity of associated companies	33	37	IS
Liabilities to associated companies	14	3	3

Copyrighted material

The directors of Ufool Ltd are aware that a sizeable number of shareholders, although still a minority. are extremely unhappy with current dividend levels and are agitating for larger distributions.

They have raised several points with the directors, who have turned to you as their trusty financial and accounting adviser for assistance. The points put forward by these shareholders are as follows:

(i) Although the annual accounts disclose that *L*150.000 profit was available for distribution, it is disclosed elsewhere m these accounts that £520,000 of the loan stock had been repaid. The shareholders assert that this repayment was an attempt to lower the true profit and that, if it were written back, more profit would be available for distribution.

(ii) Despite this year's relatively low profit there is a very large balance of retained earnings brought forward from preceding years. A significant proportion of these retained earnings from preceding years should be used to pay a larger dividend this year.

(iii) It is unfair to have kept the dividend rate at 1096 over the past few years when the average dividend yield on the Stock Exchange has risen from 12% to 18%. The company's dividend rate should follow this average.

(iv) The return on capital employed for the company is 20% and this high rate of profitability accurately reflects the ability of the company to pay far higher dividend levels.

(v) As profit figures can so easily be manipulated by the company's accountants, the *L*\ 50\000 is more than likely to be a significant underestimate of the real profit so more profit could be distributed if different accounting bases were used.

Comment on each of the above assertions to enable the board of directors to refute them convincingly.

2 It is said that Format I extends the management accounting concept of responsibility accounting to published financial statements. Explain what this means.

3 When preparing accounts under Format I, how would a bad debt that was materially larger than normal be disclosed?

4 Explain the conditions set out in IFRS 5 for determining whether operations have been discontinued and the problems that might arise in applying them.

5 'Annual accounts have been put into such a straitjacket overemphasis on uniform disclosure that there will be a grow.ng pressure by national bodies to introduce changes unilaterally which will again lead to diversity in the quality of disclosure. This is both healthy and necessary." Discuss.

6 Explain the relevance to the user of accounts if expenses are classified as 'administrative expenses* rather than as 'cost of sales'.

7 The regulators are correct in their thinking that voluntary disclosures, e.g. OFR and Chairman's Statement are more helpful to shareholders than disclosures made under mandatory, more closely defined formats.' Discuss.

8 IAS I *Presentation of Financial* Statements requires the publication of a statement of recognised income and expense or a statement of changes in equity.

Explain the need for the publishing of these statements, identifying the circumstances in which they have to be published, and identify the items you would include in them.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (•).

* Question I

Springtime Ltd is a UK trading company buying and selling as wholesalers fashionable summer clothes. The following balances have been extracted from the books as at 31 March 20X4:

	£000
Auditor's remuneration	30
Income tax based on the accounting profit	
For the year to 31 March 20X4	3.200
Overprovision for the year to 31 March 20X3	200
Delivery expenses (including £300,000 overseas)	1.200
Dividends: final (proposed - to be paid I August 20X4)	200
interim (paid on I October 20X3)	100
Non-current assets at cost	
Delivery vans	200
Office cars	40
Stores equipment	5,000
Dividend income (amount received from listed companies)	1.200
Office expenses	800
Overseas operations: closure costs of entire operations	350
Purchases	24,000
Sales (net of sales tax)	35,000
Inventory at cost	
At I April 20X3	5.000
At 31 March 20X4	6,000
Storeroom costs	1,000
Wages and salaries:	
Delivery staff	700
Directors' emoluments	400
Office staff	100
Storeroom staff	400

Notes:

1 Depreciation is provided at the following annual rates on a straight-line basis; delivery vans 20%; office cars 25% stores 1%.

2 The following taxation rates may be assumed: corporate income lax 35%: personal income tax 25%.

3 The dividend income arises from investments held in non-current investments.

4 It has been decided to transfer an amount of £ 150,000 to the deferred taxation account

5 The overseas operations consisted of exports. In 20X3/X4 these amounted to £5,000.000 (sales) with purchases of £4.000.000. Related costs included £ 100.000 in storeroom staff and £ 15.000 for office staff.

6 Directors' emoluments include;

Chairperson	100.000	
Managing director	125.000	
Finance director	75.000	
Sales director	75.000	
Export director	25.000	(resigned 31 December 20X3)
	£400.000	

Required:

(a) Produce an income statement suitable for publication and complying as far as possible with generally accepted accounting practice.

(b) Comment on how IFRS 5 has improved the quality of information available to users of accounts.

Copyrighted material

(c) Give two reasons why information contained in the accounting policies notes is of importance to users of accounts.

* Question 2

Olive A/S, incorporated with an authorised capital consisting of one million ordinary shares of €1 each, employs 646 persons, of whom 428 work at the faaory and the rest at the head office. The trial balance extracted from its books as at 30 September 20X4 is as follows:

	€000	€000
Land and buildings (cost €600,000)	520	
Plant and machinery (cost €840,000)	**680**	–
Proceeds on disposal of plant and machinery		**180**
Fixtures and equipment (cost € 120,000)	94	–
Sales	–	3.460
Carriage inwards	**162**	
Share premium account	–	150
Advertising	*W)*	
Inventory on I Oct 20X3	**211**	–
Heating and lighting	80	
Prepayments	**115**	
Salaries	820	- ^
Trade investments at cost	**248**	–
Dividend received (net) on 9 Sept 20X4		45
Directors' emoluments	180	–
Pension cost	100	–
Audit fees and expense	6S	–
Retained earnings b/f	—	**601**
Sales commission	92	
Stationery	**28**	–
Development cost	425	^ –
Formation expenses	120	
Receivables ana payables	**584**	**296**
Interim dividend paid on 4 Mar 20X4	60	
12% debentures issued on I Apr 20X4		500
Debenture interest paid on I Jul 20X4	15	
Purchases	925	^ –
Income tax on year to 30 Sept 20X3		**128**
Other administration expenses	**128**	–
Bad debts	**158**	–
Cash and bank balance	38	
Ordinary shares of € I fully called	–	**600**
	5.960	5.960

Copyrighted material

You are informed as follows:

(a) As at I Oaober 20X3 land and buildings were revalued at €900.000. A third of the cost as well as all the valuation is regarded as attributable to the land. Directors have decided to report this asset at valuation.

(b) New fixtures were acquired on I January 20X4 for €40.000; a machine acquired on I Oaober 20X1 for €240.000 was disposed of on I July 20X4 for €180.000. being replaced on the same date by another acquired for €320.000.

(c) Depreciation for the year is to be calculated on the straight-line basis as follows:
Buildings: 2% p.a.
Plant and machinery: 10% p.a.
Fixtures and equipment: 10% p.a.

(d) Inventory in trade, including raw materials and work-in-progress on 30 September 20X4. has been valued at cost at €364.000.

(e) Prepayments are made up as follows:

	€000
Amount paid in advance for a machine	60
Amount paid in advance for purchasing raw materials	40
Prepaid rent	[5
	€115

(f) In March 20X3 a customer had filed legal aaion claiming damages at €240.000. When accounts for the year ended 30 September 20X3 were finalised, a provision of €90.000 was made in respect of this claim. This claim was settled out of court in April 20X4 at €150.000 and the amount of the underprovision adjusted against the profit balance brought forward from previous years.

(g) The following allocations have been agreed upon:

	Foctory	*Administration*
Depreciation of buildings	60%	40%
Salaries other than to direaors	55%	45%
Heating and lighting	80%	20%

(h) Pension cost of the company is calculated at 10% of the emoluments and salaries.

(i) Income tax on 20X3 profit has been agreed at €140.000 and that for 20X4 estimated at € 185.000. Corporate income tax rate is 35% and the basic rate of personal income tax 25%.

(j) Direaors wish to write off the formation expenses as far as possible without reducing the amount of profits available for distribution.

Required:

Prepare for publication:

(a) The income statement of the company for the year ended 30 September 20X4, and

(b) the balance sheet as at that date along with as many notes (other than the one on accounting policy) as can be provided on the basis of the information made available.

Copyrighted material

Question 3

Cryptic pic extracted its trial balance on 30 June 20X5 as follows:

	£000	£000
Land and buildings at cost	750	–
Plant and machinery at cost	480	–
Accumulated depreciation on plant and machinery at 30 Jun 20X5		400
Depreciation on machinery	80	–
Furniture, tools and equipment at cost	380	–
Accumulated depreciation on furniture, etc. at 30 Jun 20X4		95
Receivables and payables	475	360
Inventory of raw materials at 30 Jun 20X4	112	–
Work-in-progress at factory cost at 30 Jun 20X4	76	–
Finished goods at cost at 30 jun 20X4	264	–
Sales including selling taxes	–	2.875
Purchases of raw materials including selling taxes	1,380	–
Share premium account		150
Advertising	65	– .
Deferred taxation		185
Salaries	360	–
Rent	120	–
Retained earnings at 30 Jun 20X4		226
Factory power	48	–
Trade investments at cost	240	–
Overprovision for tax for the year ended 30 Jun 20X4	^ –	21
Electricity	36	^ –
Stationery	12	
Dividend received (net)	–	24
Dividend paid on 15 April 20X5	60	•—
Other administration expenses	468	
Disposal of furniture	–	64
Selling tax control account	165	*—
Ordinary shares of 50p each	–	1.000
1296 Preference shares of £1 each (IAS 32 liability)		200
Cash and bank balance	29	
	5.600	5.600

The following information is relevant

(i) The company discontinued a major activity during the year and replaced it with another. All non-current assets involved in the discontinued activity were redeployed for the new one. **The** following expenses incurred in this respect however, are included in "Other administration expenses':

	£000
Cancellation of contracts re terminated activity	165
Fundamental reorganisation arising as a result	**145**

Cryptic has decided to present its results from discontinued operations as a single line on the face of the income statement with analysis in the notes to the accounts as allowed by IFRS 5.

Copyrighted material

(ii) On I January 20X5 the company acquired new land and buildings for £150.000. The remainder of land and buildings, acquired nine years earlier, have NOT been depreciated until this year, The company has decided to depreciate the buildings, on the straight-line method, assuming that one-third of the cost relates to land and that the buildings have an estimated economic life of 50 years. The company policy is to charge a full year of depreciation in the year of purchase and none in the year of sale.

(iii) Plant and machinery was all acquired on I July 20X0 and has been depreciated at 10% per annum on the straight-line method. The estimate of useful economic life had to be revised this year when it was realised that if the market share is to be maintained at current levels, the company has to replace all its machinery by I July 20X6. The balance in the 'Accumulated provision for depreciation' account on I July 20X4 was amended to reflect the revised estimate of useful economic life and the impact of the revision adjusted against the retained earnings brought forward from prior years.

(iv) Furniture acquired for £80,000 on I January 20X3 was disposed of for £64,000 on I April 20X5. Furniture, tools and equipment are depreciated at 5% p.a. on cost Depreciation for the current year has not been provided.

(v) Results of the inventory counting at year-end are as follows:

Inventory of raw materials at cost including selling tax	£197.800
Work-in-progress at factory cost	£54.000
Finished goods at cost	£364.000

The company allocates its expenditure as follows:

	Production cost	*Factory overhead*	*Distribution cost*	*Administrative expenses*
Salaries and wages	65%	1596	5%	15%
Rent	—	60%	15%	25%
Electricity	- ^	10%	20%	70%
Deprecation of building	—	40%	10%	50%

(vii) The directors wish to make an accrual for audit fees of £18.000 and estimate the income tax for the year at £65.000. £ 11.000 should be transferred from the deferred tax account The directors have to pay the preference dividend.

(viii) The following analysis has been made:

	New *activity*	*Discontinued activity*
Sales excluding selling taxes	£ 165.000	£215,000
Cost of sales	£98.000	£ 155,000
Distribution cost	£16.500	£48.500
Administrative expenses	£22.500	£38,500

(ix) Assume that selling taxes applicable to all purchases and sales is 15%. the basic rate of personal income tax is 25% and the corporate income tax rate is 35%

Required:

(a) Advise the company on the accounting treatment in respect of information stated in (ii) above.

(b) In respect of the information stated in (iii) above, state whether a company is permitted to revise its estimate of the useful economic life of a non-current asset and comment on the appropriateness of the accounting treatment adopted.

(c) Set out a statement of movement of property, plant and equipment in the year to 30 June 20X5.

(d) Set out for publication the income statement for the year ended 30 June 20X5. the balance sheet as at that date and any notes other than that on accounting policy, in accordance with relevant standards.

Copyrighted material

Question 4

The IASC/IASB has issued accounting standards that concentrate on the issue of reporting financial performance. The mam standards that report this are:

IAS I *Presentation of Financial* Statements

IAS H Segment *Reporting*

IFRS 5 *Non<urrent* Assets *held for Sale and Discontinued Operations*

All of these accounting standards require companies to give disclosures or further presentation on the face of the financial statements to help users understand the performance of the enterprise. These further disclosures improve the quality of the information in the financial statements and therefore should improve the decisions taken by users in response to the financial statements.

Required:

(a) Describe how the statement of changes in equity (from IAS I), segmental disclosures and discontinued operations disclosures will help investors and lenders make decisions based on the financial statements.

(b) Bedok Ltd has three divisions: a paper manufacturing division, a printing division and a clothing manufacturing division. On I April 20X9 the directors of Bedok Ltd decided to sell the clothing division as it was not in line with the core activities of the company. This decision was announced to the employees and the public on I June 20X9. The net assets of the clothing division as at 31 December 20X9 were **£16** million (£20 million assets less £4 million liabilities). On 10 May 20Y0 the board signed an agreement with Woodlands Ltd to sell the clothing division for £20 million. The net assets of the clothing division at this date were £18 million (£23 million assets and £5 million liabilities). Bedok Ltd incurred redundancy costs of £1 million which had been expected from the date the decision to sell the division was made. The redundancy costs are not reflected in the income statement information given below. The sale was completed on I July 20Y0 and the clothing division did not trade between 10 May 20Y0 and I July 20Y0.

The results of the clothing manufacturing division for 20X9 and 20Y0 are as follows:

	20X9	**20Y0** (to **I** July)
	£000	£000
Turnover	65,000	40,000
Expenses	(50.000)	(32.000)
Operating profit	15,000	8.000
Tax charge	(5,000)	(3.000)

Prepare extracts from the financial statements (including notes) of Bedok Ltd for 31 December 20X9 and 20Y0 in accordance with IFRS 5, including all relevant information on the face of the income statement.

Copyrighted material

Question 5

The following is the draft trading and income statement of Parnell Ltd for the year ending 31 December 2003:

	$m	$m
Revenue		563
Cost of sales		310
		253
Distribution costs	45	
Administrative expenses	78	
		123
Profit on ordinary activities before tax		130
Tax on profit on ordinary activities		45
Profit on ordinary activities after taxation - all retained		85
Profit brought forward at I January 2003		101
Profit earned forward at 31 December 2003		186

You are given the following additional information, which is reflected in the above income statement only to the extent stated:

1 Distribution costs include a bad debt of $15 million which arose on the insolvency of a major customer. There is no prospect of recovering any of this debt. Bad debts have *never* been material in the past

2 The company has traditionally consisted of a manufacturing division and a distribution division. On 31 December 2003, the entire distribution division was sold for $50 million; its book value at the time of sale was $40 million. The profit on disposal was credited to administrative expenses. (Ignore any related income tax.)

3 During 2003, the distribution division made sales of $100 million and had a cost of sales of $30 million. There will be no reduction in stated distribution costs or administration expenses as a result of this disposal.

4 The company owns offices which it purchased on I January 2001 for $500 million, comprising $200 million for land and $300 million for buildings. No depreciation was charged in 2001 or 2002. but the company now considers that such a charge should be introduced. The buildings were expected to have a life of 50 years at the date of purchase, and the company uses the straight-line basis for calculating depreciation, assuming a zero residual value. No taxation consequences result from this change.

5 During 2003. part of the manufacturing division was restructured at a cost of $20 million to take advantage of modern production techniques. The restructuring was not fundamental and will **not** have a material *effect* on the nature and focus of the company's operations. This cost is included under administration expenses in the income statement

Required:

(a) State how each of the items 1-5 above must be accounted for in order to comply with the requirements of international accounting standards.

(b) Redraft the income statement of Parnell Ltd for 2003. taking into account the additional information so as to comply, as far as possible, with relevant standard accounting practice. Show clearly any adjustments you make. Notes to the accounts are not required. Where an IAS recommends information to be on the face of the income statement it could be recorded on the face of the statement *(The Chartered Institute of bankers)*

Copyrighted material

Question 6 Related party scenarios

(a) In 20X3 Arthur is a large loan creditor of X Ltd and receives interest at 20% p.a. on this loan. He also has a 24% shareholding m X Ltd. Until 20X1 he was a director of the company and left after a disagreement The remaining 76% of the shares are held by the remaining directors. Is Arthur a related party to X Ltd?

(b) Brenda joined Y Ltd. an insurance broking company, on I January 20X0 on a low salary but high commission basis. She brought clients with her that generated 30% of the company's 20X0 turnover. Is Brenda a related party to Y Ltd?

(c) Carrie is a director and major shareholder of Z Ltd. Her husband. Donald, is employed in the company on administrative duties for which he is paid a salary of £25.000 p.a. Her daughter. Emma, is a business consultant running her own business. In 20X0 Emma carried out various consultancy exercises for the company for which she was paid £85.000. Are Donald or Emma related parties to Z Ltd?

(d) Fred is a director of V Ltd. V Ltd is a major customer of W Ltd. In 20X0 Fred also became a director of W Ltd. Are related party disclosures required in either V Ltd or W Ltd?

Required:
Discuss whether parties are related in the above situations.

Question 7

Maxpool pic. a listed company, owned 60% of the shares m Ching Ltd. Bay pic. a listed company. owned the remaining 40% of the *L* ordinary shares in Ching Ltd. The holdings of shares were acquired on I January 20X0.

On 30 November 20X0 Ching Ltd sold a factory outlet site to Bay pic at a price determined by an independent surveyor.

On I March 20XI Maxpool pic purchased a further 30% of the *L*I ordinary shares of Ching Ltd from Bay pic and purchased 25% of the ordinary shares of Bay pic.

On 30 June 20XI Ching Ltd sold the whole of its fleet of vehicles to Bay pic at a price determined by a vehicle auctioneer.

Required:
Explain the implications of the above transactions for the determination of related party relationships and disclosure of such transactions in the financial statements of (a) Maxpool Group pic, (b) Ching Ltd and (c) Bay pic for the years ending 31 December 20X0 and 31 December 20X1.

{ACCA)

Question 8

The following is an extract from the trial balance of Imecet at 31 October 2005:

	$000	$000
Property valuation	8.000	
Factory at cost	2.700	
Administration building at cost	1.200	
Delivery vehicles at cost	500	
Sales		10,300
Inventory at I November 2004	1.100	

Copyrighted material

Purchases	6.350	
Factory wages	575	
Administration expenses	140	
Distribution costs	370	
Interest paid (6 months to 30 April 2005)	100	
Accumulated profit at 1 November 2004		3.701
10% Loan stock		2.000
$1 Ordinary shares (mcl. issue on 1 May 2005)		4.000
Share premium (after issue on 1 May 2005)		1.500
Dividends (paid 1 June 2005)	400	
Revaluation reserve	2.500	
Deferred tax	650	

Other relevant information;

(i) One million $I Ordinary shares were issued I May 2005 at the market price of $1.75 per ordinary share.

(ii) The inventory at 31 October 2005 has been valued at $1. 150.000.

(iii) A current tax provision for $350,000 is required for the period ended 31 October 2005 and the deferred tax liability at that date has been calculated to be $725,000.

(iv) The property has been further revalued at 31 October 2005 at the market price of $9,200,000.

(v) No depreciation charges have yet been recognised for the year ended 31 October 2005.

The depreciation rates are:

Factory - 5% straight-line.

Administration building - *3%* straight-line.

Delivery vehicles - 25% reducing balance. The accumulated depreciation at 31 October 2004 was $ 10.000. There were no new vehicles acquired in the year to 31 October 2005.

Required:

(a) Prepare the Income Statement for Imecet for the year ended 31 October 2005.

(b) Prepare the Statement of Changes in Equity for Imecet for the year ended 31 October 2005.

(The AssoooDon *of Inter navonal Accountants)*

Question 9

The following trial balance has been extracted from the books of Hoodurz as at 31 March 2006:

	$000	**$000**
Administration expenses	210	
Ordinary share capital. $I per share		600
Trade receivables	470	
Bank overdraft		80
Provision for warranty claims		205
Distribution costs	420	
Non-current asset investments	560	
Investment income		75
Interest paid	10	
Property, at cost	200	
Plant and equipment at cost	550	

Copyrighted material

Plant and equipment accumulated depreciation (at 31.3.2006)		220
Accumulated profits (at 31.3.2005)		80
Loans (repayable 31.12.2010)		100
Purchases	960	
Inventories (at 31.3.2005)	150	
Trade payables		260
Sales		2.010
2001/2005 final dividend paid	65	
2005/2006 interim dividend paid	35	
	3.630	3.630

The following information is relevant:

(i) The trial balance figures include the following amounts for a disposal group that has been classified as "held for sale' under IFRS 5 *Non-Current Assets Held for Sale ond Discontinued Operations:*

	$000
Plant and equipment at cost	150
P»ant and equipment, accumulated depreciation	15
Trade receivables	70
Bank overdraft	10
Trade payables	60
Sales	370
Inventories (at 31.12.2005)	25
Purchases	200
Administration expenses	55
Distribution costs	60

The disposal group had no inventories at the date classified as 'held for sale'.

(ii) Inventories (excluding the disposal group) at 31.3.2006 were valued at $ 160.000.

(lii) The depreciation charges for the *year* have already been accrued.

(iv) The income tax for the year ended 31.3.2006 is estimated to be $74,000. This includes $ 14.000 in relation to the disposal group.

(v) The provision for warranty claims is to be increased by $16.000. This is classified as administration expense.

(vi) Staff bonuses totalling $20,000 for administration and $20,000 for distribution are to be accrued.

(vii) The property was acquired during February 2006; therefore depreciation for the year ended 31.3.2006 is immaterial. The directors have chosen to use the fair value model for such an asset The fair value of the property at 31.3.2006 .s $280,000.

Required:

Prepare for Hoodruz:

(a) an income statement for the year ended 31 March 2006; and

(b) a balance sheet as at 31 March 2006.

Both statements should comply as far as possible with relevant International Financial Reporting Standards. No notes to the financial statements are required nor is a statement of changes in equity, but all workings should be clearly shown.

(The Association of Inter national Accountants)

Copyrighted material

References

1 IAS 1 *Presentation of Financial Statements*, 1ASB, revised 2004, para. 88.
2 IAS 1 *Presentation of Financial Statements*, IASB, 2004.
3 IAS 24 *Related Party Disclosures*, IASB, revised 2003, para. 9.
4 *Ibid.*, para. 11.
5 *Ibid.*, para. 20.
6 *Ibid.*, para. 17.

PART 3

Balance sheet - equity, liability and asset measurement and disclosure

10.1 Introduction

In this chapter we consider:

- Total owners' equity: an overview
- Total shareholders[1] funds: more detailed explanation
- Accounting entries on issue of shares
- Creditor protection: capital maintenance concept
- Creditor protection: why capital maintenance rules are necessary
- Creditor protection: how to quantify the amounts available to meet creditors* claims
- Issued share capital: minimum share capital
- Distributable profits: general considerations
- Distributable profits: how to arrive at the amount using relevant accounts
- When capital may be reduced
- Writing off part of capital which has been lost and is not represented by assets
- Repayment of part of paid-in capital to shareholders or cancellation of unpaid share capital
- Purchase of own shares.

10.1.1 Common themes

Companies may be financed by equity investors, loan creditors and trade creditors- Governments have recognised that for an efficient capital market to exist the rights of each of these stakeholders need to be protected. This means that equity investors require a clear siatcmcm of their powers to appoint and remunerate directors and of their entitlement to share in residual income and net assets; loan creditors and trade creditors require assurance that the directors will not distribute funds to the equity investors before settling outstanding debts in full.

Statutory rules have, therefore, evolved which attempt a balancing act by protecting the creditors on the one hand, e.g. by restricting dividend distributions to realised profits, whilst, on the other hand, not unduly restricting the ability of companies to organise their financial affairs, e.g. by reviewing a company's right to purchase and hold Treasury shares. Such rules may not be totally consistent between countries but there appear to be some common themes in much of the legislation. These are:

- Share capital can be broadly of two types, equity or preference.
- Equity shares are entitled to the residual income in the income statement after paying expenses, loan interest and tax.
- Equity itself is a residual figure in that the standard setters have taken the approach of defining assets and liabilities and leaving equity capital as the residual difference in the balance sheet.
- Equity may consist of ordinary shares or equity elements of participating preference shares and compound instruments which include debt and equity, i.e. where there are conversion rights when there must be a split into their debt and equity elements, with each element being accounted for separately.
- Preference shares arc not entitled (unless participating) to share in the residual income but may be entitled to a fixed or floating rate of interest on their investment.
- Distributable reserves equate to retained earnings when these have arisen from realised gains.
- Trade payables require protection to prevent an entity distributing assets to shareholders if creditors are not paid in full.
- Capital restructuring may be necessary when there arc sound commercial reasons.

However, the rules are not static and there are periodic reviews in most jurisdictions, e.g. the proposal that an entity should make dividend decisions based on its ability to pay rather than on the fact that profits have been realised.

- The distributable reserves of entities arc those that have arisen due to realised gains and losses (retained profits), as opposed to unrealised gains (such as revaluation reserves).
- There must be protection for trade payables to prevent an entity distributing assets to shareholders to the extent that the trade payables are not paid in full. An entity must retain net assets at least equal to its share capital and non-distributable reserves (a capital maintenance concept).
- The capital maintenance concept also applies with regard to reducing share capital, with most countries generally requiring a replacement of share capital with a non-distributable reserve if it is redeemed.

Because all countries have company legislation and these themes are common, the authors felt that, as the UK has relatively well developed company legislation, it would be helpful to consider such legislation as illustrating a typical range of statutory provisions. We therefore now consider the constituents of total shareholders' funds (also known as total owners' equity) and the nature of distributable and non-distributable reserves. We then analyse the role of the capital maintenance concept in the protection of creditors, before discussing (he effectiveness of the protection offered by the Companies Act 2006 in respect of both private and public companies.

10.2 Total owners' equity: an overview

Total owners' equity consists of the issued share capital stated at nominal (or par) value, non-distributable and distributable reserves. Here we comment brieflv on the main constituents of total shareholders' funds. We go on to deal with them in greater detail in subsequent sections.

Copyrighted material

10.2.1 Right to issue shares

Companies incorporated[1] under the Companies Act 2006 arc able to raise capital by the issue of shares and debentures. There are two main categories of company: private limited companies and public limited companies. Public limited companies are designated by the letters pic and have the right to issue shares and debentures to the public. Private limited companies are often family companies; they are not allowed to seek share capital by invitations to the public. The shareholders of both categories have the benefit of limited personal indemnity, i.e. their liability to creditors is limited to the amount they agreed to pay the company for the shares they bought.

10.2.2 Types of share

Broadly, there arc two types of share: ordinary and preference.

Ordinary shares

Ordinary shares, often referred to as equity shares, carry the main risk and their bearers are entitled to the residual profit after the payment of any fixed interest or fixed dividend to investors who have invested on the basis of a fixed return. Distributions from the residual profit arc made in the form of dividends, which are normally expressed as pence per share.

Preference shares

Preference shares usually have a fixed rate of dividend, which is expressed as a percentage of the nominal value of the share. The dividend is paid before any distribution to the ordinary shareholders. The specific rights attaching to a preference share can vary widely.

10.2.3 Non-distributable reserves

There are a number of types of statutory non-distributable reserve, e.g. when the paid-in capital exceeds the par value as a share premium. In addition to the statutory non-distributable reserves, a company might have restrictions on distribution within its memorandum and articles, stipulating that capital profits are non-distributable as dividends.

10.2.4 Distributable reserves

Distributable reserves are normally represented by the retained earnings that appear in the balance sheet and belong to the ordinary shareholders. However, as we shall see, there mav be circumstances where credits that have been made to the income statement arc not actually distributable, usually because they do not satisfy the realisation concept.

Although the retained earnings in the balance sheet contain the cumulative residual distributable profits, it is the earnings per share (EPS), based on the post-tax earnings for the year as disclosed in the profit and loss account, that influences the market valuation of the shares, applying the price/earnings ratio.

When deciding whether to issue or buy back shares, the directors will therefore probably consider the impact on the EPS figure. If the EPS increases, the share price can normally be expected also to increase.

Copyrighted material

10.3 Total shareholders' funds: more detailed explanation

10.3.1 Ordinary shares - risks and rewards

Ordinary shares (often referred to as equity shares) confer the right to:

- share proportionately in the rewards, i.e.:
  - the residual profit remaining after paying any loan interest or fixed dividends to investors who have invested on the basis of a fixed return;
  - any dividends distributed from these residual profits;
  - any net assets remaining after settling all creditors* claims in the event of the company ceasing to trade;
- share proportionately in the risks, i.e.:
  - lose a proportionate share of invested share capital if the company ceases to trade and there are insufficient funds to pay all the creditors and the shareholders in full.

10.3.2 Ordinary shares - powers

The owners of ordinary shares generally have one vote per share which can be exercised on a routine basis, e.g. at the Annual General Meeting to vote on the appointment of directors, and on an *ad hoc* basis, e.g. at an Extraordinary General Meeting to vote on a proposed capital reduction scheme.

However, there are some companies that have issued non-voting ordinary shares which may confer the right to a proportional share of the residual profits but not to vote.

Non-voting shareholders can attend and speak at the Annual General Meeting but, as they have no vote, are unable to have an influence on management if there are problems or poor performance - apart from selling their shares.

The practice varies around the world and is more common in continental Europe. In the UK, institutional investors have made it clear since the early 1990s that they regard it as poor corporate governance and companies have taken steps to enfranchise the non-voting shareholders. The following is an extract from a letter from John I.aing pic to shareholders setting out its enfranchisement proposals:

LAING SETS OUT ENFRANCHISEMENT PROPOSALS 23 March 20(H)

John I .aing pic today issues enfranchisement proposals to change the Group voting structure.

The key points are as follows:

- Convert the Ordinary A (non-voting) Shares into Ordinary Shares
- All redesignated shares to have full voting rights ranking pari passu in all respects with the existing Ordinary Shares
- Compensatory Scrip Issue for holders of existing Ordinary Shares of one New-Ordinary Share for every 20 Ordinary Shares held [authors* note: this is in recognition of the fact that the proportion of votes of the existing ordinary shareholders has been reduced - an alternative approach would be to ask the non-voting shareholders to pay a premium in exchange for being given voting rights]
- EGM to be held on 18th May 2000

Reasons for enfranchisement

- To increase the range of potential investors in the Company which the Directors believe should enhance the markctabilit) and liquidity of the Company's Shares

Copyrighted material

- To enable all classes of equity shareholders, who share the same risks and rewards, to share the same voting rights
- To ensure the Company has maximum flexibility to manage its capital structure in order Co reduce its cost of capital and to enhance shareholder value.

In other countries, however, there may be sound commercial reasons why non-voting shares are issued. In Japan, for example, the Japanese Commercial Code was amended in 2002 to allow companies to issue shares with special rights, e.g. power to veto certain company decisions, and to increase the proportion of non-voting shares in issue. The intention was to promote successful restructuring of ailing companies and stimulate demand for Japanese equity investments.

10.3.3 Methods and reasons for issuing shares

Methods of issuing shares

Some of the common methods of issuing shares arc: *offer for subscription,* where the shares are offered directly to the public; *pftiangs,* where the shares are arranged (placed) to he bought by financial institutions; and *rights issues,* whereby the new shares are offered to the existing shareholders at a price below the market price of those shares. The rights issue might be priced significantly below the current market price but this may not mean that the shareholder is benefiting from cheap shares as the price of existing shares will be reduced, e.g. the British Telecommunications pic £5.[1]) billion rights issue announced in 2001 made UK corporate history in that no British company had attempted to raise so much cash from its shareholders. The offer was three BT shares for every ten held and, to encourage take-up, the new shares were offered at a deeply discounted rate of £3 which was at a 47% discount to the share price on the day prior ro the launch.

Reasons for issuing shares

- For future investment, e.g. Watford Leisure pic (Watford Football Club) offered and placed 540,000,000 ordinary shares and expected to raise cash proceeds of about £4.7 million. The company has since been floated on the AIM.
- As consideration on an acquisition, e.g. Microsoft Corp. acquired Circat Plains Software Incorporated, a leading supplier of mid-market business applications. The acquisition was structured as a stock purchase and was valued at approximately Sl.l billion. Each share of Great Plains common stock was exchanged for 1.1 shares of Microsoft common stock.
- To shareholders to avoid paying out cash from the company's funds, e.g. the BID Vest Group Ltd decided in 2001 that in lieu of an interim dividend, a cash payment of 40 cents per share should be paid out of share premium, and a capitalisation issue of shares awarded in the ratio of 0.8631 new shares per 100 shares held, being equivalent to 41 cents per share. The total value awarded to shareholders in lieu of a dividend was 81 cents per share.
- To directors and employees to avoid paying out cash in the form of salary from company's funds, e.g. in the Psion 2000 Annual Report the note on directors' remuneration stated:

Name	As at 1/1/00	Exercised	As at 31.12.00	Option price	Market price
M.M. Wyatt	150,000	150,000	-	£0.73	£12.0"

Copyrighted material

- To shareholders to encourage re-investment, e.g. some companies operate a Dividend Reinvestment Plan whereby the dividends of shareholders wishing to reinvest are pooled and reinvested on the Stock Exchange. A typical Plan is operated by the Royal Bank of Scotland where the Plan is operated through a special dealing arrangement.

10.3.4 Types of preference shares

The following illustrate some of the ways in which specific rights can vary.

Cumulative preference shares
Dividends not paid in respect of any one year because of a lack of profits are accumulated for payment in some future year when distributable profits are sufficient.

NorKumulative preference shares
Dividends not paid in any one year because of a lack of distributable profits are permanently forgone.

Participating preference shares
These shares carry the right to participate in a distribution of additional profits over and above the fixed rate of dividend after the ordinary shareholders have received an agreed percentage. The participation rights are based on a precise formula.

Redeemable preference shares
These shares may be redeemed by the company al an agreed future date and at an agreed price.

Convertible preference shares
These shares may be converted into ordinary shares at a future date on agreed terms. The conversion is usually at the preference shareholder's discretion.

There can be a mix of rights, e.g. Getronics entered into an agreement in 2005 with its cumulative preference shareholders whereby Getronics had the right in 2009 to repurchase (redeem) the shares and, if it did not redeem the shares, the cumulative preference shareholders had the right to convert into ordinary shares.

10.4 Accounting entries on issue of shares

10.4.1 Shares issued at nominal (par) value

If shares arc issued at nominal value, the company simply debits the cash account with the amount received and credits the ordinary share capital or preference share capital, as appropriate, with the nominal value of the shares.

10.4.2 Shares issued at a premium

The market price of the shares of a company, which is based on the prospects of that company, is usually different from the par (nominal) value of those shares.

On receipt of consideration for the shares, the company again debits the cash account with the amount received and credits the ordinary share capital or preference share capital, as appropriate, with the nominal value of the shares.

Copyrighted materia

Assuming thai the market price exceeds the nominal value, a premium element will be credited to a share premium account. The share premium is classified as a non-distributable reserve to indicate that it is not repayable to the shareholders who have subscribed for their shares: it remains a part of the company's permanent capital.

The accounting treatment for recording the issue of shares is straightforward. For example, the journal entries to record the issue of 1,000 £1 ordinary shares at a market price of £2.50 per share payable in instalments of:

on application	on 1 January 20X1	25p
on issue	on 31 January 20X1	£1.75 including tl
on first call	on 31 January 20X2	25p
on final call	on 31 January 20X4	25p

would be as follows:

1 Jan 20X1	*Dr*	Cr
	£	**£**
Cash account	250	
Application account		250
31 Jan 20X1	*Dr*	*Cr*
		£
Cash account	1,750	
Issue account		1,750
31 Jan 20X1	*Dr*	*Cr*
		£
Application account	250	
Issue account	1,750	
Share capital account		500
Share premium in excess of par value		1,500

The first and final call would be debited to the cash account and credited to the share capital account on receipt of the date of the calls.

10.5 Creditor protection: capital maintenance concept

To protect creditors, there arc often rules relating lo the use of the total shareholders* funds which determine how much is distributable.

As a general rule, the paid-in share capital is not repayable to the shareholders and the reserves are classified into two categories distributable and non-distributable. The directors have discretion as to the amount of the distributable profits that they recommend for distribution as a dividend to shareholders. However, they have no discretion as to the treatment of die non-distributable funds. There may be a statutory requirement for the company to retain within the company net assets equal to the non-distributable reserves. This requirement is to safeguard the interests of creditors and is known as capital maintenance.

10.6 Creditor protection: why capital maintenance rules are necessary

It is helpful at this point to review the position of unincorporated businesses in relation lo capital maintenance.

Copyrighted material

10.6.1 Unincorporated businesses

An unincorporated business such as a sole trader or partnership is not required to maintain any specified amount of capital within the business to safeguard the interests of its creditors. The owners are free to decide whether to introduce or withdraw capital. However, they remain personally liable for the liabilities incurred by the business, and the creditors can have recourse to the personal assets of the owners if the business assets are inadequate to meet their claims in full.

When granting credit loan unincorporated business the creditors may well be influenced by the personal wealth and apparent standing of the owners and not merely by the assets of the business as disclosed in its financial statements. This is why in an unincorporated business there is no external reason for the capital and the profits to be kept separate.

In partnerships, there are frequently internal agreements that require each partner to maintain his or her capital at an agreed level. Such agreements are strictly a matter of contract between the owners and do not prejudice the righLs of the business creditors.

Sometimes owners attempt to influence creditors unfairly, by maintaining a lifestyle in excess of what they can afford, or try to frustrate the legal rights of creditors by putting their private assets beyond their reach, e.g. by transferring their property to relatives or trusts. These subterfuges become apparent only when the creditors seek to enforce their claim against the private assets. Banks are able to protect themselves by seeking adequate security, e.g. a charge on the owners* property.

10.6.2 Incorporated limited liability company

Because of limited liability, the rights of creditors against the private assets of the owners, i.e. the shareholders of the company, are restricted to any amount unpaid on their shares. Once the shareholders have paid the company for their shares, they are not personally liable for the company's debts. Creditors are restricted to making claims against the assets of the company.

Hence the legislature considered it necessary to ensure that the shareholders did not make distributions to themselves such that the assets needed to meet creditors* claims were put beyond creditors' reach. This may be achieved by setting out statutory rules.

10.7 Creditor protection: how to quantify the amounts available to meet creditors' claims

Creditors arc exposed to two types of risk: the business risk that a company will operate unsuccessfully and will be unable to pa\ them; and the risk that a company will operate successfully, but will pay its shareholders rather than its creditors.

The legislature has never intended trade creditors to be protected against ordinary business risks, e.g. the risk of the debtor company incurring either trading losses or losses that might arise from a fall in the value of the assets following changes in market conditions.

In the UK, the Companies Act 2(HK> requires the amount available to meet creditors* claims to be calculated by reference to the company's annual financial statements. There are two possible approaches:

- The direct approach which requires the asset side of the balance sheet to contain assets with a realisable value sufficient to cover all outstanding liabilities.
- The indirect approach which requires the liability side of the balance sheet to classify reserves into distributable and non-distributable reserves (i.e. respectively, available and not available to the shareholders b\ wa\ of dividend distributions).

Copyrighted material

The Act follows the indirect approach by specifying capital maintenance in terms of the total shareholders[1] funds. However, this has not stopped certain creditors taking steps to protect themselves by following the direct approach, e.g. it is bank practice to obtain a mortgage debenture over the assets of the company. The effect of this is to disadvantage the trade creditors. The statutory restrictions preventing shareholders from reducing capital accounts on the liability side arc weakened when management grants certain parties priority rights against some or all of the company's assets.

We will now consider total shareholders' funds and capital maintenance in more detail, starting with share capital. Two aspects of share capital are relevant to creditor protection: minimum capital requirements and reduction of capital.

10.8 Issued share capital: minimum share capital

The creditors of public companies may be protected by the requirements that there should be a minimum share capital and that capital should be reduced only under controlled conditions.

In the UK, the minimum share capital requirement for a public company is currently set at £50,000 or its euro equivalent although this can be increased by the Secretary of State for Trade and Industry. A company is not permitted to commence trading unless it has issued this amount. However, given the size of many public companies, it is questionable whether this figure is adequate.

The minimum share capital requirement refers to the nominal value of the share capital. In the UK, the law requires each class of share to have a stated nominal value. This value is used for identification and also for capital maintenance. The law ensures that a company receives an amount that is at least equal to the nominal value of the shares issued, less a controlled level of commission, by prohibiting the issue of shares at a discount and by limiting any underwriting commissions on an issue. This is intended to avoid a material discount being granted in the guise of commission. However, the requirement is concerned more with safeguarding the relative rights of existing shareholders than with protecting creditors.

There is effectively no minimum capital requirement for private companies. We can see many instances of such companies having an issued and paid-up capital of only a few £\ shares, which cannot conceivably be regarded as adequate creditor protection. The lack of adequate protection for the creditors of private companies is considered again later in the chapter.

10.9 Distributable profits: general considerations

We have considered capital maintenance and non-distributable reserves. However, it is not sufficient to attempt to maintain the permanent capital accounts of companies unless there are clear rules on the amount that they can distribute to their shareholders as profit. Without such rules, they may make distributions to their shareholders out of capital. The question of what can legitimately be distributed as profit is an integral part of the concept of capital maintenance in company accounts. In the UK, there are currently statutory definitions of the amount that can be distributed by private, public and investment companies.

10.9.1 Distributable profits: general rule for private companies

The definition of distributable profits under the Companies Act 2006 is:

Copyrighted material

> Accumulated, realised profits, so far as not previously utilised by distribution or capitalisation, less its accumulated, realised losses, as far as not previously written off in a reduction or reorganisation of capital.

This means the following:

- Unrealised profits cannot be distributed.
- There is no difference between realised revenue and realised capital profits.
- All accumulated net realised profits (i.e. realised profits less realised losses) on the balance sheet date must be considered.

On the key question of whether a profit is realised or not, the Companies Act (para. 853) simply says that realised profits or realised losses are

> such profits or losses of the company as fall to be treated as realised in accordance with principles generally accepted, at the time when the accounts are prepared, with respect to Che determination for accounting purposes of realised profits or losses.

I lence the Act does not lay down detailed rules on what is and what is not a realised profit; indeed, it docs not even refer specifically to 'accounting principles'. Nevertheless, it would seem reasonable for decisions on realisation to be based on generally accepted accounting principles at the time, subject to the court's decision in cases of dispute.

10.9.2 Distributable profits: general rule for public companies

According to the Companies Act, the undistributable reserves of a public company are its share capital, share premium, capital redemption reserve and also 'the excess of accumulated unrealised profits over accumulated unrealised losses at the time of the intended distribution and ... any reserves not allowed to be distributed under the Act or by the company's own Memorandum or Articles of Association*.

This means that, when dealing with a public company, the distributable profits have to be reduced by any net unrealised loss.

10.9.3 Investment companies

The Companies Act 2006 allows for the special nature of some businesses in the calculation of distributable profits. There are additional rules for investment companies in calculating their distributable profits. For a company to be classified as an investment company, it must invest its funds mainly in securities with the aim of spreading investment risk and giving its members the benefit of the results of managing its funds.

Such a company has the option of applying one of two rules in calculating its distributable profits. These are cither:

- the rules that apply to public companies in general, but excluding any realised capital profits, e.g. from the disposal of investments; or
- the company's accumulated realised revenue less its accumulated realised and unrealised revenue losses, provided that its assets arc at least one and a half times its liabilities both before and after such a distribution.

The reasoning behind these special rules seems to be to allow investment companies to pass the dividends they receive to their shareholders, irrespective of any changes in the values of their investments, which are subject to market fluctuations. However, the asset cover ratio of liabilities can easily be manipulated by the company simply paying creditors, whereby the ratio is improved, or borrowing, whereby it is reduced.

Copyrighted materia

10.10 Distributable profits: how to arrive at the amount using relevant accounts

In the UK, the Companies Act 2006 stipulates that the distributable profits of a company must be based on relevant accounts. These would normally be the audited annual accounts, which have been prepared according to the requirements of the Act to give a true and fair view of the company's financial affairs. In the case of a qualified audit report, the auditor is required to prepare a written statement stating whether such a qualification is material in determining a company's distributable profit. Interim dividends are allowed to be paid provided they can be justified on the basis of the latest annual accounts, otherwise interim accounts will have to be prepared that would justify such a distribution.

10.1 I When may capital be reduced?

Once the shares have been issued and paid up, the contributed capital together with any payments in excess of par value are normally regarded as permanent. However, there might be commercially sound reasons for a company to reduce its capital and we will consider three such reasons. These are:

- Writing off part of capital which has already been lost and is not represented by assets.
- Repayment of part of paid-up capital to shareholders or cancellation of unpaid share capital.
- Purchase of own shares.

10.12 Writing off part of capital which has already been lost and is not represented by assets

This situation normally occurs when a company has accumulated trading losses which prevent it from making dividend payments under the rules relating to distributable profits. The general approach is to eliminate the debit balance on retained earnings by setting it off against the share capital and non-distributable reserves.

10.12.1 Accounting treatment for a capital reduction to eliminate accumulated trading losses

The accounting treatment is straightforward. A capital reduction account is opened. It is debited with the accumulated losses and credited with the amount written off the share capital and reserves.

For example, assume that the capital and reserves of Hopeful Ltd were as follows at 31 December 20X1:

	i
200,000 ordinary shares of £1 each	200,000
Income statement	(180,000)

The directors estimate that the company will return to profitability in 20X2, achieving profits of £4,000 per annum thereafter. Without a capital reduction, the profits from 20X2 must be used to reduce the accumulated losses. This means that the company would be unable to pay a dividend for forty-five years if it continued at that level of profitability and

Copyrighted material

ignoring tax. Perhaps even more importantly, it would not be attractive for shareholders to put additional capital into the company because they would not IK* able to obtain any dividend for some years.

There might be statutory procedures such as the requirement for the directors to obtain a special resolution and court approval lo reduce the £1 ordinary shares to ordinary shares of 10p each. Subject to satisfying such requirements, the accounting entries would be:

	I)r	Cr
	£	**£**
Capital reduction account	180,000	
Income statement:		180,000
Transfer of debit balance		
Share capital	180,000	
Capital reduction account:		180,000
Reduction of share capital		

Accounting treatment for a capital reduction to eliminate accumulated trading losses and loss of value on non-current assets - losses borne by equity shareholders

Companies often take the opportunity to revalue all of their assets at the same time as they eliminate the accumulated trading losses. Any loss on revaluation is then treated in the same way as the accumulated losses and transferred to the capital reduction account.

For example, assume that the capital and reserves and assets of Hopeful Ltd were as follows at 31 December 20X1:

	£	**£**
200,000 ordinary shares of £I each		200,000
Income statement		(180,000)
		20,000
Non-current assets		
Plant and equipment		15,000
Current assets		
Cash	17,000	
Current liabilities		
Trade payables	**12,000**	
Net current assets		5,000
		20,000

The plant and equipment is re\alued at £5,000 and it is resolved to reduce the share capital to ordinary shares of 5p each. The accounting entries would be:

	Dr	Cr
	£	***I***
Capital reduction account	190,000	
Income statement		180,000
Plant and machinery:		10,000
Transfer of accumulated losses and loss on revaluation		
Share capital	190,000	
Capital reduction account:		190.000
Reduction of share capital to 200,000 shares of St each		

The balance sheet after the capital reduction shows that the share capital fairly reflects the underlying asset values:

	I	*I*
200,000 ordinary shares of 5p each		10,000
		10,000
Non-current assets		
Plant and equipment		5,000
Current assets		
Cash	17,000	
Current liabilities		
Trade payables	12,000	5,000
		10,000

The pro forma balance sheet shown in Figure 10.1 is from the Pilkington's Tiles Group pic's 2002 Annual Report. It shows the position w hen the company proposed the creation of distributable reserves after a substantial deficit in the reserves had been caused by the writing down of an investment - this was to be achieved by transferring to the profit and loss account the sums currently standing to the credit of the capital redemption reserve and share premium account.

The proposal was the subject of a special resolution to be confirmed by the High Court - the court would consider the proposal taking creditor protection into account. The Company recognised this with the following statement:

> the Company will need to demonstrate to the satisfaction of the High Court that no creditor of the Company who has consented to the cancellations will be prejudiced by them. At present, it is anticipated that the creditor protection will take the form of an undertaking ... not to treat as distributable any sum realised ... which represents the realisation of hidden value in the balance sheet.

10.12.2 Accounting treatment for a capital reduction to eliminate accumulated trading losses and loss of value on non-current assets - losses borne by equity and other stakeholders

In the I lopeful 1 .td example above, the ordinary shareholders alone bore the losses. It might well be, however, that a reconstruction involves a compromise between shareholders and

Figure 10.1 Pilkington's Tiles Group pro forma balance sheet assuming the competition of the restructuring plan

creditors, with an amendment of the rights of the latter. Such a reconstruction would be subject to any statutory requirements within the jurisdiction, e.g. the support, say, of 75% of each class of creditor whose rights are being compromised, 75% of each class of shareholder and the permission of the court. For such a reconstruction to succeed there needs to be reasonable evidence of commercial viability and that anticipated profits are sufficient to service the proposed new capital structure.

Assuming in the Hopeful Ltd example that the creditors agree to bear £5,000 of the losses, the accounting entries would be as follows:

Share capital	185,000	
Creditors	5,000	
Capital reduction account:		190,000
Reduction of share capital to 200,000 shares of 7.5p each		

Reconstruction schemes can be complex, but the underlying evaluation by each party will be the same. Each will assess the scheme to see how it affects their individual position.

Trade payables

In their decision to accept £5,000 less than the book value of their debt, the trade payables of Hopeful Ltd would be influenced by their prospects of receiving payment if Hopeful were to cease trading immediately, the effect on their results without I lopeful as a continuing customer and the likelihood that they would continue to receive orders from Hopeful following reconstruction.

Loan creditors

l-oan creditors would take into account the expected value of any security they possess and a comparison of the opportunities for investing any loan capital returned in the event of liquidation with the value of their capital and interest entitlement in the reconstructed company.

Preference shareholders

Preference shareholders would likewise compare prospects for capital and income following a liquidation of the company with prospects for income and capital from the company as a going concern following a reconstruction.

Relative effects of the scheme

In practice, the formulation of a scheme will involve more than just the accountant, except in the case of very small companies. A merchant bank, major shareholders and major debenture holders will undoubtedly be concerned. F,ach vested interest will be asked for its opinion on specific proposals: unfavourable reactions will necessitate a rethink by the accountant. The process will continue until a consensus begins to emerge.

Each stakeholder's position needs to be considered separately. For example, any attempt to reduce the nominal value of all classes of shares and debentures on a proportionate basis would be unfair and unacceptable. This is because a reduction in the nominal values of preference shares or debentures has a different effect from a reduction in the nominal value of ordinary shares. In the former cases, the dividends and interest receivable will be reduced; in the latter case, the reduction in nominal value of the ordinary shares will have no effect on dividends as holders of ordinary shares are entitled to the residue of profit, whatever the nominal value of their shares.

Copyrighted material

Total support may well be unachievable. The objective is to maintain the company as a going concern. In attempting to achieve this, each party will continually he comparing its advantages under the scheme with its prospects in a liquidation.

Illustration of a capital reconstruction

XYZ pic has been making trading losses, which have resulted in a substantial debit balance on the profit and loss account. The balance sheet of XYZ pic as at 31 December 20X3 was as follows:

		£000
Ordinary share capital (£1 shares)		1,000
Less: Accumulated losses	Note 1	(800)
		200
10% debentures (£1)		600
Net assets at book value	Note 2	800

Notes:

1 The company is changing its product and markets and expects to make £150,000 profit before interest and tax even' year from 1 January 20X4.

2 (a) The estimated break-up or liquidation value of the assets at 31 December 20X3 was £650,000.

(I)) The going concern value of assets at 31 December 20X3 was £700,000.

The directors arc faced with a decision to liquidate or reconstruct. I laving satisfied themselves that the company is returning to profitability, they propose the following reconstruction scheme:

- Write off losses and reduce asset values to £700,000.
- Cancel all existing ordinary shares and debentures.
- Issue 1,200,000 new ordinary shares of 25p each and 400,000 12.5% debentures of £1 each as follows:
  - the existing shareholders are to be issued with 800,000 ordinary 25p shares;
  - the existing debenture holders arc to be issued with 400,000 ordinary 25p shares and the new debentures.

The stakeholders, i.e. the ordinary shareholders and debenture holders, have first to decide whether the company has a reasonable chance of achieving the estimated profit for 20X4. The company might carry out a sensitivity analysis to show the effect on dividends and interest over a range of profit levels.

Next, stakeholders must consider whether allowing the company to continue provides a better return than that available from the liquidation of the company. Assuming that it does, they assess the effect of allowing the company to continue without any reconstruction of capital and with a reconstruction of capital.

The accountant writes up the reconstruction accounts and produces a balance sheet after the reconstruction has been effected.

The accountant will produce the following information:

Copyrighted material

***Effect** of liquidating*

		Debenture holders	*Ordinary shareholders*
	£	**£**	**£**
Assets realised	650,000		
Less: Prior claim	(600,000)	600,000	
Less: Ordinary shareholders	(50,000)		50,000
		600,000	50,000

This shows that the ordinary shareholders would lose almost all of their capital, whereas the debenture holders would IK- in a much stronger position. This is important because it might influence the amount of inducement that the debenture holders require to accept any variation of their rights.

Company continues without reconstruction

		Debenture holders	*Ordinary shareholders*
	£	**L**	**£**
Expected annual income:			
Expected operating profit	150,000		
Debenture interest	(60,000)	60,000	
I-ess: Ordinary dividend	(90,000)		90,000
Annual income		60,000	90,000

However, as far as the ordinary shareholders arc concerned, no dividend will be allowed to be paid until the debit balance of £800,000 has been eliminated, i.e. there will be no dividend for more than nine years (for simplicity the illustration ignores tax effects).

Company continues with a reconstruction

		Debenture holders	*Ordinary shareholders*
	£	**£**	**£**
Expected annual income:			
Expected operating profit	150,000		
Less: Debenture interest (12.5% on £400,000)	(50,000)	50,000	
Isss: Dividend on shares	(33,000)	33,000	
Less: Ordinary dividend	(67,000)		67,000
Annual income		83,000	67,000

How will debenture holders react to the scheme?

At first glance, debenture holders appear to be doing reasonably well: the £83,000 provides a return of almost 14% on the amount that they would have received in a liquidation (83,000/600,000 x 100), which exceeds the 10% currently available, and it is £23,000 more than the £60,000 currently received. I lowcvcr, their exposure to risk has increased because £33,000 is dependent upon the level of profits. They will consider their position in relation to the ordinary shareholders.

For the ordinarv shareholders the return should be calculated on the amount that they would have received on liquidation, i.e. 134% (67,000/50,000 X KM)). In addition to receiving a return of 134%, they would hold two-thirds of the share capital, which would give them control of the company.

Copyrighted material

A final consideration for the debenture holders would be their position if the company were to fail after a reconstruction. In such a case, the old debenture holders would be materially disadvantaged as their prior claim will have been reduced from £600,000 to £400,000.

Accounting for the reconstruction

The reconstruction account will record the changes in the book values as follows:

Reconstruction account

	£000		£000
Income statement	800	Share capital	1,000
Assets (losses written off)	100	Debentures	
		(old debentures cancelled)	600
Ordinary share capital (25p)	300		
12.5% debentures (new issue)	400		
	1,600		1,600

The post-reconstruction balance sheet will be as follows:

Ordinary share capital (25p)	300,000
12.5% debentures of £1	400,000
	700,000

10.13 Repayment of part of paid-in capital to shareholders or cancellation of unpaid share capital

This can occur when a company wishes to reduce its unwanted liquid resources. It takes the form of a pro rata payment to each shareholder and may require the consent of the creditors.

At the same time, the Directors need to retain sufficient to satisfy the company's capital investment requirements. The following is an extract from the Astra Zeneca 2005 Annual Report;

> Dividend and share rc-purchascs
>
> In line with the policy stated last year, the Board intends to continue its practice of growing dividends in line with earnings (maintaining dividend cover in the two to three times range) whilst substantially distributing the balance of cash flow via share re-purchases. During 2005, we returned $4,718 million out of free cash of $6,052 million to shareholders through a mix of share buy-backs and dividends. The Board firmly believes that the first call on free cash flow is business need and, having fulfilled that, will return surplus cash flow to shareholders.
>
> The primary business need is to build the product pipeline by supporting internal and external opportunities. Accordingly, in 2006, the Board intends to re-purchase shares at around the same level as 2005, with any balance of free cash flow available firstly for investment in the product pipeline or subsequent return to shareholders.

10.14 Purchase of own shares

This might take the form of the redemption of redeemable preference shares, the purchase of ordinary shares which are then cancelled and the purchase of ordinary shares which are not cancelled but held in treasury.

Copyrighted material

10.14.1 Redemption of preference shares

In the UK, when redeemable preference shares are redeemed, the company is required cither to replace them with other shares or to make a transfer from distributable reserves to non-distributable reserves in order to maintain permanent capital. The accounting entries on redemption arc to credit cash and debit the redeemable preference share account.

10.14.2 Buyback of own shares - intention to cancel

There are a number of reasons for companies buying back shares. These provide a benefit when taken as:

- a strategic measure, e.g. recognising that there is a lack of viable investment projects, i.e. expected returns being less than the company's weighted average cost of capital and so returning excess cash to shareholders to allow them to search out better growth investments;
- a defensive measure, e.g. an attempt to frustrate a hostile takeover or to reduce the power of dissident shareholders;
- a reactive measure, e.g. taking advantage of the fact that the share price is at a discount to its underlying intrinsic value or stabilising a falling share price;
- a proactive measure, e.g. creating shareholder value by reducing the number of shares in issue which increases the earnings per share, or making a distribution more tax efficient than the payment of a cash dividend.
- a tax efficient measure, e.g. Rolls Royce made a final payment to shareholders in 2004 of 5.00p, making a total of 8.18p per ordinary share (2003 8.18p), stating that: *Thc Company will continue to issue B Shares in place of dividends in order to accelerate the recovery of its advance corporation lax.*

There is also a potential risk if the company has to borrow funds in order to make the buyback, leaving itself liable to service the debt. Where it uses free cash rather than loans it is attractive to analysts and shareholders. For example, in the UP share buyback scheme (one of the UK's largest), the chief executive. Lord Browne, said that any free cash generated from HP's assets when the oil price was above S20 a barrel would be returned to investors over the following three years.

10.14.3 Buyback of own shares - treasury shares

The benefits to a company holding treasury shares are that it has greater flexibility to respond to investors* attitude to gearing, e.g. reissuing the shares if the gearing is perceived to be too high. It also has the capacity to satisfy loan conversions and employee share options without the need to issue new shares which would dilute the existing shareholdings.

National regimes where buyback is already permitted

In Europe and the USA it has been permissible to buy back shares, known as treasury shares, and hold them for reissue. In the UK this has been permissible since 2003. There are two common accounting treatments - the cost method and the par value method. The most common method is the cost method, which provides the following:

On purchase

- The treasury shares arc debited at gross cost to a Treasury Stock account - this is deducted as a one-line entry from equity, e.g. a balance sheet might appear as follows:

Copyrighted materia

Owners Equity section of Balance Sheet*

Common stock, £\ par, 100,000 shares authorised, 30,000 shares issued	30,000
Paid-in capital in excess of par	60,000
Retained earnings	165,000
Treasury Stock (15,000 shares at cost)	(75,000)
Total owners' equity	180,000

In some countries, e.g. Switzerland, the treasury shares have been reported in the balance sheet as a financial asset. When a company moves to IAS this is not permitted and it is required that the shares are disclosed as negative equity.

On resole

- If on resale the sale price is higher than the cost price, the Treasury Stock account is credited at cost price and the excess is credited to Paid-in Capital (Treasury Stock).
- If on resale the sale price is lower than the cost price then the Treasury Stock account is credited with the proceeds and the balance is debited to Paid-in Capital (Treasury Stock). If the debit is greater than the credit balance on Paid-in Capital (Treasury Stock), the difference is deducted from retained earnings.

The UK experience

Under the Companies Act 1985 companies were required to cancel any of their own shares that they purchased. This changed with effect from December 2003 when the Companies (Acquisition of Own Shares) (Treasury Shares) Regulations 2003 - (SI 2003/1116 and SI 2003/3031) - came into effect. The Companies Act 2006 (paras 724-732) now contains the regulations relating to Treasury shares. These regulations permit companies with listed shares that purchase their own shares out of distributable profits to hold them 'in treasury[1] for sale at a later date or for transfer to an employees* share scheme.

There arc certain restrictions whilst shares are held in treasury, namely:

- Their aggregate nominal value must not exceed 10% of the nominal value of issued share capital (if it exceeds 10% then the excess must be disposed of or cancelled).
- Rights attaching to the class of share - e.g. receiving dividends, and the right to vote - cannot be exercised by the company.

There are stipulations as to the accounting treatment on disposal:

- If the proceeds arc equal to or less than the purchase price, the proceeds arc treated as realised profit (this recognises that they had been purchased out of distributable profits). If the proceeds exceed the purchase price, an amount equal to the purchase price is treated as a realised profit and the excess is transferred to a share premium account.

The Singapore experience

It is interesting to note that until 1998 companies in Singapore were not permitted to purchase their own shares and had to rely on obtaining a court order to reduce capital. It was realised, however, that regimes such as those in the UK allowed a quicker and less expensive way to return capital to shareholders. UK experience meant that public companies were able to return capital if there were insufficient investment opportunities, and private companies were able to repurchase shares to resolve disputes between family members or minority and majority shareholders.

Copyrighted material

The following criteria apply:

- the company should have authority under its Articles of Association;
- the repayment should be from distributable profits that are realised;
- the creditors should be protected by requiring the company to IK* solvent before and after the repayment (assets and liabilities to be restated to current values for this exercise);
- mi market acquisitions require an ordinary resolution;
- selective off market acquisitions require a special resolution because of the risk that directors may manipulate the transaction.

The amount paid by the company will be set against the carrying amount of the contributed capital, i.e. the nominal value plus share premium attaching to the shares acquired and ihe retained earnings. In order to maintain capital, there will be a transfer from retained earnings to a capital redemption reserve. For example, a payment of SI 00,000 to acquire shares with a nominal value of $20,000 would be recorded as:

	Dr	Cr
Share capital	$20,000	
Retained earnings	$80,000	
Cash		$100,000

Being purchase of20,000 SI shares for $100,000 and their cancellation

Retained earnings	$20,000	
Capital redemption reserve		$20,000

Being the creation of capital redemption reserve to maintain capital.

1 What is the relevance of dividend cover if dividends are paid out of distributable profits?

2 How can distributable profits become non-distributable?

3 Why do companies reorganise their capital structure when they have accumulated losses?

4 What factors would a loan creditor take into account if asked to bear some of the accumulated loss?

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (•).

Question I

The draft balance sheet of Telm pic at 30 September 20X5 was as follows:

	£000		£000
Ordinary shares of £ I each, fully paid	12.000	Product development costs	1.400
129% preference shares of £I each, fully paid	8.000	Sundry assets	32.170
Share premium	4.000	Cash and bank	5.450
Retained (distributable) profits	4.600		
Payables	10.420		
	39.020		39.020

Preference shares of the company were originally issued at a premium of 2p per share.The directors of the company decided to redeem these shares at the end of October 20X5 at a premium of 5p per share.They also decided to write off the balances on development costs and discount on debentures (see below).

All write-offs and other transactions are to be entered into the accounts according to the provisions of the Companies Acts and in a manner financially advantageous to the company and to its share-holders.

The following transactions took place during October 20X5:

(a) On 4 October the company issued for cash 2,400.000 10% debentures of £1 each at a discount

(b) On 6 October the balances on development costs and discount of debentures were written off.

(c) On 12 October the company issued for cash 6.000.000 ordinary shares at a premium of I Op per share.This was a specific issue to help redeem preference shares.

(d) On 29 October the company redeemed the 12% preference shares at a premium of 5p per share and included in the payments to shareholders one month's dividend for October.

(e) On 30 October the company made a bonus issue, to all ordinary shareholders, of one fully paid ordinary share for ^*N*^*ry* 20 shares held.

(f) During October the company made a net profit of £275.000 from its normal trading operations. This was reflected in the cash balance at the end of the month.

Required:

(a) Write up the ledger accounts of Telin pic to record the transactions for October 20X5.

(b) Prepare the company's balance sheet as at 31 October 20X5.

(c) Briefly explain accounting entries which arise as a result of redemption of preference shares.

Question 2

The following is the balance sheet of Alpha Ltd as on 30 June 20X8:

	£000 Cost	£000 Accumulated *depreciation*	£000
Non<urrent assets			
Freehold property	46	5	41
Plant	85	_6	_79
	131	II	120
Investments			
Shares in subsidiary company		90	
Loans		40	130
Current assets			
Inventory		132	
Trade receivables		106	
		238	
Current liabilities			
Trade payables		282	
Bank overdraft		58	
		340	
Net current liabilities			(102)
Total assets less liabilities			148
Capital and reserves			
250.000 *%A%* cumulative redeemable preference shar es			
of £I each fully paid			250
100.000 ordinary shares of £1 each 75p paid			75
			325
Retained earnings			(177)
			148

The following information is relevant

1 There are contingent liabilities in respect of (i) a guarantee given to bankers to cover a loan of £30.000 made to the subsidiary and (ii) uncalled capital of lOp per share on the holding of 100.000 shares of £1 each in the subsidiary.

2 The arrears of preference dividend amount to £106,250.

3 The following capital reconstruction scheme, to **take effect** as from I July 20X8. has been duty approved and authorised:

(i) the unpaid capital on the ordinary shares to be called up;

(ii) the ordinary shares thereupon to be reduced to shares of 25p each fully paid up by cancelling 75p per share and then each fully paid share of 25p to be subdivided into five shares of 5p each fully paid;

(iii) the holders to surrender three of such 5p shares out of every five held for reissue as set out below.

(iv) the 8/% cumulative preference shares together with all arrears of dividend to be surren-

Copyrighted material

dered and cancelled on the basis that the holder of every 50 preference shares will pay to Alpha a sum of £30 in cash, and will be issued with;

(a) one £40 convertible 73\4% note of £40 each, and

(b) 60 fully paid ordinary shares of 5p each (being a redistribution of shares surrendered by the ordinary shareholders and referred to in (iii) above);

(v) the unpaid capital on the shares in the subsidiary to be called up and paid by the parent company whose guarantee to the bank should be cancelled:

(vi) the freehold property to be revalued at £55,000;

(vii) the adverse balance on retained earnings to be written off. £55.000 to be written off the shares in the subsidiary and the sums made available by the scheme to be used to write down the plant

Required:

(a) Prepare a capital reduction and reorganisation account.

(b) Prepare the balance sheet of the company as it would appear immediately after completion of the scheme.

* Question 3

A summary of the balance sheet of Doxin pic. as at 31 December 20X0. is given below;

	£		£
800,000 ordinary shares of £ 1 each	800.000	Assets other than bank (at book values)	1.500.000
300.000 *6%* preference shares of £ 1 each	300.000	Bank	200.000
General reserves	200.000		
Payables	400.000		
	1.700.000		1.700.000

^^^^^ ™ ™

During 20X1. the company;

(i) Issued 200.000 ordinary shares of £1 each at a premium of K)p per share (a specific issue to redeem preference shares).

(ii) Redeemed all preference shares at a premium of 5%. These were originally issued at 25% premium.

(iii) Issued 4.000 *7%* debentures of £100 each at £90.

(iv) Used share premium, if *any,* to issue fully paid bonus shares to members.

(v) Made a net loss of £500,000 by end of year which affected the bank account

Required:

(a) Show the effect of each of the above items in the form of a moving balance sheet (i.e. additions/ deductions from original figures) and draft the balance sheet of 31 December 20X1.

(b) Consider to what extent the interests of the creditors of the company are being protected.

Copyrighted material

Question 4

Discuss the advantages to a company of

(a) purchasing and cancelling its own shares;

(b) purchasing and holding its own shares in treasury.

Question 5

Speedster Ltd commenced trading in 1986 as a wholesaler of lightweight travel accessories. The company was efficient and traded successfully until 2000 when new competitors entered the market selling at lower prices which Speedster could not match. The company has gradually slipped into losses and the bank is no longer prepared to offer overdraft facilities. The directors are considering liquidating the company and have prepared the following balance sheet and supporting information:

Balance sheet (000s)

Norxurrent assets		
Freehold land at cost		1,500
Plant and equipment (NBV)		1,800
Current assets		
Inventories	600	
Trade receivables	1.200	
	1.800	
Current liabilities		
Payables	**1.140**	
Bank overdraft (secured on the plant and equipment)	**1.320**	
	2.460	
Net current assets		(660)
Norxurrent liabilities		
Secured loan (secured on the land)		(1,200)
		1.440
Financed by		
Ordinary shares of £1 each		3,000
Income statement		(1,560)
		1,440

Supporting information

(i) The freehold land has a market value of £960.000 if it is continued in use as a warehouse. There is a possibility that planning permission could be obtained for a change of use allowing the warehouse to be converted into apartments. If planning permission were to be obtained the company has been advised that the land would have a market value of £2,500,000.

(ii) The net realisable values on liquidation of the other assets are:

Plant and equipment	£ 1.200,000
Inventory	£450.000
Trade receivables	£ 1,050,000

Copyrighted material

(iii) An analysis of the payables indicated that there would be £300,000 owing to preferential creditors for wages, salaries and taxes.

(rv) Liquidation costs were estimated at £200.000

Required:

Prepare a statement showing the distribution on the basis that:

(a) planning permission was not obtained; and

(b) planning permission was obtained.

References

1 Companies Act 2006.
2 *Ibid.*, section 764.

Copyrighted material

11.1 Introduction

Accountants have traditionally followed an objective, transaction-based book-keeping system for recording financial data and a conservative, accrual-based system for classifying into income and capital and reporting to users and financial analysts.

However, since the 1950s there has been a growth in the use of off balance sheet finance and complex capital instruments. The financial analyst can no longer rely on the residual balances that appear in the traditional balance sheet when assessing risks and returns.

The traditional balance sheet is undergoing conceptual change. To understand this change we need to consider the evolving treatment in the primary financial statements of the various forms of loan capital and the changing needs of financial analysts. In this chapter we consider:

- Primary financial statements: their interrelationship
- Reasons that companies borrow
- Capital gearing and its implications
- Off balance sheet finance
- Substance over form
- Impact of converting to IFRS
- Balance sheet as a valuation document
- Why companies take steps to strengthen their balance sheet
- IAS 10 *Events after the Balance Sheet Date*
- IAS 37 *Provisions* Contingent Liabilities and Contingent Assets.*
- ED IAS 37 Non-financial liabilities.

11.2 Primary financial statements: their interrelationship

11.2.1 Income statement

At a mechanistic level, the historical income statement is an integral feature of the book-keeping system, in that receipts and payments of a revenue nature are transferred to this account.

At a conceptual level, it is an integral part of the financial reporting system, in that the matching and accruals concepts are applied to the receipts and payments transaction balances in order to arrive at the reported profit or loss for the period.

I 1.2.2 Balance sheet

At a mechanistic level, the historical cost balance sheet simply contains all those monetary balances remaining within the ledger after revenue and expenses have been transferred to the income statement. It is a form of second trial balance representing the balances of residual data at the end of the financial year as liabilities or assets.

Liabilities are expenses incurred and expected as a consequence of activities not yet finalised by cash transactions with creditors and other third parties; assets constitute expenditure whose economic benefits have not been fully utilised.

These residual values are a direct result of the accruals, or matching, concept.

11.3 Primary financial statements: changes in their interrelationship

11.3.1 Importance of the income statement

Although the income statement and the balance sheet were presented in tandem, the income statement used to be considered more important than the balance sheet. It was seen as having a dynamic quality, in that it reported the change in wealth that had occurred during the year with details of costs, taxation, earnings and dividends.

In contrast, the balance sheet's static quality revealed only the left-over balances arising from the double entry book-keeping system.

11.3.2 Emerging importance of the balance sheet

This picture was irrevocably altered by the emergence of capital-hungry joint stock companies. Kquity capital, which was the traditional source of finance, was unable to satisfy total demand and loan capital became important. Later, other financial institutions such as insurance companies, merchant banks and pension funds entered the field. The balance sheet came to be viewed in a new light.

Equity or ordinary shareholders were the risk carriers of the limited company. Risk-averse investors seeking greater security of investment income at the expense of capital growth were able to invest in preference shares.

Risk-averse investors seeking greater security of both investment income and investment capital became loan creditors; however, they demanded greater security, and evidence of such security, before parting with money.

While all investors looked to the income statement as a means of assessing the borrower's ability to service the interest and dividend payments, the loan creditors, as a further precaution, looked to the balance sheet to determine the safety of the principal sum secured on the net assets available in the event of foreclosure or liquidation.

I 1.4 Reasons that companies borrow

Companies borrow money for many reasons:

- Temporary cash flow problems. Cash may be needed as a consequence of temporary cash flow problems, and early repayment might be foreseen.
- Lower cost. Prevailing interest rates may be attractively low.
- Fiscal advantages. Loan interest may attract tax relief for the borrower; such relief is not available for dividend payments.

Copyrighted material

- Income gearing. A fixed rate of loan interest may be less than the anticipated return obtainable by the company in employing the loan funds. The excess will benefit shareholders via earnings per share and increased dividends and, perhaps, capital growth.
- Timing. When there is a lack of buoyancy in the capital market, a comparn might satisfy a medium-term capital requirement by borrowing with a view to redeeming the debt and making a share issue when market conditions arc favourable.
- Dilution of voting power. Shareholders and management might be reluctant to issue shares if this would dilute the control of the existing shareholders. They might also consider that an increase in the number of shares would increase the risk of a takeover bid.
- Earnings per share considerations. The anticipated return on any proposed new share capital, although desirable in absolute terms, might be insufficient to prevent a fall in F.PS. A resultant fall in the market value per share might be unacceptable.

In practice, capital gearing decisions will be influenced by a mixture of motives.

I 1.5 Capital gearing and its implications

Capital gearing is an attempt to measure the risk to the equity shareholders arising from a company's capital structure. It is the arithmetic relationship between borrowed capital and total capital employed. There is no single definition or standard description, but companies operating with a low proportion of borrowed capital as compared with equity capital arc described as low geared.

The usual arithmetical model compares long-term debt with equity funds. However, it is customary to include within long-term debt any form of long-term capital demanding fixed servicing costs. Hence, preference shares are included because they receive a priority payment of fixed dividend before any distribution to the ordinary shareholders, thus increasing the risk that the latter will receive little or nothing. Under IAS 32 preference shares arc often presented as liabilities on the balance sheet.

The measurement usually takes the form of a ratio, which we illustrate using two definitions of gearing. The first definition excludes bank overdraft, the second includes it.

Overdraft excluded

Company Y:	$\frac{\text{Debentures + Preference shares}}{\text{Debentures + Preference shares + Equity}}$	
	Year 2	Year 1
	$\frac{10 + 20}{10 + 20 + 50}$	$\frac{5 + 20}{5 + 20 + 30}$
	37.5%	45.5%
Company Z:	$\frac{2 + 6}{2 + 6 + 80}$	$\frac{0 + 10}{10 + 72}$
	9.1%	12.2%
Industrv average:	25%	27%

Copyrighted material

Company Y is shown in year 2 to be more highly geared than the industry's average. However, a reduction has occurred in the gearing from 45.5°o to **37.5%** because the increase in borrowing of *£5* million has been more than offset by a growth in equity of £20 million.

Company Z is shown in year 2 to be lower geared than the industry's average. It loo has experienced a reduction in gearing due to a change in its capital structure. The change arises from the redemption of £4 million preference shares, the issue of *£2* million debentures and an increase of £8 million in equity shares. Notice the gearing of each company as a proportion of the industry average:

	Year 2	*Year I*
Company Y	1S0%	168.5%
Company Z	**36.4%**	45.2%

In general, 'long-term debt* means borrowed funds (and preference shares) assumed to be repayable after one year. However, where companies make a habit of maintaining a bank overdraft, it can be argued that such funding is in effect long or medium term and should be treated as such when assessing risk.

The measure of risk is increased for both entities:

Overdraft included

	Debentures + Preference shares + Overdraft / Debentures + Preference shares + Overdraft + Equity	
	£m(Year2)	/m(Yearl)
Company V:	10 + 20 + 5 / 10 + 20 + 5 + 50	5 + 20 + 7 / 5 + 20 + 7 + 30
	41.2%	51.6%
Company Z:	**2 + 6 + 3** / 2 + 6 + 3 + 80	0 + 10 + 4 / 10 + 4 + **72**
	12.1%	**16.3%**
Industry average:	**31%**	36%

	Year 2	*Year I*
Company V	132.9%	143.3%
(Company /.	**39.0%**	**45.3%**

In comparison with the industry's average, the gearing of V is higher for both years and the gearing of Z is lower.

11.5.1 Implication of gearing

The risk to the ordinary shareholders in the above example is higher with company V than with company Z. The fixed dividend of preference shareholders and the fixed interest of loan creditors remains constant irrespective of the level of profits. This leads to fluctuations in the amount of profits attributable to equity. In times of high profits, the return will be generous; in periods of low profits, the return may be low or nonexistent. This volatility is

Copyrighted material

a measure of the risk inherent in an equity shareholding arising from the level of loan finance; it influences dividend yield and the market price of the equity shares.

11.5.2 Interest cover

Interest cover is calculated from the income statement. It indicates the extent to which profits before interest and tax cover the interest charges shown in the income statement. It can be adapted to take account of fixed dividends on preference shares, even if they are not presented as an expense in the income statement. An illustration for companies V and Z shows:

	Company V	Company Z	Industry average	Company Y	Company Z	Industry average
Profit before interest and tax	27	]8			**II**	
Interest	4	3		5	4	
	6.75 times	6 times	4 times	4.2 times	3.5 times	4.5 times

The interest cover ratios suggest that, while V is more highly geared than Z, it has a marginally greater safety factor (6.75 times compared with 6; 4.2 times compared with 3.5). It has a considerably greater cover than the industry average. However, if profits suffered a severe decline, the relative interest cover ratios could change drastically.

An analysis of the capital structure indicates an entity's ability to discharge its obligations in respect of interest and principal on long-term borrowings. This information is of value to all types of providers of funds, e.g. bankers, debenture holders, preference and ordinary shareholders.

It is primarily the balance sheet that provides the capital structure information; it thus performs a key role in financial decision making. Hut is its information adequate?

11.6 Off balance sheet finance

Off balance sheet finance is the descripti\e phrase for all financing arrangements where strict recognition of the legal aspects of the individual contract results in the exclusion of liabilities and associated assets from the balance sheet.

The impact of such transactions is to understate resources (assets) and obligations (liabilities) to the detriment of the true and fair view.' The analyst cannot assess the value of capital employed or the real gearing ratio, and attempts to determine risk are nullified.

This can happen as an innocent side-effect of the transaction-based book-keeping system. For example, when a company undertakes the long-term hire of a machine by payment of annual rentals, the rental is recorded in the income statement, but the machine, because it is not owned by the hirer, will not be shown in the hirer's balance sheet.

If the facility to hire did not exist, the asset could still be used and a similar cash outflow pattern incurred by purchasing it with the aid of a loan. A hiring agreement, if perceived in terms of its accounting substance rather than its legal form, has the same effect as entering into a loan agreement to acquire the machine.

The exclusion of a liabilitv and its associated asset undermines the use of the balance sheet as a vehicle for assessing risk by means of the gearing ratio.

The true and fair view can also l>e compromised by deliberate design. The problem of off balance sheet finance became exacerbated by attempts to camouflage the substance of trans-

Copyrighted material

actions by relying on a strictly legal distinction. For example, loan capital arrangements were concealed from shareholders and other creditors by a legal subterfuge to which management and lenders were party, and with which the auditors colluded.

11.7 Substance over form

IAS 17 *Lenses*[1] was the first formal imposition of the principle of accounting for substance over legal form, aiming to ensure thai the legal characteristics of a financial agreement did not obscure its commercial impact. In particular, it was intended to prevent the inherent gearing implications of the traditional balance sheet being circumvented and, consequently, the true and fair view being jeopardised.

The standard's aim has generally been achieved, but total elimination of leasing as a vehicle for generating off balance sheet finance has proved difficult. For instance, some companies have manipulated the criteria in the standard which distinguish a finance lease from an operating lease.

The explosive growth of additional and complex forms of financial arrangements during the 1980s focused attention on the need to increase the disclosure and awareness of such arrangements and led to substance over form being included as one of the qualities of reliable information in the *Framework for the Preparation and Presentation of Financial Statements.*

II.7.1 Accounting for substance over form

The IASIJ has not issued a standard on accounting for substance over form and therefore guidance must be sought from the *Framework for the Preparation ami Presentation of Financial Statements.* To account for substance we need to consider the definitions of assets and liabilities as these will dictate the substance of a transaction. If a transaction or item meets the definition of an asset or liability it should be recognised on the balance sheet regardless of the legal nature of the transaction or item.

The definitions of assets and liabilities[1] are as follows:

- An asset is a resource controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise.
- A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.

The definitions emphasise economic benefits controlled (assets) and economic benefits transferable (liabilities). Thus the issues of legal ownership of, or title to, assets and possession of legal responsibilities for liabilities arc necessarily evaded in the quest for an identification of substance inherent within the individual transaction.

I 1.7.2 Applying the definitions

This involves the consideration of key factors in analysing the commercial implications of an individual transaction. The kev factors are:

1 Substance must first he identified by determining whether the transaction has given rise to new assets or liabilities for the reporting entity and whether it has changed the entity's existing assets and liabilities.

Copyrighted material

2 Rights or other access to benefits (i.e. possession of an asset) must IK evidenced by the entity's exposure CO risks inherent in the benefits, taking into account the likelihood of those risks having a commercial effect in practice.

3 Obligations to transfer benefits (i.e. acceptance of a liability) must be evidenced by the existence of some circumstance by which the entity is unable to avoid, legally or commercially, an outflow of benefits.

4 Options, guarantees or conditional provisions incorporated in a transaction should have their commercial effect assessed within the context of all the aspects and implications of the transaction in order to determine what asseis and liabilities exist.

11.7.3 Recognition in the balance sheet

Having applied the definition to determine the existence of an asset or liability, it is then necessary to decide whether to include the asset or liability in the balance sheet. This decision necessitates:

- sufficient evidence that a transfer of economic benefits is probable; and
- that monetarv evaluation of the item is measurable with sufficient reliability.

11.7.4 Substance over form examples

The following examples illustrate the appropriate treatment for transactions concerning consignment stocks, sale and repurchase agreements, and debt factoring.

Consignment stocks

Consignment inventory normally remains the property of the consignor until a sale has been effected by the consignee or the consignee takes legal ownership of the inventory. This is illustrated by the following extract from the Annual Report of the Baldwin Piano and Organ Company which reports the effect of a change in policy:

> Beginning in 1997 and concluding in 1998, Baldwin phased out its historical consignment inventory program. Under its historical consignment inventory program, the consigned pianos in a dealer's possession remained part of Baldwin's inventory until actually sold by the dealer. In 1997, as a result of Baldwin's development and implementation of a more attractive flooring plan, the dealers opted out of the existing consignment program and most of the Company inventory in each of these dealers' possession was immediately sold to the dealers. This created a non-recurring increase in Baldwin's 1997 sales and net earnings of S14.f> million and $0.9 million, respectively.

However, there are circumstances where, although the legal ownership is retained by the consignor, the economic risks and rewards are transferred to the consignee.

How to determine the commercial impact

The absolute commercial impact of these transactions requires consideration of the rights of each party to have the inventory returned to the consignor. The agreement may contain an absolute right of return of the inventory to the consignor, but in practice penalty provisions may effectively neutralise the right so that inventory is never returned.

EXAMPLE • Producer 1* pic supplies leisure caravans to caravan dealer C Ltd on the following terms:

Copyrighted material

1 Each party has the option to have the caravans returned to the producer.

2 C Ltd pays a rental charge of 1% per month of the cost price of the caravan as consideration for exhibiting the caravan in its display compound.

3 Eventual sale of a caravan necessitates C Ltd remitting to P pic the lower of:

(a) the ex-factory price of the caravan when first delivered to C Ltd, or

(b) the current ex-factory price of the caravan, less all rentals paid to date.

4 If the caravans remain unsold for six months, C Ltd must pay for each unsold caravan on the terms specified above.

To some extent the risks and rewards of ownership are shared between both parties. However, in practice we must decide in favour of one party because it is not acceptable to show the caravans partly on each balance sheet.

The factors in favour of treating the consigned goods as inventory of P pic are:

- P pic's right to demand the return of the vans.
- C Lid's ability to return the vans to P pic.
- P pic is deriving a rental income per caravan for six months or until the time of sale, whichever occurs first.

The factors in favour of treating the goods as the inventor) of CI Ltd are:

- C Ltd's obligation to pay for unsold vans at the end of six months.
- The payment of a monthly rental charge. This may be considered as interest on the amount outstanding.
- C Ltd's payment need not exceed the ex-works price existing at the time of supply.

However, if (I Ltd has an unrestricted right to return the caravans before the six months have elapsed it can, in theory, avoid the promise to pa\ for the caravans. Indeed, providing the ex-works cost has not increased beyond the rental (i.e. 1% per month), the company can recover the sum of the rental.

On balance the factors seem to favour treating the transaction as a sale to C Ltd, so its balance sheet would carry the caravans as stock and I' pic would carry them as a receivable.

Consider also the option of return held by C Ltd. This may not be unrestricted. Disputes may develop if the exhibited caravans suffer wear and tear considered excessive by P pic; or other restrictions may be considered inherent in the various clauses. Thus substance over form is not always easy to identify or isolate. In practice, a decision may be delayed to observe how the terms actually operated, on the basis that what actually transpired constitutes the substance.

Sale and repurchase agreements

Sale and repurchase agreements appear in a variety of guises. The essential ingredient is that the original holder or purported vendor of the asset does not relinquish physical control: it retains access to the economic benefits and carries exposure to the commercial risks. In short, the characteristics of a normal sale are absent. Substance would deem that such a transaction be treated as non-sale, the asset in question remaining in the balance sheet of the purported vendor.

EXAMPLE • A company specialising in building domestic houses sells a proportion of its landholding to a merchant bank for £750,000 on 25 March 20X5, agreeing to repurchase the land for £940,800 on 24 March 20X7. The land remains under the control and supervision of the vendor.

Copyrighted material

Substance deems this contract to be a financing arrangement. The risks and rewards of ownership have not been transferred to the bank. Money has been borrowed on the security of the land. The bank is to receive a fixed sum of £190,800 a! the end of a two-year term. This equates to 12% per annum compound interest. The balance sheet should retain the land as an asset, the cash inflow of £750,000 being displayed as a loan, redeemed two years later by its repayment at £750,000 plus accrued interest of £190,800.

In deciding whether it is a sale or a finance agreement, consider which party enjoys the benefits and suffers the risk between sale and repurchase. In the simplest version of this kind of contract, this will usually be indicated by the prices at which the two transactions are arranged. If the prices arc market prices current at the date of each transaction, risks and rewards of ownership rest with the buyer for the period between the two transactions. But if the later price displays any arithmetic linking with the former, this suggests a relationship of principal and interest between the two dates. Thus benefits and risk reside with the original entity-seller, who is in effect a borrower; the original entity-buyer is in effect a lender.

Debt factoring

Factoring is a means of accelerating the cash inflow by selling debtors to a third party. Sales ledger administration and protection from bad debts may be involved. Is the transaction really a sale in substance, or merely a borrowing arrangement with collateral in the form of accounts receivable? Once again, identification of substance will necessitate consideration of the overall terms of the factoring contract as the factor may be supplying a variety of services. We may safely dispense with the benefits of ownership and concentrate on the risks: there is no likelihood of any improvement in benefit in relation to debtors, apart perhaps from a reduction in finance costs as a side-effect of earlier cash inflow.

The main risk of ownership of debtors is the bad debt risk and the risk of slow payment. If these risks have been transferred to a third party the substance of the factoring arrangement is the genuine sale of accounts receivable, but if these risks are retained by the enterprise the factoring arrangement is in substance a loan arrangement. To decide on the transference of risks the details of the agreement with the third party must be established.

If the agreement transfers the debts without recourse then the third party accepts the risks and will have no recourse to the enterprise in the event of non-payment by the debtor. The receipt of cash by the enterprise from the third party in this situation would be recorded to reduce the balance of debtors in the balance sheet.

If the agreement transfers the debts with recourse then the third party has not accepted the risks and in the event of default by the debtor the third party will seek redress from the enterprise. The substance of this arrangement is a financing transaction and therefore any cash received by the enterprise from the third party will be recorded as a liability until the debtor pays. Only at that point does the risk and the obligation to repay the third party disappear.

The above examples of substance over form concentrate on a key issue - whether assets and liabilities should be recognised on the balance sheet. The substance approach taken in all the examples follows the principle that if a transaction or transactions creates something that meets the definition of an asset or liability it should IK* recognised on the balance sheet. If a transaction, on the other hand, passes the risks and rewards of an asset to another party it should be dcrccognised from the balance sheet regardless of the legal nature of the transaction. This issue is considered again in Chapter 13 since IAS 39 *Financial Instruments: Recognition and Measurement* addresses recognition and derecognition of financial assets and liabilities.

Copyrighted materia

11.8 Impact of converting to IFRS

Owing to the importance of the balance sheet, the impact of converging to IFRS on the balance sheet must be considered. Changes to the balance sheet can change the perceptions of risk by different investors and can therefore potentially affect the ability of companies to raise capital and provide adequate returns to investors. The general changes to assets and liabilities, together with an example, arc shown below.

As regards liabilities, this may require

(a) the recognition of new liabilities onto the balance sheet, e.g. provisions for environmental and decommissioning costs; and
(b) the derecognition of existing liabilities, e.g. provisions for future restructuring costs.

As regards assets, this may require

(a) the recognition of new assets, e.g. derivative financial assets; and
(b) the derecognition of existing assets, e.g. start-up costs and research.

For some companies the main impact might, however, arise from the reclassification of existing assets and liabilities. This is illustrated with the following extract from the Annual Report of Arinso International which converted to IFRS in 2003 and restated its 2002 balance sheet.

Arinso International extract

December 31, 2002 (IFRS opening balance 2003) (in EUR)	*Note*	*2002 Belgian GAAP*	*IFRS corrections*	*IFRS reclass.*	*2002 IFRS*
Assets					
Non-current Assets					
Start-up expenses	1	45,017	(45,017)		
Property, plant and equipment		2,298,195			2,298,195
Goodwill	3	10,986,740	(347,062)		10,639,678
Intangible assets		5,536			5,536
Long term receivables		665,354		228,755	894,109
Deferred tax assets	8		1,583,035		1,583,035
Current Assets					
Amounts receivable after one vcar		228,755		(228,755)	
Work in process	4	37,621	26,200	(63,821)	
Tax assets				992,805	992,805
Trade and other receivables	7	34,787,200	5,187	332,781	35,125,168
Investments		19,578,727		(19,578,727)	
Cash and cash equivalents		29,771,618		19,578,727	49,350,345
Deferred charges and accrued income		1,261,765		(U261,765)	
Total assets		99,666,528	1,222,343	0	100,888,871

Copyrighted material

December 31, 2002 (IFRS opening balance 2003) (in FAIR)	*Note*	*2002 Belgian GAAP*	*IFRS corrections*	*IFRS reclass.*	*2002 IFRS*
Liabilities					
Equity					
Capital		60,245,423			60,245,423
Reserves		1,023,738			1,023,738
Retained earnings	1>2,3, 4,5,6, 7,8	9,484,114	1,567,936		11,052,050
Translation differences		433,035			433,035
Third parties		2,500			2,500
Non-current liabilities					
Interest bearing liabilities		13,619			13,619
Provisions	5	831,673	(223,947)	(607,726)	
Deferred tax liabilities	8	266,511	98,594		365,105
Current liabilities					
Tax liabilities	8		18,300	2,567,731	2,586,031
Trade and other liabilities	2,6	9,675,272	(183,940)	13,565,034	23,056,366
Advances		248,284		(248,284)	
Social and tax liabilities	2	16,873,639	(54,600)	(16,819,039)	
Provisions				2,111,004	2,111,004
Other debts		30,193		(30,193)	
Accrued charges and deferred income		538,527		(538,527)	
Total liabilities		99,666,528	1,222,343	0	100,888,871

AriltSO is a Belgian company and the reclassifications required will vary in different regulatory regimes.

Investors may be interested in the effect on retained earnings and distributable profits, e.g. increased by 1,567,936; loan creditors may be interested in the effect on non-current liabilities, gearing and possible breaking of debt covenants; and creditors may be interested in the effect on the liquidity expressed as current and quick ratios.

There might be difficulties in differentiating real changes in performance from the impact of the new IFRS requirements. It will be important for companies to highlight the economic impact of any changes on their business strategy, treasury management, financing, profitability and dividends, e.g Barclays have indicated that there will be little impact on profit after tax and earnings per share but that there will be an impact on the balance sheet as off balance sheet items are brought on to the balance sheet.

I 1.9 Balance sheet as valuation document

Another evolutionary feature of the modem balance sheet is its increasing tendency to be perceived as a valuation document. The traditional balance sheet was seen as a form of second trial balance, i.e. a statement listing economic benefits still to come, unused expenditures of earlier accounting periods, prepayments, obligations not yet discharged, unsettled accounts and accruals.

Copyrighted material

The main motives for the change in perception are to report the financial strengths of an entity and to allow an assessment of risk by extracting appropriate ratios, such as gearing and net asset cover. We have already discussed the gearing ratio and will now discuss net asset cover.

11.9.1 Net asset cover

Net asset cover compares the current market price of a company's equity share with the value of underlying net assets attributable to that share as revealed by the entity's most recent published balance sheet.

EXAMPLE • Each of NAC pic's £0.25 fully paid ordinary shares has a current middle market price of 80p on 31 January 20X7. Its summarised balance sheet as at 31 December 20X6 is shown in Figure **11.1.**

Two methods - the micro and macro - may be used to compute the net asset cover, but the formula is:

$$\frac{\text{Net assets per equity share}}{\text{Current market price per equity share}}$$

NAC pic's net assets attributable to the equity shares arc £900. The computations of net asset cover are, then:

(i) Micro method: £900/2400 = 4; : 1 or 4/%

(ii) Macro method: . . = 47: I or 47%

What does the ratio reveal?

In NAC's case, the ratio reveals that the current market price per share of 80p is represented by assets of 37.5p, i.e. the price is covered by 47% in the form of net assets. Thus, it may be argued, if the company is forced into liquidation, the equity holders will receive some 47%

Figure M.I Balance sheet to determine net asset cover

of the current market price. It pretends to reveal the extent of the safety net underpinning the current share price by assuming the following:

- The net asset carrying value in the balance sheet is a current market price value and all assets in the balance sheet will be saleable, even in a piecemeal situation.
- The aggregate values will be received after allowing for liquidation expenses.
- The share price is inclined to be static.

In order to differentiate the quality or realisability of individual assets, assets such as goodwill, copyright and patents were often deducted in arriving at the net assets applicable to each ordinary share. In other words, the safety net was seen to consist only of tangible assets; but not all city analysts applied such rules.

Is the **ratio** any use?

Yes, as long as we appreciate that the inherent assumptions may be questionable and that it is a MTV rough measurement of risk in a capital market where share prices arc volatile and where balance sheet data may not be representative of market values. Fundamentally, it is a basis for comparison between like companies in the same industry. It is subjective and considerable care must be applied in the assessment using this ratio.

In spite of its shortcomings, management perceives that the balance sheet is used as a risk measure. Management attention is therefore often given to strengthening the balance sheet. For example, assets may be revalued to improve the apparent asset cover.

11.10 Why companies take steps to strengthen their balance sheets

One of several reasons is management's belief that the gearing ratio is important, and that it can be improved by increasing equity reserves as a consequence of revaluing existing assets in the balance sheet. The revaluation can have an effect on the gearing ratio and earnings per share (EPS).

11.10.1 Gearing ratio improved

In addition to revaluing the book values of assets appearing in the balance sheet, companies may introduce assets into the balance sheet. For example, brand accounting is a system of asset creation designed to bolster the net worth of the entity, and was adopted by a number of major companies during the late 1980s. It caused major concern throughout the accountancy profession because it violated the transaction basis of traditional accountancy reporting; valuation was extremely subjective and it was thought that a brand was too ephemeral to be recorded as an asset. Under IAS 38 *Intangible Assets* it would be unacceptable to recognise an internally generated brand on the balance sheet.

I 1.10.2 Earnings per share improved

The earnings per share figure may be improved by the way in which assets are classified. For example, if a positive difference arising on an acquisition is classified as goodwill then it will not be reduced unless it is impaired whereas, if it is classified as an intangible asset it will be required to be amortised with an annual charge to the income statement. However if a revaluation causes an increase in depreciation charges the earnings per share figure can be reduced as a result of strengthening the balance sheet.

11.10.3 Commercial pressures to revalue

Pressure on management to strengthen the balance sheet is often associated with a perceived commercial benefit from doing so. Strengthening might be undertaken to frustrate a potential takeover, either real or anticipated. A company experiencing or expecting a hostile bid may revalue its assets to improve the interpretation of its balance-sheet and so influence its equity share price. The management may feel that the current price is too low and consequently attractive to a would-be predator. Thus revaluation becomes part of an attempt to make shareholders believe that the current share price does not reflect the true worth of the entity, and hence that the bidder's offer price is not adequate,

Strengthening might also be undertaken to support a potential takeover bid. A predator might try to improve its own balance sheet to encourage shareholders of the target company to accept its offer. Such an offer invariably embraces an exchange of shares between target company shareholders and the bidder.

W'c saw in earlier chapters that there have been proposals to reflect current values in t he-balance sheet by implementing a coherent price-level model to adjust the historical carrying amounts. To date, these proposals have not been adopted and historic values, with some modification, still appear in the balance sheet.

11.11 Definitions cannot remove uncertainty: IAS 10 and IAS 37

We have seen that the IASB has issued standards and the *Framework for the Preparation and Presentation of Financial Statements* to help determine the nature of a transaction, by defining assets and liabilities and requiring the substance of commercial transactions to be reflected in the accounts. However, there arc times when the nature of the transaction is clear, but the events have not crystallised to the extent that the effect on the accounts is certain. There has to be an estimate and this requires the directors to exercise judgement.

The IASB had already issued standards in two areas: IAS 10 Events after the Balance Sheet Date and IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

In June 2005 IASB issued an cxposive draft IAS 37 *Non-Financial Liabilities* to revise the former IAS 37 (see section 11.12).

11.11.1 IAS 10 Events after the Balance Sheet Date

IAS 10 requires financial statements to reflect the conditions that existed at the balance-sheet date. There is a period of perhaps two months after the year-end before the accounts are signed by the directors and auditors, and information that becomes available during that period should be appraised to determine whether the accounts need to be-adjusted.

Adjusting events

If information becomes available during this period that gives further evidence of the conditions that existed at the balance sheet date, it is described as an adjusting event and, if it is material, will require changes in the amounts to be included in the financial statements. Examples are the subsequent determination of the purchase price or proceeds of sale of non-current assets sold before the year-end, and a valuation of property that provides evidence of impairment in value.

Copyrighted material

Non-adjusting events

Non-adjusting events are post balance sheet events which concern conditions that did not exist at the balance sheet date, but which arc so material that non-disclosure would affect the ability of the users of financial statements to reach a proper understanding of the financial position. These events arc required to be disclosed by way of note. The following is an extract from the 2003 Annual Report of Manchester United:

Post balance sheet events

Subsequent to the balance sheet date, the playing registrations of two footballers have been acquired for a total consideration including associated costs of £18,063,000 of which £7,393,000 is due for payment after more than one year.

The playing registration of one footballer has been disposed of for a total consideration, net of associated costs, of £\ 1,941,000. The associated book value of the playing registration **at 31 July** 2003 was £16,469,000. As the transaction was in progress at the balance sheet date, a provision for the loss on disposal of £4,528,000 has been included in these financial statements. The revised carrying value of the registration of £\ 1,941,(MM) has been transferred from intangible fixed asset (see note 11) and reclassified as an intangible asset **held** for sale.

I I.I 1.2 IAS 37 *Provisions, Contingent Liabilities and Contingent* Assets[5]

The IASC approved IAS 37 in July 1998. IAS 37 superseded IAS 10 in respect of contingencies, but also gave further guidance on the accounting treatment for provisions. The key objective of IAS 37 is to ensure that appropriate recognition criteria and measurement bases arc applied and that sufficient information is disclosed in the notes to enable users to understand their nature, timing and amount.

The IAS sets out a useful **decision tree,** shown in Figure 11.2, for determining whether an event requires the creation of a provision, the disclosure of a contingent liability or no action.

We will now consider provisions, contingent liabilities and contingent assets.

I I.I 1.3 Provisions

IAS 37 is mainly concerned with provisions. It defines a provision as *a liability of uncertain timing or amount'.

In particular it targets 'big bath' provisions that companies historically have been able to make. These are the type of provisions that it has been tempting for directors to make in order to smooth profits without any reasonable certainty that the provision would actually be required in subsequent periods. Sir David Tweedie, the chairman of the IA SB, has said:

> A main focus of [IAS 37] is *big-bath' provisions. Those who use them sometimes pray in aid of the concept of prudence. All too often however the provision is wildly excessive and conveniently finds its way back to the [income statement) in a later period. The misleading practice needs to IK* stopped and |IAS 37| proposes that in future provisions should only be allowed when the company has an unavoidable obligation - an intention which may or may not be fulfilled will not be **enough.** Users of accounts can't be expected to be mind readers.

Copyrighted material

Figure 11.2 **Decision tree**

Copyrighted image

11.4 What are the general principles that IAS 37 applies to the recognition of a provision?

The general principles are that a provision should be recognised when:[6]

(a) an entity has a present obligation (legal or constructive) as a result of past events;

(b) it is probable that a transfer of economic benefits will be required to settle the obligation;

(c) a reliable estimate can be made of the amount of the obligation.

Copyrighted material

Provisions by their nature relate to the future. This means that there is a need for estimation and IAS 37 comments' that the use of estimates is an essential part of the preparation of financial statements and docs not undermine their reliability.

The IAS addresses the uncertainties arising in respect of present obligation, past event, probable transfer of economic benefits and reliable estimates when deciding whether to recognise a provision.

Present obligation

The test to be applied is whether it is more likely than not, i.e. more than 50% chance of occurring. For example, if involved in a disputed lawsuit, the company is required to take account of all available evidence including that of experts and of post balance sheet events to decide if there is a greater than 50% chance that the lawsuit will be decided against the company.

Where it is more Iikch that no present obligation exists at the balance sheet date, the company discloses a contingent liability, unless the possibility of a transfer of economic resources is remote.

Past event[8]

A past event that leads to a present obligation is called an obligating event. This is a new-term with which to become familiar. This means that the compam has no realistic alternative to settling the obligation. The IAS defines no alternative as being only where the settlement of the obligation can be enforced by law or, in the case of a constructive obligation, where the event creates valid expectations in other parties that the company will discharge the obligation.

The IAS stresses that it is only those obligations arising from past events existing independently of a company's future actions that are recognised as provisions, e.g. clean-up costs for unlawful environmental damage that has occurred require a provision; environmental damage that is not unlawful but is likely to become so and involve clean-up costs will not be provided for until legislation is virtually certain to be enacted as drafted.

Probable transfer of economic benefits[9]

The IAS defines probable as meaning that the event is more likely than not to occur. Where it is not probable the company discloses a contingent liabilit) unless the possibility is remote.

I I.I 1.5 What are the general principles that IAS 37 applies to the measurement of a provision?

IAS 37 states[10] that the amount recognised as a provision should be the *best estimate* of the expenditure required to settle the present obligation at the balance sheet date.

Best estimate is defined as the amount that a company would rationally pay to settle the obligation or to transfer it to a third party. The estimates of outcome and financial effect are determined by the judgement of management supplemented by experience of similar transactions and reports from independent experts. Management deal with the uncertainties as to the amount to IK* provided in a number of ways:

- A class obligation exists
  - where the provision involves a large population of items such as a warranty provision, statistical analysis of expected values should be used to determine the amount of the provision.

Copyrighted material

- A single obligation exists

  where a single obligation is being measured, the individual most likeh outcome may be the best estimate;

  however, there may be other outcomes that are significantly higher or lower indicating that expected values should be determined.

Management must avoid creation of excessive provisions based on a prudent view:

- Uncertainty does not justify the creation of excessive provisions"

  if the projected costs of a particular adverse outcome are estimated on a prudent basis, that outcome should not then be deliberate^ treated as more probable than is realistically the case.

The IAS states'-' that *w here the effect of the time value of money is material, the amount of a provision should be the present value of the expenditures expected to be required to settle the obligation'.

Present value is arrived at'[1] by discounting the future obligation at [fc]a pre-tax rale (or rates) that retleet(s) current market assessments of the time value of money and the risks specific to the liability. The discount rate(s) should not reflect risks for which future cash How estimates have been adjusted.*

If provisions are recognised at present value a company will have to account for the unwinding of the discounting. As a simple example, assume a company is making a provision at 31 December 20% for an expected cash outflow of €1 million on 31 December 2008. The relevant discount factor is estimated at 10%. Assume the estimated cash flows do not change and the provision is still required at 31 December 2007

	€000
Provision recognised at 31 December 20(H) (€lm X 1/1.1[2])	826
Provision recognised at 31 December 2007 (€lm X 1/1.1)	909
Increase in the provision	83

This increase in the provision is purely due to discounting for one year in 2007 as opposed to two years in 2006. This increase in the provision must be recognised as an expense in the income statement, usually as a finance cost, although IAS 37 does not make this mandatory.

The extract from the 2005/2006 Annual Report of Scottish Power highlights the unwinding of the discounting policy:

> Mine reclamation and Closure costs
>
> Provision was made for mine reclamation and closure costs when an obligation arose out of events prior to the balance sheet date. The amount recognized was the present value of the estimated future expenditure determined in accordance with local conditions and requirements. A corresponding asset was also created of an amount equal to the provision. This asset, together with the cost of the mine, was subsequently depreciated on a unit of production basis. The unwinding of the discount was included within finance costs.

I I.I 1.6 Application of criteria illustrated

Scenario I

An offshore oil exploration company is required by its licence to remove the rig and restore the seabed. Management have estimated that 85"o of the eventual cost will be incurred in removing the rig and 15% through the extraction of oil. The company's practice on similar projects has been to account for the decommissioning costs using the "unit of production*

Copyrighted material

method whereby the amount required for decommissioning was built up year by year, in line with production levels, to reach the amount of the expected costs by the time production ceased.

Decision process

1 Is there a present obligation as a result of a past event?
The construction of the rig has created a legal obligation under the licence to remove the rig and restore the seabed.

2 Is there a probable transfer of economic benefits?
This is probable.

3 Can the amount of the outflow be reasonablv estimated?
A best estimate can be made by management based on past experience and expert advice.

4 Conclusion
A provision should be created of 85% of the eventual future costs of removal and restoration.
This provision should be discounted if the effect of the time value of money is material.
A provision for the 15% relating to restoration should be created when oil production commences.
The unit of production method is not acceptable in that the decommissioning costs relate to damage already done.

Scenario 2

A company has a private jet costing £24 million. Air regulations required it to be overhauled every four years. An overhaul costs £1.6 million. The company policy has been to create a provision for depreciation of £2 million on a straight-line basis over twelve years and an annual provision of £400,000 to meet the cost of the required overhaul every four years.

Decision process

1 Is there a present obligation as a result of a past obligating event?
There is no present obligation. The company could avoid the cost of the overhaul by, for example, selling the aircraft.

2 Conclusion
No provision for cost of overhaul can be recognised. Instead of a provision being recognised, the depreciation of the aircraft takes account of the future incidence of maintenance costs, i.e. an amount equivalent to the expected maintenance costs is depreciated over four years.

I I.I 1.7 Disclosures

Specific disclosures,[14] for each material class of provision, should be given as to the amount recognised at the year-end and about any movements in the year, e.g.:

- Increases in provisions - any new provisions; any increases to existing provisions; and, where provisions arc carried at present value, any change in value arising from the passage of time or from any movement in the discount rate.
- Reductions in provisions - any amounts utilised during the period; management are required to review provisions at each balance sheet date and

Copyrighted material

- adjust to reflect the current best estimates; and
- if it is no longer probable that a transfer of economic benefits will be required to settle the obligation, the provision should be reversed.

Disclosures need not be given in cases where to do so would be seriously prejudicial to the company's interests. For example, an extract from the Technotrans 2002 Annual Report states:

> A competitor filed patent proceedings in 2(KK>,... the court found in favour of the plaintiff... paves the way for a claim for compensation which may have to be determined in further legal proceedings ... the particulars pursuant to IAS .>7.X5 are not disclosed, in accordance with IAS 37.92, in order not to undermine the company's situation substantially in the ongoing legal dispute.

- A provision for future operating losses should not be recognised (unless under a contractual obligation) because there is no obligation at the date of the balance sheet. However, where a contract becomes onerous (see next point) and cannot be avoided, then a provision should be made.

  This can be contrasted to cases where a company supplies a product as a loss leader to gain a foothold in the market. In the latter case, the company may cease production at any time. Accordingly, no provision should be recognised as no obligation exists.

- A provision should be recognised if there is an onerous contract. An onerous contract is one entered into with another party under which the unavoidable costs of fulfilling the contract exceed the revenues to be received and where the entity would have to pay compensation to the other party if the contract was not fulfilled as, e.g. in the following extract from the Kuoni Travel Holding AG 2001 Annual Report when it created a provision of overCHI'SOm:

  > The provision for onerous contracts covers the loss anticipated in connection with excess flight capacity at Scandinavian charter airline Novair for the period up to the commencement of the 2005 summer season and resulting from the leasing agreement for an Airbus A-330. Until this time, the aircraft will be leased, for certain periods only to other airlines at the current low rates prevailing in the market. The leasing agreement will expire in autumn 2007.

- A provision for restructuring should only be recognised when there is a commitment supported by:
  (a) a detailed formal plan lor the restructuring identify ing at least:
    (i) the business or part of the business concerned;
    (ii) the principal locations affected;
    (iii) details of the approximate number of employees who will receive compensation payments;
    (iv) the expenditure that will be undertaken; and
    (v) when the plan will be implemented; and
  (b) has raised a \alid expectation in those affected that it will carry out the restructuring by implementing its restructuring plans or announcing its main features to those affected b\ it.

- A provision for restructuring should not be created merely on the intention to restructure. For example, a management or board decision to restructure taken before the balance sheet dale does not give rise to a constructi\e obligation at the balance sheet date unless the company has, before the balance sheet date:

Copyrighted material

started to implement the restructuring plan, e.g. dismantling plant or selling assets;
announced the main features of the plan with sufficient detail to raise the valid expectation of those affected that the restructuring will actually take place.

- A provision for restructuring should only include the direct expenditures arising from the restructuring which are necessarily entailed and not associated with the ongoing activities of the company. For example, the following costs which relate to the future conduct of the business are not included:

  retraining costs; relocation costs; marketing costs; investment in new systems and distribution networks.

- A provision for environmental liabilities should be recognised at the time and to the extern that ihe entity becomes obliged, legally or constructively, to rectify environmental damage or to perform restorative work on the environment. This means that a provision should be set up only for the entity's costs to meet its /^///obligations. It could be argued that any provision for any additional expenditure on environmental issues is a public relations decision and should be written off.

- A provision for decommissioning costs should be recognised to the extent that decommissioning costs relate to damage already done or goods and services already received.

The last point may require a change of accounting policy in the way in which companies provide for restoration costs. Gold Mines of Sardinia Ltd, an Australian company listed on the Alternative Issues Market in the UK, stated in its accounting policies in the 1997 accounts:

Restoration costs

Restoration costs that are expected to be incurred are provided for as a part of the exploration, evaluation, development, construction or production phases that give rise to the need for restoration. Accordingly these costs are recognised gradually over the life of the facility as these phases occur. The costs include obligations relating to reclamation, waste site closure, plant closure, platform removal and other costs associated with the restoration of the site. These estimates of the restoration obligations are based on anticipated technology and legal requirements and future costs, which have been discounted to their present value.

It would appear that the company is applying the units of production method in respect of restoration costs.

I I.I 1.8 The use of provisions

Only expenditures that relate to the original provision are to be set against it because to set expenditures against a provision that was originally recognised for another purpose uould conceal the impact of two different events.

Illustration of accounting policy from Scottish Power 2005/06 Annual Report

Mine reclamation and closure costs

Provision was made for mine reclamation and closure costs when an obligation arose out of events prior to the balance sheet date. The amount recognised was the present value of the estimated future expenditure determined in accordance with local conditions and requirements. A corresponding asset was also created of an amount equal to the

Copyrighted material

provision. This asset, together with the cost of the mine, was subsequently depreciated on a unit of production basis. The unwinding of the discount was included within finance costs.

I I.I 1.9 Contingent liabilities

IAS 37 deals with provisions and contingent liabilities within the same IAS because the IASB regarded all provisions as contingent as they are uncertain in timing and amount. For the purposes of the accounts, it distinguishes between provisions and contingent liabilities in that:

- Provisions are a present obligation requiring a probable transfer of economic benefits that can be reliably estimated - a prov ision can therefore be recognised as a liability.
- Contingent liabilities fail to satisfy these criteria, e.g. lack of a reliable estimate of the amount; not probable that there will be a transfer of economic benefits; yet to be con-lirmed that there is actually an obligation - a contingent liability cannot therefore be recognised in the accounts hut may be disclosed by way of note to the accounts or not disclosed if an outflow of economic benefits is remote.

Where the occurrence of a contingent liability becomes sufficiently probable, it falls within the criteria for recognition as a provision as detailed above and should be accounted for accordingly and recognised as a liability in the accounts.

Where the likelihood of a contingent liabilit) is possible, but not probable and not remote, disclosure should he made, for each class of contingent liability, where practicable, of:

(a) an estimate of its financial effect, taking into account the inherent risks and uncertainties and, where material, the time \alue of money;

(b) an indication of the uncertainties relating to the amount or timing of any outflow; and

(c) the possibility of any reimbursement.

For example, an extract from the 2003 Annual Report of Manchester United pic informs as follows:

> Contingent liabilities
>
> *Transfer fees payuble*
> Under the terms of certain contracts with other football clubs in respect of player transfers, certain additional amounts would be payable by the Group if conditions as to future team selection are met. The maximum that could be payable is £12,005,000 **(2002 £12,548,000).**
>
> *Guarantee on behalf oj associate*
> Manchester United PLC has undertaken to guarantee the property lease of its associate, Timecreatc Limited. The lease term is 35 years with annual rentals of £400,0110.

I I.I 1.10 Contingent assets

A contingent asset is a possible asset that arises from past events whose existence will be con-firmed onlv bv the occurrence of one or more uncertain future events not wholly within the cntitv's control.

Recognition as an asset is only allowed if the asset is *virtually certain,* i.e. and therefore by definition no longer contingent.

Copyrighted material

Disclosure by way of note is required if an inflow of economic benefits is *probable.* The disclosure would include a brief description of the nature of the contingent asset at the balance sheet date and, where practicable, an estimate of their financial effect taking into account the inherent risks and uncertainties and, where material, the time value of money.

No disclosure is required where the chance of occurrence is anything less than probable. For the purposes of IAS 37, probable is defined as more likely than not, i.e. more than a 50% chance.

11.12 ED IAS 37 *Non-financial Liabilities*

In June 2005, the International Accounting Standards Board (IASB) proposed amendments to IAS 37 *Provisions, Contingent Liabilities and Contingent Assets.* The new title strips IAS 37 of the words 'Provisions*, 'Contingent* and 'Assets' and adds the term 'Non-financial* to create the new title IAS 37 *Son-Financial Liabilities.* It is interesting to see that the new Standard has been developed around the *Frameworks* definitions of an asset and a liability.

It appears that the word 'non-financial' has been added to distinguish the subject from 'financial liabilities' which are covered by IAS 32 and IAS 39.

11.12.1 The 'old' IAS 37 Provisions, Contingent Liabilities and Contingent Assets

To understand the 'new' approach in ED IAS 37 (Non-financial liabilities), it is necessary first to look at the 'old* IAS 37. The old treatment can be represented by the following table:

Probability	Contingent liabilities	Contingent assets
Virtually certain	Liability	Asset
Probable (/»> 50%)	Provide	Disclose
Possible *(p* < 50%)	Disclose	No disclosure
Remote	No disclosure	No disclosure

Note that contingent liabilities are those items where the probability is less than 50% *(p* < 50%). Where, however, the liability is probable, i.e. the probability *sp* > 50%, the item is classified as a provision and not a contingent liability. Normally, such a provision will be reported as the product of the value of the potential liability and its probability.

Note that the approach to contingent assets is different in that the 'prudence' concept is used which means that only virtually certain assets are reported as an asset. If the probability is probable, i.e. *p* > 50% then contingent assets arc disclosed by way of a note to the accounts and if the probability is^ < 50% then there is no disclosure.

Criticisms of the 'old[1] IAS 37

The criticisms included the following:

- The 'old* IAS 37 was not even-handed in its treatment of contingent assets and liabilities. In ED IAS 37 the treatment of contingent assets is similar to contingent liabilities, and provisions are merged into the treatment of contingent liabilities.
- The division between 'probable' and 'possible' was too strict/crude (at *xhep* = 50% level) rather than being proportional. For instance, if a television manufacturer was considering the need to provide for guarantee claims (e.g. on televisions sold with a three-year warranty), then it is probable that each television sold would have a less than 50% chance of being subject to a warranty claim and so no provision would need to be made. However,

Copyrighted material

if the company sold 10,000 televisions it is almost certain that there would be some claims which would indicate that a provison should be made. A company could validly take either treatment, but the effect on the financial statements would be different.

- If there was a single possible legal claim, then the compam could decide it was 'possible' and just disclose it in the financial statements. However, a more reasonable treatment would be to assess the claim as the product of the amount likely to be paid and its probability. This latter treatment is used in the new EI) IAS 37.

11.12.2 Approach taken by ED IAS 37 *Non-Financial Liabilities*

The new Standard uses the term 'non-financial liabilities[1] which it defines as *a liabilitv other than a financial liabilitv as defined in IAS32 *Financial Instruments: Disclosure and Presentation*. In considering ED IAS 37, we will look at the proposed treatment contingent liabilities/provisions and contingent assets, starting from the *Framework's* definitions of a liability and an asset.

11.12.3 Contingent liability/provision

The *Framework;* para. 91, defines a liability as follows:

> A liability is recognised in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliablv.

ED **IAS** 37 **approach** to **provisions**

Considering a provision first, old IAS 37 (para. 10) defines it as follows:

> A provision is distinguished from other liabilities because there is uncertainty about the timing or amount of the future expenditure required in settlement.

El) IAS 37 argues that a provision should be reported as a liability, as it satisfies the *Frameworks* definition of a liability. It makes the point that there is no reference in the *Framework* to 'uncertainty about the timing or amount of the future expenditure required in settlement'. It considers a provision to be just one form of liability which should be treated as a liabilitv in the financial statements.

Will the item 'provision' no longer appear in financial statements?

One would expect that to be the result of the ED classification. However, the new Standard does not take the step of prohibiting the use of the term as seen in the following extract (para. 9):

> In some jurisdictions, some classes of liabilities are described as provisions, for example those liabilities that can be measured only by using a substantial degree of estimation. Although this (draft) Standard does not use the term 'provision', it does not prescribe how entities should describe their non-financial liabilities. Therefore, entities may describe some classes of non financial liabilities as provisions in their financial statements.

ED IAS 37 approach to contingent liabilities

Now considering contingent liabilities, old IAS 37 (para. 10) defines these as:

Copyrighted material

(a) a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not whollv within the control of the entity; or

(b) a present obligation that arises from past events, but is not recognised because:

(i) it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or

(ii) the amount of the obligation cannot be measured with sufficient reliability.

This definition means that the old (AS 37 has taken the strict approach of using the term 'possible* (p < 50%) when it required no liability to be recognised.

K!) IAS 37 is different in that it takes a two-Stage approach in considering whether 'contingent liabilities[1] are 'liabilities*. To illustrate this, we will take the example of a restaurant where some customers have suffered food poisoning.

First determine whether there is a present obligation

The restaurant's year end is 30 June 20X6. If the food poisoning took place after 30 June 20X6, then this is not a 'present obligation* at the \ear end, so it is not a liability. If the food poisoning occurred up to 30 June, then it is a 'present obligation* at the year end, as there are possible future costs arising from the food poisoning. This is the first stage in considering whether the liability exists.

Then determine whether a liability exists

The second stage is to consider whether a 'liability* exists. The *Framework's* definition of a liability says it is a liability if'it is probable that an outflow of resources will result from the settlement of the present obligation*. So, there is a need to consider whether any payments (or other expenses) will IK incurred as a result of the food poisoning. This may involve settling legal claims, other compensation or giving 'free' meals. The estimated cost of these items will be the liability (and expense) included in the financial statements.

The rationale

Y.\y IAS 37 explains this process as

- The unconditional obligation (stage 1) establishes the liability, and
- the conditional obligation (stage 2) affects the amount that will be required to settle the liability.

The liability being the amount that the entity would rationally pay to settle the present obligation or to transfer it to a third party on the balance sheet date. Often, the liability will be estimated as the product of the maximum liability and the probability of it occurring, or a decision tree will be used with a number of possible outcomes (costs) and their probability.

In many cases, the new ED IAS 37 will cover the 'possible* category for contingent liabilities and include the item as a liability (rather than as a note to the financial statements). This gives a more 'proportional* result than the previously strict line between 'probable* (/> > 50%) (when a liability is included in the financial statements) and 'possible* (/> < 50**6) (when only a note is included in the financial statements and no charge is included for the liability).

What if they cannot be measured reliably?

For other 'possible* contingent liabilities, which have not been recognised because they cannot be measured reliably, the following disclosure should be made:

Copyrighted material

- a description of the nature of the obligation,
- an explanation of why it cannot be measured reliably,
- an indication of the uncertainties relating to the amount or timing of any outflow of economic benefits, and
- the existence of any rights to reimbursement.

What disclosure is required for maximum potential liability?
F.I) IAS 37 does not require disclosure of the maximum potential liability, e.g the maximum damages if the entity loses the legal case.

11.12.4 Measured reliably

The *Framework* definition of a liability includes the condition 'and the amount at which the settlement will take place can be measured reliably*. This posed a problem when drafting ED IAS 37 because of the concern that an entity could argue that the amount of a contingent liability could not be measured reliably and that there was therefore no need to include it as a liability in the financial statements - i.e. to use this as a 'cop out* to give a 'rosier' picture in the financial statements. Whilst acknowledging that in many cases a non-financial liability cannot be measured exactly, it considered that it could (and should) be estimated. It then savs that cases where the liability cannot be measured reliably are 'extremely rare'. We ean see from this that the KI) approach is that 'measured reliably' does not mean 'measured exactly* and that cases where the liability 'cannot he measured reliably* will be 'extremely rare*.

11.12.5 Contingent asset

The *Framework*^ para. 89, defines an asset as follows:

> An Asset is recognised in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliablv.

Note thai under the old IAS 37, contingent assets included items where they were 'probable* (unlike liabilities, when this was called a 'provision*). However, probable contingent assets are not included as an asset, but only included in the notes to the financial statements.

The ED IAS 37 approach

KI) IAS 37 takes a similar approach to 'contingent assets* as it does to 'provisions/ contingent liabilities'. It abolishes the term 'contingent asset* and replaces it with the term 'contingency*. The term contingency refers to uncertainty about the amount of the future economic benefits embodied in an asset, rather than uncertainty about whether an asset exists.

Essentially, the treatment of contingent assets is the same as contingent liabilities. The first stage is to consider whether an asset exists and the second stage is concerned with valuing the asset (i.e. the product of the value of the asset and its probability). A major change is to move contingent assets to IAS 38 *Intangible Assets* (and not include them in IAS **37).**

The treatment of'contingent assets* under IAS 38 is now similar to that for 'contingent liabilities/provisions'. This seems more appropriate than the former 'prudent approach' used bv the'old'IAS 37.

Copyrighted materia

11.12.6 Reimbursements

Under the *old* IAS 37 an asset could be damaged or destroyed, when the expense would be included in the income statement (and any future costs included as a provision). If the insurance claim relating to this loss was made after the year-end, it is likely that no asset could be included in the financial statements as compensation for the loss, as the insurance claim was *not certain'. In reality, this did not reflect the true situation when the insurance claim would compensate for the loss, and there would be little or no net cost.

With the new rules under ED IAS 37, the treatment of contingent assets and contingent liabilities is the same, so an asset would be included in the balance sheet as the insurance claim, which would offset the loss on damage or destruction of the asset. But, ED IAS 37 says the liability relating to the loss (e.g. the costs of repair) must be stated separately from the asset for the reimbursement (i.e. the insurance claim) - they cannot be netted off (although they will be in the income statement).

I 1.12.7 Constructive and legal obligations

The term 'constructive obligation' is important in determining whether a liability exists. F-D IAS 37 (para. 10) defines it as:

> A constructive obligation is a present obligation that arises from an entity's past actions when:
>
> (a) by an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated to other parties that it will accept particular responsibilities, and
>
> (b) as a result, the entity has created a valid expectation in those parties, that they can reasonably rely on it to discharge those responsibilities.

It also defines a legal obligation as follows:

> A legal obligation is a present obligation that arises from the following:
>
> (a) a contract (through its explicit or implicit terms)
>
> (b) legislation, or
>
> (c) other operating law.

A contingent liability/provision is a liability only if it is either a constructive and/or a legal obligation. Thus, an entity would not normally make a provision (recognise a liability) for the potential costs of rectifying faulty products outside their guarantee period.

I 1.12.8 Present Value

ED IAS 37 says that future cash flows relating to the liability should be discounted at the pre-tax discount rate. Unwinding of the discount would still need to be recognised as an interest cost.

11.12.9 Subsequent measurement and de-recognition

On subsequent measurement, ED IAS 37 says the carrying value of the non-iinancial liabilitv should be reviewed at each balance sheet date. The non-financial liabilitv should be dcrecogniscd when the obligation is settled, cancelled or expires.

Copyrighted material

11.12.10 Onerous contracts

If a contract becomes onerous, the entity is required to recognise a liability as the present obligation under the contract. However, if the contract becomes onerous as a result of the entity's own actions, the liability should not be recognised until it has taken the action.

11.12.11 Restructurings

ED IAS 37 says:

> An entity shall recognise a non-financial liability for a cost associated with a restructuring only when the definition of a liability has been satisfied.

There are situations where management has made a decision to restructure and the ED provides that in these cases 'a decision by the management of an entity to undertake a restructuring is not the requisite past event for recognition of a liability. A cost associated with a restructuring is recognised as a liabilit) on the same basis as if that cost arose independently of the restructuring.

I I.I2.12 Other items

These include the treatment of termination costs and future operating losses where the approach is still to assess whether a liability exists. The changes to termination costs will require an amendment to IAS 19 *Employee Benefits.* In the case of termination costs, these are only recognised when a liabilit) is incurred: e.g. the costs of closure of a factory become a liability only when the expense is incurred and redundancy costs become a liability only when employees are informed of their redundancy. In the case of future operating losses, these are not recognised as they do not relate to a past event.

Under the new KD IAS 37, the liabilit) arises no earlier than under the *old' IAS 37 and sometimes later.

11.12.13 Disclosure

KD IAS 37 requires the following disclosure of non-financial liabilities:

For each class of non-financial liability, the carrying amount of the liability at the period-end together with a description of the nature of the obligation.

For any class of non-financial liability with uncertainty about its estimation:

(a) a reconciliation of the earn ing amounts at the beginning and end of the period showing:
  (i) liabilities incurred;
  (ii) liabilities derecognised;
  (iii) changes in the discounted amount resulting from the passage of time and the effect of any change in the discount rate; and
  (iv) other adjustments to the amount of the liabilit) (e.g. revisions in the estimated cash flows that will be required to settle it);

(b) the expected timing of any resulting outflows of economic benefits;

(c) an indication of the uncertainties about the amount or timing of those outflows. If necessary, to provide adequate information on the major assumptions made about future events;

(d) the amount of any right to reimbursement, stating the amount of any asset that has been recognised

Copyrighted material

If a non-financial liability is not recognised because it cannot be measured reliably, that fact should be disclosed together with:

(a) a description of the nature of the obligation;

(b) an explanation of why it cannot be measured reliably;

(c) an indication of the uncertainties relating to the amount or timing of any outflow of economic benefits; and

(d) the existence of any right to reimbursement.

11.12.14 Conclusion on ED IAS 37 *Non-Financial Liabilities*

This proposed standard makes significant changes to the subject of'Provisions, Contingent Liabilities and Contingent Assets', which arc derived from the general principles of accounting. Its good features include:

(a) It is conceptually sound by basing changes on the *Framework*** definitions of an asset and a liability.

(b) It is more appropriate that the treatment of provisions/contingent liabilities and contingent assets should he more 'even handed*.

(c) It avoids the 'strict' breaks at 50% probability between 'probable' and 'possible'. It uses probability in estimating the liability down (effectively) to 0°o.

(d) The definition of a constructive obligation has been more clearly defined.

(e) It overcomes the previous anomaly of not allowing reimbursements after the year-end (e.g. where there is an unsettled insurance claim at the year-end).

I lowever, in some ways it could be argued that the proposed standard goes loo far, particularly in its new terminology:

(a) The abolition of the term 'contingent liability' and not defining 'provision'. The new term 'non-financial liability' does not seem as meaningful as 'contingent liability'. It would seem better (more meaningful) to continue to use the term 'contingent liability* and make this encompass provisions (as it does for contingent assets).

(b) It would seem more appropriate to continue to include 'contingent assets* in this Standard, rather than move them to 'intangible assets*, as the treatment of these items is similar to 'contingent liabilities*.

1 Some members of the board of directors of a company deliberating over a possible source of new capital believe that irredeemable debentures carrying a fixed annual coupon rate would suffice. They also believe that the going concern concept of the balance sheet would obviate the need to include the debt thereon; the entity is a going concern and there is no intention to repay the debt; therefore disclosure is unwarranted. Discuss.

2 A company is obliged to reveal, m note form, a quantitative assessment of the dilution of future earnings per share on the assumption that convertible slock in issue will experience total conversion into ordinary shares at the earliest possible date. Why should this philosophy not apply to the balance sheet and thus enable such stock to be classified entirely as equity? Discuss.

3 In 20X6 Alpha AS made the decision to close a loss-making department in 20X7. The company proposed to make a provision for the future costs of termination in the 20X6 income statement Its argument was that a liability existed in 20X6 which should be recognised in 20X6. The auditor objected to recognising a liability, but agreed to recognition if it could be shown that the management decision was irrevocable. Discuss whether a liability exists and should be recognised m the 20X6 balance sheet

4 As a sales incentive, a computer manufacturer. Burgot SA, offers to buy back its computers after three years at *25%* of the original selling price, so providing the customer with a guaranteed residual value which would be exercised if he or she were unable to achieve a higher price in the second-hand market

Discuss the substance of this transaction and conclude on how the transaction should be presented in the financial statements of the customer.

5 A boat manufacturer, Swann SpA supplies its dealers on a consignment basis, which allows either Swann SpA or a dealer to require a boat to be returned. Each dealer has to arrange insurance for the boats held on consignment

When a boat is sold to a customer, the dealer pays Swann SpA the lower of:

- the delivery price of the boat as at the date it was first supplied, or
- the current delivery price less the insurance premiums paid to date of sale.

If a boat is unsold after three months, the dealer has to pay on the same terms.

Discuss, with reasons, whether boats held by the dealers on consignment should appear as inventory in the balance sheet of Swann SpA or the dealer.

7 Discuss the problems of interpreting financial reports when there are events after the balance sheet date, and the extent to which you consider IAS 10 should be amended. Illustrate your decisions with practical examples as appropriate.

8 D Ltd has a balance on its debtors' account of £100.000. Previous experience would anticipate bad debts to a maximum of 3%. The company adopts a policy of factoring its debts. Explain how the transaction would be dealt with in the books of D Ltd under each of the following independent sets of circumstances:

(i) The factoring agreement involves a sole payment of £95.000 to complete the transaction. No further payments are to be made or received by either party to the agreement.

(ii) The debtors are transferred to the factoring entity on receipt of £93.000. The agreement provides for further payments, which will vary on the basts of timing and receipts from debtors. Interest is chargeable by the factor on a daily basis, based on the outstanding amount at the close of the day's transactions. The factor also has recourse to D Ltd for the first £10,000 of any loss.

9 Mining, nuclear and oil companies have normally provided an amount each *ye^r* over the life of an enterprise to provide for decommissioning costs. Explain why the IASB considered this to be an inappropriate treatment and how these companies would be affected by IAS 37 *Provisions, Contingent Liabilities and Contingent* Assets and ED IAS 37 *Non-fmanbal Liabilities.*

10 The following note appeared in the Jarvis pic 2004 Annual Report:

Provision against onerous lease liabilities

The provision reflects the anticipated costs arising from the Group's decision not to occupy new premises on which it has entered into a long-term lease...

Discuss the criteria for assessing whether a contract is onerous.

11 The following note appeared in the Eesti Telekom 2003 Annual Report

Factoring of receivables

The factoring of receivables is the sale of receivables. Depending on the type of factoring contract the buyer acquires the right to sell the receivables back to the seller (factoring with recourse) or there is no right to resell and all the risks and rewards are transferred from the seller to the buyer (factoring without recourse).

Explain how the accounting treatment would differ between a non-recourse and a recourse factoring agreement.

Copyrighted material

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (*).

Question I

(a) Post balance sheet events are those events, both favourable and unfavourable, which occur between the balance sheet date and the date on which the financial statements are approved by the board of directors.

Required:

Set out the treatment of events after the balance sheet date as laid down by IAS 10. Explain why this treatment is required by that **IAS** in order to ensure that financial statements show a true and fair view and give appropriate information to the shareholders and other legitimate users.

(b) You are the financial accountant of Tooting Engineering pic (a substantial private company). You are responsible for preparing the company's financial statements and are at present finalising those for the year ended 31 December 20X6 for presentation to the board. The following items are material:

(i) You have recently discovered that during September and October 20X6, while you were away sick. the cashier took advantage of the weakened internal controls to defraud the company of £8.000.

(ii) At a board meeting on 3 February 20X7 the directors agreed to purchase the business of Mr N. M. Patel (a small engineering business) for £45.000.

(iii) On 18 January 20X7 the company made a I for 4 rights issue to existing ordinary shareholders. This involved the issue of 20.000 £I ordinary shares for a consideration of £25.000.

(iv) A customer. General Products **Ltd.** owed Tooting Engineering pic £16.000 on 31 December 20X6. This company had always been considered a good credit risk until on 15 February 20X7 it went into voluntary liquidation. Of the £16.000 debt. £12.000 is still outstanding and General Products Ltd is expected to pay approximately 25p in the pound on this £12.000.

Required:

Explain how you will treat items (i)-(iv) above in the financial statements and give a brief explanation of why you are adopting your proposed treatment-

Question 2

As the financial controller of SEAS Ltd, you are responsible for preparing the company's financial statements and are at present finalising these for the year ended 31 March 20X8 for presentation to the board of directors. The following items are material:

(i) Costs of £250.000 arose from the closure of the company's factory in Garratt which manufactured coffins. Owing to a declining market the company has withdrawn from this type of business prior to the year-end.

(ii) You discover that during February 20X8. whilst you were away skiing, the cashier took advantage of the weakness in internal control to defraud the company of £30.000.

(iii) During the year ended 31 March 20X8. stocks of obsolete electrical components had to be written down by £250.000 owing to foreign competitors producing them more cheaply.

(iv) At a board meeting held on 30 April 20X8. the directors signed an agreement to purchase the business of Mr Hacker (a small computer manufacturer) for the sum of £100,000.

(v) £300.000 of development expenditure, which had been capitalised in previous years, was written off during the year ended 31 March 20X8. This became necessary due to foreign competitors' price cutting, which cast doubt on the recovery of costs from future revenue.

(vi) Dynatron Ltd. a customer, owed the company £50.000 on 31 March 20X8, However, on 15 May 20X8 it went into creditors' voluntary liquidation. Of the £50.000. £-10.000 is still outstanding and the liquidator of Dynatron is expected to pay approximately 25p *in* the pound to unsecured creditors.

(vii) On 30 April 20X8. the company made a I for 4 rights issue to the ordinary shareholders, which involved the issue of 50.000 £I ordinary shares for a sum of £62.500.

Required

Explain how you will treat the above financial statements, and give a brief explanation of why you are adopting your proposed treatment

Question 3

(a) Provisions are particular kinds of liabilities. It therefore follows that provisions should be recognised when the definition of a liability has been met. The key requirement of a liability is a present obligation and thus this requirement is critical also in the context of the recognition of a provision. IAS 37 Provisions. *Contingent Liabilities and Contingent Assets* deals with this area.

Required;

(i) Explain why there was a need for detailed guidance on accounting for provisions.

(ii) Explain the circumstances under which a provision should be recognised in the financial statements according to IAS 37 Provisions, Contingent *Liabilities and Contingent* Assets.

(b) World Wide Nuclear Fuels, a public limited company, disclosed the following information in its financial statements for the year ending 30 November 20X9:

> The company purchased an oil company during the year. As part of the sale agreement, oil has to be supplied to the company's former holding company at an uneconomic rate for a period of five years. As a result a provision for future operating losses has been set up of $135m. which relates solely to the uneconomic supply of oil. Additionally the oil company is exposed to environmental liabilities arising out of its past obligations, principally in respect of soil and ground water restoration costs, although currently there is no legal obligation to carry out the work. Liabilities for environmental costs are provided for when the group determines a formal plan of action on the closure of an inactive site. It has been decided to provide for $120m m respect of the environmental liability on the acquisition of the oil company. World Wide Nuclear Fuels has a reputation for ensuring the preservation of the environment in its business activities.

Required:

Discuss whether the provision has been accounted for correctly under IAS 37 Provisions, *Contingent Liabilities and Contingent Assets.*

Question 4

The directors of Apple Pie pic at the September 20X5 board meeting were expressing concern about falling sales and the lack of cash to meet a dividend for the current year ending 31 December at the same rate as the previous year. They suggested to the Finance Director that

Copyrighted material

- equipment with a book value of £40 million as at the beginning of the year and an estimated useful economic life of three years should be sold for £62.5 million;
- the £62.5 million and £40 million should be included in the sales and cost of sales for the period resulting in an improvement of £22.5 million in profit which would cover the proposed dividend;
- the equipment should then be leased back at I October 20X5 for the remainder of its economic life. The commercial rate of interest for a similar lease agreement had been 10%.

Required:
Draft the Finance Director's response to their suggestion and indicate the effect on the income statement and balance sheet as at 31 December 20X5 if the lease agreement is entered into on I October 20X5.

Question 5

On 20 December 20X6 one of Incident pic's lorries was involved in an accident with a car. The lorry driver was responsible for the accident and the company agreed to pay for the repair to the car. The company put m a claim to its insurers on 17 January 20X7 for the cost of the claim. The company expected the claim to be settled by the insurance company except for a £250 excess on the insurance policy. The cost of repairing the car was estimated as £5.000. all of which was incurred after the year end.

Required:
Explain how this item should be treated in the financial statements for the year ended 31 December 20X6 according to ED IAS 37 *Non-financial Liabilities.*

Question 6

Plasma Ltd. a manufacturer of electrical goods, guarantees them for 12 months from the date of purchase by the customer. If a fault occurs after the guarantee period, but is due to faulty manufacture or design of the product, the company repairs or replaces the product However, the company does not make this practice widely known.

Required:
Explain how repairs after the guarantee period should be treated in the financial statements.

References

1 K.V. Peasnell .ind **R.A.Yaansah, *Off-Balance** Sheet Financing* ACCA, WSS.
2 IAS 17 *Uates,* IASC. revised 1997.
3 *Framework for the Preparation and Presentation of Financial Statements,* IASC, 1989, para. 49.
4 //'/(/., para. 8ft.
5 IAS 37 *Provisions. (,'outindent Liabilities and Contingent Assets.* IASC"., 1998.
6 *Ibid.,* para. 2.
7 *Ihid.,* para. *25.*
8 *Ibid.,* para. 17.
9 */bid.,* para. 23.
II) *Ibid.,* para. 3ft.
11 **JMf.,** pom 43.
12 *Ibid.,* para. 45.
13 *Ibul.,* para. 47.
14 *Ibid.,* para. 84.

Copyrighted materia

12.1 Introduction

The area of financial instruments has proved to be one of the most controversial and difficult ones that the IASB has had to provide guidance on. The impact on the balance sheet and the income statement is great and the implications for company systems have also been significant. The controversy caused by IAS 39 *Financial Instruments: Recognition and Measurement* in particular is highlighted by the difficulties the European Union (EU) had in endorsing the standard. In late 2(M)4 the EU agreed to endorse a 'carved out' version of IAS 39 as the full standard was not considered acceptable to member states and under EU law. IAS 39 has subsequently been amended and the EU has endorsed the amended version.

When writing IAS 32 and 39 the IAS drew significantly on US GAAP, but introduced requirements into accounting in advance of many other national standard setters. Tor example, the ASH in the UK has only very recently introduced accounting standards based on IAS 32 and 3V, and they will not be applicable for all UK companies for some time to come, possibly for periods beginning in 2007.

This chapter looks at the main requirements for accounting for financial instruments governed b\ IAS 32 *Financial Instruments: Disclosure and Presentation*^ and IAS 39 *Financial Instruments: Recognition and Measurement.* The two standards should be viewed together as they are effectively two parts of the same issue. The reason that two standards were issued as opposed to one is the result of pragmatism - the IASB could get agreement on disclosure and presentation before recognition and measurement. It felt it was better to introduce some guidance even though the whole issue had not been sorted out.

This chapter will also briefly consider the changes being introduced by IFRS 7 *Financial Instruments: Disclosures* that will be applicable for periods beginning on or after 1 January 2007. When applicable IFRS 7 will replace the disclosure requirements of IAS ^2.

12.2 IAS 32 *Financial Instruments: Disclosure and Presentation*[1]

The dynamic nature of the international financial markets has resulted in a great variety of financial instruments from traditional equity and debt instruments to derivative instruments such as futures or swaps. These instruments are a mixture of on balance sheet and off balance sheet instruments, and they can significantly contribute to the risks that an enterprise faces. IAS 32 was introduced to highlight to users of financial statements the range of financial instruments used by an enterprise and how they affect the financial position, performance and cash flows of the enterprise.

IAS 32 only considers the areas of presentation and disclosure of financial instruments; recognition and measurement are considered in a subsequent standard, IAS 39.

12.2.1 Scope of the standard

IAS 32 should be applied In all enterprises and should consider all financial instruments with the exceptions of:

(a) share-based payments as defined in ll'RS 2;

(b) interests in subsidiaries as defined in IAS 27;

(c) interests in associates as defined in IAS 28;

(d) interests in joint ventures as defined in IAS 31;

(c) employers' rights and ligations under employee benefit plans;

(f) rights and obligations arising under insurance contracts (except embedded derivatives requiring separate accounting under IAS 39);

(g) contracts for contingent consideration in a business combination (this exemption applies only to the acquirer).

12.2.2 Definition of terms[2]

The following definitions are used in IAS 32 and also in IAS 39, which is to be considered later.

A liii.iiK-i.il instrument is an\ contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise.

A financial asset is anv asset that is;

(a) cash;

(b) a contractual right to receive cash or another financial asset from another enterprise;

(c) a contractual right to exchange financial instruments with another enterprise under conditions that are potentially favourable; or

(d) an equity instrument of another enterprise.

A financial liability is any liability that is a contractual obligation:

(a) to deliver cash or another financial asset to another enterprise; or

(b) to exchange financial instruments with another enterprise under conditions that are potentially unfavourable.

An equity instrument is any contract that evidences a residual interest in the assets of an enterprise after deducting all of its liabilities.

Following the introduction of IAS 39 extra clarification was introduced into IAS 32 in the application of the definitions. First, a commodity-based contract (such as a commodity future) is a financial instrument if either party can settle in cash or some other financial instrument. Commodity contracts would not be financial instruments if they were expected to be settled bv delivery, and this was always intended.

The second clarification is for the situation where an enterprise has a financial liability that can be settled either with financial assets or the enterprise's own equity shares. If the number of equity shares to be issued varies with changes in their value so that the enterprise always has an obligation to give shares equal to the fair value of the obligation, the\ arc treated as a financial liability.

Copyrighted material

12.2.3 Presentation of instruments in the financial statements

Two main issues are addressed in the standard regarding the presentation of financial instruments. These issues are whether instruments should be classified as liabilities or equity instruments, and how compound instruments should be presented.

Liabilities v equity

IAS 32 follows a substance approach[1] to the classification of instruments as liabilities or cquin. If an instrument has terms such that there is an obligation on the enterprise to transfer financial assets to redeem the obligation then it is a liability instrument regardless of its legal nature. Preference shares are the main instrument where in substance they could be liabilities but legally are equity. The common conditions on the preference share that would indicate it is to be treated as a liability instrument are as follows:

- annual dividends are compulsory and not at the discretion of directors; or
- the share provides for mandatory redemption by the issuer at a fixed or determinable amount at a future fixed or determinable date; or
- the share gives the holder the option to redeem upon the occurrence of a future event that is highly likely to occur (e.g. after the passing of a future date).

If a preference share is treated as a liability instrument it is presented as such in the balance sheet and also am dividends paid or pavable on that share are calculated in the same way as interest and presented as a finance cost in the income statement. The presentation on the income statement could be as a separate item from other interest costs but this is not mandatory. Any gains or losses on the redemption of financial instruments classified as liabilities are also presented in the income statement.

Impact on companies

The presentation of preference shares as liabilities does not alter the cash Hows or risks that the instruments give, but there is a danger that the perception of a company may change. This presentational change has the impact of reducing net assets and increasing gearing. This could be very important, for example, if a company had debt covenants on other borrowings that required the maintenance of certain ratios such as gearing or interest cover. Moving preference shares to debt and dividends to interest costs could mean the covenants are breached and other loans become repayable.

In addition, the higher gearing and reduced net assets could mean the company is perceived as more risky, and therefore a higher credit risk. This in turn might lead to a reduction in the company's credit rating, making obtaining future credit more difficult and expensive.

These very practical issues need to be managed by companies converting to IFRS from a local accounting regime that treats preference shares as equity or non-equit> funds. Good communication with users is key to smoothing the transition.

Compound instruments[4]

Compound instruments are financial instruments that have the characteristics of both debt and equity. A convertible loan, which gives the holder the option to conxert into equity shares at some future date, is the most common example of a compound instrument. The view of the IASB is that the proceeds received by an enterprise for these instruments are made up of two parts, a debt part and an equity option, and following substance IAS 32 requires that the two parts are presented separately, a 'split accounting* approach.

Copyrighted material

The split is made by measuring the debt part and making the equity the residual of the proceeds. This approach is in line with the definitions of liabilities and equity, where equit\ is treated as a residual. The debt is calculated by discounting the cash Hows on the debt at a market rate of interest for similar debt without ihe conversion option.

The extract below from Balfour Hcatty shows the impact of compound instruments:

Extract from Balfour Bcattv IFRS restatement of 2004 results

Preference shares:

The Group's £136m outstanding convertible redeemable preference shares included within 'Shareholders' funds' at 31 December 2004 under UK GAAP arc, under IAS 32, regarded as a compound instrument consisting of a liability (£1 12m, including £10m deferred tax) and an equity component (£I9m). The preference dividend is shown in the income statement as an interest expense.

	UK GAAP	IAS 32 Adjusted
Capital and reserves		
Callcd-up share capital	213	212
Share premium account	150	IS
Kquity component of preference shares	-	19
\on-current liabilities		
Borrowings- PFI/PPP non-recourse term loans	(261)	(261)
- other	(62)	(62)
Liability component of preference shares	-	(102)

Illustration for compound instruments

Rohan pic issues 1,000 £100 5% convertible debentures at par on 1 January 2000. The debentures can either be converted into 50 ordinary shares per £100 of debentures, or redeemed at par at any date from 1 January 2005. Interest is paid annually in arrears on 31 December. The interest rate on similar debentures without the conversion option is **6%.**

To split the proceeds the debt \alue must be calculated by discounting the future cash Hows on the debt instrument.

The value of debt is therefore:

Present \aluc of redemption paj men!	£74,726
Present value of interest (5 years)	£21,062
Value of debt	£95,788
The value of the equity proceeds: (£100,000 - £95,788) (presented as part of equity)	£4,212

Perpetual debt

Following a substance approach, perpetual or irredeemable debt could be argued to be an equity instrument as opposed to a debt instrument. IAS 32, however, takes the view that it is a debt instrument because the interest must be paid (as compared to dividends which are only paid if profits are available for distribution and if directors declare a dividend approved by the shareholders), and the present value of all the future obligations to pay interest will equal the proceeds of the debt if discounted at a market rate. The proceeds are therefore a liability obligation.

Copyrighted material

12.2.4 Calculation of finance costs on liability instruments

The linance costs will be debited in the income statement. The finance cost of debt is the total payments to be incurred over the life-span of that debt less the initial carrying value. Such costs should be allocated to the income statement over the life-time of the debt at a constant rate of interest based on the outstanding carrying value per period. If a debt is settled before maturity, any profit or loss should be reflected immediately in the income statement - unless the substance of the settlement transaction fails to generate am change-in liabilities and assets.

Illustration of the allocation of finance costs and the determination of carrying value

On 1 January 20X6 a company issued a debt instrument of £\ ,000,000 spanning a four-)ear term. It received from the lender £890,000, being the face value of the debt less a discount of £110,000. interest was payable yearly in arrears at 8<> per annum on the principal sum of £1,000,000. The principal sum was to lie repaid on 31 December 20X9,

To determine the yearly tinanee costs and year-end carrying value it is necessary to compute:

- the aggregate finance cost;
- the implicit rate of interest carried by the instrument;
- the finance charge per annum; and
- the carrying value at successive year-ends.

Aggregate finance cost

This is the difference between the total future payments of interest plus principal, less the net proceeds received less costs of the issue, i.e. £430,000 in column (i) of Figure 12.1.

Implicit rate of interest carried by the instrument

This can be computed by using the net present \alue (NP\ ) formula:

$$I \quad -=\bullet{**}- \quad - / = 0$$

where *A* is forecast net cash flow in year A, / time (in years), *n* the life-span of the debt in years, r the company's annual rate of discount and / the initial net proceeds. Note that the application of this formula can be quite time-consuming. A reasonable method of assessment is by interpolation of the interest rate.

The aggregate formula given above may be disaggregated for calculation purposes:

$$A \quad (1+f)' \qquad (l+r)-' \qquad (1+r)' \qquad (1+r)^4$$

Using the data concerning the debt and assuming (allowing for discount and costs) an implicit constant rate of, say, 11%:

$$I_{-} \; \frac{80{,}000}{\text{TTTIF}} \quad \frac{80{,}000}{UW^{+}} \quad \frac{80{,}000}{\text{IW}} \quad \frac{1{,}080{,}000}{\text{UTTF}} \; " \; 89\text{WTO}^{-}\text{-}^{\circ}$$

= 72,072 + 64,930 + 58,495 + 711,429 - 890,000 = +16,926

The chosen implicit rate of 1 1% is too low. We now choose a higher rate, say 12%:

Copyrighted material

$$z'' \; TOIT^{+} \; TOIF^{+} \; TTHF \quad TTHF \; '' \; mm_{\sim}{}^{\circ}$$

$$= 71{,}429 + 63{,}776 + 56{,}942 + 686{,}360 - 890{,}000 = -11{,}493$$

This rate is too high, resulting in a negative net present value. Interpolation will enable us to arrive at an implicit rate:

$$!\% + \frac{16{,}926}{16{,}926 + 11{,}493} \times (12\% - 11\%)$$

$$= 11\% + 0.59\% = \mathbf{11.59\%}$$

Figure 12.1 shows the entries for each year 20X6-20X9.

This is a trial and error method of determining the implicit interest rate. In this example the choice of rates, 11% and 12%, constituted a change of only 1%. It would be possible to choose, say, 11% and then 14%, generating a 3% gap within which to interpolate. This wider margin would result in a less accurate implicit rate and an aggregate interest charge at variance with the desired **£430,000** of column (ii). The aim is to choose interest rates as close as possible to either side of the monetary zero, so that the exact implicit rate may be computed.

The object is to determine an \PV of zero monetary units, i.e. to identify the discount rate that will enable the aggregate future discounted net (lows to equate to the initial net proceeds from the debt instrument. In the above illustration, a discount (interest) rate of 11.59% enables £430,000 to be charged to the income statement after allowing for payment of all interest, costs and repayment of the face value of the instrument.

12.2.5 Offsetting financial instruments[5]

Financial assets and liabilities can only be offset and presented net if the following conditions are met:

(a) the enterprise has a legally enforceable right to set off the recognised amounts; and

(b) the enterprise intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Figure 12.1 Allocation of finance costs and determination of carrying value

IAS *M* emphasises the importance of the intention to settle on a net basis as well as the legal right to do so. Offsetting should only occur when the cash (lows and therefore the risks associated with the financial asset and liability are offset and therefore to present them net in the balance sheet shows a true and fair view.

Situations where offsetting would not normally be appropriate are:

- several different financial instruments are used to emulate the features of a single financial instrument;
- financial assets and financial liabilities arise from financial instruments having the same primary risk exposure but involve different counterparties;
- financial or other assets are pledged as collateral for non-recourse financial liabilities;
- financial assets are set aside in trust by a debtor for the purpose of discharging an obligation without those assets having been accepted by the creditor in settlement of the obligation;
- obligations incurred as a result of events giving rise to losses are expected to be recovered from a third party by virtue of a claim made under an insurance policy.

12.2.6 Disclosure requirements

Disclosure is a major part of IAS 32 and the requirements for disclosure co\er both non-derivative and derivative instruments. The disclosures are very extensive but aim to ensure that users understand the risks faced by an enterprise because of its use of financial instruments and the reductions in risk that can also be achieved. A summary of the main disclosures[6] relating to price, currency, liquidity and cash flow risks and risk management policies follows:

Market risk

This risk is made up of three types: currency risk, interest rate risk and price risk.

Currency risk	The risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates.
Interest rate risk	The risk that the value of a financial instrument will fluctuate due to changes in interest rates.
Price risk	The risk that the value of a financial instrument will fluctuate in value as a result of changes in market prices whether those changes are caused by factors specific to the individual security or its issuer or factors affecting all securities traded in the market.

Credit risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause another party to incur a financial loss.

Liquidity risk

This is also referred to as funding risk, and is the risk that an enterprise will encounter difficulty in raising funds to meet commitments associated with the financial instruments. I .iquidity risk may result from an inability to sell a financial asset quickly at close to its fair value.

Cash flow risk

Cash (low risk is the risk that future cash (lows associated with a monetary financial instrument will fluctuate in amount. In the case of a floating rate debt instrument, for example,

Copyrighted material

such fluctuations result in a change in the effective interest rate of the financial instrument, usually without a corresponding change in its fair value.

The standard does not prescribe the format of the disclosures hut does give some detailed standards and guidance on what has to IK* disclosed.

Risk management policies

This disclosure would include the financial risk management objectives and policies, including its policy for hedging each major type of forecasted transaction for which hedge accounting is used.

12.2.7 The detailed disclosure standards

Terms, conditions and accounting policies

Standard

For each class of financial asset, financial liability and equity instrument, both recognised and unrecognised, an enterprise should disclose:

(a) information about the extent and nature of the financial instruments, including significant terms and conditions that may affect the amount, timing and certainty of future cash flows; and

(b) the accounting policies and methods adopted, including the criteria for recognition and the basis of measurement applied.

Guidance

The contractual terms of the instrument are important factors in deciding the certainties of future cash flows. The financial instruments should either be treated separately if individually material or as a group if the group of instruments is material,

If ihe instruments held or issued create a potentially significant exposure to the risks outlined above the following should be disclosed:

(a) the principal amount on which future payments are based;

(b) the date of maturity of the instrument;

(c) the early settlement options on the instrument held by either party;

(d) options held by either party to convert the instrument into another financial instrument, asset or liability;

(e) the amount and timing of future cash receipts/payments of the principal amount;

(f) stated rate of interest or di\ idend;

(g) collateral held or pledged;

(h) the currency in which cash flows are denominated (if a foreign currency);

(i) in the case of an instrument that provides for an exchange - all the above information for the instrument to I>e acquired in the exchange; and

(j) any condition or covenant that, if breached, would significantly alter any of the other terms (e.g. a maximum debt-equity ratio in a bond that, if breached, would cause the bond to become immediately repayable).

As well as the above disclosures a company must explain in its accounting policies the basis of measurement of financial instruments and the basis for dealing with income and expenses associated with the instrument.

Copyrighted material

Interest rate risk

Standard

For each class of financial asset and financial liability, both recognised and unrecognised, an enterprise should disclose information about its exposure to inierest rale risk, including:

(a) contractual repricing or maturity dates, whichever dates are earlier; and

(b) effective interest rates, when applicable.

Guidance

The disclosures of interest rate risk are designed to give the use rsof the financial statements information about the interest rate price risks and cash flow risks. An interest rate price risk would occur if the instrument has a fixed interest rate (as interest rate changes would alter the value of the instrument), and a cash flowrisk would occur if the instrument was a variable rate instrument,

If an instrument does not have an effective interest rate (as, e.g. with derivative instruments) they do not require disclosure.

The guidance indicates the type of presentation that may be applicable (although it does say that it will depend on the particular situation):

(a) the carrying amounts of financial instruments exposed to interest rate price risk in tabular form:
   - within one year of the balance sheet date;
   - between two and five years, giving separate disclosure for each year;
   - five years and more from the balance sheet date;

(b) in the case of an enterprise significantly affected by the level of interest rate price risk (such as a bank) lower time periods may be appropriate (e.g. one month, two to twelve months, over twelve months);

(c) an enterprise could indicate its exposure to interest rate cash flow risk by presenting a table of the aggregate carrying amount of the various instruments that have a floating rate, and the time to repricing or maturity;

(d) the information could be presented by individual instrument or by groups. If instruments are exposed to different credit risks they should be disclosed as separate groups.

An enterprise may feel that it would provide valuable information to the users if it gave disclosure of the sensitivity of instruments to interest rate changes. This disclosure may be given; however, the enterprise must clearly disclose the basis of the calculations and any assumptions that have been made.

Credit risk

Standard

For each class of financial asset, both recognised and unrecognised, an enterprise should disclose information about its exposure to credit risk, including:

(a) the amount that best represents its maximum credit risk exposure ai the balance sheet date, without taking account of the fair value of any collateral, in the event that parties fail to perform their obligations under financial instruments; and

(b) significant concentrations of credit risk.

Guidance

The credit risk disclosures are designed to give the users of the accounts an understanding of the maximum risk that the company bears in relation to non-payment of financial assets

Copyrighted material

and liabilities. The credit risk is before any collateral held because it is designed to be the maximum potential loss.

In most cases if the instrument is recognised on the balance sheet, the maximum credit risk will be the balance on the balance sheet. If this is the case no additional disclosure is required to meet the standard. If, however, credit risk arises that is different to the balance on the balance sheet extra disclosure may be required. The type of instrument where the credit risk is different to the balance on the balance sheet could be:

(a) where a company has a legal right of offset but this has not been reflected because the company has no intention 10 settle on a net basis;

(b) where an unrecognised financial asset may be offset against an unrecognised financial liability;

(c) where a com pan \ gives a guarantee to another party that exposes the guarantor to credit risk.

The other considerations for the disclosure are the concentrations of credit risk. The guidance on the concentrations of credit risk savs that concentrations would arise either via a single debtor or a group of debtors. The characteristics that give rise to the concentration of credit risk could be the nature of the industry or the geographical location of the debtors. IAS 14 *Segment Reporting* would give indications of the type of areas that could give rise to credit risk.

Fair value

Standard

For each class of financial assets and financial liabilities, an entity shall disclose the fair \aluc of that class of assets and liabilities in a way that permits it to be compared with the corresponding carrying amount in the balance sheet.

Guidance

Tlie fair value information is valuable because many management decisions are based on the fair values of financial instruments, and the fair value can represent the discounted value of future cash Hows on the enterprise.

The fair value will often be found from an active market for the financial instrument and therefore the bid price will be the best estimate of the fair value. If an active market does not exist it may be necessary for the company to use a reasonable estimate (such as discounted cash flow, option pricing models, or comparison to a similar traded instrument).

The fair value of the instrument is calculated by assuming that the company is a going concern and considering the company's intentions for the instrument. The transaction costs should IK deducted from the value of the instrument to gel the fair value.

Risk management policies and hedging activites

An entity must describe its financial risk management objectives and policies, including its policy for hedging each main type of forecast transaction for which hedge accounting is used.

An emit) must disclose the following separately for designated fair \alue hedges, cash flow hedges and hedges of a net investment in a foreign operation (as defined in IAS 39):

(a) a description of the hedge;

(b) a description of the financial instruments designated as hedging instruments and their fair values at the balance sheet date;

Copyrighted material

(c) the nature of the risks being hedged; and

(d) for cash flow hedges, the periods in which they are expected to occur and when they are expected to enter into the determination of profit or loss.

For cash How hedges the movements in the amounts recognised in equity must also he disclosed.

A sample illustration of the disclosures for a simple situation is given in Figure 12.2.

From 1 January 2007 IAS 32 will no longer deal with disclosure requirements, instead they will be dealt with in IFRS 7 *Financial Instruments: Disclosures.* **IFRS** 7 **will** require similar disclosures to IAS 32 and therefore the change of standard should not result in a weakening of the information provided to users of financial statements.

12.3 IAS 39 *Financial Instruments: Recognition and Measurement*

IAS 39 is the first comprehensive standard on the recognition and measurement of financial instruments and completes the guidance that was started with the introduction of IAS 32.

12.3.1 Scope of the standard

IAS 39 should IK* applied by **all** enterprises to all financial instruments except those excluded from the scope of IAS 32 (see above) and the following additional instruments:

- rights and obligations under leases to which IAS 17 applies (except for embedded derivatives);
- equity instruments of the reporting enterprise including options, warrants and other financial instruments that are classified as shareholders* equity;
- loan commitments that cannot be settled net in cash or other financial instruments.

12.3.2 Additional definitions

As well as the definitions given in IAS 32, other definitions are required in order to discuss the treatments in IAS 39 as follows:

A derivative is a financial instrument:

(a) whose value changes in response to the change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, a credit rating or credit index or similar variable (sometimes called the 'underlying*);

(b) that requires no initial net investment or an initial net investment that is smaller than would be required for other types of contract that would IK expected to have a similar response to changes in market factors; and

(c) that is settled at a future date.

Definitions of four categories of financial instruments

Financial asset or liability at fair value through profit or loss

'A financial asset or financial liability that meets either of the following conditions:

(a) It is classified as held for trading. A financial asset or financial liability is classified as held for trading if it is:

Copyrighted material

Figure **12.2 Extract from the 2006** financial statements of Findel pic

(i) acquired or incurred principally for the purpose of selling or repurchasing it in the near term;
(ii) part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking, or
(iii) a derivative (except for a derivative that is a designated and effective hedging instrument).

(b) Upon initial recognition is designated as fair value through profit or loss. An entity may use this designation only in the following situations:

(i) it eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as *an accounting mismatch*) that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases; or
(ii) a group of financial assets, financial liabilities or both is managed and performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy; or
(iii) the financial asset or liability contains an embedded derivative that would otherwise require separation from the host/

It is prohibited to transfer instruments into and out of this category while the instrument is held.

Held-to-moturity investments

'Non-derivative financial assets with fixed or determinable payments and fixed maturity that an enterprise has the positive intent and ability to hold to maturity, other than:

(a) those that the entity upon initial recognition designates as at fair value through profit or loss;
(b) those that the entity designates as available for sale; and
(c) those that meet the definition of loans and receivables.'

I leld-to-maturitv investments must be investments that have a fixed term to maturitv and therefore cannot include ordinan shares in other enterprises. Ordinary share investments are available-for-sale assets. Investments such as corporate or government bonds and redeemable preference shares may be held to maturity.

For items to be classified as held-to-maturity a company must justify that it will hold them to maturity. The tests a company must pass to justify this classification are summarised in Figure 12.3.

Loans and receivables

'Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market, other than:

(a) those that the entity intends to sell immediately or in the near term, which shall be classified as held for trading, and those that the entity upon initial recognition designates as at fair value through profit or loss;
(b) those that the entity upon initial recognition designates as available for sale; or
(c) those for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration, which shall be classified as available for sale.

An interest in a pool of assets that are not loans or receivables (e.g. an interest in a mutual fund or a similar fund) is not a loan or receivable.'

Copyrighted material

Figure 12.3 Tests for classification as held-to-maturity investment

Available-for-sale financial assets

'Non-derivative financial assets that arc designated as available for sale or are not classified as (a) loans and receivables, (b) hcld-to-maturity investments or (c) financial assets at fair value through profit or loss.*

A common financial asset that would be classified as available-for-sale would be equity investments in other companies that are not subsidiary, associate or joint venture investments.

Impact of classification on the financial statements

The impact of the classification of financial instruments on the financial statements is important as it affects the value of assets **and** liabilities and also the income recognised. For example, assume that Henry pic had the following financial assets and liabilities at its year-end. All the instruments had been taken out at the start of the current vcar:

1 A forward exchange contract. At the balance sheet date the contract was an asset with a fair value of £100,000.
2 An investment of £1,(>00,(X)0 in a 6% corporate bond. At the balance sheet date the market rate of interest increased and the bond fair value fell to £960,000
3 An equity investment of £500,000. This investment was worth £550,000 at the year-end.

The classification of these instruments is important and choices are available in how they are accounted for. For example, the investment in the corporate bond above could be accounted for as a held-to-maturity investment if Henry pic had the intent and ability to hold it to maturity, or it could be an available-for-sale investment if chosen In Henry. The bond and

the equity investment could even be recognised as fair value through profit or loss if they met the criteria to be designated as such on initial recognition.

To highlight the impact on the financial statements the tables below show the accounting positions for the investments on different assumptions. Not all possible classifications are shown in the tables:

Option I

Instrument	*Classification*	*Balance shed*	*Income statement*	*Changes in equity*
Forward contract	FV-P&L	£100,000	£'00,000	
Corporate bond	Held-to-maturity	£1,000,000	•(£60,000)	
Equity investment	Availablc-for-salc	£550.000	-	£50,000

• *Interest on the bond of*£/*,000,000* X *6%*

The bond is not revalued because held-to-maturity investments are recognised at amortised cost.

Option 2

Instrument	*Classification*	*Balance sheet*	*Income statement*	*Changes in equity*
Forward contract	FV-P&L	£100,000	£100,000	
Corporate bond	Availablc-for-salc	£960,000	(£60,000)	(£40,000)
Equity investment	Availablc-for-salc	£550,000	-	£50,000

Interest is still recognised on the bond but at the year-end it is revalued through equity to its fair value of £960,000.

Option 3

Instrument	*Classification*	*Balance sheet*	*Income statement*
Changes in equity			
Forward contract	F\ -P&L	£100,000	£100,000
Corporate bond	Hcld-to-maturity	£960,000	(£60,000)
Equity investment	FV-P&L	£550,000	£50,000

The equity investment is revalued through the income statement as opposed to through equity as it would be if classified as availablc-for-salc.

12.3.3 Recognition of financial instruments

Initial recognition

A financial asset or liability should be recognised on the balance sheet when it becomes party to the contractual provisions of the instrument. This means that derivative instruments must be recognised on the balance sheet if a contractual right or obligation exists.

Derecognition

Financial assets should only be derecognised from the balance sheet when the enterprise transfers the risks and rewards that comprise the asset. This could be because the benefits are realised, the rights expire or the enterprise surrenders the benefits.

If it is not clear whether the risks and reward have been transferred the entity considers whether control has passed. If control has passed the entity should dcrccognise the asset.

On derecognition any gain or loss should IK- recorded in the income statement. Also any gains or losses previously recognised in reserves relating to the asset should IK transferred to the income statement.

Copyrighted material

Financial liabilities should only be derecognised when the obligation specified in the contract is discharged or cancelled, or expires.

The rule on the derecognition of liabilities docs mean that it is not acceptable to write oft" liabilities. In some industries this will lead to a change in business practice. For example, UK banks will not be allowed to remove dormant accounts from their balance sheets as the liability has not been leg-ally extinguished.

12.3.4 Embedded derivatives

Sometimes an enterprise will enter into a contract that includes both a derivative and a host contract - with the effect that some of the cash flows of the combined instrument van in a similar way to a stand-alone derivative. Examples of such embedded derivatives could IK a put option on an equity instrument held b\ an enterprise, or an equity conversion feature embedded in a debt instrument.

An embedded instrument should be separated from the host contract and accounted for as a derivative under this standard if all of the following conditions are met:

(ii) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract;

(b) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and

(c) the hybrid instrument is not measured at fair value with changes in fair value reported in net profit or loss.

If an enterprise is required to separate the embedded derivative from its host contract but is unable to separately measure the embedded derivative, the entire hybrid instrument should be treated as a financial instrument held at fair value through profit or loss and as a result changes in fair value should be reported through the income statement.

12.3.5 Measurement of financial instruments

Initial measurement

Financial assets and liabilities (other than those at fair value through profit or loss) should be initially measured at fair value plus transaction costs. In almost all cases this would be at cost. For instruments at fair value through profit and loss, transaction costs are not included.

Subsequent measurement

Figure 12.4 summarises the way that financial assets and liabilities are to be subsequently measured alter initial recognition.

The measurement after initial recognition is at either fair value or amortised cost. The only financial instruments that can be recognised at cost (not amortised) arc equity investments for which there is no measurable fair value. These should be verv rare.

The fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction.

The methods for lair value measurement allow a number of different bases to be used for the assessment of fair value. These include:

- published market prices;
- transactions in similar instruments;

Copyrighted material

Figure 12.4 **Subsequent measurement**

- discounted future cash flows;
- valuation models.

The method used will be the one which is most reliable for the particular instrument.

Amortised cost is calculated using the effective interest method on assets and liabilities. For the definition of effective interest it is necessary to look at IAS 39, para. 9. The effective rate is defined as:

> *the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial instrument'
>
> The definition then goes on to require that the entity shall:

- estimate cash flows considering all contractual terms of the financial instrument (for example, prepayment, call and similar options), but not future credit losses;
- include all necessary fees and points paid or received that are an integral part of the effective yield calculation (IAS 18);
- make a presumption that the cash flows and expected life of a group of similar financial instruments can be estimated reliably.

Illustration of the effective yield method

George pic lends £10,000 to a customer for fixed interest based on the customer paying 5% interest per annum (annually in arrears) for 2 years, and then 6% fixed for the remaining 3 years with the full £10,000 repayable at the end of the 5-year term.

The tables below show the interest income over the loan period assuming:

(a) it is not expected that the customer will repay early (effective rate is 5.55"o per annum derived from an internal rate of return calculation); and

(b) ii is expected the customer will repay at the end of year 3 but there arc no repayment penalties (effective rate is 5.3% per annum derived from an internal rate of return calculation).

The loan balance will alter as follows:

No early repayment

Period	*B/F*	*Interest income(5.55%)*	*Cash received*	*C/F*
Year I	10,000	555	(500)	10,055
Year 2	10,055	55S	(5(H))	10,113
Year 3	10,113	561	(600)	10,074
Year 4	10,074	559	(6(H))	10,033
Year 5	10,033	557	(10,600)	(10)»

* Difference due to rounding

Early repayment

Period	*B/F*	*Interest income(S.3%)*	*Cash received*	*C/F*
Year 1	10,000	530	(500)	10,030
Year 2	10,030	532	(500)	10,062
Year 3	10,062	533	(10,600)	(5)*

* Difference due to rounding

Gains or losses on subsequent measurement

When financial instruments are remeasurcd to fair value the rules for the treatment of the subsequent gain or loss are as shown in Figure 12.5. Gains or losses arising on financial instruments that have not been remeasurcd to fair value will arise either when the assets are impaired or the instruments are derecognised. These gains and losses are recognised in the income statement for the period.

12.3.6 Hedging

If a financial instrument has been taken out to act as a hedge, and this position is clearly identified and expected to be effective, hedge accounting rules should IK followed.

There are three types of hedging instrument:

I Fair value hedge

A hedge of the exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment that will affect reported net income. Any gain or loss arising

Figure I2.S Gains or losses on subsequent measurements

on remeasuring the hedging instrument and the hedged item should be recognised in the income statement in the period.

2 Cash flow hedge

A hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with the recognised asset or liability and that will affect reported net income. A hedge of foreign exchange risk on a firm commitment may be a cash flow or a fair value hedge. The gain or loss on the hedging instrument should be recognised directly in equity. If the instrument being hedged results in the recognition of a non-financial asset or liability, the gain or loss on the hedging instrument can be recognised as part of the cost of the hedged item. Any gains or losses recognised in equity should be included in the income statement in the period thai the hedged item affects the income statement.

Cash flow hedge illustrated

Harvey pic directors agreed at their July 2006 meeting to acquire additional specialist computer equipment in September 2007 at an estimated cost of $500,000. The company entered into a forward contract in July 2006 to purchase $500,000 in September 2007 and paid GBP260,000. At the year-end in December 2006 the S has appreciated and has a sterling value of GBP276,000. At the year-end the increase of GBI'16,000 will be debited to Forward Contract and credited to Reserves. In September 2007 when the equipment is purchased the 16,000 will he deducted in its entirety from the Equipment carrying amount or transferred as a reduction of the annual depreciation charge.

3 Net investment hedge

A hedge of an investment in a foreign entity. The gain or loss on the hedging instrument should be recognised directly in equity to match against the gain or loss on the hedged investment.

Conditions for hedge accounting

In order to be able to apply the hedge accounting techniques detailed above an entity must meet a number of conditions. These conditions are designed to ensure that only genuine-hedging instruments can be hedge accounted, and that the hedged positions are clearly identified and documented.

The conditions are:

- at the inception of the hedge there is formal documentation of the hedge relationship and the enterprise's risk management objective and strategy for undertaking the hedge;
- the hedge is expected to be highly effective at inception and on an ongoing basis in achieving offsetting changes in fair values or cash Hows;
- the effectiveness of the hedge can be reliably measured, that is the fair value of the hedged item and the hedging instrument can be measured reliably;
- for cash flow hedges, a forecasted transaction that is the subject of the hedge must be highly probable; and
- the hedge was assessed on an ongoing basis and determined actualh to have been effective throughout the accounting period (effective between 80{!u and 125%).

Copyrighted material

12.4 IFRS 7 *Financial Statement Disclosures*

Introduction

This standard came nut of the ongoing project of improvements to the accounting and disclosure requirements relating to financial instruments.

For periods before those starting on 1 January 2007 disclosures in respect of financial instruments are governed by two standards:

1 IAS 30 *Disclosures in the financial statements of banks and similar financial institutions',* and

2 IAS 32 *Financial instruments: disclosure and presentation.*

In drafting IFRS 7, the IASB:

- reviewed existing disclosures in the two standards, and removed duplicative disclosures;
- simplified the disclosure about concentrations of risk, credit risk, liquidity risk and market risk under IAS 32; and
- transferred disclosure requirements from IAS 32.

Main requirements

The standard applies to all entities, regardless of the quantity of financial instruments held. I lowevcr, the extent of the disclosures required will depend on the extent of the entity's use of financial instruments and of its exposure to risk.

The standard requires disclosure of:

- the significance of financial instruments for the entity's financial position and performance (many of these disclosures were previously in IAS 32); and
- qualitative and quantitative information about exposure to risks arising from financial instruments, including specified minimum disclosures about credit risk, liquidity risk, and market risk.

The qualitative disclosures describe management's objectives, policies and processes for managing those risks.

The quantitative disclosures provide information about the extent to which the entity is exposed to risk, based on the information provided internally to the entity's key management personnel.

For the disclosure of the significance of financial instruments for the entity's financial position and performance a key aspect will be to clearly link the balance sheet and income statement to the classifications in IAS 39. The requirements from IFRS in this respect for the balance sheet and income statement are as follows:

8 The carrying amounts of each of the following categories, as defined in IAS 39, shall be disclosed either on the face of the balance sheet or in the notes:

(a) financial assets at fair value through profit or loss, showing separately (i) those designated as such upon initial recognition and (ii j those classified as held for trading in accordance with IAS 39;

(b) held-to-maturity investments;

(c) loans and receivables;

(d) availablc-for-sale financial assets;

(e) financial liabilities measured at amortised cost.

20 An entity shall disclose the following items of income, expense, gains or losses either on the face of the financial statements or in the notes:

(a) net gains or net losses on:
  (i) financial assets or financial liabilities at fair value through profit or loss, showing separately those on financial assets or financial liabilities designated as such upon initial recognition, and those on financial assets or financial liabilities that are classified as held for trading in accordance with IAS 39;
  (ii) available-for-salc financial assets, showing separately the amount of gain or loss recognised directly in equity during the period and the amount removed from equity and recognised in profit or loss for the period;
  (iii) held-to-maturity investments;
  (iv) loans and receivables; and
  (v) financial liabilities measured at amortised cost;
(b) total interest income and total interest expense (calculated using the effective interest method) for financial assets or financial liabilities that are not at fair value through profit or loss;
(c) fee income and expense (other than amounts included in determining the effective interest rate) arising from:
  (i) financial assets or financial liabilities that are not at fair value through profit or loss; and
  (ii) trust and other fiduciary activities that result in the holding or investing of assets on behalf of individuals, trusts, retirement benefit plans, and other institutions;
(d) interest income on impaired financial assets accrued in accordance with paragraph AG93ofIAS39;and
(e) the amount of any impairment loss for each class of financial asset.

Effective date

The standard must be applied for annual accounting periods commencing on or alter 1 January 2(K>7, although early adoption is encouraged.

IAS 32 was renamed' in 2005 as *Financial Instruments: Presentation*^ following the transfer of the disclosure requirements to IFRS 7.

1 Discuss the implications for businesses of a substance approach being used for the presentation of liabilities and equity. Indicate how the terms of an instrument could present problems in classification, eg. a preference share that has accelerating dividends payable at the option of the company.

2 Explain why financial instruments, particularly derivatives, can alter the risk profile of a business. Use a forward currency contract as an example. Discuss whether disclosure alone is sufficient to address these risks.

3 'Disclosure of the fair values of financial instruments (as required by FRS 13 in the UK) is better than measuring them at fair values in the financial statements (as is often required by IAS 39) because measurement at fair value would introduce unwanted volatility to the reported earnings.' Discuss.

4 A reduction in the credit rating of a business would reduce the fair value of its debt instruments. Explain why this is the case.

5 Following from Question 4, if the debt instrument was included in the balance sheet at fair value through profit or loss this would mean that a profit would be recognised in the income statement This appears counter-intuitive. Discuss.

6 Many groups have treasury policies that use hedging of net positions. They would look at their group-wide exposure in. e.g. foreign currency and then take forward contracts to cover the position. Discuss the difficulties that would arise in hedge accounting if this practice is followed.

7 Interest rate swaps can be designated as hedges of underlying borrowings. A swap of floating for fixed rate is a cash flow hedge, but a swap of fixed for floating is a fair value hedge. Why?

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (*).

* Question I

On I April year I, **a** deep discount bond was issued by DDB AG. It had a face value of £2.5 million covering a five-year term. The lenders were granted a discount of *S%.* The coupon rate was 10% on the principal sum of £2.5 million, payable annually in arrears. The principal sum was repayable in cash on 31 March year 5. Issuing costs amounted to £150.000.

Required:

Compute the finance charge per annum and the carrying value of the loan to be reported in each year's income statement **and** balance sheet respectively.

* Question 2

On I October year I. RP5 pic issued one million £1 5% redeemable preference shares. The shares were issued at **a** discount of £50,000 and are due to be redeemed on 30 September Year 5. Dividends are paid on 30 September each year.

Required:

Show the accounting treatment of the preference shares throughout the life-span of the instrument

calculating the finance cost to be charged to the income statement in each period-

Question 3

October 20X1. Little Raven pic issued 50.000 debentures, with a par value of £100 each, to investors at £80 each. The debentures are redeemable at par on 30 September 20X6 and have a coupon rate of *6%.* which was significantly below the market rate of interest for such debentures issued at par. In accounting for these debentures to date. Little Raven pic has simply accounted for the cash flows involved, namely:

- On issue: Debenture 'liability' included in the balance sheet at £4,000.000.
- Income statements: Interest charged m years ended 30 September 20XZ 20X3 and 20X4 (published accounts) and 30 September 20X5 (draft accounts) - £300.000 each year (being 6% on £5.000.000).

The new finance director, who sees the likelihood that further similar debenture issues will be made. considers that the accounting policy adopted to date is not appropriate. He has asked you to suggest a more appropriate treatment.

Little Raven pic intends to acquire subsidiaries in 20X6.

Income statements for the years ended 30 September 20X4 and 20X5 are as follows:

	We *30 Sept 20X5 (Draft)*	We *30 Sept 20X4 (Actual)*
	£000	£000
Turnover	6,700	6.300
Cost of sales	(3.025)	(2.900)
Gross profit	3.675	3.400
Overheads	(600)	(550)
Interest payable - debenture	(300)	(300)
- others	(75)	(50)
Profit for the financial year	2.700	2.500
Retained profits brought forward	4.300	1.800
Retained profit carried forward	7.000	4,300

Extracts from the balance sheet are:

	At 30 Sept 20X5 *(Draft)*	*At 30 Sept 20X4 (Actual)*
	£000	£000
Share capital	2.250	2,250
Share premium	550	550
Profit and loss account	7.000	4,300
	9.800	7.100
696 debentures	4.000	4.000
	13.800	I 1.100

Copyrighted material

Required:

(a) Outline the considerations involved in deciding how to account for the issue, the interest cost and the carrying value in respect of debenture issues such as that made by Little Raven pic. Consider the alternative treatments in respect of the income statement and refer briefly to the appropriate balance sheet disclosures for the debentures. Conclude in terms of the requirements of IAS 32 (on accounting for financial instruments) in this regard.

(b) Detail an alternative set of entries in the books of Little Raven pic for the issue of the debentures and subsequently; under this alternative the discount on the issue should be dealt with under the requirements of IAS 32. The constant rate of interest for the allocation of interest cost is given to you as 11.476%. Draw up a revised income statement for the year ended 30 September 20X5 - together with comparatives - taking account of the alternative accounting treatment.

References

1 I \S 32 *Financial Instruments: Disclosure and Presentation.* IASC, revised I'WS.
2 *Ibid.*, para. 5.
3 //»/,/., para. 18.
4 *Ibnl.*, para. 23.
5 *Ibid.*, para. *}}.*
6 //»/«/., para. 43.
7 IAS 32 *Financial Instruments: Present at inn,* IASB. revised 2005.

Copyrighted material

13.1 Introduction

In this chapter we consider the application of IAS 19- *Employee Benefits.*[1] IAS 19 is concerned with the determination of the cost of retirement benefits in the financial statements of employers having retirement benefit plans (sometimes referred to as pension schemes*, 'superannuation schemes' or 'retirement benefit schemes'). The requirements of IFRS 2 *Share-Based Payments* will also be considered here. Even though IKRS 2 covers share-based payments for almost any good or service a company can receive, in practice it is employee service that is most commonly rewarded with share-based payments. We also consider the disclosure requirements of IAS 26 *Accounting and Reporting by Retirement Benefit Plans.*[2]

13.I.I Employee interest in pensions has widened

The percentages of pensioners and public pension expenditure are increasing.

	% of population over 60		Public pensions as % of GDP
	2000	2040	2040
	%	% (projected)	% (projected)
German v	24	^	IS
Italy	24	37	21
Japan	23	34	IS
UK	21	30	5
US	17	29	7

This has led to gloom\ projections that countries could even he bankrupted by the increasing demand for state pensions. In an attempt to avert what governments see as a national disaster, there have been increasing efforts to encourage private funding of pensions.

As people become more and more aware of the possible failure of governments to provide adequate basic state pensions, they recognise the advisability of making their own provision for their old age. This has raised their expectation that their employers should offer a pension scheme and other post-retirement benefits. These have increased, particularly in Ireland, the UK and the USA, and what used to be a 'fringe benefit* for only certain categories of staff has been broadened across the workforce. This has been encouraged by various governments with favourable tax treatment of both employers' and employees* contributions to pension schemes.

13.2 Financial reporting implications

The provision of pensions lor employees as part of an overall remuneration package has led to the related costs being a material pari of the accounts. The very nature of such arrangements means that the commitment is a long-term one that ma\ well involve estimates. Tin- way the related costs are allocated between accounting periods and are reported in the financial statements needs careful consideration to ensure that a fair view of the position is shown.

In recent years there has been a shift of view on the way that pension costs should be accounted for. The older view was thai pension costs (as recommended by IAS 1<> prior to its revision in 1998) should be matched against the period of the employee's service so as to create an even charge lor pensions in the income statement, although the balance sheet amount could have been misleading. The more recent approach is to make the balance sheet more sensible, but perhaps accept greater variation in the pension cost in the income statement. The new view is the one endorsed by IAS 19 (revised) and is the one now in use by companies preparing accounts to international accounting standards.

Before examining the detail of how IAS 19 (revised) requires pensions and other long-term benefits to be accounted for, we need to consider the types of pension scheme that are commonlv used.

13.3 Types of scheme

13.3.1 Ex *gratia* arrangements

These are not schemes at all but arc circumstances where an employer agrees to grant a pension to be paid for out of the resources of the firm. Consequently these are arrangements where pensions have not been funded but decisions are made on an *ad hoc* or case-by-case basis, sometimes arising out of custom or practice. No contractual obligation to grant or pay a pension exists, although a constructive obligation ma\ exist which would need to be provided for in accordance with IAS *M Provisions, Contingent Liabilities and Contingent Assets,*

13.3.2 Defined contribution schemes

These are schemes in which the employer undertakes to make certain contributions each year, usually a stated percentage of salary. These contributions are usually supplemented by contributions from the employee. The money is then invested and, on retirement, the emplo\cc gains ihe pension benefits that can IK* purchased from the resulting funds.

Such schemes have uncertain future benefits hut fixed, predetermined costs. Schemes of this sort were very common among smaller employers but fell out of fashion for a time. In recent years, due to the fixed cost to the company and the resulting low risk to the employer for providing a pension, these schemes have become increasingly popular. They are also popular with employees who regularly change employers, since the funds accrued within the schemes are relatively easv to transfer.

The contributions may be paid into a wide variety of plans, e.g. government plans to ensure state pensions are supplemented (these ma> be optional or compulsory), or schemes operated by insurance companies.

The following is an extract from the 2005 Annual Report of Nokia:

Copyrighted material

Pensions

The Group's contributions to defined contribution plans and to multi-employer and insured plans are charged to the profit and loss account in the period to which the contributions relate.

13.3.3 Defined benefit schemes

Under these schemes the employees will, on retirement, receive a pension based on the length of service and salary, usually final salary or an average of the last few (usually three) Years' salarv.

These schemes form the majority of company pension schemes. They are, however, becoming less popular when new schemes are formed because the cost to employers is uncertain and there are greater regulation requirements being introduced.

Whilst the benefits to the employee are not certain, they are more predictable than under a defined contribution scheme. The cost to the employer, however, is uncertain as the employer will need to vary the contributions in the scheme to ensure it is adequately funded to meet the pension liabilities when employees eventually retire.

The following is an extract from the accounting policies in the 2005 Annual Report of the Nestle Group:

> Employee benefits
>
> *Post-employment benefits*
>
> The liabilities of the Group arising from defined benefit obligations, and the related current service cost, are determined using the projected unit credit method.
>
> Valuations are carried out annually for the largest plans and on a regular basis for other plans. Actuarial advice is provided both by external consultants and by actuaries employed by the Group. The actuarial assumptions used to calculate the benefit obligations vary according to the economic conditions of the country in which the plan is located.
>
> Such plans are either externally funded, with the assets of the schemes held separately from those of the Group in independently administered funds, or unfunded with the related liabilities carried in the balance sheet.
>
> For the funded defined benefit plans, the deficit or excess of the fair value of plan assets over the present value of the defined benefit obligation is recognised as a liability or an asset in the balance sheet, taking into account any unrecognised actuarial gains or losses and past service cost. However, an excess of assets is recognised only to the extent that it represents a future economic benefit which is actually available to the Group, e.g. in the form of refunds from the plan or reductions in future contributions to the plan. When such excess is not available or does not represent a future economic benefit, it is not recognised but is disclosed in the notes.
>
> Actuarial gains and losses arise mainly from changes in actuarial assumptions and differences between actuarial assumptions and what has actually occurred. They arc-recognised in the income statement, over the expected average remaining working lives lit the employees only to the extent that iheir net cumulative amount exceeds I0*\» of the greater of the present value of the obligation or the fair value of plan assets at the end of the previous year. Unrecognised actuarial gains and losses are reflected in the balance sheet.
>
> For defined benefit plans the actuarial cost charged to the income statement consists of current service cost, interest cost, expected return on plan assets and past service cost as well as actuarial gains or losses to the extent that they are recognised. The past

Copyrighted material

service cost for the enhancement of pension benefits is accounted for when such benefits vest or become a constructive obligation.

The accounting policy is quite complex to apply and we will illustrate the detailed calculations involved below.

13.3.4 Equity compensation plans

IAS IV d(M.s not specify recognition or measurement requirements for equity compensation plans such as shares or share options issued to employees at less than fair value. The valuation of share options has proved an extremely contentious topic and we will consider the issues that have arisen. IFRS *2 Share-Bused Payment* covers these plans.[3]

The following is an extract from the accounting policies in the 2005 Annual Report of the Nestle (iroup:

> The Group has equity-settled and cash-settled share-based payment transactions.
>
> Equity-settled share-based payment transactions are recognised in the income statement with a corresponding increase in equity over the vesting period. They are fair valued at grant date and measured using the Black and Scholcs model. The cost of equity-settled share-based payment transactions is adjusted annually by the expectations of vesting, for the forfeitures of the participants* rights that no longer satisfy the plan conditions, as well as for early vesting.
>
> Liabilities arising from cash-settled share-based payment transactions are recognised in the income statement over the vesting period. They are fair valued at each reporting date and measured using the Hlack and Scholcs model. The cost of cash-settled share-based payment transactions is adjusted for the forfeitures of the participants* rights that no longer satisfy the plan conditions, as well as for early vesting.

13.4 Defined contribution pension schemes

Defined contribution schemes (otherwise known as money purchase schemes) have not presented any major accounting problems. The cost of providing the pension, usually a percentage of salary, is recorded as a remuneration expense in the income statement in the period in which it is due. Balance sheet assets or liabilities may exist for the pension contributions if the company has not paid the amount due for the period. If a contri budon was payable more than twelve months after the balance sheet date for services rendered in the current period, the liability should be recorded at its discounted amount (using a discount rate based on the market rate for high-quality corporate bonds).

Disclosure is required of the pension contribution charged to the income statement for the period.

Illustration of Andrew pic defined contribution pension scheme costs

Andrew pic has payroll costs of £2.7 million for the year ended 30 June 2005. Andrew pic pays pension contributions of 5% of salary, but for convenience paid £10,000 per month standard contribution with am shortfall to be made up in the July 21*05 contribution.

Income statement charge

The pension cost is £2,700,000 X 5%	£135,000

Copyrighted material

Balance sheet

The amount paid over the period is £120,000 and therefore an accrual of £15,000 will be made in ihe balance sheet at 30 June 2005.

13.5 Defined benefit pension schemes

13.5.1 Position before 1998

To consider the accounting requirements for defined benefit pension schemes it is useful to look at the differences between the original IAS 19 and IAS 19 as revised in 1998. By looking at the original IAS 19 it is possible to see why a revision was necessary and what the revision to the standard was trying to achieve.

Income statement

Under the original standard both the costs and the fund value were computed on an actuarial basis. The valuation was needed to give an estimate of the costs of providing the benefits over the remaining serviee lives of the relevant employees. This was normally done in such a way as to produce a pension cost that was a level percentage of both the current and future pensionable payroll. Both the accounting standard and the actuarial professional bodies gave guidance on the assumptions and methods to l>e employed in the \alu.it ion and required that those guidelines were followed.

Treatment of variations from regular costs

If a valuation gave rise to a \ariation in the regular costs, it would normally IK allocated over the remaining service lives of the employees. If, however, a variation arose out of a surplus or deficit arising from a significant reduction in pensionable employees, it was recognised when it arose unless such treatment was not prudent and involved the anticipating of income.

Balance sheet

This was a much simpler approach and was based purely on the accruals principle for defined benefit pension schemes. The difference between cumulative pension costs charged in the income statement and the money paid either as pensions or contributions to a scheme or fund was shown as either a prepayment or an accrual. In effect the balance sheet value was a balancing figure representing the difference between the amounts charged against the income statement and the amounts paid into the fund.

Illustration of Hart pic defined benefit pension scheme

Hart pic operates a defined benefit pension scheme on behalf of its employees. At an actuarial valuation in early 2(MI5 the following details were calculated:

Regular service costs (per annum)	£10,000
Kstimated remaining average service lives of staff	10 years
Surplus on scheme at 31 December 2004	£30,000

Hart pic has been ad\ ised to eliminate the surplus on the scheme b\ taking a three-year contribution holiday, and then returning to regular service cost contributions.

The financial statements over the remaining service lives of the employees would show the following amounts:

Copyrighted material

Year	*Contribution*	*Income statement charge*	*Balance sheet liability*
	I	***i***	***I***
2005	Nil	7,000	7,000
2006	Nil	7,000	14,000
2007	Nil	7,000	21,000
2008	10,000	7,000	18,000
2009	10,000	7,000	15,000
2010	10,000	7,000	12,000
2011	10,000	7,000	9,000
2012	10,000	7,000	6,000
2013	10,000	7,000	3,000
2014	10,000	7,000	
	70,000		

The income statement charge is the total contributions paid over the period (£70,000) divided by the average remaining service lives often years. The effect of this is to spread the surplus over the remaining service lives in the income statement.

13.5.2 Problems of the old standard

The old IAS 19 had a number of problems in its approach which needed to be addressed by the revised standard.

A misleading balance sheet position

Making the balance sheet accrual or prepayment a balancing figure based on the comparison of the amount paid and charged to date could be very misleading. In the above illustration it can be seen that the balance sheet shows a liability even though there is a surplus on the fund. A user of the financial statements who was unaware of the method used to account for the pension scheme could be misled into believing that contributions were owed to the pension fund.

Current emphasis is on getting the balance sheet to report assets and liabilities more accurately

There is an issue regarding the consistency of the presentation of the pension asset or liability with that of other assets and liabilities. Accounting is moving towards ensuring that the balance sheet shows a sensible position with the income statement recording the change in the balance sheet position. Accounting for pension schemes under the old IAS *) does not do this.

The old IAS 19 was also inconsistent with the way that US GAAP would require pensions to be accounted for, although in its defence it was consistent with the approach adopted b> UK GAAP.

Valuation basis

The old IAS 19 required the use of an actuarial valuation basis for both assets and liabilities of the fund in deciding what level of contribution was required and whether any surplus or deficit had arisen. In addition the liabilities of the fund (i.e. the obligation to pay future pensions) were discounted at the expected rate of return on the assets. These approaches to

Copyrighted material

valuation arc difficult to justify and could give rise to unrealistic pension provision being made.

13.6 IAS 19 (revised) *Employee Benefits*

After a relatively long discussion and exposure period IAS 19 (revised) was issued in 1998 and it redefined how all employee benefits were to be accounted for.

IAS 19 has chosen to follow a 'balance sheet[1] approach to accounting for the pension scheme contributions by the employer and, therefore, it defines how the balance sheet asset or liability should be built up. The income statement charge is effectively the movement in the balance sheet asset or liability. The pension fund must be valued sufficiently regularly so that the balance sheet asset or liability is kept up to date. The valuation would normally be done by a qualified actuary and is based on actuarial assumptions.

13.7 The liability for pension and other post-retirement costs

The liability for pension costs is made up from the following amounts:

(a) the present value of the defined benefit obligation at the balance sheet date;

(b) plus any actuarial gains (less actuarial losses) not yet recognised;

(c) minus any past service cost not yet recognised;

(d) minus the fair \alue at the balance sheet date of plan assets (if any) out of which the obligations are to be settled dircctl).

If this calculation comes out with a negative amount the company should recognise a pension asset in the balance sheet. There is a limit on the amount of the asset, if the asset calculated above is greater than the total of:

(i) any unrecognised actuarial losses and past service cost; plus

(ii) the present \alue of any future refunds from the scheme or reductions in future contributions.

Within IAS 19 there are rules regarding the maximum pension asset that can be created.

Each of the elements making up the balance sheet position (a) to (d) above can now be considered.

13.7.1 Obligations of the fund

The pension fund obligation must be calculated using the 'projected unit credit method*. This method of allocating pension costs builds up the pension liability each year for an extra year of service and a reversal of discounting. Discounting of the liability is done using the market \iclds on high-quality corporate bonds with similar currency and duration.

The Grado illustration below shows how the obligation to pay pension accumulates over the working life of an employee.

Grado illustration

A lump sum benefit is payable on termination of service and equal to 1% of final salary for each year of service. The salary in year 1 is £10,000 and is assumed to increase at 7% (com-

Copyrighted material

pound) each year. The discount rate used is 10"... The following table shows how an obligation (in *Q* builds up for an employee who is expected to leave at the end of year 5. For simplicity, this example ignores the additional adjustment needed to reflect the probability that the employee ma\ lea\e service at an earlier or later date.

Year	1	2	3	4	5
Benefit attributed to prior years	0	131	262	393	524
Benefit attributed to current year (l"o of final salary)*	131	131	131	131	131
Benefit attributed to current and prior years	131	262	393	524	655
Opening obligation (present \alue of benefit attributed to prior years)		89	196	324	476
Interest at 10°o	-	9	20	33	48
Current service cost (present value of benefit attributed to current year)	89	98	108	119	131
Closing obligation (present value of benefit attributed to current and prior years)**	89	196	524	476	655

* Final salary is £10,000 X $(1.07)^4$ - £15,100.

** Discounting the benefit attributable to current and prior years at 10'N.

13.7.2 Actuarial gains and losses

Actuarial gains or losses result from changes either in the present value of the defined benefit obligation or changes in the market value of the plan assets. The) arise from experience adjustments - that is, differences between actuarial assumptions and actual experience. Typical reasons for the gains or losses would be:

- unexpectedly low or high rates of employee turnover;
- the effect of changes in the discount rate;
- differences between the actual return on plan assets and the expected return on plan assets.

Accounting treatment

Since a revision of IAS 19 in 2004 there has been a choice of accounting treatment for actuarial gains and losses. One approach follows a *I0% corridor* and requires recognition of gains and losses in the income statement whereas an alternative makes no use of the corridor and requires gains and losses to be recognised in cquit).

/ 0% corridor approach

- If actual gains and losses are greater than the higher of 10% of the present value of the defined benefit obligation or 10% of the market value of the plan assets, the excess gains and losses should be charged or credited to the income statement over the average remaining service lives of current employees. Any shorter period of recognition of gains or losses is acceptable, provided it is systematic.
- If beneath the 10% thresholds they can be part of the defined benefit liabilit) for the >ear; however, the standard also allows them to be recognised in the income statement.

Copyrighted material

Any actuarial gains anil losses that are recognised in the income statement are recognised in the periods following the one in which they arise. For example, if an actuarial loss arose in the year ended 31 December 2004 that exceeded the HI'Ni corridor and therefore required recognition in the income statement, that recognition would begin in the 2005 year. This means that to calculate the income statement charge or credit for the current year the cumulative unrecognised gains or losses at the end of the previous year arc compared to the corridor at the end of the previous year (or the beginning of the current year).

The comprehensive illustration in section 13.9 below illustrates this treatment.

Equity recognition approach

It is acceptable to recognise actuarial gains and losses immediately in equity, usually as part of retained earnings.

This approach has the benefit over the corridor approach in that it does not require any acturial gains and losses to be recognised in the income statement; however, its drawback comes in volatility on the balance sheet. Under this approach all actuarial gains and losses are recognised and therefore no unrecognised ones are available for offset against the balance sheet asset or liability. As the actuarial valuations are based on fair values the volatility could be significant.

This new treatment in IAS 19 is not effective until accounting periods commencing in 2006; however, earlier adoption is allowed.

13.7.3 Past service costs

Past service costs are costs that arise for a pension scheme as a result of improving the scheme or when a business introduces a plan. They are the extra liability in respect of previous years' service by employees. Do note, however, that past service costs can only arise if actuarial assumptions did not take into account the reason why they occurred. Typicalh thev would include:

- estimates of benefit improvements as a result of actuarial gains (if the company proposes to give the gains to the employees);
- the effect of plan amendments that increase or reduce benefits for past service.

Accounting treatment

The past service cost should be recognised on a straight-line basis oxer the period to which the benefits vest. If already vested the cost should be recognised immediately in the income statement. A benefit vests when an cmplovee satisfies preconditions. For example, if a company offered a scheme whereby an employee would only be entitled to a pension if they worked for at least five years, the benefits would vest as swin as they started their sixth >ear of employment. The company will still have CO make provision for pensions for the first five years of employment (and past service costs could arise in this period), as these will be pensionable service years provided the emplovee works for more than five years.

13.7.4 Fair value of plan assets

This is usual!) the market \alue of the assets of the plan (or the estimated value if no immediate market value exists). The plan assets exclude unpaid contributions due from the reporting enterprise to the fund.

Copyrighted material

13.7.5

For many businesses the implication on net assets on moving to the balance sheet approach to pensions required by IAS 19 has been significant. The extract below shows the impact on the net assets of Hal four Hearty for 2004.

Extract from Balfour Beatty financial statements

Net assets

Reconciliation of net assets	£m
Net assets - UK GAAP at 31 December 2004	413
Il'RS 3 - Goodwill amortisation not charged	17
IAS 19 - Retirement benefit obligations (net of tax)	(174)
II'RS 2/IAS 12 - Share-based payments - tax effects	5
1A.S 10 - Elimination of provision for proposed dividend	16
IAS 12 - Deferred taxation	J 4)
Net assets - IFRS restated at 31 December 2004	273

13.8 The income statement

The income statement charge for a period should be made up of the following parts:

(a) current service cost;

(b) interest cost;

(c) the expected return on any plan assets;

(d) actuarial gains and losses to the extent that they are recognised;

(e) past service cost to the extent that it is recognised;

(0 the effect of any curtailments or settlements.

These items are all the things that cause the balance sheet liability for pensions to alter and the income statement is consequently based on the movement in the liability. Because of the potential inclusion of actuarial gains and losses and past service costs the income statement is liable to fluctuate much more than the charge made under the original IAS 1[5].

13.9 Comprehensive illustration

The following comprehensive illustration is based on .*m* example in IAS 1[5] (revised)[4] anil demonstrates how a pension liability and income statement charge is calculated. The example does noi include the effect of curtailments or settlements. This illustration demonstrates the 10"o corridor approach for actuarial gains and losses.

Illustration

The following information is given about a funded defined benefit plan. To keep the computations simple, all transactions are assumed to occur at the year-end. The present value of the obligation and the market value of the plan assets were both 1,000 at 1 January 20X1. The average remaining service lives of the current employees is ten years.

Copyrighted material

	20X1	*20X2*	*20X3*
Discount rate at start of vear	W\	9°o	8°u
Kxpcctcd rate of return on plan assets at start of vear	12%	11%	10%
Current service cost	160	140	150
Benefits paid	150	180	190
Contributions paid	90	100	110
Present value of obligations at 31 December	1,100	1,380	1.455
Market value of plan assets at 31 December	1,190	1,372	1,188

In 20X2 the plan was amended to provide additional benefits with effect from 1 January 20X2. The present value as at 1 January 20X2 of additional benefits for employee service before I January 20X2 was 50, all for vested benefits.

Required:
Show how the pension scheme would he shown in the accounts for 20X1, 20X2 and 20X3.

Solution to the comprehensive illustration

Step / *Change in the obligation*
The changes in the present value of the obligation must be calculated and used to determine what, if any, actuarial gains and losses have arisen. This calculation can be done by comparing the expected obligations at the end of each period with the actual obligations as follows:

Change in the obligation:

	20X1	*20X2*	*20\3*
Present value of obligation, 1 January	1,000	1,100	1.380
Interest cost	100	99	110
Current sen ice cost	160	140	150
Past service cost - vested benefits	^ ^	50	–
Benefits paid	(150)	(180)	(190)
Actuarial (gain) loss on obligation (balancing figure)	*(10)*	*111*	*3*
Present value of obligation. 31 December	1.10(1	1,380	1,455

Step 2 Change in the assets
The changes in the fair value of the assets of the fund must be calculated and used to determine what, if any, actuarial gains and losses have arisen. This calculation can be done by comparing the asset values at the end of each period with the actual asset values.

Change in the assets:

	20X1	*20X2*	*20X3*
Fair value of plan assets. 1 January	1,000	1,190	1.372
Expected return on plan assets	120	131	137
Contributions	90	100	110
Benefits paid	(150)	(ISO)	(190)
Actuarial gain (loss) on plan assets (ba lancing figure)	*130*	*131*	*(241)*
Fair value of plan assets, 31 December	1,190	,372	1,188

Copyrighted material

Step *3 I0% corridor calculation*

The limits of the '10% corridor[1] need to be calculated in order to establish whether actuarial gains or losses exceed the corridor limit and therefore need recognising in the income statement. Actuarial gains and losses are recognised in the income statement if they exceed the 10% corridor, and they are recognised by being amortised over the remaining service lives of employees.

The limits of the 10^{n}n corridor (at 1 January) arc set at the greater ol;

(a) I0°o of the present value of the obligation before deducting plan assets (KM), 110 and 13K);and

(b) 10°<M>fthe fair \aluc of plan assets (100, 119-and 137).

	20X1	*20X2*	*20X3*
Limit of'10% corridor' at 1 January	00	119	138
Cumulative unrecognised gains (losses) - 1 Januar\		140	98
(Jains (losses) on the obligation	10	(171)	(5)
Gains (losses) on the assets	130	131	(241)
Cumulative gains (losses) before amortisation	140	1(H)	(148)
Amortisation of excess over ten years (see working)		(2)	
Cumulative unrecognised gains (losses) - 31 December	140	98	(148)

... ,. (140 - 119) _ , _nv,

Working: —rr;———— = 2 - amortisation charge in 20\2.
10 \ rs p

Step 4 Calculate the income statement entry

	20X1	*20X2*	*20X3*
Current service cost	160	140	ISO
Interest cost	too	99	111)
Kxpected return on plan assets	(120)	(131)	(137)
Recognised actuarial (gains) losses		(2)	
Recognised past service cost			50
Income statement charge	*NO*	*ISO*	*123*

Step *5 Calculate the balance sheet entry*

	20X1	*20X2*	*20X3*
Present value of obligation, 31 December	1,100	1,380	1,455
Fair value of assets, 31 December	(1.190)	(1,372)	(1,188)
Unrecognised actuarial gains (losses) - from Step 3	140	98	(14S)
Liability in balance sheet	*SO*	*106*	*119*

13.10 Plan curtailments and settlements

A curtailment of a pension scheme occurs when a company is committed to make a material reduction in the number of employees of a scheme or when the employees will receive no

Copyrighted material

benefit for a substantial part of their future service. A settlement occurs when an enterprise enters into a transaction that eliminates any further liability from arising under the fund.

The accounting for a settlement or curtailment is that a gain or loss is recognised in the income statement when the settlement or curtailment occurs. The gain or loss on a curtailment or settlement should comprise:

(a) any resulting change in the present value of the defined benefit obligation;

(b) any resulting change in the fair value of the plan assets;

(c) any related actuarial gain/loss and past service cost that had not previous!) been recognised.

Before determining the effect of the curtailment the enterprise must remeasure the obligations and the liability to get it to the up-to-tlate \alue.

13.11 Multi-employer plans

The definition of a multi-employer plan per IAS IT is that it is a defined contribution or defined benefit plan that:

(a) pools the assets contributed by various enterprises that are not under common control; and

(b) uses those assets to provide benefits to employees of more than one enterprise, on the basis that contribution and benefit levels are determined without regard to the identity of the enterprise that employs the employees concerned.

An enterprise should account for a multi-employer defined benefit plan as follows:

- account for its share of the defined benefit obligation, plan assets and costs associated with the plan in the same wav as for am defined benefit plan; or
- if insufficient information is available to use defined benefit accounting it should:
  - account for the plan as if it were a defined contribution plan; and
  - give extra disclosures.

In 2004 the IASB revised IAS 19 and changed the position for group pension plans in the financial statements of the individual companies in the group. Prior to the revision a group pension scheme could not be treated as a multi-employer plan and therefore any group schemes would have had to be split across all the individual contributing companies. The amendment to IAS 1*), however, made it acceptable to treat group schemes as multi-employer schemes. This means that the defined benefit accounting is only necessary in the consolidated accounts and not in the individual company accounts of all companies in the group. The requirements for full tlefined benefit accounting are required in the individual sponsor companv financial statements.

This amendment to IAS 19 was not effective until accounting periods commencing in 2006; however, earlier adoption was allowed.

13.12 Disclosures

The major disclosure requirements'' of the standard are:

- the enterprise's accounting policy for recognising actuarial gains and losses;
- a general description of the type of plan;
- a reconciliation of the assets and liabilities including the present value of the obligations, the market value ol the assets, the actuarial gains/losses and the past service cost;

Copyrighted material

- a reconciliation of the movement during the period in the net liability;
- the total expense in the income statement broken down into different parts;
- the actual return on plan assets;
- the principal actuarial assumptions used as at the balance sheet date.

13.13 Other long-service benefits

So far in this chapter we have considered the accounting for post-retirement costs for both defined contribution and defined benefit pension schemes. As well as pensions, IAS 19 (revised) considers other forms of long-service benefit paid to employees.' These other forms of long-service benefit include:

(a) long-term compensated absences such as long-service or sabbatical leave;

(b) jubilee or other long-service benefits;

(c) long-term disability benefits;

(d) profit-sharing and bonuses payable twelve months or more after the end of the period in which the employees render the related service;

(e) deferred compensation paid twelve months or more after the end of the period in which it is earned.

The measurement of these other long-service benefits is not usually as complex or uncertain as it is for post-retirement benefits and therefore a more simplified method of accounting is used for them. For other long-service benefits any actuarial gains and losses and past service costs (if they arise) are recognised immediately in the income statement and no 'lOVii corridor' is applied.

This means that the balance sheet liability for other long-service benefits is just the present value of the future benefit obligation less the fair value of any assets that the benefit will be settled from directlv.

The income statement charge for these benefits is therefore the total of:

(a) current service cost;

(b) interest cost;

(c) expected return on plan assets (if any);

(d) actuarial gains and losses;

(e) past service cost;

(f) the effect of curtailments or settlements.

13.14 Short-term benefits

In addition to pension and other long-term benefits considered earlier, IAS 19 gives accounting rules for short-term employee benefits.

Short-term employee benefits include items such as:

1 wages, salaries and social security contributions;

2 short-term compensated absences (such as paid annual leave and paid sick leave) where the absences are expected to occur within twelve months after the end of the period in which the employees render the related employee service;

Copyrighted material

3 profit-sharing and bonuses payable within twelve months after the end of the period in which the employees render the related service; and

4 non-monetary benefits (such as medical care, housing; or cars) for current employees.

All short-term employee benefits should be recognised at an undiscountcd amount:

- as a liability (after deducting any payments already made), and
- as an expense (unless another international standard allows capitalisation as an asset).

If the payments already made exceed the undiscountcd amount of the l>encfits an asset should be recognised only if it will lead to a future reduction in payments or a cash refund.

Compensated absences

The expected cost of short-term compensated absences should be recognised:

(a) in the case of accumulating absences, when the employees render service that increases their entitlement to future compensated absences; and

(b) in the case of non-accumulating compensated absences, when the absences occur.

Accumulating absences occur when the employees can carry forward unused absence from one period to the next. They are recognised when the employee renders services regardless of whether the benefit is vesting (the employee would get a cash alternati\e if they left employment) or non-vesting. The measurement of the obligation reflects the likelihood of employees leaving in a non-vesting scheme.

It is common practice for leave entitlement to be an accumulating absence (perhaps restricted to a certain number of days) but lor sick pay entitlement to l>e non-accumulating.

Profit-sharing and bonus plans

The expected cost of a profit-sharing or bonus plan should only be recognised when:

(a) the enterprise has a present legal or constructive obligation to make such payments as a result of past events; and

(b) a reliable estimate of the obligation can be made.

13.15 Termination benefits[8]

These benefits are treated separately from other employee benefits in IAS 19 (revised) because the event that gives rise to the obligation to pay is the termination of employment as opposed to the service of the employee.

The accounting treatment for termination benefits is consistent with the requirements of IAS 37 and the rules concern when the obligation should be provided for and the measurement of the obligation.

Recognition

Termination benefits can only be recognised as a liability when the enterprise is demonstrablv committed to either:

(a) terminate the employment of an employee or group of employees before the normal retirement date; or

(b) provide termination benefits as a result of an offer made in order to encourage voluntary redundancy.

Copyrighted material

The enterprise would only be considered to be demonstrably committed to a termination when a detailed plan tor the termination is made and there is no realistic possibility of withdrawal from that plan. The plan should include as a minimum:

- the location, function and approximate number of employees whose services arc to be terminated;
- the termination benefits for each job classification or function;
- the time at which the plan will be implemented.

In June 2005 the IASH issued an exposure draft of IAS 37 *Provisions. Contingent Liabilities ami Contingent Assets*- When they issued this exposure draft they also proposed an amendment to IAS 19 regarding provisions for termination benefits. The proposal is that for voluntary redundancy payments provision can only be made once the employees have accepted the offer as opposed to when the detailed plan has been announced. The 1ASB view is that this is the date the payment becomes an obligation.

Measurement

If the termination benefits arc to be paid more than twelve months after the balance sheet date, they should be discounted, at a discount rate using the market yield on good quality corporate bonds. Prudence should also be exercised in the case of an offer made to encourage voluntary redundancy, as provision should only be based on the number of employees expected to accept the offer.

13.16 IFRS 2 Shore-Based Payment

Share awards either directly through shares or through options are very common ways of rewarding employee performance. These awards align the interests of the directors with those of the shareholders and, as such, are aimed at motivating the directors to perform in the way that benefits the shareholders. In particular, there is a belief that they will motivate the directors towards looking at the long-term success of the business as opposed to focusing solely on short-term profits. They have additional benefits also to the company and employees, for example in relation to cash and tax. If employees are rewarded in shares or options the company will not need to pay out cash to reward the employees, and in a start-up situation where cash flow is \ery limited this can be very beneficial. Many dot.com companies initially rewarded their staff in shares for this reason. There arc also tax benefits to employees with shares in some lax regimes which give an incentive to employees to accept share awards.

Whilst commercially share-based payments have many benefits, the accounting world has struggled in finding a suitable way to account for them. IAS 1°- only covered disclosure requirements for share-based payments and had no requirements for the recognition and measurement of the payments when it was issued. The result of this was that many companies who gave very valuable rewards to their employees in the form of shares or options did not recognise any charge associated with this. The IASH addressed this by issuing, in February 2004, IFRS 2 *Share-Based Payment* which is designed to cover all aspects of accounting for share-based payments.

13.16.1 Should an expense be recognised?

I listorieally there has been some debate about whether a charge should be recognised in the income statement for share-based payments. One view is that the reward is given to

Copyrighted material

employees in their capacity as shareholders and, as a result, it is not an employee benefit cost. Also supporters of the 'no-charge* view claimed that to make a charge would be a double hit to earnings per share in that it would reduce profits and increase the number of shares, which they felt was unreasonable.

Supporters of a charge pointed to opposite arguments thai claimed having no charge underestimated the reward given to employees and therefore overstated profit. The impact of this was to give a misleading view of the profitability of the company. Also, making a charge gave comparability between companies who rewarded their Staff in different ways. Comparability is one of the key principles of financial reporting.

For many years these arguments were not resolved and no standard was in issue but the IASB has now decided that a charge is appropriate and they have issued IFRS 2. In drawing up IFRS 2 a number of obstacles had to be overcome and decisions had to be made, for example:

(i) What should the value of the charge be - fair value or intrinsic value?

(ii) At what point should the charge be measured - grant date, vesting date or exercise date?

(iii) How should the charge IK* spread over a number of periods?

(iv) If the charge is made to the income statement, where is the opposite entry to be made?

(v) What exemptions should be given from the standard?

IFRS 2 has answered these questions, and when introduced it made substantial changes to the profit recognised by man\ companies. In the UK, for example, the share-based payments charge for many businesses was one of their largest changes to profit on adopting IFRS.

13.17 Scope of IFRS 2

IFRS 2 proposes a comprehensive standard that would cover all aspects of share-based payments. Specifically IFRS 2 covers:

- equity-settled share-based payment transactions, in which the entity receives goods or services as consideration for equity instruments issued;
- cash-settled share-based payment transactions, in which the entity receives goods or sen-ices by incurring liabilities to the supplier of those goods or services for amounts that are based on the price of the entity's shares or other equity instruments; and
- transactions in which the entity receives goods or services and either the entity or the supplier of those goods or services may choose w hether the transaction is settled in cash (based on the price of the entity's shares or other equity instruments) or by issuing equity instruments.

There are no exemptions from the provisions of the IFRS except for:

(a) acquisitions of goods or other non-financial assets as part of a business combination; and

(b) acquisitions of goods or services under derivative contracts where the contract is expected to be settled b\ delivery as opposed to being settled net in cash.

13.18 Recognition and measurement

The general principles of recognition and measurement of share-based payment charges are as follows:

Copyrighted material

- Entities should recognise the goods or services acquired in a share-based payment transaction over the period the goods or services are received.
- The entity should recognise an increase in equity if the share-based payment is equity-settled and a liability if the payment is a cash-settled payment transaction.
- The share-based payment should be measured at fair value.

13.19 Equity-settled share-based payments

For equity-settled share-based payment transactions, the entity shall measure the goods and services received, and the corresponding increase in equity:

- directly at the fair value of the goods and services received, unless that fair value cannot he estimated reliably;
- indirectly, by reference to the fair value of the equity instruments granted, if the cntitv cannot estimate reliably the fair value of the goods and services received.

For transactions with employees, the entity shall measure the fair value of services received by reference to the fair value of the equity instruments granted, because typically it is not possible to estimate reliably the fair value of the services received.

In transactions with the employees the IASB has decided that it is appropriate to value the benefit at the fair value of the instruments granted at their *grant Jute.* The I ASH could have picked a number of different dates at which the options could have been valued:

- grant date - the date on which the options are given to the employees;
- vesting date - the date on which the options become unconditional to the employees;
- exercise date - the date on which the employees exercise their options.

The IASB went for the grant date as they felt that the grant of options was the reward to the employees and not the exercise of the options. This means that after the grant date any movements in the share price, whether upwards or downwards, do not influence the charge to the financial statements.

Employee options

In order to establish the fair value of an option at grant date the market price could be used (if the option is traded on a market), but it is much more likely that an option pricing model will need to be used. Examples of option pricing models that are possible include:

Black •ScHoles An option pricing model used for options with a fixed exercise date that does not require adjustment for the inability of employees to exercise options during the vesting period; or

Binomial model An option pricing model used for options with a variable exercise date that will need adjustment for the inability of employees to exercise options during the vesting period-

Disclosures are required of the principle assumptions used in applying the option pricing model.

IFRS 2 does not recommend any one pricing model but insists that whichever model is chosen a number of factors affecting the fair \alue of the option such as exercise price, market price, time to maturity and volatility of the share price must be taken into account. In practice the Black-Scholes model is probabl) most commonly used; however, many

Copyrighted material

companies vary the model to some extent to ensure it fits with the precise terms of their options.

Once the fair value of the option has been established at the grant date it is charged to the income statement over the vesting period. The vesting period is the period in which the employees are required to satisfy conditions, for example sen ice conditions, that allow them to exercise their options. The charge is spread over the vesting period by calculating a revised cumulative charge each year, and then apportioning that over the vesting period with catch-up adjustments made to amend previous under- or over-charges to the income statement. The illustration below shows how this approach works.

When calculating the charge in the income statement the likelihood of options being forfeited due to non-market price conditions (for example, because the employees leave in the conditional period) should be adjusted for. For non-market conditions the charge is amended each year to reflect any changes in estimates of the numbers expected to vest.

The charge cannot be adjusted, however, for market price conditions. If, for example, the share price falls and therefore the options will not be exercised due to the exercise price being higher than market price, no adjustment can be made. This means that if options are 'under water' the income statements will still be recognising a charge for those options.

The charge is made to the income statement but there was some debate about how the credit entry should be made. The credit entry must be made either as a liability or as an entry to equity, and the I ASH has decided that it should be an entry to equity. The logic for not including a liability is that the future issue of shares is not an 'obligation to transfer economic benefits[1] and therefore does not meet the definition of a liabilitv. When the shares are issued it will increase the equity of the company and be effectively a contribution from an owner.

Even though the standard specifies that the credit entry is to equity it does not specify which item in equity is to be used. In practice it seems acceptable either to use a separate reserve or to make the entry to retained earnings. If a separate reserve is used and the options are not ultimately exercised this reserve can be transferred to retained earnings.

Illustration of option accounting

A Ltd issued share options to staff on 1 January 20X0, details of which are as follows:

Number of staff	1,000
Number of options to each staff member	500
Vesting period	3 years
Fair value at grant date (per option)	£3
Expected employee turnover (per annum)	5%

In the 31 December 20X1 financial statements, the company revised its estimate of employee turnover to 8% per annum for the three-year vesting period.

In the 31 December 20X2 financial statements, the actual employee turnover had averaged 6% per annum for the three-year vesting period.

Options vest as long as the staff remain with the company for the three-year period.

The charge for share-based payments under II RS 2 would be as follows:

Copyrighted material

Year-ended 31 December 20X0

In this period the charge would be based on the original terms of the share option issue. The total value of the option award at fair value at the grant date is:

	£000
1000 staff X 500 options X £3 X (0.95 X 0.95 X 0.95)	1,286

The charge to the income statement for the period is therefore:

£1,286-3	427

Year ended 31 December 20X1

In this year the expected employee turnover has risen to 8"o per annum. The estimate of the effect of the increase is taken into account-

Amended total expected share option award at grant date:

	£000	£000
1000 staff X 500 options X £3 X (0.92 X 0.92 X 0.92)		1,168

The charge to the income statement is therefore

£1,168 X*	779	
Less: recognised to date	(427)	
		352

Year ended 31 December 20X2

The actual number of options that vest is now known.

The actual value of the option award that vests at the grant date is:

	£000	£000
1000 staff X 500 options X £3 X (0.94 X 0.94 X 0.94)		1,246

The charge to the income statement is therefore:

Total value over the vesting period	1,246	
Less: recognised to date	**(779)**	
		467

Re-priced options

If an entity re-prices its options, for instance in the event of a falling share price, the incremental fair value should be spread over the remaining vesting period. The incremental fair value per option is the difference between the fair value of the option immediately before re-pricing and the fair value of the re-priced option.

13.20 Cash-settled share-based payments

Cash-settled share-based payments result in the recognition of a liability. The entity shall measure the goods or services acquired and the liability incurred at the fair value. Until the liability is settled, the entity shall remeasurc the fair value of the liability at each reporting date, with any changes in fair value recognised in profit or loss.

For example, an entity might grant share appreciation rights to employees as part of their pay package, whereby the employees will become entitled to a future cash payment (rather than an equity instrument), based on the increase in the entity's share price from a specified level over a specified period.

Copyrighted material

The entity shall recognise the services received, and a liability to pay for those services, as the employees render service. For example, some share appreciation rights vest **immediately,** and the employees are therefore not required to complete a specified period of service to become entitled to the cash payment. In the absence of evidence to the contrary, the entity shall presume that the services rendered by the employees in exchange for the share appreciation rights have been received. Thus, the entity shall recognise immediately the services received and a liability to pay for them. If the share appreciation rights do not vest until the employees have completed a specified period of service, the entity shall recognise the services received, and a liability to pay for them, as the employees render service during that period.

The liability shall be measured, initially and at each reporting date until settled, at the fair value of the share appreciation rights, by applying an option pricing model, taking into account the terms and conditions on which the share appreciation rights were granted, and the extent to which the employees ha\e rendered service to date. The entity shall remeasure the fair value of the liability at each reporting date until settled.

Disclosure is required of the difference between the amount that would be charged to the income statement if the share appreciation rights are paid out in cash as opposed to being paid out with shares.

13*21 Transactions which may be settled in cash or shares

Some share-based payment transactions can be settled in either cash or shares with the settlement option being either with the supplier of the goods or sen ices and/or with the entity. The accounting treatment is dependent upon which counterparty has the choice of settlement.

Supplier choice

If the supplier of the goods or services has the choice over settlement method, the entity has issued a compound instrument. The entity has an obligation to pay out cash (as the supplier can take this choice), but also has issued an equity option, as the supplier may decide to take equity to settle the transaction. The entity therefore recognises both a liability and an equity component.

The (air value of the equity option is the difference between the fair value of the offer of the cash alternative and the lair \aluc of the offer of the equity payment. In many cases these are the same value, in which case the equity option has no value.

Once the split has been determined each part is accounted for in the same way as other cash-settled or equity-settled transactions.

If cash is paid in settlement, any equity option recognised may be transferred to a different category in equity. If equity is issued, the liability is transferred to equity as the consideration for the equity instruments issued.

Entity choice

For a share-based payment transaction in which an entity may choose whether to settle in cash or by issuing equity instruments, the entity shall determine whether it has a present obligation to settle in cash and account for the share-based payment transaction accordingly. The entity has a present obligation to settle in cash if the choice of settlement in equity instruments is not substantive, or if the entity has a past practice or a stated jxilicy of settling in cash.

Copyrighted material

If such an obligation exists, the entity shall account for the transaction in accordance with the requirements applying to cash-settled share-based payment transactions.

If no such obligation exists, the entity shall account for the transaction in accordance with the requirements applying to equity-settled transactions.

13.22 Transitional provisions

For equity-settled share-based payment transactions, the entity shall apply the requirements of IFRS 2 to grants of shares, options or other equity instruments that were granted after 7 November 2002 that had not yet vested at the effective date of this IFRS (1 January 2005). For first-time adopters of the standard the same retrospective date applies, options granted after 7 November 2002.

For liabilities arising from share-based payment transactions existing at the effective date of this IFRS, the entity shall apph retrospectively the requirements of this IFRS, except that the entity is not required to measure vested share appreciation rights (and similar liabilities in which the counterparty holds vested rights to cash or other assets of the entity) at fair value. Such liabilities shall be measured at their settlement amount (i.e. the amount that would be paid on settlement of the liability had the counterparty demanded settlement at the date the liability is measured).

13.23 IAS 26 Accounting *and Reporting by Retirement Benefit Plans*

This standard provides complementary guidance in addition to IAS 19 regarding the way that the pension fund should account and report on the contributions it receives and the obligations it has to pay pensions. The standard mainly contains the presentation and disclosure requirements of the schemes as opposed to the accounting methods that they should adopt.

13.23.1 Defined contribution plans

The report prepared b\ a defined contribution plan should contain a statement of net assets available for benefits and a description of the funding policy.

With a defined contribution plan it is not normally necessary to involve an actuary, since the pension paid at the end is purely dependent on the amount of fund built up for the employee. The obligation of the employer is usually discharged by the employer pay ing the agreed contributions into the plan. The main purpose of the report of the plan is to provide information on the performance of the investments, and this is normally achieved by including the following statements:

(a) a description of the significant activities for the period and the effect of any changes relating to the plan, its membership and its terms and conditions;

(b) statements reporting on the transactions and investment performance for the period and the financial position of the plan at the end of the period; and

(c) a description of the investment policies.

13.23.2 Defined benefit plans

Under a defined benefit plan (as opposed to a defined contribution plan) there is a need to provide more information, as the plan must be sufficiently funded to provide the agreed

Copyrighted material

pension benefits at the retirement of the employees. The objective of reporting by the defined benefit plan is to periodically present information about the accumulation of resources and plan benefits over time that will highlight an excess or shortfall in assets.

The report that is required should contain" either:

(a) a statement that shows:

(i) the net assets available for benefits;

(ii) the actuarial present value of promised retirement benefits, distinguishing between vested benefits and non-vested benefits; and

(iii) the resulting excess or deficit; or

(b) a statement of net assets available for benefits including either:

(i) a note disclosing the actuarial present value of promised retirement benefits, distinguishing between \ested benefits and non-vested benefits; or

(ii) a reference to this information in an accompanying report.

The most recent actuarial valuation report should be used as a basis for the above disclosures and the date of the valuation should be disclosed. IAS 26 does not specify how often actuarial valuations should be done but suggests that most countries require a triennial valuation.

When the fund is preparing the report and using the actuarial present value of the future obligations, the present value could be based on either projected salary levels or current salary levels. Whichever has been used should be disclosed. The effect of any significant changes in actuarial assumptions should also be disclosed.

Report format

IAS 26 proposes three different report formats that will fulfil the content requirements detailed above. These formats are:

(a) A report that includes a statement that shows the net assets available for benefits, the actuarial present value of promised retirement benefits, and the resulting excess or deficit. The report of the plan also contains statements of changes in net assets available for benefits and changes in the actuarial present value of promised retirement benefits. The report ma) include a separate actuary's report supporting the actuarial present value of promised retirement benefits.

(b) A report that includes a statement of net assets available for benefits and a statement of changes in net assets available for benefits. The actuarial present value of the promised retirement benefits is disclosed in a note to the statements. The report may also include a report from an actuary supporting the actuarial value of the promised retirement benefits.

(c) A report that includes a statement of net assets available for benefits and a statement of changes in net assets available for benefits with the actuarial present value of promised retirement benefits contained in a separate actuarial report.

In each format a trustees' report in the nature of a management or directors' report and an investment report may also accompany the statements.

13.23.3 All plans - disclosure requirements[10]

For all plans, whether defined contribution or defined benefit, some common valuation and disclosure requirements exist.

Copyrighted material

Valuation

The investments held by retirement benefit plans should be carried at lair value. In most eases the investments will be marketable securities and the fair value is the market value. Il it is impossible to determine the lair value of an investment, disclosure should be made of the reason vvhv fair \alue is not used.

Market values are used for the investments because this is felt to be the most appropriate value at the report date and the best indication of the performance of the investments over the period.

Disclosure

In addition to the specific reports detailed above lor defined contribution and defined benefit plans, the report should also contain:

(a) a statement of net assets available for benefits disclosing:

- assets at the end of the period suitably classified
- the basis of valuation of assets
- details of am single in\estment exceeding either 5% of the net assets available for benefits or **5°o** of any class or type of security
- details of any investment in the employer
- liabilities other than the actuarial present value of promised retirement benefits;

(b) a statement of changes in net assets for benefits showing the following:

- employer contributions
- employee contributions
- investment income such as interest or dividends
- other income
- benefits paid or payable
- administratis- expenses
- other expenses
- taxes on income
- profits or losses on disposal of investment and changes in value of investments
- transfers from and to other plans;

(c) a summary of significant accounting policies;

(d) a description of the plan and the effect of any changes in the plan during the period.

1 Outline the differences between a defined benefit and a defined contribution pension scheme.

2 If a defined contribution pension scheme provided a pension that was *6%* of salary each year, the company had a payroll cost of €5 million, and the company paid €200.000 in the year, what would be the income statement charge and the balance sheet liability at the year-end?

3 The approach taken in IAS 19 before its 1998 revision was to match an even pension cost against the period the employees provided service. This follows the accruals principle and is therefore fundamentally correct* Discuss.

4 Under the revised IAS 19 (post 1998) what amount of actuarial gains and losses should be recognised in the income statement?

5 Past service costs are recognised under IAS 19 (revised) immediately if the benefit is 'vested'. In what circumstances would the benefits not be vested?

6 What is the required accounting treatment for a curtailment of a defined benefit pension scheme?

7 What distinguishes a termination benefit from the other benefits considered in IAS 19 (revised)?

8 The issue of shares by companies, even to employees, should not result in a charge against profits. The contribution m terms of service that employees give to earn their rewards are contributions as owners and not as employees and when owners buy shares for cash there is no charge to profit. Discuss.

9 The use of option pricing models to determine the charges to the income statement brings undesired estimation and subjectivity into the financial statements. Discuss.

10 Briefly summarise the required accounting if a company gives their staff a cash bonus directly linked to the share price

11 Explain what distinguishes the different types of share-based payment, equity-settled, cash-settled and equity with a cash alternative.

12 A pic issues 50.000 share options to its employees on I January 2006. which the employees can only exercise if they remain with the company until 31 December 2008. The options have a fair value of £5 each on I January 2006.

It is expected that the holders of options over 8.000 shares will leave A pic before 31 December 2008.

In March 2006 adverse press comments regarding A pic's environmental policies and a downturn in the stock market cause the share price to fall significantly to below the exercise price on the options. The share price is not expected to recover m the foreseeable future.

Required

What charge should A pic recognise for share options in the financial statements for the year-ended 31 December 2006?

13 The following *are* extracts from the financial statements of Heidelberger Druckmaschinen AG showing the accounting policy and detailed notes regarding the provision of pensions according to IAS 19. As can be seen the disclosures are quite complex but they attempt to give a sensible balance sheet and income statements position.

Accounting policy disclosure

Provisions for pensions and similar obligations comprise both the provision obligations of the Group under defined benefit plans and defined contribution plans. Pension obligations are determined according to the prodded unrt credit method (IAS 19) for defined benefit plans. Actuarial expert opinions are obtained annually in this connection. Calculations are based on an assumed trend of 3.5% (previous year 2.5%) for the growth in pensions, and a discount rate of 6.0% (previous year. 6.0%). The probability of death is determined according to Heubec's current mortality tables as well as comparable foreign mortality tables.

In the case of defined contribution plans (for example, direct insurance pokies). compulsory contributions are offset directly as an expense. No provisions for pension obligations *are* formed, as in these cases our Company does not have any liability over and above its liability to make premium payments.

Provisions for pensions and similar obligations (Note (5 in the financial statements)

We maintain benefit programs for the majority of employees for the period following their retirement - either a direct program or one financed by payments of premiums to private institutions. The level of benefits payments depends on the conditions m particular countries. The amounts are generally based on the term of employment and the salary of the employees. The liabilities include both those arising from current pensions as well as vested pension rights for pensions payable in the future. The pension payments expected following the beginning of benefit payment are accrued over the entire service time of the employee.

Copyrighted material

The provisions for pensions and simitar obligations are broken down as follows:

	31 Mar98	31 Mar99
Net present value of the pension claims	408.208	445.054
Adjustment amount based on (not offset) actuarial profits/losses	-12.843	-18,225
Provisions for pensions and similar obligations	395J65	426,829

The amount of €18,225 thousand (previous year €12.843 thousand), which is not yet adjusted arises largely from profits/losses m connection with deviations of the actual income trends from the assumptions that were the basis of the calculation. As soon as it exceeds 10% of total liabilities. this amount is earned as an expense over the average remaining period of service of the staff (IAS 19).

The expense for the pension plan is broken down as follows:

	Mar 98	31 Mar 99
Expense for pension claims added during the financial year"	16.902	17.084
Interest expense for claims already acquired	21.583	22.855
Net additions to pension provision	38.485	39.939
Expenses for other pension plans*	14.848	19.407
	53.333	59.346

"The expense for the pension plan included under personnel expenses totals 36,491 thousand (previous year 31.750 thousand).

We include interest expenses for already acquired pension claims under interest and similar expenses.

Required:

(a) Explain the projected unit credit method for determining pension obligations for defined benefit plans.
(b) Why does the company need to use a discount rate?
(c) Explain the reference to the 10% corridor.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (•).

Question I

Kathryn

Kathryn pic. a listed company, provides a defined benefit pension for its staff, the details of which are given below.

Pension scheme

As at the 30 April 2004. actuaries valued the company's pension scheme and estimated that the scheme had assets of £10.5 million and obligations of £102 million (using the valuation methods prescribed in IAS 19).

The actuaries made assumptions in their valuation that the assets would grow by I I % over the coming year to 30 April 2005. and that the obligations were discounted using an appropriate corporate bond

rate of 1096. The actuaries estimated the current service cost at £600.000. The actuaries informed the company that pensions to retired direaors would be £800.000 during the year, and the company should contribute £700.000 to the scheme.

At 30 April 2005 the actuaries again valued the pension fund and estimated the assets to be worth £10.7 million, and the obligations of the fund to be £10.9 million.

Assume that contributions *and benefits are paid on* the lost *day ofecch year.*

Required:

(a) Explain the reasons why IAS 19 was revised in 1998, moving from an actuarial income driven approach to a market-based balance sheet driven approach. Support your answer by referring to the *Framework Document* principles.

(b) Show the extracts from the income statement, statement of movement in equity and balance sheet of Kathryn pic in respect of the information above for the year ended 30 April 2005. You do not need to show notes to the accounts.

[The accounting policy adopted by Kathryn pic is to recognise actuarial gains and losses immediately in equity as allowed by IAS in its 2004 amendment.]

* Question 2

Donna Inc

Donna Inc operates a defined benefit pension scheme for staff. The pension scheme has been operating for a numbe[r] of years but not following IAS 19. The finance director is unsure of which accounting policy to adopt under IAS 19 because he has heard very conflicting stories. He went to one presentation in 20X3 that referred to a ' 10% corridor approach to actuarial gains and losses, but went to another presentation in 20X4 that said actuarial gains and losses could be recognised m equity.

The pension scheme had market value of assets of £3.2 million and a present value of obligations of £3.5 million on I January 2002. There were no actuarial gams and losses brought forward into 2002.

The details relevant to the pension are as follows (in 000s) are:

			20X4
Discount rate at start of year	*6%*	596	
Expected rate of return on plan assets at start of year	10%	*9%*	8%
Current service cos:	150	160	170
Benefits paid	140	150	130
Contributions pa.d	120	120	130
Present value of obligations at 31 December	1600	3.500	3.200
Market value of plan assets at 31 December	3.400	3.600	3.600

In all years the average remaining service lives of the employees was ten years. Uncer the 1096 corridor approach any gains or losses above the corridor would be recognised over the average remaining service lives of the employees.

Required:

Advise the finance director of the differences in the approach to actuarial gains and losses following the '10% corridor' and the recognition in equity. Illustrate your answer by showing the impact on the pension for 20X2 to 20X4 under both bases.

Copyrighted material

Question 3

The following information (in £m) relates to the defined benefrt scheme of Basil pic for the year ended 31 December 20X7:

Fair value of plan assets at I January 20X7 £3.150 and at 31 December 20X7 £2.384; contributions £26; current service cost £80; benefits paid £85; past service cost £150; present value of the obligation at I January 20X7 £3.750 and at 31 December 20X7 £4.192.

The discount rate was *7%* at 31 December 20X6 and *8%* at 31 December 20X7. The expected rate of return on plan assets was *9%* at 31 December 20X6 and 10% at 31 December 20X7.

Required:
Show the amounts that will be recognised in the Income Statement, Balance Sheet and the Statement of Recognised Income and Expense for Basil pic for the year ended 31 December 20X7 under IAS 19 *Employee Benefits* and the movement in the net liability in the balance sheet.

Question 4

C pic wants to reward its directors for their service to the company and has designed a bonus package with two different elements as follows. The directors are informed of the scheme and granted any options on I January 20X7.

1 Share options over 300,000 shares that can be exercsed on 31 December 20Y0. These options are granted at an exercise price of €4 each, the share price of C pic on I January 20X7. Conditions of the options are that the directors remain with the company, and the company must achieve an average increase in profit of at least 10% per year, for the year's ending 31 December 20X7 to 31 December 20X9. C pic obtained a valuation on I January 20X7 of the options which gave them a fair value of € 3.

   No directors were expected to leave the company but surprisingly, on 30 November 20X9 a director with 30.000 options did leave the company and therefore forfeited his options. At the 31 December 20X7 and 20X8 year-ends C pic estimated that they would achieve the profit targets (they said 80% sure) and by 31 December 20X9 the profit target had been achieved.

   By 3 I December 20Y0 the share price had risen to €1 2 giving the directors who exercised their options *an* €8 profit per share on exercise.

2 The directors were offered a cash bonus payable on 31 December 20X8 based on the share price of the company. Each of the frve directors was granted a €5.000 bonus for each €1 rise in the share price or proportion thereof by 31 December 20X8.

   On I January 20X7 the estimated fair value of the bonus was €75.000; this had increased to €85.000 by 31 December 20X7, and the share price on 31 December 20X8 was €8 per share.

Required
Show the accounting entries required in the years ending 31 December 20X7. 20X8 and 20X9 for the directors' options and bonus above.

Question 5

The following information is available for the year ended 31 March 20X6 (values in $m):

Present value of scheme liabilities at I April 20X5 $1,007; Fair value of plan assets at I April 20X5 $844; Benefits paid $44; Expected return on plan assets $67: Contributions paid by employers $16; Current service costs $28; Past service costs $I; Actuarial gains on assets $31; Actuarial losses on liabilities $10; Interest costs $58.

Copyrighted material

Required:

(a) Calculate the net liability to be recognised in the balance sheet

(b) Show the amounts recognised in the income statement.

References

1 IAS 19 *Employee Benefits** IASB, amended 2(to2.

2 IAS 26 *Accounting and Reporting by Retirement Benefit Plans** IASC, reformatted 1W4.

3 II-RS 2 *Share-Basal Payment,* I ASH, 2004.

4 IAS 19, Appendix I.

5 *Ihnl.,* para. 7.

6 /J&.para. 120.

7 *Ibul.,* para. 126.

S //>;./.. para. 132.

9 IAS 26. para. 28.

10 /W<f, para. 32.

Copyrighted material

shareholder is an individual, then income tax may become due on (heir diwdend income receded.

This is in contrast to the position in a partnership, where each partner is individuall) liable lor the tax on that share of the pre-tax profit that has been allocated. A partner is taxed on the profit and not simply on drawings. Note that it is different from the treatment of an employee who is charged tax on the amount of salary that is paid.

In this chapter we consider the different types of company taxation and their accounting treatment. The International Accounting Standard that applies specifically to taxation is IAS 12 *Income Taxes,* The standard was last modified radically in 19%, further modified in part by IAS 10 in 1W9 and revised by the I ASH in 2(HK). Those UK unquoted companies that choose not to follow international standards will follow FRS 16 *Current Tax* and FRS

19 *DeferredTax.*

14.2 Corporation tax

Corporation tax is calculated under rules set by Parliament each year in the Finance Act. The Finance Act may alter the existing rules; it also sets the rate of tax payable. Because of this annual review of the rules, circumstances may change year by year, which makes com parabilit) difficult and forecasting uncertain.

The reason for the need to adjust accounting profits for tax purposes is that although the tax payable is based on the accounting profits as disclosed in the profit and loss account, the tax rules may differ from the accounting rules which apply prudence to income recognition. For example, the tax rules may not accept that all the expenses which are recognised by the accountant under the IASB's *Framework for the Preparation an J Presentation of Financial Statements* and the IAS 1 *Presentation of Financial Statements* accrual concept are deductible when arriving at the taxable profit. An example of this might be a bonus, payable to an employee (based on profits), which is payable in arrear but which is deducted from accounting profit as an accrual under IAS I. This expense is only allowed in calculating taxable profit on a cash basis when it is paid in order to ensure that one taxpayer does not reduce his potential tax liability before another becomes liable to tax on the income received.

The accounting profit ma\ therefore he lower or higher than the taxable profit, l*'or example, the Companies Acts require that the formation expenses of a company, which are the costs of establishing it on incorporation, must be written off in its first accounting period; the rules of corporation tax, however, state that these arc a capital expense and cannot be deducted from the profit for tax purposes. This means that more tax will be assessed as payable than one would assume from an inspection of the published profit and loss account.

Similar!), although most businesses would consider thai entertaining customers and other business associates was a normal commercial trading expense, it is not allowed as a deduction for tax purposes.

A more complicated situation arises in the case of depreciation. Because the directors have the choice of method of depreciation to use, the legislators have decided to require all companies to use the same method when calculating taxable profits. If one thinks about this, then it would seem to be the equitable practice. Each company is allowed to deduct a uniform percentage from its profits in respect of the depreciation that has arisen from the wear ami tear and diminution in value of fixed assets.

The substituted depreciation that the tax rules allow is known as a capital allowance. The capital allowance is calculated in the same way as depreciation; the only difference is that the rates are those set out in the Finance Acts. At the time of writing, most commercial fixed assets (excluding land and buildings) qualify for a capital allowance of 25°" calculated on the reducing balance method. There are restricted allowances, called industrial buildings allowances, for certain categories of buildings used in manufacturing. Just as the depreciation that is charged b\ the company under accrual accounting is substituted by a capital allowance, profits or losses arising on the sale of fixed assets are not used for tax purposes.

14.3 Corporation tax systems - the theoretical background

It might be useful to explain that there are three possible s\stems of compan) taxation (classical, imputation and partial imputation).[1] These systems differ solely in their tax treatment of the relationship between the limited compan) and those shareholders who ha\e invested in it.

14.3.1 The classical system

In the classical system, a company pays tax on its profits, and then the shareholders suffer a second and separate tax liability when their share of the profits is distributed to them. In effect, the dividend income of the shareholder is regarded as a second and separate source of income from that of the profits of the compan). 'Ihe pavment of a dividend creates an additional tax liabilit) which falls directly on the shareholders. It could be argued that this double taxation is inequitable when compared to the taxation system on unincorporated bodies where the rate of taxation suffered overall remains the same whether or not profits are withdrawn from the business. It is suggested that this classical system discourages the distribution of profits to shareholders since the second tranche of taxation (the tax on dividend income of the shareholders) only becomes payable on payment of the dividend, although some argue that the effect of the burden of double taxation on the economy is less serious than it might seem.[2] Austria, Hclgium, I)enmark, the Netherlands and Sweden have classical systems.

Copyrighted materia

14.3.2 The imputation system

In an imputation system, the dividend is regarded merely as a How of the profits on each sale to the individual shareholders, as there is considered to be merely one source of income which could either be retained in the company or distributed to the shareholders. It is certainly correct that the payment of a dividend results from the flow of monies into the company from trading profits, and that the choice between retaining profits to fund future growth and the payment of a dividend to investing shareholders is merely a strategic choice unrelated to a view as to the nature of taxable profits. In an imputation system the total of the tax paid by the company and by the shareholder is unaffected by the payment of dividends and the tax paid by the company is treated as if it were also a payment of the individual shareholders' liabilities on dividends received. It is this principle of the flow of net profits from particular sales to individual shareholders that has justified the repayment of tax to shareholders with low incomes or to non-taxable shareholders of tax paid by the limited company, even though that tax credit has represented a reduction in the overall tax revenue of the state because the tax credit repaid also represented a payment of the company's own corporation tax liability. If the dividend had not been distributed to such a low-income or non-taxable shareholder who was entitled to repayment, the tax revenue collected would have been higher overall. France and Germany have such an imputation system. The UK modified its imputation system in 1999, so that a low-income or non-taxable shareholder (such as a charity) could no longer recover any tax credit.

14.3.3 The partial imputation system

In a partial imputation system only part of the underlying corporation tax paid is treated as a tax credit.

14.3.4 Common basis

All three systems are based on the taxation of profits earned as shown under the same basic principles used in the preparation of financial statements.

14.4 Corporation tax systems - avoidance and evasion

Governments have to follow the same basic principles of management as individuals. To spend money, there has to be a source of funds. The sources of funds are borrowing and income. With governments, the source of income is taxation. As with indi\iduals, there is a practical limit as to how much they can borrow; to spend for the benefit of the populace, taxation has to be collected. In a democracy, the tax system is set up to ensure that the more prosperous tend to pay a greater proportion of their income in order to fund the needs of the poorer; this is called a progressive system. As Franklin Roosevelt, the American politician, stated, 'taxes, after all, are the dues that we pay for the privileges of membership in an organised society*.[3] Corporation tax on company profits represents L>°o of the taxation collected bv the Inland Revenue in the UK.

It appears to be a general rule that taxpayers do not enjoy paying taxation (despite the tact that they may well understand the theory underpinning the collection of taxation). This fact of human nature applies just as much to company directors handling company resources as it does to individuals. Ever) extra pound paid in taxation by a company reduces the resources available for retention for funding future growth.

Copyrighted material

14.4.1 Tax evasion

Politicians often complain about tax evasion. Evasion is the illegal (and immoral) manipulation of business affairs to escape taxation. An example could be the directors of a family-owned company taking cash sales for their own expenditure. Another example might be the payment of a low salary (below the threshold of income tax) to a family member not working in the company, thus reducing profits in an attempt to reduce corporation tax. It is easy to understand the illegality and immorality of such practices. When politicians complain of tax evasion, they tend not to distinguish between evasion and avoidance.

14.4.2 Tax avoidance

Tax avoidance could initially IK* defined as a manipulation of one's affairs, within the law, so as to reduce liability; indeed, as it is legal, it can be argued that it is not immoral. There is a well established tradition within the UK that 'every man is entitled if he can to order his affairs so that the tax attaching under the appropriate Acts is less than it otherwise would be'.[4]

Indeed the government deliberately sets up special provisions to reduce taxes in order to encourage certain behaviours. The more th;it employers and employees save for employee retirement, the less social security benefits will be paid out in the future. Thus both companies and individuals obtain full relief against taxation for pension contributions. Another example might IK* increased tax depreciation (capital allowances) on capital investment, in order to increase industrial investment and improve productivity within the UK economy.

The use of such provisions, as intended by the legislators, is not criticised by anyone, and might better he termed 'tax planning*. The problem area lies between the proper use of such tax planning, and illegal activities. This 'grey area* could best be called 'tax avoidance'.

The Institute for Fiscal Studies has stated:

> We think it is impossible to define the expression "tax avoidance' in any truly satisfactory manner. People **routine!)** alter their behaviour to reduce or defer their taxation liabilities. In doing so, commentators regard some actions as legitimate tax planning and others as tax avoidance. We have regarded tax avoidance (in contra-indication to legitimate ... tax planning) as action taken to reduce or defer tax liabilities in a way Parliament plainly did not intend ... *?*

The law tends to define tax avoidance as an artificial element in the manipulation of one's affairs, within the law, so as to reduce liability."

14.4.3 The problem of distinguishing between avoidance and evasion

The problem lies in distinguishing clearh between legal avoidance and illegal evasion. It can be difficult for accountants to walk the careful line between helping clients (in tax avoidance) and colluding with them against the Inland Revenue."

When clients seek advice, accountants have to be careful to ensure that they have integrity in all professional and business relationships. Integrity implies not merely honesty but fair dealing and truthfulness. 'In all dealings relating to the tax authorities, a member must act honestly and do nothing that might mislead the authorities.'[8]

As an example to illustrate the problems that could arise, a client company has carried out a transaction to avoid taxation, but failed to minute the details as discussed at a directors' meeting. If the accountant were to correct this act of omission in arrear, this would IK a

Copyrighted material

move from tax avoidance towards tax evasion. Another example of such a move from tax avoidance to tax evasion might he where an accountant in informing the Inland Revenue of a lax-avoiding transaction fails to detail aspects of (he transaction which might show it in a disadvantageous light.

Companies can move profit centres from high-taxation countries to low-taxation countries by setting up subsidiaries therein. These areas, known in extreme cases as tax havens, are disliked by governments.

Tax havens are countries with very low, or nil, tax rates on some or all forms of income. They could be classified into two groups:

1. the zero rate and low tax havens,
2. the tax haven that imposes tax at normal rates but grants preferential treatment to certain activities.

Group 1 countries tend to be small economies that make up for the absence of taxation on profits and earnings by the use of taxes on sales. This group of tax havens is disliked by governments of larger economies. Gibraltar is to take the European Commission to court* over its ruling that it should not run a tax regime more favourable than that in the United Kingdom.

Ireland is an example of the second group, with its manufacturing incentives under which a special low rate of tax applies to manufacturing operations located there.

The use of zero rate and low-tax havens could be considered a form of tax avoidance, although sometimes they are used by tax evaders for their lack of regulation.

Companies can make use of government approved investment schemes to reduce (or "shelter") their tax liability, although there have recently been examples of improper (or abusive) schemes where short-term transactions were taken solely for taxation purposes. On 26 August 2005 the US Justice Department obtained an admission by and penalties of$456 million from the USA KPMG accounting firm over such a scheme.[10] The agreement reached with the Justice Department requires permanent restrictions on KPMG tax practice in the USA.[11] A few partners in the firm had set up a scheme for clients and misled the US Internal Revenue Service. Whilst the schemes may or may not have been legal, the misleading information certainly resulted in tax evasion. The dangers of starting to act improperly were illustrated in an in an e-mail obtained by the Senate Committee in which a senior KPMG tax adviser told his colleagues that even if regulators took action against their sales strategies for a tax shelter known as OPIS the potential profits from these deals would still greail) exceed the possible court penalties.[12]

14.5 Corporation tax - the system from 6 April 1999

A company pays corporation tax on its income. U hen that company pays a dividend to its shareholders it is distributing some of its taxed income among the proprietors. In an imputation system the tax paid by the company is 'imputed[1] to the shareholders who therefore receive a dividend which has already been taxed.

This means that, from the paying company's point of view, the concept of gross dividends does not exist. From the paying company's point of view, the amount of dividend paid shown in the profit and loss account will equal the cash that the company will have paid.

However, from the shareholder's point of view, the cash received from the company is treated as a net payment after deduction of tax. The shareholders will have received, with the cash dividend, a note of a tax credit, which is regarded as equal to basic rate income tax on the total of the dividend plus the tax credit. For example:

Copyrighted material

Dividend being the cash paid by the company and disclosed in the company's profit and loss account	400.01)
Imputed tax credit of 1/9 of dividend paid (being the rate from 6 April 1999)	44.44
Gross dividend	444.44

The imputed tax credit calculation (as shown above) has been based on a basic tax rate of 10% for dividends paid, being the basic rate of income tax on dividend income from 6 April 1999. This means that an individual shareholder who onlv pays basic rate income tax has no further liability in that the assumption is that the basic rate tax has been paid by the company. A non-taxpayer cannot obtain a repayment of tax.

Although a company pays corporation tax on its income, when that company pays a dividend to its shareholders it is still considered to lie distributing some of its taxed income among the proprietors. In this system the tax payable by the company is 'imputed' to the shareholders who therefore receive a dividend which has already been taxed. This means that, from the paying company's point of view, the concept of'gross* dividends does not exist. From the paying company's point of view, the amount of dividends paid shown in the profit and loss account will equal the cash that the compain will have paid to the shareholders.

The essential point is that the dividend paying company makes absolutely no deduction from the dividend nor is any payment made by the company to the Inland Revenue. The addition of l\9 of the dividend paid as an imputed tax credit is purely nominal. A tax credit of 1\9 of the dividend will be deemed to be attached to that dividend (in effect an income tax rate of 10%). That credit is notional in that no payment of the 10% will be made to the Inland Revenue.[11] The payment of taxation is not associated with dividends.

Large companies (those with taxable profits of over £1,500,000) pay their corporation tax liabilitv in quarterly instalments starting within the > ear of account, rather than paving their Corporation tax liability nine months thereafter. The payment of taxation is not associated with the payment of dividends. Smaller companies pay their corporation tax nine months after the vear-end.

It has been argued that the imputation system has encouraged the payment of dividends, and consequent 1\ discourages firms from reinvesting earnings. Since 19X5, both investment and the ratio of dividend payments to Gl)1* have soared in Britain relative to the USA, but it is not obvious that such trends are largclv attributable to tax policy.[1]* It has been suggested that the corporation tax svstem (from 5 April 1999) would tend to discourage companies from paying 'excessive' dividends because the major pressure for dividends has come in the past from pension fund investors who previously could reclaim the tax paid, and that the decrease in cash How to the com pain caused by pavment of quarterly corporation tax payments might tend to assist company directors in resisting dividend increases to compensate for this loss.

14.5.1 Advance corporation tax - the system until 5 April 1999

A company pays corporation tax on its income. Statute previously required that when a company paid a dividend it was required to make a payment to the Inland Revenue equal to the total tax credit associated with that dividend. This payment was called 'advance corporation tax' (ACT) because it was a payment on account of the corporation's tax liability that would lx- paid on the profits of the accounting period. When the company eventually made its pavment of the corporation tax liability, it was allowed to reduce the amount paid by the amount already paid as ACT. The net amount of corporation tax that was paid alter

Copyrighted material

offsetting the ACT was known as mainstream corporation tax. The total amount of corporation tax was no greater than that assessed on the taxable profits of the company; there was merely a change in the timing of the amount of tax paid by paying it in two parts - the ACT element and the mainstream corporation tax element.

What would have been the position if the company had declared a dividend but had not paid it out to the shareholders by the date of the balance sheet? In such a case the ACT could onl\ have been offset against the corporation tax in the accounting period during which the tax was actually paid. The offset of ACT against corporation tax was effectively restricted to the ACrr rate multiplied by the company's profits chargeable to corporation tax. A further refinement was that for offset purposes the ACT rate was multiplied by the UK profit - this does not include profits generated overseas. Should a distribution have exceeded the chargeable profits for that period, then the ACT could not be recovered immediately. Under tax law, such unrelieved ACT could be carried back against corporation tax payments in the preceding six years or forward against future liabilities indefinitely.

Unrecovered ACT would have appeared in the balance sheet as an asset. At this point the accountant must have considered the prudence concept. In order for it to have remained as such on the balance sheet it must ha\e been (a) reasonably certain and (b) foreseeable that it would be recoverable at a future date. If the ACT could be reasonably seen as recoverable then it should have been shown on the balance sheet as a deferred asset. If, for any reason, it seemed improbable that there would be sufficient future tax liabilities to 'cover' the ACT, then it had to be written off as irrecoverable. This payment of ACT stopped on 5 April 1W) with a change in the imputation system. Companies which had paid tax for which they had not yet had relief against mainstream corporation tax at 5 April 1999 are permitted to carry it forward against future corporation tax liabilities - this carry-forward is called shadow ACT.

14.6 IFRS and taxation

Kuropcan Union law requires listed companies to draw up their consolidated accounts according to IFRS for accounting periods beginning after 1 January 2M5 (with adjusted comparative figures for the previous year). United Kingdom law has been amended to allow the Inland Revenue to accept accounts drawn up in accordance with GAAP ('generally accepted accounting practice'), which is defined as IFRS or UK GAAP (UK Generally Accepted Accounting Practice).[1']

Although the Accounting Standards Board (ASH) intends to bring its standards into accordance with IFRS (but not necessarily identical with them), it will take several years to do this. Consequently two different standards will be acceptable for some years. The move towards IFRS is leading to a detailed study of accounting theory and principles, so that the accounting treatment may eventually become the benchmark standard for taxation purposes, although this will take several years to reach fruition (if it proves to be attainable).

The Inland Revenue and the professional bodies have anticipated the potential impact of the move to IFRS. For some years at least, the legislation will have to provide for different treatment of specific items under UK GAAP and IFRS.

The Finance Act 2004 included legislation which ensured that companies that adopted IFRS to draw up their accounts would receive broadly equivalent tax treatment to companies that continue to use UK GAAP."' The intention of these provisions is to defer the major tax effects of most transitional adjustments until the tax impact becomes clearer.

The Prc-Budgct Report of 2 December 2004 proposed further tax changes to ensure this policy of deferring tax effects of these accounting changes, for which the Chancellor of the Exchequer further confirmed his support in his Budget of 16 March 20X)5.

Copyrighted material

The clearest intimation of the intention to defer major tax effects is shown by the proposals for special purpose securitisation companies. These are certain companies where borrowing is located in a separate company in order to protect from insolvency- Under the proposed provisions, these companies would continue to use the previous accounting practice for taxation purposes for a further year, thus avoiding a significant tax charge on items that would not have been treated as income under UK. GAAP. Another example is that there will be difficulties under IAS 39 where hedging profits are taken into account before they are realised, and tax law will ignore these volatile items.

A deliberate decision had already been made during the discussion of the Finance Act 21H)> not to follow the changes in the treatment of share-based payments to employees that would not only follow from IFRS 2 but also from FRS 20 (under UK GAAP).[17]

IAS S includes adjustments for fundamental errors in the statement of changes in equity, but the legislation specifically excludes the tax effects of these.

It remains to be seen whether the taxation effects of any significant changes in profit resulting from the change from UK GAAP to IFRS will be deferred until UK GAAP becomes truly aligned with IFRS.

IFRS will not remain static. The IASH Project on the 'Financial Reporting of all Profit-Oriented Entities[1] (for under consideration is the development of a standard 'performance statement') will lead to further significant changes from UK GAAP. Such a move from the present Profit and I^oss Account would lead to the need for a decision whether it could be used for tax purposes and what further adjustments would be needed for tax assessment purposes.

At least for the time being, any significant effects of the change to IFRS will be deferred for tax purposes.

14.7 IAS 12 - accounting for current taxation

The essence of IAS 12 is that it requires an enterprise to account for the tax consequences of transactions and other events in the same way that it accounts for the transactions and other events themselves. Thus, for transactions and other events recognised in the income statement, any related tax effects are also recognised in the income statement.

The details of how IAS 12 requires an enterprise to account for the tax consequences of transactions and other events follow below.

Income statement disclosure

The standard (para. 77) states that the tax expense related to profit or loss from ordinary activities should IK presented on the face of the income statement. It also provides that the major components of the tax expense should be disclosed separately. These separate components of the tax expense may include (para. 80):

(a) current tax expense for the period of account,

(b) any adjustments recognised in the current period of account for prior periods (such as where the charge in a past year was underprovided),

(c) the amount of any benefit arising from a previously unrecognised tax loss, tax credit or temporary difference of a prior period that is used to reduce the current tax expense, and

(d) the amount of tax expense (income) relating to those changes in accounting policies and fundamental errors which are included in the determination of net profit or loss for the period in accordance with the allowed alternative treatment in IAS 8 *Net Profit or Loss for the Period, Fundamental Errors and Changes in Accounting Polities.*

Copyrighted material

Balance sheet disclosure

The standard states that current tax for current and prior periods should, 10 the extent unpaid, be recognised as a liability. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess should be recognised as an asset.

The treatment of tax losses

As regards losses for tax purposes, the standard states that the benetit relating to a tax loss that can be carried back to recover current tax of a previous period should be recognised as an asset. Tax assets and tax liabilities should be presented separate!) from other assets and liabilities in the balance sheet. An enterprise should offset (para. 71) current tax assets and current tax liabilities if, and only if, the enterprise:

(a) has a legally enforceable right to set off the recognised amounts; and

(b) intends either to settle on a net basis, or to realise the asset and settle the liabilit) simultaneous! v.

The standard provides (para. 81) that the following should also be disclosed separately:

(a) tax expense (income) relating to extraordinan items recognised during the period,

(b) an explanation of the relationship between tax expense (income) and accounting profit in either or both of the following forms:
   (i) a numerical reconciliation between tax expense (income) and the product of accounting profit multiplied by the applicable tax rate(s), disclosing also the basis on which the applicable tax rate(s) is (are) computed; or
   (ii) a numerical reconciliation between the average effective tax rate and the applicable tax rate, disclosing also the basis on which the applicable tax rate is computed,

(c) an explanation of changes in the applicable tax ratc(s) compared to the previous accounting period.

The relationship between tax expense and accounting profit

The standard sets out the following example in Appendix B of an explanation of the relationship between tax expense (income) and accounting profit:

Current Tax Expense

	\ 5	X6
Accounting profit	8,775	8,740
Add		
Depreciation for accounting purposes	4,800	8,250
Charitable donations	500	350
Fine for environmental pollution	700	–
Product development costs	250	250
Health care benefits	2,000	1,000
	17,025	18,590
Deduct		
Depreciation for tax purposes	(8,100)	(11,850)
Taxable profit	8,925	6.740
Current tax expense at 40°o	5,570	
Current tax expense at 35"o		2,559-

Copyrighted material

IAS 12 **and FRS** 16

IAS 12 is similar to FRS 16 *Current* '/in, which L K non-quoted companies thai choose noi to follow international standards can choose to adopt.

There are very few rules for calculating current ta\ in UK GAAP, although in practice the calculation will be largel) similar to that under I \S 12. FRS 16 does not go into the detail of calculating current tax, but it does, however, **clflrif)** the treatment of withholding taxes and the effect thev have on the income statement.

14.8 Deferred tax

14.8.1 IAS 12 - background to deferred taxation

The profit on which tax is paid ma\ differ from that shown in the published profit and loss account. This is caused b\ two separate factors.

Permanent differences

One **factor** that we looked at abo\c JN that certain items of expenditure may not be legitimate deductions from profit for tax purposes under the tax legislation. These differences are referred to as permanent differences because they will not be allowed at a different time and will be permanent!) disallowed, even in future accounting periods.

Timing differences

Another factor is that there are some other expenses that are legitimate deductions in arriving at the taxable profit which are allowed as a deduction for tax purposes at a later date. These might be simplv inning dillerences in that tax relict and charges to the profit and loss account occur in different accounting periods. The accounting profit is prepared on an accruals basis but (he taxable profit might require certain of the items to be dealt with on a cash hasis. Examples of this might include bonuses payable to senior management, **proper!}** included in the financial statements under the accruals concept but not eligible for tax relief until actual!) paid some considerable time later, thus giving tax relief in a later period.

Temporary differences

The original IAS 12 allowed an enterprise to account lor deferred tax using the income statement liabilit) method which focused on timing differences. IAS 12 (revised) requires the balance sheet liability method, which focuses on temporary differences, to be used. Timing differences are differences between taxable profit and accounting profit that originate in one period *MM*\ reverse in one or more subsequent periods. Temporal") differences are differences between the tax base ot an asset or liability and its carrying amount in the balance sheet. The tax base of an asset or liability is the amount attributed to that asset or liabilit) for tax purposes. All timing differences are temporan differences.

The most significant temporary difference is depreciation. The depreciation charge made in the financial statements must be added back in the tax calculations and replaced by the official tax allowance for such an expense. The substituted expense calculated in accordance with the tax rules is rarely the same amount as the depreciation charge computed in accordance with IAS 16 *Property. Plant and Equipment.*

Copyrighted material

Capital investment incentive effect

It is common for legislation to provide for higher rates of tax depreciation than are used for accounting purposes, for it is believed thai ihc consequent deferral of taxation liabilities serves as an incentive to capital investment (this incentive is not forbidden by European Union law or the OECD rules). The classic effect of this is for tax to be payable on a lower figure than the accounting profit in the earlier years of an asset's life because the tax allowances usualh exceed depreciation **in** the earlier years of an asset's life. In later accounting periods, the tax allowances will be lower than the depreciation charges and the taxable profit will then be higher than the accounting profit that appears in the published profit and loss account.

Deferred tax provisions

The process whereby the cumpam pays tax on a profit that is lower than the reported profit in the early years and on a profit that is higher than reported profit in later years is known as reversal. Given the knowledge that, ultimately, these timing differences will reverse, the accruals concept requires that consideration *be* given to making provision for the future liability in those early years in which the tax payable is calculated on a lower figure. The provision that is made is known as a deferred tax provision.

Alternative methods for calculating deferred tax provisions

As you might expect, there has been a history of disagreement within the accounting profession over the method to use to calculate the provision. There ha\e been, historically, two methods of calculating the provision for this future liability - the deferral method and the liability method.

The deferral method

The deferral method, which used to be favoured in the USA, involves the calculation each year of the tax effects of the timing differences that have arisen in that year. The tax effect is then debited or credited to the profit and loss account as part of the tax charge; the double entry is effected by making an entr\ to the deferred tax account. This deferral method of calculating the tax effect ignores the effect of changing tax rates on the timing differences that arose in earlier periods. This means that the total provision may consist of differences calculated at the rate of tax in force in the year when the entry was made to the provision.

The liability method

The liability method requires the calculation of the total amount of potential liability each year at current rates of tax, increasing or reducing the provision accordingly. This means that the company keeps a record of the timing differences and then recalculates at the end of each new accounting period using the rate of corporation tax in force as at the date of the current balance sheet.

To illustrate the two methods we will take the example of a single asset, costing £10,000, depreciated at 10% using the straight-line method, but subject to a tax allowance of 25% on the reducing balance method. The workings are shown in Figure **14.1.** This shows, that, **if** there were no other adjustments, for the first four years the profits subject to tax would be lower than those shown in the accounts, but afterwards the situation would reverse.

Charge to income statement under the deferral method

The deferral method would charge to the profit and loss account each year the variation multiplied by the current tax rate, e.g. 19% at *25"t>* on £1,500 gi\ing £375.00, and 1999 at

Copyrighted material

Figure 14.1 Deferred tax provision using deferral method

24% on £55 giving £13.20. This is in accordance with the accruals concept which matches the tax expense against the income that gave rise to it. Under this method the deferred tax provision will be credited with £375 in 1997 and this amount will not be altered in 199° when the tax rate changes to 24%. In the example, the calculation for the live years would be as in Figure 14.2.

Charge to income statement under the liability method

The liability method would make a charge so that the total balance on deferred tax equalled the cumulative variation multiplied by the current tax rate. The intention is that the balance-sheet liability should be stated at a figure which represents the tax effect as at the end of each new accounting period. This means that there would be an adjustment made in 1999 to recalculate the tax effect of the timing difference that was provided for in earlier years. For example, the provision for 1997 would be recalculated at 24%, giving a figure of £3n0 instead of the £375 that was calculated and charged in 1997. The decrease in the expected liability will be reflected in the amount charged against the profit and loss account in 1997. The £15 will in effect be credited to the 1997 profit statement.

Figure 14.2 Summary of deferred tax provision using the deferral method

The effect on the charge to the 2000 profit statement (Figures 14.2 and 14.3) is that there will be a charge of £13.20 using the deferral method and a credit of £14.61 using the liability method. The £14.61 is the reduction in the amount provided from £695.25 at the end of 1999 to the £680.64 that is required at the end of 2000.

World trend towards the liability method

here has been a move in national standards awav from the deferral method towards the liability method, which is a change of emphasis from the income statement to the balance sheet because the deferred tax liability is shown ai current rates of tax in the liability method. This is in accordance with the IASB*S conceptual framework which requires that all items in the balance sheet, other than shareholders* equity, must be either assets or liabilities as defined in the framework. Deferred tax as it is calculated under the traditional deferral method is not in fact a calculation of a liability, but is better characterised as deferred income or expenditure. This is illustrated by the fact that the sum calculated under the deferral method is not recalculated to lake account of changes in the rate of tax charged, whereas it is recalculated under the liability method.

The world trend towards using the liability method also results in a change from accounting only for timing differences to accounting for temporary differences.

Temporary versus timing: conceptual difference

These temporary differences are defined in the IASH standard as 'differences between the carrying amount of an asset or liability in the balance sheet and its tax basc\ls The conceptual difference between these two views is that under the liability method provision is made for only the future reversal of these liming differences whereas the temporary difference approach provides for the tax that would be payable if the company were to be liquidated at balance sheet values (i.e. if the company were to sell all assets at balance sheet values).

The US standard SFAS 109 argues the theoretical basis for these temporary differences to be accounted for on the following grounds:

> A government levies taxes on net taxable income. Temporary differences will become taxable amounts in future years, thereby increasing taxable income and taxes payable, upon recovery or settlement of the recognised and reported amounts of an enterprise's assets or liabilities ... A contention that those temporary differences will nexcr result in taxable amounts ... would contradict the accounting assumption inherent in the statement of financial position that the reported amounts of assets and liabilities will be recovered and settled, respectively; thereby making that statement internally inconsistent.[1"]

Figure 14.3 Deferral tax provision using the liability method

A consequence of Accepting this conceptual argument in IAS 12 is that provision must also be made for the potential taxation effects of asset revaluations.

14.8.2 IAS 12 - deferred taxation

The standard requires that the financial statements are prepared using the liability method described above (which is sometimes known as the balance sheet liability method).

An example of how deferred taxation operates follows.

EXAMPLE • An asset which cost £150 has a carrying amount of £100. Cumulative depreciation for tax purposes is £90 and the lax rate is 25% as shown in Figure 14.4.

The tax base of the asset is £60 (cost of £150 less cumulathe tax depreciation of £90). To recover the carrying amount of £100, the enterprise must earn taxable income of £100, but will only be able to deduct tax depreciation of £60. Consequently, the enterprise will pay taxes of £10 (£40 at 25°o) when it rcco\crs the carrying amount of the asset. The difference between the carrying amount of £100 and the tax base of £60 is a taxable temporary difference of £40. Therefore, the enterprise recognises a deferred tax liability of £10 (£40 at 25°«) representing the income taxes that it will pay when it recovers the carrying amount of the asset as shown in Figure 14.5.

The accounting treatment over the life of an asset

The following example, taken from IAS I2,:" illustrates the accounting treatment over the life of an asset.

EXAMPLE • An enterprise buys equipment for £10,000 and depreciates it on a straight-line basis over its expected useful life of five years. For tax purposes, the equipment is depreciated at 25"u per annum on a straight-line basis. Tax losses may be carried back against taxable profit of the previous five years. In year 0, the enterprise's taxable profit was £5,000. The tax rate is 40%. The enterprise will recover the carrying amount of the equipment by using it to manufacture goods for resale. Therefore, the enterprise's current tax computation is as follows:

Figure 14.4 Cumulative depreciation

Figure 14.5 Deferred tax liability

Year	1	2	3	4	5
Taxable income (£)	2,000	2,000	2,000	2,000	2,000
Depreciation for tax purposes	2,500	2,500	2,500	2,500	0
Tax profit (loss)	(5(H))	(500)	(500)	(500)	2,000
Current tax expense (income) at 40%	(2(H))	(200)	(200)	(200)	800

The enterprise recognises a current tax asset at the end of \ears 1 to 4 because it recovers the benefit of the tax loss against the taxable profit of year 0.

The temporary differences associated with the equipment and the resulting deferred tax asset and liability and deferred tax expense and income are as follows:

Year	1	2	3	4	5
Carrying amount *(£)*	8.00(1	6,000	4,000	2000	0
Tax base	7,500	5,000	2,500	0	0
Taxable temporary difference	500	1,000	1,500	2,000	0
Opening deferred tax liability	0	2(H)	400	600	800
Deferred tax expense (income)	200	2(H)	200	200	(8(H))
Closing deferred tax liability	200	400	600	800	0

The enterprise recognises the deferred tax liability in years 1 to 4 because the reversal of the taxable temporary difference will create taxable income in subsequent years. The enterprise's income statement is as follows:

Year	1	2	3	4	5
Income *(£)*	2,001)	2,000	2,000	2,000	2.0(H)
Depreciation	2,000	2,000	2,000	2,000	2.0(H)
Profit before tax	0	0	o	0	0
Current tax expense (income)	(200)	(2(H))	(200)	(200)	8(H)
Deferred tax expense (income)	200	200	200	200	(8(H))
Total tax expense (income)	0	0	0	0	0
Net profit for the period	0	0	0	0	0

Further examples of items that could give rise to temporary differences are:

- Retirement benefit costs ma_\ be deducted in determining accounting profit as service is provided by ihe employee, but deducted in determining taxable profit either when contributions are paid to a fund by the enterprise or \\ hen retirement benefits are paid h> the enterprise. A temporary difference exists between the carrying amount of the liability (in the financial statements) and its tax base (the earning amount of the liability for tax purposes); the tax base of the liability is usually nil.
- Research costs are recognised as an expense in determining accounting profit in the period in which they are incurred but may not be permitted as a deduction in determining taxable profit (tax loss) until a later period. The difference between the tax base (the carrying amount of the liability for tax purposes) of the research costs, being the amount the taxation authorities will permit as a deduction in future periods, and the earning amount of nil is a deductible tempo ran difference that results in a deferred tax asset.

Treatment of asset revaluations

The original IAS 12 permitted, but did not require, an enterprise to recognise a deferred tax liabilitv in respect of asset revaluations. If such assets were sold at the revalued sum then a

Copyrighted material

profit would arise that could he subject to tax. IAS 12 as currently written requires an enterprise to recognise a deferred tax liability in respect of asset revaluations.

Such a deferred tax liability on a revalued asset might not arise for many years, for there might be no intention to sell the asset. Many would argue that IAS 12 should allow for such timing differences by discounting the deferred liability (for a sum due man\ years in advance is certainly recognised in the business community as a lesser liability than the sum due immediately, for the sum could be invested and produce income until the liability would become due; this is termed the time value of money). The standard does not allow such discounting. [n] Indeed, it could IK- argued that in reality most businesses tend to have a policy of continuous asset replacement, with the effect that any deferred liability will be further deferred by these future acquisitions, so that the deferred tax liability would only become payable on a future cessation of trade. Not only does the standard preclude discounting, it also does not permit any account being made for future acquisitions by making a partial provision for the deferred tax.

Accounting treatment of deferred tax following a business combination

In a business combination that is an acquisition, the cost of the acquisition is allocated to the identifiable assets and liabilities acquired by reference to their fair values at the date of the exchange iransaction. Temporary differences arise when the tax bases of the identifiable assets and liabilities acquired are not affected by the business combination or are affected different!). For example, when the carrying amount of an asset is increased to fair \ alue but the tax base of the asset remains at cost to the previous owner, a taxable temporary difference arises which results in a deferred lax liability. Paragraph H16(i) of IFRS -> *Business Combinations* prohibits discounting of deferred tax assets acquired and deferred tax liabilities assumed in a business combination as does IAS 12 (revised). IAS 12 states that deferred tax should not he provided on goodwill if amortisation of it is not allowable for tax purposes (as is the case in many states). Deferred tax arising on a business combination that is an acquisition is an exception to the rule that changes in deferred tax should IK* recognised in the income statement (rather than as an adjustment by way of a note to the financial statements).

Another exception to this rule relates to items charged (or credited) directly to equity. Examples of such items are:

- a change in the carrying amount arising from the revaluation of property, plant and equipment (IAS 16 *Property, Plant and Equipment);*
- an adjustment to the opening balance of retained earnings resulting from either a change in accounting policy that is applied retrospectively or the correction of an error (IAS 8 *Accounting Policies, Changes in Accounting F.stimates and Errors)',*
- exchange differences arising on the translation of the financial statements of a foreign entity (IAS 21 *The Effects of Changes in Foreign Exchange Rates);*
- amounts arising on initial recognition of the equity component of a compound financial instrument.

Deferred tax asset

A deferred tax asset should be recognised for the carry-forward of unused tax losses and unused tax credits to the extent that it is probable that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised.

At each balance sheet date, an enterprise should reassess unrecognised deferred tax assets. The enterprise recognises a previously unrecognised deferred tax asset to the extent that it has

Copyrighted material

become probable thai future taxable profit will allow the deferred tax asset to be recovered. For example, an improvement in trading conditions may make it more probable that the enterprise will IK* able to generate sufficient taxable profit in the future for the deterred tax asset.

14.9 FRS 19 (the UK standard on deferred taxation)

Those L'K unquoted companies that choose not to follow international standards will follow IRS *V) Deferred Tax.*

Accounting for deferred tax in the L K pre-dates the issue of accounting standards.

Prior to the issue of standards, companies applied an accounting practice known as 'tax equalisation accounting*, whereby thev recognised that aecounting periods should each he allocated an amount of income tax expense that bears a 'normal relationship to the ineome shown in the income statement', and to let reported income taxes follow reported income has been the objective of accounting for income taxes ever since." There is also an economic consequence that (lows from the practice of tax equalisation in that the trend of reported after-tax income is smoothed, and there is less likelihood of pressure for a cash dividend distribution based on the crediting of the tax benefit of capital investment expenditure to the earlv vears of the fixed assets.

There followed a period of ver\ high rates of capital allowances and, with a nai\e belief that this situation would continue and allow permanent deferral, companies complained that to provide full provision was unrealistic and so in 1977 the concept of partial provision was introduced in which deferred lax was onlv provided in respect of timing differences that were likely to be reversed. The argument was that if the company continued with the replacement of fixed assets, and if the capital allowances were reasonably certain to exceed the depreciation in the foreseeable future, it was unrealistic to make charges against the prolit and create provisions that would not cnstallise. This would merely lead to the appearance of an ever-increasing provision on the balance sheet.

The *Foreword to Accounting Standards* published in June 1993 by the Accounting Standards Hoard (ASH) states that 'FRSs are formulated with due regard to international developments ... the Hoard supports (he IASC in its aim to harmonise' and that 'where the requirements of an accounting standard and an IAS differ, the accounting standard should be followed'.

Prolessor Andrew Leonard, then Assistant Technical Director of the ASB, confirmed during a lecture on I" March 1999 that this was a matter where there was a divergence of view between the ASH and international regulators, where the ASH was unhappy to account in full for deferred tax where there was no discounting for long delays until the anticipated payment; indeed he expressed his exasperation with the topic in stating that 'he wished deferred tax accounting would go away\:* Applying the full provision method is more consistent with both international practice and the ASB's draft *Statement of Principles* (as modified in March 1999). However, a criticism of the full provision method in the past was that it could, if the company had a continuous capital expenditure programme, lead to a build-up of large liabilities that may fall due only far into the future, if at all.

The significant differences between FRS 19 and IAS 12 are:

1 Under FRS 19 there is a general requirement that a deferred tax charge should not be recognised on revaluation gains on non-monetary assets which are revalued to fair values on the acquisition of a business. IAS 12 requires tax on revaluations.

2 Under FRS 19 discounting of deferred taxation liabilities is made optional. The ASH had stated its belief that, in principle, deferred tax should be discounted, but has

Copyrighted material

taken (he view that discounting should be optional so as to give a choice to the preparer of the accounts. However, although discounting appears to be an attractive method for allowing for the delay in payment of the liability. it has been pointed out that in some cases where capital expenditure is uneven, then an unexpected effect of discounting both the initial and final cash flow effects could be to turn an eventual liability into an initial asset.[24] IAS 12 does not allow such discounting.[25]

The ASH is aware that the break with international standards is undesirable. Indeed it has been suggested that the ASH developed and implemented FRS 1*' with a view that it would 'encourage the International Accounting Standards Committee to think again' about IAS 12.[26]

14.10 A critique of deferred taxation

It could be argued that deferred tax is not a legal liability until it accrues. The consequence of this argument would be that deferred tax should not appear in the financial statements, and financial statements should:

- present the tax expense for the \car equal to the amount of income taxes that has been levied based on the income tax return for the year;
- accrue as a receivable am income refunds that are due from taxing authorities or as a payable any unpaid current or past income taxes;
- disclose in the notes to the financial statements differences between the income tax bases of assets and liabilities and the amounts at which they appear in the balance sheet.

The argument is that the process of accounting for deferred tax is confusing what did happen to a company, i.e. the agreed tax payable for the year, and what did not happen to the company, which is the tax that would have been payable if the adjustments required by the tax law for timing differences had not occurred. It is felt that the investor should be provided with details of the tax charge levied on the profits for the year and an explanation of factors that might lead to a different rate of tax charge appearing in future financial statements. The argument against adjusting the tax charge for deferred tax and the creation of a deferred tax provision holds that shareholders are accustomed to giving consideration to many other imponderables concerning the amount, timing and uncertainty of future cash receipts and payments, and the treatment of tax should be considered in the same way. This \icw has receixed support from others,[2,] who have held that tax attaches to taxable income and not to the reported accounting income and that there is no legal requirement for the tax to bear any relationship to the reported accounting income. Indeed it has been argued that 'deferred tax means income smoothing*.[28]

Before discussing the arguments it is appropriate to consider the economic reality of deferred taxation.

Those industries which are capital-intensive tend to ha\c benefited from tax deferral by way of accelerated tax depreciation on plant investment, and it could be suggested that their accounts do not truly reflect the economic reality without provision for deferred taxation. Studies in the UK certainly support this view.

In the UK it has not been the practice to make full provision for deferred taxation. 'Full provision' refers to the fact (hat the potential liability to deferred taxation has not been reduced to allow for the view of management that the entire liability will not be paid in the future as a result of liming differences because the taxation benefits of future capital investments will result in a further deferral of taxation liability. In the UK, the

Copyrighted material

deferred taxation liability has been reduced to allow lor the effects of these anticipated future investments.

Terry Smith points out in Table 17.2 of'his *Accountingfir Growth*[1]" that according to the companies' own figures their estimated EPS would fall as follows if full provision for deterred tax were made:

British Airways	36.4%	
Severn Trent	25.3%	
British Gas	**20.5%**	(based on CCA earnings of 15.1p per share adjusted to exclude restructuring costs)
TI Group	**13.8%**	

In his Table 17.3 he lists companies which expected an LPS fall of over 10% and with more than 10% of shareholders' funds in unprovided deferred tax:

Estimated impact on historic gearing of full provision

	From	*To*
	%	%
British Airways	148	214
BP	67	78
British Gas	56	68

He points out in his Table 17.4 that five of the companies he lists without any exposure to an increase in deferred tax charge are some of the UK's most successful and conservatively financed large companies.

	Tai rate (°o)
General Electric	32
Marks & Spencer	32
Reuters	32
GL'S	33
\\o!ese\	33

In the light of such economic facts, it is possible to understand why business managers might oppose deferred tax accounting, for it would lower their company stock valuation, whereas investment advisers might support deferred tax accounting as enabling them to form a better view of future prospects. Academic Research has shown the extent of corporate lobbying against the full provision of deferred taxation liabilities.[1]" IAS 12 is believed to be deeply unpopular with company directors. Whilst IASB believes the standard makes tax more transparent, the ICAEW suggests that the deterred tax charge will act as a disincentive to the adoption of IFRS (particularly because the adoption of IFRS will force companies to create a deferred tax liability on the revaluation of assets or subsidiaries).[11] In the change from the use of UK. GAAP to IFRS, UK companies have started[32] to provide for deferred taxation on \aluation gains. The following companies showed a deferred tax charge on these gains and a decrease in Shareholder's Equity as follows:

	£ million
Slough Estates pic	30.5
Brixton pic	68.1
Great Portland Estates pic	**34.8**

Copyrighted material

It has been argued-'* that IAS 12 uses definitions of assets and liabilities that are different to those otherwise used in IFRS and consequently require an entry to record taxes on future income. This argument, whilst initially attractive, ignores the fact that additional asset value has been created on the balance sheet.

It is suggested that the arguments for and against deferred taxation accounting must IK based solely on the theory underpinning accounting, and unaffected by commercial considerations.

It is also suggested that the above arguments against the use of deferred tax accounting are unconvincing if one considers the lASrTs underlying assumption about accrual accounting, as stated in the *Framework;*

> In order to meet their objectives, financial statements are prepared on the accrual basis of accounting ... Financial statements prepared on the accrual basis inform users not only of past transactions involving the payment and receipt of cash but also of obligations to pay cash in the future and of resources that represent cash to be received in the future.[14]

This underlying assumption confirms that deferred tax accounting makes the fullest possible use of accrual accounting.

Pursuing this argument further the *Framework* states:

> The future economic benefit embodied in an asset is the potential to contribute, directly or indirectly, to the (low of cash and cash equivalents to the enterprise. The potential may be a productive one that is part of the operating activities of the enterprise.*[I>]

If a balance sheet includes current market valuations based on this view of an asset, it is difficult to argue logically thai the implicit taxation arising on this future economic benefit should not be provided for at the same time. The previous argument for excluding the deferred tax liability cannot therefore be considered persuasive on this basis.

On the other hand, it is stated in the *Framework* that *An essential characteristic of a liability is that the enterprise has a present obligation.'[;h] One could argue soleh from these words that deferred tax is not a liability, but this conflicts with the argument based on the definition of an asset; consequently when considered in context this does not provide a sustainable argument against a deferred tax provision. The fact is that accounting practice has moved definitixely towards making such a provision for deferred taxation.

The legal argument that deferred tax is not a legal liability until it accrues runs counter to the criterion of substance over form which gives weight to the economic aspects of the event rather than the strict legal aspects. The *Framework* states:

> Substance Over Form
>
> If information is to represent faithfully the transactions and other events that it purports to represent, it is necessary that they are accounted for and presented in accordance with their substance and economic reality and not merely their legal form. The substance of transactions or other events is not always consistent with that which is apparent from their legal or contrived form/[1,]

It is an interesting fact that substance over form has achieved a growing importance since the 1980s and the legal arguments are receiving less recognition. Investments are made on economic criteria, investors make their choices on the basis of anticipated cash Hows, and such Hows would be subject to the effects of deferred taxation.

Copyrighted material

14.11 Examples of companies following IAS 12

Figure 14.6 is from the Roche Group 2006 Annual Report; Figure 14.7 is from the Bayer Group 2006 Annual Report. It should be noted that these published examples do not always comply in full with all aspects of IAS 12 (revised).

14.12 Value added tax (VAT)

VAT is one other tax that affects most companies and for which there is an accounting standard (SSAP 5 *Accounting for Value Added Tax),* which was established on its introduction. This standard was issued in 1974 when the introduction of value added tax was imminent and there was considerable worry within the business community on its accounting treatment. We can now look back, having lived with VAT for well over two decades, and wonder,

Figure 14.6 Extract from Roche Group 2006 Annual Accounts

Figure 14.6 (com.)

Copyrighted image

perhaps, why an SSAP was needed. VAT is essentially a tax on consumers collected In traders and is accounted for in a similar way to PAYE income tax, which is a tax on employees collected by employers.

IAS IS (para. S) makes clear that the same principles are followed:

Copyrighted material

Figure **14.7 Extract from Bayer Group 2006 Annual Accounts**

Revenue includes only the gross inflows of economic benefits received and receivable by the enterprise on its own account. Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the enterprise and do not result in increases in equity. Therefore, the) are excluded from revenue.[38]

14.12,1 The effects of the standard

The effects ofthe standard vary depending on the status ofthe accounting entity under the VAT legislation. The term 'trader* appears in the legislation and is the terminology- for a business entity. The 'traders* or companies, as we would normally refer to them, are classified under the following headings:

(a) Registered trader

For a registered trader, accounts should only include figures net of VAT. This means that the VAT on the sales will be deducted from the invoice amount. The VAT will be payable to the government and the net amount of the sales invoice will appear in the profit and loss account in arriving at the sales turnover figure. The VAT on purchases will be deducted from the purchase invoice. The VAT will then be reclaimed from the government and the net amount ofthe purchases invoice will appear in the profit and loss account in arriving at the purchases figure.

The only exception to the use of amounts net of VAT is when the input tax is not recoverable, e.g. on entertaining and on 'private* motor cars.

(b) Non-registered or exempt trader

For a company that is classified as non-registcrcd or exempt, the VAT that it has to pay on its purchases and expenses is not rcclaimable from the government. Because the company cannot recover the VAT, it means that the expense that appears in the profit and loss account must be inclusive of VAT. It is treated as part of each item of expenditure and the costs treated accordingly. It will be included, where relevant, with each item of expense (including capital expenditure) rather than being shown as a separate item.

(c) Partially exempt trader

An entity which is partially exempt can only recover a proportion of input VAT, and the proportion of non-recoverable VAT should be treated as part of the costs on the same lines as with an exempt trader. The VAT rules are complex but, for the purpose of understanding the figures that appear in published accounts of public companies, treatment as a registered trader would normally apply.

1 Why does the charge to taxation in a company's accounts not equal the profit multiplied by the current rate of corporation tax?

2 Explain clearly how advance corporation tax arose and its effect on the profit and loss account and the year-end balance sheet figures. (Use a simple example to illustrate.)

3 Explain how the corporation tax system changed as from April 1999.

4 Deferred tax accounting may be seen as an income-smoothing device which distorts the true and fair view. Explain the impact of deferred tax on reported income and justify its continued use.

5 Explain how dividends received and paid are shown in the accounts.

6 Distinguish between (a) the deferral and (b) the liability methods of company deferred tax

7 Explain the criteria that a deferred tax provision needs to satisfy under IAS 12 in order to be accepted as a liability in the balance sheet

8 Explain the effect of SSAP 5 Accounting *for Value Added Tax.*

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (•).

Question I

In your capacity as chief assistant to the financial controller, your managing director has asked you to explain to him the differences between tax planning, tax avoidance and tax evasion.

He has also asked you to explain to him your feelings as a professional accountant about these topics.

Write some notes to assist you in answering these questions.

Question *2*

A fixed asset (a machine) was purchased by Adjourn pic on I July 20X2 at a cost of £25,000.

The company prepares its annual accounts to 31 March tn each year. The policy of the company is to depreciate such assets at the rate of 1596 straight line (with depreciation being charged pro rata on a time apportionment basis in the year of purchase). The company was granted capital allowances at 25% per annum on the reducing balance method (such capital allowances are apportioned *pro rata* on a time apportionment basis m the year of purchase).

The rate of corporation tax has been as follows:

Year ended	31 Mar 20X3	20%
	31 Mar 20X*»	30%
	31 Mar 20X5	20%
	31 Mar 20X6	19%
	31 Mar 20X7	19%

Required:

(a) Calculate the deferred tax provision using both the deferred method and the liability method.

(b) Explain why the liability method is considered by commentators to place the emphasis on the balance sheet, whereas the deferred method is considered to place the emphasis on the profit and loss account-

Question 3

The move from the preparation of accounts under UK GAAP to the users of IFRS by United Kingdom quoted companies for years beginning I January 2005 will have an *effect* on the level of profits reported. How will those profits arising from the change in accounting standards be treated for tax-ation purposes?

Question 4

Discuss the arguments for and agamst discounting the deferred tax charge.

Question 5

Austin Mitchell MP proposed an Early Day Motion in the House of Commons on 17 May 2005 as follows:

That this House urges the Government to clamp down on artificial tax avoidance schemes and end the ... tax avoidance loop-holes that enable millionaires and numerous companies trading in the UK to avoid UK taxes; and further urges the Government to... so that transactions lacking normal commercial substance and solely entered into for the purpose of tax avoidance are ignored for tax purposes, thereby providing certainty, fairness and clarity, which the UK's taxation system requires to prevent abusive tax avoidance, to protect the interests of ordinary citizens who are committed to makjng their contribution to society, to avoid an unnecessary burden of tax of individual tax-payers and to ensure that companies pay fair taxes on profits generated in this country.

Required:

(a) The Motion refers co tax avoidance. In your opinion, does the Early Day Motion tend to confuse the boundaries between tax avoidance and tax evasion?

(b) The Motion refers to nullifying the effects of tax avoidance to protect the interests of ordinary citizens who are making their contribution to society, to avoid an unnecessary burden of tax on individual taxpayers. If ordinary citizens require such protection, would it be possible to argue that even if tax avoidance were legal, it might well be immoral?

References

1 OKC1), *Theoretical and Empirical Aspects of Corporate Taxation,* Paris, 1**74; van den Temple, *Corporation Tax and individual Income Tax m the EEC,* LLC Commission, Brussels, 1974.

2 G.I I. Partington and R.I I. Chenhall, *Dividends* distortion and double taxation.* Abacus, June 1983.

3 Franklin I). Roosevelt, 1936 Speech at Worcester, Mass., 1936. Roosevelt Museum.

4 Tomlin, LJ. in. ***Duke** of Westminster* r *CIR,* III. 1935.19 TC 490.

5 *Tax Avoidance: A Report by the Tax Laiv Review Committee,* The Institute For Fiscal Studies 1997, para. 7.

6 II7 *Ramsay Ltd v* 07/c.IlL 1981, 54 TC 101; [1981]STC 174; [1981| 2 \YI.R 449; [1981] I All KR 865.

7 Robert Maas. *Harare tax avoidance drifting into evasion,* Taxlinc, Tax Planning 2003—2004, Institute of Chartered Accountants in Kngland & Wales.

8 *Professional Conduct in Relation to Taxation,* Kthical Statement 1.308, Institute of Chartered Accountants in Kngland & Wales, para. 2.13 (this is similar to the statements issued by the other accounting bodies).

9 *The Telegraph** 4 July 2005.

10 *Business Week** 1 September 2005.

11 The International Tax Planning Association Library, September 2005.

12 'Power Without Responsibility: Tax Avoidance and Corporate Integrity", John Christensen, e-mail of January 2005.

13 R. **Allshul,** 'Act now'. *Accountancy Age,* 5 February 1998, p. 19.

14 William Gale, 'What can America Learn from the British Tax System?', *Fiscal Studies** vol. 18, no. 4, November 1W7.

15 S. 836A *Income and Corporation Taxes Act I9HH* (as modified by Finance Act 2004).

16 Sections 50 to 54, under the heading of Accounting Practice, and Schedule 10 (Amendment of enactments that operate by reference to accounting practice). Finance Act 2004.

17 Schedule 23 to Finance Act 2003.

18 **IAS** 12 *Income Taxes** IASB revised 2000, para 5.

19 SFAS 109, *Accounting for Income Taxes,* FASB, 1992, extracts therefrom.

20 IAS 12 *Income Taxes,* IASB revised 2000, Example I to Appendix B.

21 IAS 12 *Income Taxes,* IASB revised 2000, para. 54.

22 P. Rosenlield and W.C Dent, 'Deferred income taxes' in R. Bloom and P.T. Elgers (cds.), *Accounting Theory and Practice** Harcourt Brace Jovanovich, 1987, p. 545.

2i Andrew C. Lennard during a guest lecture at Sunderland Business School.

Copyrighted material

24 Mike Mctcalf, 'Alchemical Accounting*, *Accountancy,* November 1999, p. 100.
25 IAS 12 *Income Taxes,* IASB, revised 2000, para. 54.
26 Joan Brown, 'A step closer to harmony*. *Accountancy,* January 2001, p. 90.
27 R.J. Chambers, *Tax Allocation and Financial Reporting,* Abacus, I96S.
28 Prof. D.R. Middleton, letters to the Editor, *The Financial Times,* 29 September 1994.
29 Terry Smith, *Accounting for Growth: stripping the camouflage from Company Accounts* (2nd edition), Random Mouse, 1996.
30 'Corporate Lobbying in the UK: analysis of attitudes towards the ASB*s 1995 deferred taxation proposals*. G. Gcordgiou and C. Roberts, *British Accounting Review,* Dec. 2004, vol. 36, issue 4.
31 iFRS Update October 2005 - Tax*, *Accountancy Age,* 5 October 2005.
32 international Financial Reporting Standards. Communicating the changes', BDO Stoy I layward, December 2006.
33 David Cairns, *Accountancy,* October 2006, vol. 138, p. 14.
34 *Framework for the Preparation and Presentation of Financial Statements** IASB 2001, para. 22.
35 *Ibid.*, para. 53.
36 *Ibid.,* para. 60.
37 *Ibul.*, para. 35.
38 IAS 18 *Revenue,* IASB 2001, para. 8.

Copyrighted material

15.1 Introduction

In this chapter we consider properly, plane and equipment (PPK). It is helpful to consider the importance of PPE relative to intangible assets, inventory and receivables. This will, of course, vary with the nature of the industry as shown if we consider the pharmaceutical and brewing industries.

The relative importance of the different categories of asset within the two industries based on average industry profile has been compiled from IPA UK Industrial Performance Analysis 1996/97 (ICC Business Publications Ltd 1996 - ISSN 0262 3684) based on S3 pharmaceutical manufacturers and developers and 55 brewers and appears in Figure 15.1.

For PPK the accounting treatment is based on the accruals or matching concepts, under which expenditure is capitalised until it is charged as depreciation against revenue in the periods in which benefit is gained from its use. Thus, if an item is purchased that has an economic life of two years, so that it will be used over two accounting periods to help earn profit for the entity, then the cost of that asset should be apportioned in some way between the two accounting periods.

Figure 15.1 Ratio of assets to total assets for 1994/95 for 83 pharmaceutical manufacturers and developers and 55 brewers

However, this docs not take into account the problems surrounding PPK accounting and depreciation, which ha\e so far given rise to six. relevant international accounting standards. We will consider these problems in this chapter covering:

IAS 16 and IAS 23:

- What is PPE (IAS 16)?
- 1 low is the cost of PPE determined (IAS 16 and IAS *2$)r*
- I low is depreciation of PPF. computed (IAS 16):
- \\ hat are the regulations regarding carrying PPK at revalued amounts (IAS 16):

Other relevant international accounting standards and pronouncements:

- I low should grants receivable towards the purchase of PPK IK dealt with (IAS 20):
- Are there ever circumstances in which PPK should not IK depreciated (IAS 40):
- What is impairment and how does this affect the carrying value of PPK (IAS 36):
- What are the key changes proposed b\ the I ASH concerning the disposal of non-current assets (IFRS 5):

15.2 What is PPE?

IAS 16 *Property, Plant and Equipment** defines PPK as tangible assets that are:

(a) held by an entity for use in the production or supply of goods and services, for rental to others, or for administrative purposes, and

(b) expected to IK used during more than one period.

It is clear from the definition that PPK will be included in the non-current assets section of the balance sheet.

15.2.1 Problems that may arise

Problems may arise in relation to the interpretation of the definition and in relation to the application of the materiality concept.

The definitions give rise to some areas of practical difficulty. For example, an asset that has previously been held for use in the production or supply of goods or services but is now going to IK sold should, under the provisions of Il'RS 5, IK classified separately on the balance sheet as an asset 'held for sale'.

Differing accounting treatments arise if there are different assessments of materiality. This may result in the same expenditure being reported as an asset in the balance sheet of one company and as an expense in the income statement of another company. In the accounts of a self-employed carpenter, a kit of hand tools that, with careful maintenance, will last many years will, quite rightly, be shown as PPK. Similar assets used b\ the main tenance department in a large factory will, in all probability, be treated as Moose tools' and written off as acquired.

Many entities have *dc minimis* policies, whereby only items exceeding a certain value are treated as PPI[7].; items below the cut-off amount will be expensed through the income statement.

For example, the MAN 2003 Annual Report stated in its accounting policies:

Copyrighted material

Tangible assets are depreciated according to the straight-line method over their estimated useful lives. Low-value items (defined as assets at cost of €410 or less) are fully written off in the year of purchase.

15.3 How is the cost of PPE determined?

15.3.1 Components of cost[2]

According to IAS 16, the cost of an item of PPK comprises its purchase price, including import duties and non-refundable purchase taxes, plus any directly attributable costs *of* bringing the asset to working condition for its intended use. Kxamplcs of such direct I) attributable costs include:

(a) the costs of site preparation;

(b) initial delivery and handling costs;

(c) installation costs;

(d) professional fees such as for architects and engineers;

(c) the estimated cost of dismantling and removing the asset and restoring the site, to the extent that it is recognised as a provision under IAS 37 *Provisions. Contingent Liabilities and Contingent Assets.*

Administration and other general overhead costs are not a component of the cost of PPE unless they can be directly attributed to the acquisition of the asset or bringing it to its working condition. Similarly, start up and similar pre-production costs do not form part of the cost of an asset unless they are necessary to bring the asset to its working condition.

15.3.2 Self-constructed assets[3]

The cost of a self-constructed asset is determined using the same principles as for an acquired asset. If the asset is made available for sale by the entity in the normal course of business then the cost of the asset is usually the same as the cost of producing the asset for sale. This cost would usually be determined under the principles set out in IAS 2 */memories.*

The normal profit that an enterprise would make if selling the self-constructed asset would not be recognised in 'cost* if the asset were retained within the entity. Following similar principles, where one group company constructs an asset that is used as PPK by another group company, any profit on sale is eliminated in determining the initial carrying value of the asset in the consolidated accounts (this will also clearly affect the calculation of depreciation).

[fan item of PPK is exchanged in whole or in part for a dissimilar item of PPK then the cost of such an item is the fair value of the asset received. This is equivalent to the lair value of the asset gi\cn up, adjusted for any cash or cash cquixalcnts transferred or received.

15.3.3 Capitalisation of borrowing costs

U here an asset takes a substantial period of time to get ready for its intended use or sale then the entity may incur significant borrowing costs in the preparation period. Under the accruals basis of accounting there is an argument that such costs should be included as a directly attributable cost of construction. IAS 2> *Borrowing Costs* was issued to deal with this issue.

Copyrighted material

The benchmark treatment[4] laid out in IAS 23 is that borrowing costs should be recognised as an expense in the period in which they are incurred, as in this extract from the SudZucker AG 2003 Annual Report: 'Production cost of internally constructed equipment includes the cost of production materials, production wages and an appropriate share of overheads; third party borrowing costs relating to the production are not included/ This is probably because there are a number of potential problems associated w ith the capitalisation of borrowing costs:

- It can be diflicult to identify specific borrowings with specific projects, especially where funds ure raised centrally.
- It could be said to be inappropriate that the cost of an asset whose construction is financed b\ borrowings is different from the cost of another (possibly very similar) asset whose construction is financed b\ equity.
- There is the possibility that capitalisation of borrowing costs could be used to manipulate the trend of reported profits.

The allowed alternative treatment' laid down in IAS 23 is that borrowing costs that arc directly attributable to the acquisition, construction or production of a 'qualifying asset' are included in the cost of that asset. A 'qualifying asset* is one that necessarily takes a substantial period of time to get read) for its intended use or sale.

Borrowing costs that would ha\e been avoided if the expenditure on the qualifying asset had not been undertaken are eligible for capitalisation under IAS 23. Where the funds arc borrowed specifically for the purpose of obtaining a qualifying asset then the borrowing costs thai are eligible for capitalisation are those incurred on the borrowing during the period less any investment income on the temporary investment of those borrow ings. Where the funds are borrowed generally and used for the purpose of obtaining a qualifying asset then the entity should use a capitalisation rate to determine the borrow ing costs that may be capitalised. This rate should be the weighted average of the borrowing costs applicable to the entity, other than borrowings made specifically for the purpose of obtaining a qualifying asset. Capitalisation should commence when:

- expenditures for the asset are being incurred;
- Ixirrowing costs are being incurred;
- activities that are nccessan to prepare the asset for its intended use or sale are in progress.

When substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete then capitalisation should cease.

Many commentators would argue that standardisation in this area is not yet complete given the choice of treatments afforded by IAS 23 and the slightly subjective manner of computing a capitalisation rate in many circumstances. I low ever, many entities that prepare financial statements in accordance with international accounting standards take advantage of the alternative treatment that is allowed hy IAS 23. The following is an extract from the 2002 financial statements of (-oil SA, a company incorporated in Belgium that prepares financial statements in euros in accordance with international accounting standards:

> Borrowing costs are recognised as an expense in the period in which they are incurred. Borrowing costs that relate to the construction or installation of fixed assets arc capitalised into the cost of the related fixed asset until the asset is substantially complete.

One of the key future priorities of the IASB is to comcrgc II'RI'S with GAAP in the USA. The equivalent US statement, SFAS 34, requires, rather than permits, capitalisation

Copyrighted material

in relevant cases. The IASB issued a revised IAS 23 *Borrowing Costs* in May 2006 which proposed Co require an entity to capitalise borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. The option of immediate!) recognising those borrowing costs as an expense has been removed. The IASB believes that the elimination of one of the two options in accounting for borrowing costs would improve financial reporting and result in more comparable information between entities. However the review of the standard would need to be more far-reaching than this since there are other differences with US GAAP, such as what interest costs are to be included, and the start and end points of the capitalisation period.

Borrowing costs treatment in the UK

The tASB's amendment to IAS 23 *Borrowing Costs* thai removes the option for expensing all borrowing costs and requires the capitalisation of those costs that related to the period of production of an asset is not followed in the UK. The ASB does not intend to amend the UK standard, I'RS 15 *Tangible Fixed Assets*^ as this is not a converged standard; FRS 15 will therefore continue to permit entities to choose between capitalisation and expense of borrowing costs.

15.3.4 Subsequent expenditure

Subsequent expenditure relating to an item of PPK that has already been recognised should normally he recognised as an expense in the period in which it is incurred. The exception to this general rule is where il is probable that future economic benefits in excess of the originally assessed standard of performance of the existing asset will, as a result of the expenditure, (low to the entity. In these circumstances, the expenditure should be added to the carrying value of the existing asset. Examples of expenditure that might fall to be treated in this way include:

- modification of an item of plant to extend its useful life, including an increase in its capacity;
- upgrading machine parts to achieve a substantial improvement in the quality of output;
- adoption of new production processes enabling a substantial reduction in previously assessed operating costs.

Conversely, expenditure that restores, rather than increases, the originally assessed standard of performance of an asset is written off as an expense in the period incurred.

Some assets have components that require replacement at regular intervals. Two examples of such components would be the lining of a furnace and the roof of a building. IAS 16 slates'[1] that, provided such components have readily ascertainable costs, they should be accounted for as separate assets because they have useful lives different from the items of PPK to which they relate. This means that when such components arc replaced they arc accounted for as an asset disposal and acquisition of a new asset.

15.4 What is depreciation?

IAS 16 defines depreciation' as the systematic allocation of the depreciable amount of an asset over its life. The depreciable amount is ihc cost of an asset or other amount substituted for cost in the financial statements, less ils residual value.

Copyrighted material

Note that this definition places an emphasis on the consumption in a particular accounting period rather than an average over the asset's life. We will consider two aspects of the definition: the measure of wearing out; and (he useful economic life.

15.4.1 Allocation of depreciable amount

Depreciation is a measure of wearing out that is calculated annually and charged as an expense against profits. Under the 'matching concept*, the depreciable amount of the asset is allocated over its productive life.

It is important to make clear what depreciation is *not.*

- It is not 'saving up for a new one'; it is not setting funds aside for the replacement of the existing asset at the end of its life; it is the matching of cost to revenue. The effect is to reduce the profit available for distribution, but this is not accompanied by the setting aside of cash of an equal amount to ensure that liquid funds arc available at the end of the asset's life.
- It is not "a way of showing the real value of assets on the balance sheet* by reducing the cost figure to a realisable value.

We emphasise what depreciation is *not* because both of these ideas are common!) held by non-accountant users of accounts; it is as well to realise these possible misconceptions when interpreting accounts lor non-accountants.

I)cpreciation is currently conceived as a charge for funds already expended, anil thus it cannot be considered as the setting aside of funds to meet future expenditure. If WC consider it in terms of capital maintenance, then we can see that it results in the maintenance of the initial invested monctarv capital of "the company. It is concerned with the allocation of that expenditure over a period of time, without having regard for the value of the asset at am intermediate period of its life.

Where an asset has been revalued the depreciation is based on the revalued amount. This is because the revalued amount has replaced cost (less residual value) as the depreciable amount.

15.4.2 Useful life

IAS 16 defines this as:

(a) the period of time over which an asset is expected to be used b\ an entitx; or

(b) the number of production or similar units expected to be obtained from the asset by an entity/

The IAS 16 definition is based on the premise that almost all assets have a Unite useful economic life. This may be true in principle, but it is incrcdiblv difficult in real life to arrive at an average economic life that can be applied to even a single class of assets, e.g. plant. This is evidenced by the accounting policy in the ICI 2005 Annual Report which states:

> Depreciation and amortization
> The Group's policy is to write-off the book value of property, plant and equipment, excluding land, and intangible assets and goodwill to their residual value evenlv over their estimated remaining lives. Residual values are reviewed on an annual basis.
> Reviews are made annually of the estimated remaining lives of individual productive assets, taking account of commercial and technological obsolescence as well as normal

Copyrighted material

wear and tear. Under this policy, the total lives approximate to 32 years for buildings and 14 years for land and equipment and .i to 5 years lor computer software,

In addition to the practical difficulty of estimating economic lives, there arc also exceptions where nil depreciation is charged. Two common exceptions found in the accounts of UK companies relate to freehold land and certain types of property.

15.4.3 Freehold land

Freehold land (but not the buildings thereon) is considered to ha\ean infinite life unless it is held simply for the extraction of minerals, etc. Thus land held for the purpose of. say, mining coal or quarrying gravel will be de-alt with for accounting purposes as a coal or gravel deposit. Consequently, although (he land may have an infinite life, the deposits will have an economic life only as long as they can IK profitably extracted. If the cost of extraction exceeds the potential prolit from extraction and sale, the economic life of the quarry has ended. When assessing depreciation for a commercial company, we are concerned only with these private costs and benefits, and not with public costs and benefits which might lead to the quarn (King kept open.

The following extract from the Goldlicld s 2006 Annual Report illustrates accounting policies for land and mining assets.

> Land
>
> Land is shown at cost and is not depreciated.
>
> Amortisation and depreciation of mining assets
>
> Amortisation is determined to give a fair and systematic charge in the income statement taking into account the nature of a particular ore bod) and the method of mining that ore body. To achieve this the following calculation methods are used:
>
> - Mining assets, including mine development and infrastructure costs, mine plant facilities and evaluation costs, are amortised oxer the lives of (he mines using the units-of-production method, based on estimated proved and probable ore reserves above infrastructure.
> - Where it is anticipated that the mine life will significantly exceed the proved and probable reserves, the mine life is estimated using a methodology that takes account of current exploration information to assess the likely recoverable gold from a particular area. Such estimates are used only for the level of confidence in the assessment and the probability of conversion to reserves.
> - At certain of the group's operations, the calculation of amortisation takes into account future costs which will be incurred to develop all the proved and probable ore reserves.
> - Proved and probable ore reserves reflect estimated quantities of economically recoverable reserves, which can be recovered in future from known mineral deposits. Certain mining plant and equipment included in mine development and infrastructure are depreciated on a straight-line basis over their estimated useful lives.
>
> Mineral and surface rights
>
> Mineral and surface rights are recorded at cost of acquisition. \\ hen there is little likelihood of a mineral right being exploited, or the value of mineral rights have diminished below cost, a write-down is effected against income in the period that such determination is made.

Few jurisdictions have comprehensive accounting standards for extractive activities. IFRS 6 - *Exploration fir and Evaluation »/ Mineral Resources* - is an interim measure pending a more comprehensive view by the ASH in future. II'RS ft allows an entity to develop an

Copyrighted materia

accounting policy for exploration and evaluation assets without considering the consistency of the policy with the IASIJ framework. This may mean that for an interim period accounting policies might permit the recognition of both current and non-current assets that do not meet the criteria laid down in the IASB Framework. This is considered by some commentators to be unduly permissive. Indeed, about the only firm requirement IFRS 6 can be said to contain is the requirement to test exploration and evaluation assets for impairment whenever a change in facts and circumstances suggests that impairment exists.

15.4.4 Certain types of property

In some jurisdictions certain types of property, e.g. hotels, have not been subject to annual depreciation charges, The rationale for this treatment is that in certain cases regular refurbishment expenditure on such properties is necessary because of their key function within the business. This regular refurbishment expenditure, it is alleged, makes the useful economic lives of such properties infinite, thus removing the need for depreciation.

An example is provided by this extract from the Accounting Policies in the 2(K)3 Annual Report of Punch Taverns pic.

> Depreciation - Leased estate
>
> It is the Group's policy to maintain the properties comprising the licensed estate in such a condition that the residual values of the properties, based on prices prevailing at the time of acquisition or subsequent revaluation, are at least equal to their book values. The primary responsibility for the maintenance of such properties, ensuring that they remain in sound operational condition, is normally that of the lessee as required by their lease contracts with the Group. I fating regard to this, it is the opinion of the Directors that depreciation of any such properly as required by the Companies Act 1985 and generally accepted accounting practice would not be material ... An annual impairment review is carried out on all properties in accordance with FRS 11 and I'RS 15.

IAS 16 docs not appear to support non-depreciation of PPE other than freehold land in any circumstances. Paragraph 58 of IAS 16 states:

> Land and buildings are separable assets and arc accounted for separately, even when the) are acquired together. With some exceptions, such as quarries and sites used for landfill, land has an unlimited useful life and is therefore not depreciated. Buildings have a limited useful life and are therefore depreciable assets. An increase in the value of the land on which the building stands does not affect the determination of the depreciable amount of the building.

The accounting policy of Punch Taverns pic has since been changed and the following appears in the 2006 Annual Report:

> Licensed properties, unlicensed properties and owner-occupied properties 50 years or the life of the lease if shorter.

15.5 What are the constituents in the depreciation formula?

In order to calculate depreciation it is necessary to determine three factors:

1 cost (or revalued amount if the company is following a revaluation policy);
2 economic life;
.> residua! value.

Copyrighted material

A simple example is the calculation of the depreciation charge for a company that has acquired an asset on I January 20X1 for £1,(KM) with an estimated economic life of four years and an estimated residual \aluc of £200. Applying a straight-line depreciation policy, the charge would be £200 per year using the formula

$$\text{(lost} \quad \frac{\text{Estimated residual value}}{\text{Estimated economic life}} = W^{TM};\ \&\text{»} = \text{£200 per a}_{\text{annum}}$$

We can see that the charge of £200 is influenced in all cases by the definition of cost; the estimate of the residual value; the estimate of the economic life; and the management decision on depreciation policy.

In addition, if the asset were to be revalued at the end of the second year to £900, then the depreciation for 20X3 and 20X4 would be recalculated using the revised valuation figure. Assuming that the residual value remained unchanged, the depreciation for 20X3 would IK*:

$$\frac{\text{Revalued asset} - \text{Estimated residual value}}{\text{Estimated economic hie}} = \text{AC}\frac{\text{£900} - \text{£200}}{2}\text{£»} = /\ 3\text{JO}\text{«}\ \text{per annu}_{\text{in}}$$

15.6 How is the useful life of an asset determined?

The LAS 16 definition of useful life is given in section 15.4.2 above. This is not necessarily the total life expectancy ol the asset. Most assets become less economically and technologically efficient as they grow older. For this reason, assets may well cease to have an economic life long before their working life is over. It is the responsibility of the preparers of accounts to estimate the economic life of all assets.

It is conventional for entities to consider the economic lives of assets by class or category, e.g. buildings, plant, office equipment, or motor vehicles. However, this is not necessarily appropriate, since the level of activity demanded by different users may differ. Por example, compare two motor cars owned by a business: one is used by the national sales manager, covering 100,000 miles per annum visiting clients; the other is used by the accountant to drive from home to work and occasionally the bank, covering perhaps one-tenth of the mileage.

In practice, the useful economic life would be determined by reference to factors such as repair costs, the cost and availability of replacements, and the comparative cash Hows of existing and alternative assets. The problem of optimal replacement lives is a normal financial management problem; its significance in financial reporting is that the assumptions used within the financial management decision may provide evidence of the expected economic life.

15.6.1 Other factors affecting the useful life Figure

We can sec that there are technical factors affecting the estimated economic life figure. In addition, other factors have prompted companies to set estimated lives that have no relationship to the active productive life of the asset. One such factor is the wish of management to take into account the effect of inflation. This led some companies to reduce the estimated economic life, so that a higher charge was made against profits during the early period of the asset's life lo compensate for the inflationary effect on the cost of replacement. The total charge will be the same, but the timing is advanced. This does not result

Copyrighted material

in the retention of funds necessary to replace; but it docs reflect the fact that there is at present no coherent policy for dealing with inflation in the published accounts - consequently, companies resort to *ad hoc* measures that frustrate efforts to make accounts uniform and comparable. *Ad hoc* measures such as these have prompted changes in the standards.

15.7 Residual value

IAS 16 delines residual \ alue as the net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal. Where PPE is carried at cost the residual value is initially estimated at the date of acquisition. In subsequent periods the estimate of residual value is revised, the revision being based on conditions prevailing at each balance sheet date. Such revisions have an effect on future depreciation charges.

Besides inflation, residual values can be affected by changes in technology and market conditions. For example, during the period 1980-90 the cost of small business computers fell dramatically in both real and monetary terms, with a considerable impact on the residual (or second-hand) value of existing equipment.

15.8 Calculation of depreciation

Haxing determined the ke\ factors in the computation, we are left with the problem of how to allocate that cost between accounting periods. For example, with an asset ha\ing an economic life of live vcars:

Asset cost	11,000
Estimated residual value	
(no significant change anticipated oxer useful economic life)	1,000
I kprcciablc amount	10,000

1 low should the depreciable amount be charged to the income statement over the five years? IAS 16 tells us that it should IK* allocated on a systematic basis and the depreciation method used should reflect as fairly as possible the pattern in which the asset's economic benefits are consumed. The two most popular methods are straight-line, in which the depreciation is charged e\cnly over the useful lite, and diminishing balance, where depreciation is calculated annually on the net writtcn-down amount. In the case above, the calculations would be as in Figure 15.2.

Note that, although the diminishing balance is generally expressed in terms of a percentage, this percentage is arrived at by inserting the economic life into the formula as //; the 38% reflects the expected economic life of five years. As we change the life, so we change the percentage that is applied. The normal rate applied to vehicles is 25% diminishing balance; if we apply that to the cost and residual value in our example, we can see that we would *be* assuming an economic life of eight >ears. It is a useful test when using reducing balance percentages to refer back to the underhing assumptions.

We can see that the end result is the same. Thus, £10,000 has been charged against income, but with a dramatically different pattern of income statement charges. The charge for straight-line depreciation in the first year is less than half that for reducing balance.

Copyrighted material

15.8.1 Arguments in favour of the straight-line method

The method is simple to calculate. 1 lowever, in these days of calculators and computers this seems a particularly facile argument, particularly when one considers the materiality of the figures.

15.8.2 Arguments in favour of the diminishing balance method

First, the charge reflects the efficiency and maintenance costs of the asset. When new, an asset is operating at its maximum efficiency, which falls as it nears the end of its life. This may be countered b\ the comment that in year 1 there may be 'teething troubles' with new equipment, which, while probably covered by a supplier's guarantee, will hamper efficiency.

Secondly, the pattern of diminishing balance depreciation gives a net book amount that approximates to second-hand values. For example, with motor cars the initial fall in value is very high.

15.8.3 Other methods of depreciating

Besides straight-line and diminishing balance, there are a number of other methods of depreciating, such as the sum of the units method, the machine-hour method and the -MInu11 \ method. We will consider these brief!v.

Sum of the units method

A compromise between straight-line and reducing balance that is popular in the USA is the sum of the units method. The calculation based on the information in Figure 15.2 is now shown in Figure 15.3. This has the advantage that, unlike diminishing balance, it is simple to obtain the exact residual amount (zero if appropriate), while giving the pattern of high initial charge shown by the diminishing balance approach.

Figure 15.2 Effect of different depreciation methods

Figure 15.3 Sum of the units method

Machine-hour method

The machine-hour system is based on an estimate of the asset's service potential. The economic life is measured not in accounting periods but in working hours, and the depreciation is allocated in the proportion of the actual hours worked to the potential total hours available. This method is commonly employed in aviation, where aircraft are depreciated on the basis of (lying hours.

Annuity method

With the annuity method, the asset, or rather the amount of capital representing the asset, is regarded as being capable of earning a fixed rate of interest. The sacrifice incurred in using the asset within the business is therefore two-fold: the loss arising from the exhaustion of the service potential of the asset; and the interest forgone by using the funds invested in the business to purchase the fixed asset. With the help of annuity tables, a calculation shows what equal amounts of depreciation, written off over the estimated life of the asset, will reduce the book value to nil, after debiting interest to the asset account on the diminishing amount of funds that are assumed to be invested in the business at that time, as represented by the value of the asset.

Figure 15.4 contains an illustration based on the treatment of a five-year lease which cost the company a premium of £10,000 on 1 January year 1. It shows how the total depreciation charge-

Figure 15.4 Annuity method

is computed. Kach year the charge for depreciation in (he income statement is the equivalent annual amount that is required to repay the investment over the five-year period at a rate of interest of 10% less the notional interest available on the remainder of the invested funds.

An extract from the annuity tables to obtain the annual equivalent factor for year 5 and assuming a rate of interest of 10% would show:

cur	*Annuity*
	* /
1	1.1 (MM)
2	0.5762
3	0.4021
4	0.3155
5	0.2638

Therefore at a rale of interest of 10% five annual payments to repay an investor of £10,000 would each be £2,638.

A variation of this system involves the investment of a sum equal to the net charge in fixed interest securities or an endowment policy, so as to build up a fund that will generate cash to replace the asset at the end of its life.

This last system has significant weaknesses. It is based on the misconception that depreciation is 'saving up for a new one', whereas in reality depreciation is charging against profits funds already expended. It is also dangerous in a time of inflation, since it may lead management not to maintain the capital of the entity adequately, in which case they may not be able to replace the assets at their new (inflated) prices.

The annuity method, with its increasing net charge to income, does tend to take inflationary factors into account, but it must be noted that the *total* net profit and loss charge only adds up to the cost of the asset.

15.8.4 Which method should be used?

The answer to this seemingly simple question is *it depends*. On the matter of depreciation IAS 16 is designed primarily to force a fair charge for the use of assets into the income statement each year, so that the earnings reflect a true and fair view.

Straight-line is most suitable for assets such as leases which have a definite fixed life. It is also considered most appropriate for assets with a short working life, although with motor cars the diminishing balance method is sometimes employed to match second-hand values. Extraction industries (mining, oil wells, quarries, etc.) sometimes employ a variation on the machine-hour system, where depreciation is based on the amount extracted as a proportion of the estimated reserves.

Despite the theoretical attractiveness of other methods the straight-line method is, by a long way, the one in most common use by entities that prepare financial statements in accordance with IFRSs. Reasons for this are essentially pragmatic:

- It is the most straightforward to compute.
- In the light of the three additional subjective factors |cost (or revalued amount); residual value; useful life] that need to be estimated, any imperfections in the charge for depreciation caused by the choice of the straight-line method are not likely to be significant.
- It conforms to the accounting treatment adopted by peers. For example, one group reported that it currently used the reducing balance method but, as peer companies used the straight-line method, it decided to change and adopt that policy.

Copyrighted material

The following accounting policy note comes from ihc financial Statements of ttorsoddhem N_\ct, a Hungarian entity preparing financial statements in accordance with international accounting standards:

> Freehold land is not depreciated. Depreciation is provided using the straight-line methods at rates calculated to write oil the cost of the asset over its expected economic useful life. The rates used arc as follows:
>
> | | |
> |---|---|
> | Buildings | 2'N. |
> | Machinery and other equipment | 5—15% |
> | Vehicles | 15-20% |
> | Computer equipment | 33% |

15.8.5 Impairment of assets

IAS .>6 *Impairment of Assets** deals with the problems of the measurement, recognition and presentation of material reductions in value of non-current assets both tangible and intangible.

Unless a review is specifically required b\ another IFRS non-current assets will be required to be reviewed for impairment onh if there is some indication thai impairment has occurred, e.g. slump in property market or expected future losses.

The [ASB's aim is to ensure that relevant assets are recorded at no more than recoverable amount. This is defined as being the higher of net selling price and value in use. Value in use is defined as the present value of future cash flows obtainable from the asset's continued use using a discount rate that is equivalent to the rate of return that the market would expect on an equally risk} investment

We will consider impairment of assets in more detail in section 15.10. 1 towcvcr, this issue is also relevant to the computation of the depreciation charge. Paragraph 17 of IAS 36 states:

> If there is an indication that an asset may be impaired this may indicate that the remaining useful life, the depreciation method, or the residual \alue for the asset need to be reviewed and adjusted under the IAS applicable to the asset, even if no impairment loss is recognised for the asset.

In the case of PPM the relevant IAS is IAS 16 and this indicates that an impairment review may well affect future depreciation charges in the income statement, e\en if no impairment loss is recognised.

15.9 Measurement subsequent to initial recognition

15.9.1 Choice of models

An entity needs to choose either the cost or the revaluation model as its accounting polic\ for an entire class of PPK. The cost model (definiicl) the most common) results in an asset being carried at cost less accumulated depreciation and any accumulated impairment losses.

15.9.2 The revaluation model

Under the revaluation model the asset is carried at revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses. The fair value of an asset is defined in IAS 16 as 'the

Copyrighted material

amount for which an asset could he exchanged between knowledgeable and willing parties in an arm's length transaction*. Thus fair value is basically market value. If a market value is not available, perhaps in the case of partly used specialised plant and equipment that is rarel) bought and sold other than as new, then IAS 16 requires that revaluation IK based on depreciated replacement cost.

EXAMPLE • An emit} purchased an item of plant for £12,000 on I Januan 20X1. The plant was depreciated on a straight-line basis over its useful economic life, which was estimated at six years. On I Januan 20\3 the entity decided to revalue its plant. No lair value was available for the item of plant that had been purchased for £12,000 on 1 Januan 2(1X1 but the replacement cost of the plant at I Januan 20X3 was £21,000.

The carrying value of the plant immediately before the revaluation would have been:

- Cost £12,000
- Accumulated deprecation £4,1)00 [(£12,000/6) X 2]
- Written down value £N,(MH>.

Under the principles of IAS 16 the revalued amount would be £14.(100 [£21,000 X 4/6]. This amount would be reflected in the financial statements either by:

- showing a revised gross figure of £14,000 and reversing out all the accumulated depreciation charged to dale so as to give a carrying \alue of £14,000; or
- restating both the gross figure and the accumulated depreciation b\ the proportionate change in replacement cost. This would give a gross figure of £21.000, with accumulated depreciation restated at £7,000 to once again give a net earning value of £14,000.

15.9.3 Detailed requirements regarding revaluations

The frequency of revaluations depends upon the movements in the fair values of those items of PPK being revalued. In jurisdictions where the rate of price changes is very significant revaluations mav be necessan on an annual basis. In other jurisdictions revaluations ever) three or five years may well be sufficient.

\\ here an item of PPK is revalued then the entire class of PPK lo which that asset belongs should be revalued.[10] \ class of PPK is a grouping ol .ISM-IS of a similar nature and use in an entities operations. Kxamplcs would include:

- land,
- land and buildings,
- maehinen.

This is an important provision because without it entities would be able to select which assets they revalued on the basis of best advantage to the balance sheet. Revaluations will usually increase the carrying values of assets and equitv and leave borrowings unchanged. Therefore gearing (or leverage) ratios will be reduced. It is important that, if the revaluation route is chosen, assets are revalued on a rational basis.

The following is a further extract from the financial statements of Coil SA, a com pan) incorporated in Belgium that prepares financial statements in euros in accordance with international accounting standards: 'Items of PPK are stated at historical cost modified bv revaluation and are depreciated using the straight-line method over their estimated useful lives.'

Copyrighted material

15.9.4 Accounting for revaluations

When the carrying amount of an asset is increased as a result of a revaluation, the increase should be credited directly to equity under the heading of revaluation surplus. The only exception is where the gain reverses a revaluation decrease previously recognised as an expense relating to the same asset.

This means that, in the example we considered under section 15.9.2 above, the revaluation would lead lo a credit of £6,000 (£14,000 - £8,000) to equity.

If however the carrying amount of an asset is decreased as a result of a revaluation then the decrease should be recognised as an expense. The only exception is where that asset had previously been revalued. In those circumstances the loss on revaluation is charged against the revaluation surplus to the extent that the revaluation surplus contains an amount relating to the same asset.

EXAMPLE • An entity buys freehold land for £100,000 in year 1. The land is revalued to £150,000 in year 3 and £90,000 in year 5. The land is not depreciated.

In year 3 a surplus of £50,000 (£150,000 - £100,000] is credited lo equity under the heading 'revaluation surplus'. In year 5 a deficit of £60,000 [£90,000 - £150,000] arises on the second revaluation. £50,000 of this deficit is deducted from the revaluation surplus and £10,000 is charged as an expense. It is worth noting that £10,000 is the amount by which the year 5 carrying amount is lower than the original cost of the land.

Where an asset that has been revalued is sold then the revaluation surplus becomes realised." It may be transferred to retained earnings when this happens but this transfer is not made through the income statement.

Turning again to our example in section 15.9.2 let us assume that the plum was sold on 1 January 20X5 for £5,000. The carrying amount of the asset in the financial statements immediately before the sale would be £7.000 [£14,000 - 2 X £3,5001. This means that a loss on sale of £2,000 would be taken to the income statement. The revaluation surplus of £6,000 would be transferred to retained earnings.

IAS 16 allows for the possibility that the revaluation surplus is transferred to retained earnings as the asset is depreciated. To turn once again to our example we see that the revaluation on 1 January 20X3 increased the annual depreciation charge from £2,000 [£12,000/6] to £3,500 |£21,000/6|. Following revaluation an amount equivalent to the 'excess depreciation' may be transferred from the revaluation surplus to retained earnings as the asset is depreciated. This would lead in our example to a transfer of £1,50X1 each year. Clearlv if this occurs then the revaluation surplus that is transferred lo retained earnings on sale is £3,000 [£6,000 - (2 X £1,500)].

15.10 IAS 36 *Impairment of Assets*

15.10.1 IAS 36 approach

IAS 36 sets out the principles and methodology for accounting for impairments of non-current assets and goodwill. Where possible, individual non-current assets should be individually tested for impairment. I lowevcr, where cash Hows do not arise from the use of a single non-current asset, impairment is measured for the smallest group of assets which generates income that is largely independent of the company's other income streams. This smallest group is referred to as a cash generating unit (COU).

Impairment of an asset, or C.GL (if assets are grouped), occurs when:

Copyrighted material

- the carrying amount of an asset or CGU is greater than its recoverable amount; where
  - carrying amount is the depreciated historical cost (or depreciated revalued amount);
  - recoverable amount is the higher of net selling price and value in use; where
    - net selling price is the amount at which an asset could be disposed of, less any direct selling costs, and
    - value in use is the present value of the future cash flows obtainable as a result of an asset's continued use, including those resulting from its ultimate disposal.

When impairment occurs a revised carrying amount is calculated for the balance sheet as follows:

Revised earning amount — The lower of

Carrying amount OR Higher of

Net selling price Value in use (ML)

It is not always necessary to go through the potentially time-consuming process of computing the value in use of an asset. If the net selling price can be shown to be higher than the existing carrying value then the asset cannot possibly be impaired and no further action is necessary. 1 lowever this is not always the case for non-current assets and a number of assets (e.g. goodwill) cannot be sold so several value in use computations are inevitable.

The revised carrying amount is then depreciated over the remaining useful economic life.

15.10.2 Dividing activities into CGUs

In order to earn out an impairment review it is necessary to decide how to divide activities into CGUs. There is no single answer to this ii is extremely judgemental, e.g. if the compain has multi-retail sites, the cost of preparing detailed cash flow forecasts for each site could favour grouping.

The risk of grouping is that poorh performing operations might be concealed within a CGL" and it would be necessary to consider whether there were an\ commercial reasons for breaking a CGL into smaller constituents, e.g. if a location was experiencing its own Unique difficulties such as local competition or inability to obtain planning permission to expand to a more profitable si/e.

15.10.3 Indications of impairment

A review for impairment is required when there is an indication that an impairment has actually occurred. The following are indicators of impairment:

- External indicators
  - a fall in the market value of the asset
  - material adverse changes in regulator) environment
  - material adverse changes in markets
  - material long-term increases in market rates of return used for discounting.
- Internal indicators
  - material changes in operations
  - major reorganisation

Copyrighted material

loss of key personnel
loss or net cash outflow from operating activities if this is expected to continue or is a continuation of a loss-making situation.

If there is such an indication, it is necessary to determine the depreciated historical cost of a single asset, or the net assets employed if a CXiU, and compare this with the net realisable value and value in use.

[{'A stated in its 2005 Annual Report:

No depreciation has been provided on land. Impairment reviews are performed where there is an indication of potential impairment. If the earning \alue of an asset exceeds the higher of the discounted estimated cash flows from the asset and net realizable value of the asset the resulting impairment is charged to the income statement.

15.10.4 Value in use calculation

Value in use is arrived at by estimating and discounting the income stream. The income streams:

- are likely to follow the way in which management monitors and makes decisions about continuing or closing the different lines of business;
- may often l>e identified by reference to major products or services;
- should be based on reasonable and supportable assumptions;
- should be consistent with the most up-to-date budgets and plans that have been formally approved by management:
  - if for a period beyond that covered by formal budgets and plans should, unless there are exceptional circumstances, assume a steady or declining growth raic;[1]-
- should be projected cash flows unadjusted for risk, discounted at a rate of return expected from a similarly risky investment or should be projected risk-adjusted pre-tax cash flows discounted at a risk-free rate.

llie discount rate should be:

- calculated on a pre-tax basis;
- an estimate of the rate that the market would expect on an equally risky investment excluding the effects of any risk for which the cash flows have been adjusted:[1,]
  - increased to reflect the way the market would assess the specific risks associated with the projected cash flows
  - reduced to a risk-free rate if the cash flows have been adjusted for risk.

The following illustration is from the Roche I loldings lad 2003 Annual Report:

When the recoverable amount of an asset, being the higher of its net selling price and its value in use, is less than the earn inu amount, then the carrvinu amount is reduced to its recoverable amount. This reduction is reported in the income statement as an impairment loss. Value in use is calculated using estimated cash flows, generally over a five-year period, with extrapolating projections for subsequent years. These are discounted using an appropriate long-term pre-tax interest rate. When an impairment arises the useful life of the asset in question is reviewed and, if necessary, the future depreciation/amortisation charge is amended.

Copyrighted materia

I 5.10.5 Treatment of impairment losses

If the carrying value exceeds the higher of net realisable value and value in use, then an impairment loss has occurred. The accounting treatment of such a loss is as follows:

Asset not previously revalued

An impairment loss should be recognised in the income statement in the year in which the impairment arises.

Asset previously revalued

An impairment loss on a revalued asset is effectively treated as a revaluation deficit. As we have alread) seen, this means that the decrease should IK* recognised as an expense. The onI\ exception is where that asset had previously been revalued. In those circumstances the loss on revaluation is charged against the revaluation surplus to the extent that the revaluation surplus contains an amount relating to the same asset.

Allocation of impairment losses

Where an impairment loss arises the loss should ideallv be set against the specific asset to which it relates. Where the loss cannot be identified as relating to a specific asset, it should be apportioned within the CGU to reduce the most subjective values first, as follows:

- first, to reduce any goodwill within the (XiL;
- then to the unit's other assets, allocated on a pro rata basis;
- however, no individual asset should be reduced below the higher of:
  - its net selling price (if determinable)
  - its value in use (if determinable)
  - zero.

Restoration of past impairment losses

Past impairment losses in respect of a tangible asset max be restored where the recoverable amount increases due to an improvement in economic conditions or a change in use of the asset. Such a restoration should be reflected in the income statement to the extent of the original impairment previous!) charged tci the income statement, adjusting for depreciation which would have been charged otherwise in the intervening period.

15.10.6 Illustration of data required for an impairment review

Pronto SA has a product line producing wooden models of athletes for export. The carrying amount of the net assets employed on the line as at 31 December 20X3 was £1 14,5(H). The scrap value of the net assets at 31 December 20X6 is estimated to be £5,000.

There is an indication that the export market will be adversely affected in 20X6 by competition from plastic to\ manufacturers. This means that the net assets employed to produce this product might have been impaired.

The finance director estimated the net realisable value of the net assets at 31 December 20X3 to be £70,000. The value in use is now calculated to check if it is higher or lower than £70,IKH). If it is higher it will be compared with the carrying amount to sec if impairment has occurred; if it is lower the net realisable value will be compared with the carrying amount.

Copyrighted material

Pronto SA has prepared budgets for the years ended 31 December 20X4, 20X5 and 20X6. The assumptions underlwng the budgets are as follows:

Unit costs and revenue:

	I
Selling price	10.00
Buying in cost	(4.00)
Production cost: material, labour, overhead	(0.75)
I lead office overheads apportioned	((1-25)
Cash inflow per model	5.00

I A! muted sales volumes:

	20X3	*20X4*	*20X5*	*20X6*
Estimated at 31 December 20X2	6,000	8,000	11,000	14,000
Revised estimate at 31 December 20X3		8,000	11,000	4,000

Determining the discount rate to be used:

	20X4	*20X5*	*20X6*
The rate obtainable elsewhere at the same level of risk is	10° n	10%	10%

The discount factors to be applied to each year are then calculated using cost of capital discount rates as follows:

20X4	1/1.1	= 0.409
20X5	1/(1-1)'	= 0.826
20X6	1/(1.1)*	= 0.751

15.10.7 Illustrating calculation of value in use

Before calculating value in use, it is necessary to ensure that (he assumptions underlying the budgets ,\w reasonable, e.g. is the selling price likely to be affected by competition in 20X6 in addition to loss of market? Is the selling price in 20X5 likely to be affected? Is the estimate of scrap value reasonably accurate? How sensitive is value in use to the scrap value? Is it valid to assume that the cash Hows will occur at vear-ends? I low accurate is the cost of eapital? Will components making up the income stream, e.g. sales, materials, labour be subject to different rates of inflation?

Assuming that no adjustment is required to the budgeted figures provided above, the estimated income streams are discounted using the normal DCF approach as follows:

	20X4	*20X5*	*20X6*
Sales (models)	8,000	11,000	4,000
Income per model	***£$***	***L$***	**£5**
Income stream *(£)*	40,000	55,000	20,000
Estimated scrap proceeds			5,000
Cash flows to be discounted	40,000	55,000	25,000
Discounted (using cost of capital factors)	0.909	0.826	0.751
Present value	36,360	45,430	18,775

Value in use - £100,565

Copyrighted material

15.10.8 Illustration determining the *revised* carrying amount

If the carrying amount at the balance sheet date exceeds net realisable value and value in use, it is revised to an amount which is the higher of net realisable value and value in use. For Pronto S A:

	I
Carrying amount as at 31 December 20X3	114,500
Net realisable value	70,000
Value in use	100,565
Revised carrying amount	100,565

15.1 I IFRS 5 *Non-Current* Assets *Held for Sale and Discontinued Operations*

IFRS 5 sets out requirements for the classification, measurement and presentation of non-current assets held for sale. The requirements which replaced IAS 35 *Discontinuing Operations* were discussed in Chapter 8. The IFRS is the result of the joint short-term project to resolve differences between IFRSs and US GAAP.

Classification as **'held for sale'**

The IFRS (para. 6) classifies a non-current asset as 'held for sale* if its carrying amount will IK recovered principally through a sale transaction rather than through continuing use. The criteria for classification as 'held lor sale' are:

- the asset must be available for immediate sale in its present condition, and
- its sale must be *highly probable.*

The criteria for a sale to be highly probable are:

- the appropriate level of management must be committed to a plan to sell the asset;
- an active programme to locate a buyer and complete the plan must have been initialed;
- the asset must be actively marketed for sale at a price that is reasonable in relation to its current fair value;
- the sale should be expected to qualify for recognition as a completed sale within one year from the date of classification unless the delav is caused bv events or circumstances beyond the entity's control and there is sufficient evidence that the entit\ remains committed to its plan to sell the asset; and
- actions required to complete the plan should indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Measurement **and** presentation **of** assets **held for** sale

The IFRS requires that assets 'held for sale' should:

- be measured at the lower of carrying amount and *fair value* less costs to sell;
- not continue to be depreciated; and
- be presented separately on the face of the balance sheet.

The following additional disclosures are required in the notes in the period in which a non-current asset has been either classified as held for sale or sold:

Copyrighted material

- a description ot the non-current asset;
- a description of the facts and circumstances of the sale;
- the expected manner and timing of that disposal;
- the gain or loss if not separately presented on the face of the income Statement; and
- the caption in the income statement that includes that gain or loss.

15.12 Disclosure requirements

For each class of PPK the financial statements need to disclose:

- the measurement bases used for determining the gross carrying amount;
- the depreciation methods used;
- the useful lives or the depreciation rates used;
- the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end ol the period;
- a reconciliation of the Carrying amount at the beginning and end ol the period.

The style employed by British Sk) Broadcasting Group Pic in its 2003 accounts is almost uni\crsall\ employed for this;

Tangible fixed assets (or PPE)

The movements in the vcar were as follows:

	Freehold land and buildings **£m**	*Short leasehold improvements* **£m**	*Equipment, fixtures and fittings* **' fa**	*Assets in course of construction*	*Total* **£m**
Group					
Cost					
Iteginning of year	37.9	83.3	554.4	29.9	705.5
Additions	0.4	3.2	73.0	24.8	101.4
Disposals	^—	^—	(10.9)		(10.9)
Transfers			*25.H*	(25.8)	—
Knd of vcar	38.3	86.5	642.3	28.9	796.0
	Freehold land and ***buildings*** **£****	*Short leasehold improvements* /:>"	*Equipment, fixtures and fittings* *Cm*	***Assets*** *m course of construction*	*Total* *£m*
Depreciation					
Beginning of year	**6.0**	43.3	313.2	—	362.5
Charge	2.3	4.0	91.6	—	97.9
Disposals	^—		(10.6)	^—	(10.6)
Knd of year	8.3	47.3	394.2		449.8
Net book value					
Beginning of year	31.9	40.0	241.2	29.9	343.0
End of vcar	30.0	39.2	248.1	28.9	346.2

Additionally the financial statements should disclose:

Copyrighted material

- the existence and amounts of restrictions on title, and 1111 pledged as security lor liabilities;
- the accounting polio for the estimated costs of restoring the site of items of PPE;
- the amount of expenditures on account of PPE in the course of construction;
- the amount of commitments for the acquisition of PPE.

15.13 Government grants towards the cost of PPE

The accounting treatment of government grants is covered by IAS 20. The basis of the Standard is the accruals concept, which requires the matching of cost and revenue so as to recognise both in the income statements of the periods to which they relate. This should, of course, be tempered with the prudence concept, which requires that revenue is not anticipated. Therefore, in the light of the complex conditions usually attached to grants, credit should not IK- taken until receipt is assured.

Similarly, there may be a right to recover the grant wholly or partially in the event of a breach of conditions, and on that basis these conditions should be regular!) reviewed and, if necessarv, provision made.

Should the lax treatment of a grant differ from the accounting treatment, then the effect of this would be accounted for in accordance with IAS 12 *Income Taxes.*

IAS 20

Government grants should be recognised in the income statement so as to match the expen diture towards which thev are intended to contribute. If this is retrospective, they should be recognised in the period in which thev became receivable.

Grants in respect of PPE should be recognised over the useful economic lives of those assets, thus matching the depreciation or amortisation.

IAS 20 outlines two acceptable methods of presenting grants relating to assets in the balance sheet:

(a) The first method sets up the grant as deferred income, which is recognised as income on a systematic and rational basis over the useful life of the asset.

EXAMPLE • An entity purchased a machine for £60,000 and received a grant of £20,000 towards its purchase. The machine is depreciated over four vears.

The 'deferred income method* would result in an initial carrying amount for the machine of £60,000 and a deferred income credit of £20,000. In the first year of use of the plant the depreciation charge would be £15,000. £5,000 of the deferred income would be recognised as a credit in the income statement, making the net charge to income £10,000. At the end of the lirst year the carrying amount of the plant would be £45,000 and the deferred income included in the balance sheet would be £15,000.

The following is an extract from the 2006 Go-Ahead Annual Report:

Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised in the income statement over the period neeessan to match on a systematic basis to the costs that it is intended to compensate. *Where the grant relates to a non-current asset, value is credited to a deferred income account and is released to the income statement over the expected useful life of the relevant asset.*

Copyrighted material

(b) The second method deducts the grant in arriving at the carrying amount of the relevant asset. If we were to apply this method to the above example then the initial carrying amount of the asset would be £40,000. The depreciation charged in the firs! year would be £10,000. This is the same as the net charge to income under the 'deferred credit' method. The closing carrying amount of the plant would be £30,000. This is of course the carrying amount under the deferred income method* (£45,000) less the closing deferred income under the 'deferred income method' (£15,000).

The following extract is from the 2006 Annual Report of A &J Muklow pic:

Capital grants

Capital grants received relating to ihe building or refurbishing of investment properties are deducted from the cost of the relevant property. Revenue grants arc deducted from the related expenditure.

The IASB is currently considering drafting an amended standard on government grants. Among the reasons for the Board amending IAS 20 were the following:

- The recognition requirements of IAS 20 often result in accounting that is inconsistent with the *Framework*^ in particular the recognition of a deferred credit when the entity has no liability, e.g. the following is an extract from the SSI, International pic Annual Report:

  Grant income

  Capital grants arc shown in other creditors within the balance sheet and released to match the depreciation charge on associated assets.

- IAS 20 contains numerous options. Apart from reducing the comparability of financial statements, the options in IAS 20 can result in understatement of the assets controlled by the entity and do not provide the most relevant information to users of financial statements.

In the near future there is the prospect of the IASB issuing a revised standard which requires entities to recognise grants as income as soon as their receipt becomes unconditional. This is consistent with the specific requirements for the recognition of grants relating to agricultural activity laid down in IAS 41 *igricuhure.* This mailer is discussed in more detail in Chapter 18.

15.14 Investment properties

While IAS 16 requires all PPKs to be subjected to a systematic depreciation charge, this may be considered inappropriate for properties held as assets but not employed in the normal activities of the entity, rather being held as investments. For such properties a more relevant treatment is to take account of the current market value of the property. The accounting treatment is set out in IAS 40 *Investment Property.*

Such properties may be held cither as a main activity (e.g. by a property investment company) or by a company whose main activity is not the holding of such properties. In each case the accounting treatment is similar.

Definition of an investment property'[4]

For the purposes of the statement, an investment property is property held (by the owner or by the lessee under a finance lease) lo earn rentals or capital appreciation or both.

Investment property docs not include:

Copyrighted material

(a) properly held for use in the production or supply of goods or services or for administrative purposes (dealt with in IAS 16);

(b) property held for sale in the ordinary course of business (dealt with in IAS 2);

(c) property being constructed or developed for future use as investment property - IAS 16 applies to such property until the construction or development is complete, at which time the property becomes investment property and IAS *M)* applies. However, IAS 40 docs apply to existing investment property that is being redeveloped for continued future use as investment property;

(d) an interest held by a lessee under an operating lease, even if the interest was a long-term interest acquired in exchange for a large up-front payment (dealt with in IAS 17);

(c) forests and similar regenerative natural resources (dealt with in IAS 41 *Agriculture);* and

(f) mineral rights, the exploration for and development of minerals, oil, natural gas and similar non-regenerative natural resources (dealt with in project on Extractive Industries).

Accounting models

Under IAS 4(1, an entity must choose either:

- a fair value model: investment property should be measured at fair value and changes in fair value should be recognised in the income statement; or
- a cost model (the same as the benchmark treatment in IAS 16 *Property, Plant and Equipment):* investment property should be measured at depreciated cost (less any accumulated impairment losses). An entity that chooses the cost model should disclose the fair value of its investment property.

An entity should apply the model chosen to all its investment property. A change from one model to the other model should be made only if the change will result in a more appropriate presentation. The standard states that this is highly unlikely to be the case for a change from the fair value model to the cost model.

In exceptional cases, there is clear evidence when an entity that has chosen the fair value model first acquires an investment property (or when an existing property first becomes investment property following the completion of construction or development, or after a change in use) that the entity will not be able to determine the fair value of the investment property reliably on a continuing basis. In such cases, the entity measures that investment property using the benchmark treatment in IAS 16 until the disposal of the investment property. The residual value of the investment property should be assumed to be zero. The entity measures all its other investment property at fair value.

15.15 Effect of accounting policy for PPE on the interpretation of the financial statements

A number of difficulties exist when attempting to earn out inter-firm comparisons using the external information that is available to a shareholder.

15.15.1 Effect of inflation on the carrying value of the asset

The most serious difficulty is the effect of inflation, which makes the charges based on historical cost inadequate. Companies have followed various practices to take account of

Copyrighted materia

inflation. None of these is as effective as an acceptable surrogate for index adjustment using specific asset indices on a systematic annual basis: this is the only way to ensure uniformity and comparability of the cost/valuation figure upon which the depreciation charge is based.

The method thai is currently allowable under IAS 16 is to revalue the assets. This is a partial answer, but it results in lack of comparability of ratios such as gearing, or leverage.

15.15.2 Effect of revaluation on ratios

The rules of double entry require that when an asset is revalued the 'profit' (or, exceptionally, 'loss') must be credited somewhere. As it is not a 'realised[1] profit, it would not be appropriate to credit the income statement, so a 'revaluation reserve* must be created. As the asset is depreciated, this reserve may be realised to income; similarly, when an asset is ultimately disposed of, any residue relevant to that asset may be taken into income.

One significant by-product of revaluing assets is the effect on gearing. The revaluation reserve, while not distributable, forms part of the shareholders' funds and thus improves the debt/equity ratio. Clare must therefore be taken in looking at the revaluation policies and reserves when comparing the gearing or leverage of companies.

The problem is compounded because the carrying value may be amended at random periods and on a selective category of asset.

15.15.3 Choice of depreciation method

There are a number of acceptable depreciation methods that may give rise lo very different patterns of debits against the profits of individual years.

15.15.4 Inherent imprecision in estimating economic life

One of the greatest difficulties with depreciation is that it is inherently imprecise. The amount of depreciation depends on the estimate of the economic life of assets, which is affected not only by the durability and workload of the asset, but also by external factors beyond ihe control of management. Such factors may be technological, commercial or economic. I iere are some examples:

- the production by a competitor of a new product rendering yours obsolete, e.g. watches with baitery-powcrcd movements replacing those with mechanical movements;
- the production by a competitor of a product ai a price lower than \our production costs, e.g. imported goods from countries where costs are lower;
- changes in the economic climate which reduce demand for your product.

This means that the interpreter of accounts must pay particular attention to depreciation policies, looking closely at the market where the entity's business opcraics. However, ihis understanding is not helped by the lack of requirement to disclose specific rates of depreciation and the basis of computation of residual values. Without such information the potential effects of differences between policies adopted by competing entities cannot IK accurately assessed.

15.15.5 Mixed values in the balance sheet

The effect of depreciation on the balance sheet is also some cause for concern. The net book amount shown lor non-current assets is the result ol deducting accumulated depreciation

Copyrighted material

from COS! (or valuation); it is not intended to be (although many non-accountants assume it is) an estimate of the value of the underlying assets. The valuation of a business based on the balance sheet is extremely difficult.

15.15.6 Different policies may be applied within the same sector

Inter-company comparisons are even more difficult. Two entities following the historical cost convention may own identical assets, which, as they were purchased at different times, may well appear as dramatically different figures in the accounts. This is particular!) true of interests in land and buildings.

15.15.7 Effect on the return on capital employed

There is an effect not only on the net asset value, but also on the return on capital employed. To make a fair assessment of return on capital it is necessary to know the current replacement cost of the underlying assets, but, under present conventions, up-to-date valuations are required only for investment properties.

15.15.8 Effect on EPS

IAS lfi is concerned to ensure that the earnings of an entit\ reflect a fair charge for the use of the assets by the enterprise. This should ensure an accurate calculation of earnings per share. But there is a weakness here. If assets have increased in value without revaluations, then depreciation will be based on the historical cost.

1 Define PPE and explain how materiality affects the concept of PPE.

2 Define depreciation. Explain what assets need not be depreciated and list the main methods of calculating depreciation.

3 What is meant by the phrases 'useful life' and 'residual value?

4 Define 'cost' in connection with PPE.

5 What effect does revaluing assets have on gearing (or leverage)?

6 How should grants received towards expenditure on PPE be treated?

7 Define an investment property and explain its treatment in financial statements.

8 'Depreciation should mean that a company has sufficient resources to replace assets at the end of their economic lives.' Discuss.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (*).

Question I

(a) Discuss why IAS 40 *Investment Property* was produced.

(b) Universal Entrepreneurs pic has the following items on its PPE list:

(i) £ 1.000.000 - the right to extract sandstone from a particular quarry. Geologists predict that extraction at the present rate may be continued for ten years.

(ii) £5.000.000 - a freehold property, let to a subsidiary on a full repairing lease negotiated on arm's-length terms for 15 years. The building is a new one. erected on a greenfield site at a cost of £4.000.000.

(iii) A fleet of motor cars used by company employees. These have been purchased under a contract which provides a guaranteed part exchange value of 60% of cost after two years' use.

(iv) A company helicopter with an estimated life of 150,000 flying hours.

(v) A 19-year lease on a property let out at arm's-length rent to another company,

Required:

Advise the company on the depreciation policy it ought to adopt for each of the above assets.

(c) The company is considering revaluing its interests in land and buildings, which comprise freehold and leasehold properties, all used by the company or its subsidiaries.

Required:
Discuss the consequences of this on the depreciation policy of the company and any special instructions that need to be given to the valuer.

Question 2

Mercury

You have been given the task, by one of the partners of the firm of accountants for which you work. of assisting in the preparation of a trend statement for a client.

Mercury has been m existence for four years. Figures for the three preceding years *are* known but those for the fourth year need to be calculated. Unfortunately, the supporting workings for the preceding years* figures cannot be found and the client's own ledger accounts and workings are not available.

One item m particular, plant is causing difficulty and the following figures have been grven to you:

/ 2 monrhs ended *31 March*	*20X6* *L*	*20X1* £	*20X8* £	20X9 £
(A) Plant at cost	80.000	80.000	90.000	.
(B) Accumulated depreciation	; 16.000)	(28.800)	(28.080)	)
(C) Net (written down) value	64.000	51,200	61.920	>

The only other information available is that disposals have taken place at the beginning of the financial years concerned:

	Dare *of* *Disposal*	*Original acquisition*	*Original cost* £	*Sales proceeds* *L*
	12 months ended 31 March			
First disposal	20X8	20X6	15.000	8.000
Second disposal	20X8	20X6	30,000	21,000

Plant sold was replaced on the same day by new plant. The cost of the plant which replaced the first disposal is not known but the replacement for the second disposal is known to have cost £50.000.

Required:
(a) Identify the method of providing for depreciation on plant employed by the client, stating how you have arrived at your conclusion.
(b) Show how the figures shown at line (B) for each of the years ended 31 March 20X6. 20X7 and 20X8 were calculated. Extend your workings to cover the year ended 31 March 20X9.
(c) Produce the figures that should be included in the blank spaces on the trend statement at lines (A). (B) and (C) for the year ended 31 March 20X9.
(d) Calculate the profit or loss arising on each of the two disposals.

Copyrighted material

* Question 3

In the year to 31 December 20X9, Amy bought a new machine and made the following payments in relation to it:

	L	*t*
Cost as per supplier's list	2,000	
Less: Agreed discount	1.000	11.000
Delivery charge		100
Erection charge		200
Maintenance charge		300
Additional component to increase capacity		400
Replacement parts		250

Required:

(a) State and justify the cost figure which should be used as the basis for depreciation.

(b) What does depreciation do. and why is it necessary?

(c) Briefly explain, without numerical illustration, how the straight-line and diminishing balance methods of depreciation work. What different assumptions does each method make?

(d) Explain the term 'objectivity' as used by accountants. To what extent is depreciation objective?

(e) It is common practice in published accounts in Germany to use the diminishing balance method for PPE in the early years of an asset's life, and then to change to the straight-line method as soon as this would give a higher annual charge. What do you think of this practice? Refer to relevant accounting conventions in your answer.

(ACCA)

* Question 4

The finance direaor of the Small Machine Parts Ltd company is considering the acquisition of a lease of a small workshop in a warehouse complex that is being redeveloped by City Redevelopers Ltd at a steady rate over a number of years. City Redevelopers are granting such leases for five years on payment of a premium of £20.000.

The accountant has obtained estimates of the likely maintenance costs and disposal value of the lease during its five-year life. He has produced the following table and suggested to the finance director that the annua) average cost should be used m the financial accounts to represent the depreciation charge in the profit and loss account.

Table prepared to calculate the annual overagecost

Years of life	I	2	:	4	5
	£	*t*	£	£	*t*
Purchase price	20.000	20.000	20.000	20,000	20,000
Maintenance/repairs					
Year 2		1.000	1.000	1.000	1.000
3			1.500	1.500	1.500
..				1.850	1,850
5					ZOOO
	20.000	21.000	21500	24.350	26.350
Resale value	11.500	10.000	8.010	5.350	350
Net cost	8.500	11.000	14.490	19.000	26,000
Annual average cost	S.500	5.500	4.830	4.750	5.200

Copyrighted material

The finance director, however, was considering whether to calculate the depreciation chargeable using the annuity method with interest at 15%.

Required:

(a) Calculate the entries that would appear in the profit and loss account of Small Machine Parts **Ltd** for each of the five years of the life of the lease for the amortisation charge, the interest element in the depreciation charge and the income from secondary assets using the ANNUITY METHOD. Calculate the net profit for each of the five years assuming that the operating cash flow is estimated to be £25.000 per year.

(b) Discuss briefly which of the two methods you would recommend.

The present value at 15% of £1 per annum for five years is **£3.35214.**

The present value at 15% of **£1** received at the end of year 5 is £0.49717.

Ignore taxation.

(ACCA)

Question 5

Simple SA has just purchased a roastmg/saiting machine to produce roasted walnuts. The finance director asks for your advice on how the company should calculate the depreciation on this machine. Details are as follows:

Cost of machine	SF8CO.0CO
Residual value	SF104.000
Estimated life	4 years
Annual profits	SF2.000.000
Annual turnover from machine	SF950.000

Required:

(a) Calculate the annual depreciation charge using the straight-line method and the reducing balance method. Assume that an annual rate of 40% is applicable for the reducing balance method.

(b) Comment upon the validity of each method, taking into account the type of business and the effect each method has on annual profits. Are there any other methods which would be more applicable?

Question 6

(a) IAS 16 Property, Plant and Equipment requires that where there has been a permanent diminution in the value of property. pJant and equipment the carrying amount should be written down to the recoverable amount The phrase 'recoverable amount' is defined in IAS 16 as "the amount which the entity expects to recover from the future use of an asset including its residual value on disposal'. The issues of how one identifies an impaired asset, the measurement of an asset when impairment has occurred and the recognition of impairment losses were not adequately dealt with by the standard. As a result the International Accounting Standards Committee issued IAS 36 *Impairment of Assets* m order to address the above issues.

Required:

(i) Describe the circumstances which indicate that an impairment loss relating to an asset may have occurred.

(ii) Explain how IAS 36 deals with the recognition and measurement of the *impairment of assets.*

Copyrighted material

(b) AB. a public limited company, has decided to comply with IAS 36 *Impairment* of Assets. The following information is relevant to the impairment review:

(i) Certain items of machinery appeared to have suffered a permanent diminution m value. The inventory produced by the machines was being sold below its cost and this occurrence had affected the value of the productive machinery. The carrying value at historical cost of these machines is $290,000 and their net selling price is estimated at $120,000. The anticipated net cash inflows from the machines is now $ 100.000 per annum for the next three years. A market discount rate of 10% per annum is to be used in any present value computations.

(H) AB acquired a car taxi business on I January 20X1 for $230,000. The values of the assets of the business at that date based on net selling pnces were as follows:

	$000
Vehicles (12 vehicles)	120
Intangible assets (taxi licence)	30
Trade receivables	10
Cash	50
Trade payables	(20)
	190

On I February 20XI, the taxi company had three of its vehicles stolen. The net selling value of these vehicles was $30,000 and because of non-disclosure of certain risks to the insurance company, the vehicles were uninsured. As a result of this event, AB wishes to recognise an impairment loss of $45,000 (inclusive of the loss of the stolen vehicles) due to the decline in the value in use of the cash generating unit, that is the taxi business. On I March 20XI a rival taxi company commenced business in the same area. It is anticipated that the business revenue of AB will be reduced by 2596 leading to a decline in the present value in use of the business, which is calculated at $150,000. The net selling value of the taxi licence has fallen to $25,000 as a result of the rival taxi operator. The net selling values of the other assets have remained the same as at I January 20XI throughout the period.

Required:
Describe how AB should treat the above impairments of assets in its financial statements.

(In part (b) (ii) you should show the treatment of the impairment loss at I February 20X1 and I March 20X1.)

(ACCA)

Question 7

Infinite Leisure Group owns and operates a number of pubs and clubs across Europe and South East Asia. Since inception the group has made exclusive use of the cost model for the purpose of its annual financial reporting. This has led to a number of shareholders expressing concern about what they see as a consequent tack of clarity and quality in the group's financial statements.

The CEO does not support use of the alternative to the cost model (the revaluation model), believing it produces volatile information. However, she is open to persuasion and so, as an example of the impact of a revaluation policy, has asked you to carry out an analysis (using data concerning 'Socr* - one of the group's nightclubs sold during the year to 31 October 2006) to show the impact the revaluation model would have had on the group's financial statements had the model been adopted from the day the club was acquired.

Copyrighted material

The following extract has been taken from the company's asset register,

Outlet	W
Acquisition data	
Date acquired	1 November 2001
Total cost	€ 10.24m
Cost components:	
Plant and equipment	
Cost	€0.24m
Economic life	six years
Residual value	nil
Property	
Buildings	
Cost	€7.0m
Economic life	50 years
Land	
Cost	€3.0m

Updates

1 November 2003	Replace>ment cost of plant & eauiprrn (mamly specialised audio visual equipment). No change to economic life. Property revaluation €13m (land €4m. buildings €9m). Future economic life as at I Nov 2003 50 years

Disposal

Date committed to a plan to sell	January 2006
Date sold	June 2006
Net sale price	€9.lm
Sale price components	
Plant and equipment	€0.1m
Property	€9.0m

Note: the Group accounts for property and plant and equipment as separate non-current assets in its balance sheet using straightlme depreciation.

Required

Prepare an analysis to show the impact on Infinite Leisure's financial statements for each year the *'Soo''* nightclub was owned had the revaluation model been in place from the day the nightclub was acquired.

(The *Association of International* Accountants)

References

1 IAS 16 *Properly, Plant ami Equipment%* IASB, revised 2(HM, para. 6.
2 *Ibid.*, para. 16.
3 *Ibid.*, para. 22.
4 IAS *1$ Borrowing Costs*. IASB, revised 2004, para. 7.
5 *Ibid.)* para. 11.
6 IAS 16 *Property. Plant and Equipments* IASB, revised 2004, para. 18.
7 *I hid.,* para. 6.
8 *Ibid.*, para. 6.

Copyrighted material

9 (AS 36 *Impairment of. facts,* IASH, 2004.
10 IAS 16 *Property, Plant and Equipment,* IASH, reused 2004, para. 29,
11 *lbid.*% para. 41.
12 IAS 36 *Impairment of Assets,* 1ASH, 2004, para. 33.
13 *IbuLs* paras. 55-56.
14 IAS 40 *Investment Property,* IASH, 2004.

Copyrighted material

16.1 Introduction

This chapter introduces the accounting principles and policies that appl\ to lease agreements primarily from the viewpoint of the lessee. We are interested in developing a wider understanding of leasing and leasing-related issues, so that you can understand how thc\ should be represented in the financial statements and why a compan) might Favour a particular type of lease agreement.

In this chapter we consider the following:

- Leasing - an introduction
- IAS 17- the coniro\crs\
- IAS 17 -classification of a lease
- IAS 17-accounting for leases b\ lessees
- Accounting for the lease of land and buildings
- Leasing - a form of off balance sheet financing
- Accounting for leases - a new approach
- Accounting for leases by lessors

We must understand not only w hat a lease is and the mechanical adjustments required to account for any gi\en leasing agreement in the financial statements, but also the economic consequences of the accounting treatment that is applied and the impact of these economic consequences on companx behaviour.

16.2 Background to leasing

In this section we consider the nature of the lease; historical developments in leasing; reasons for its popularity; and why it was necessan to introduce IAS 17.

16.2.1 What is a lease?

IAS **17** *Liases* provides the following definition:

> A */ease* is an agreement wherein the lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time.

In practice, there might well be more than two parties involved in a lease. For example, on leasing a car the parties involved arc the motor dealer, the finance company and the compan\ using the car.

Sonic leases will give the lessee the option to purchase the asset at the end of the lease term, or may require the lessee to purchase the asset at the end of the lease term. In some countries an agreement where legal title will pass to the lessee is known as a hire purchase contract.

16.2.2 Historical developments in leasing

The growth in the leasing industn until the advent of IAS 17, and indeed after its introduction, was staggering.[1] Statistics produced by the Finance and Leasing Association, whose members account for 80"<> of all leasing in the UK, show[2] that the cost of assets acquired for leasing each year rose from *£2HX* miilion in 1973 to £2,894 million in 1983 to £10,200 million in 1991. In fact, it was estimated that in 1985 the value of leased equipment rep resented over 20" o of capital expenditure in the LK..[1]

16.2.3 Why did leasing become popular?

In the UK, there were two major reasons: the tax advantage to the lessor; and the commercial advantage to the lessee.

Tax advantage

The government is responsible for the initial stimulus to the leasing industn. In 1972, first year allowances (FYAs) on equipment were increased to 100%. These allowances could be offset against taxable profits, which reduced a company's tax bill.

Companies, especially in the manufacturing sector, which had sustained tax losses in preceding years could not utilise the tax benefits of FYAs. This resulted in lessors claiming the FYAs and then leasing out equipment to these other companies at a reduced rental, thus enabling both lessors and lessees to benefit from a leasing agreement.

The leasing industn nourished even more in times of high interest rates. In these periods, lessors can achieve even greater cash flow benefits by deferring tax payments. Consequently, lessors are even more committed to leasing.

Many of these tax advantages were removed by the Finance Act 1984. This implemented a gradual reduction in the corporation lax rale and a gradual removal of FYAs. Some other countries had similar or alternative tax advantages.

Commercial advantage

Despite the Finance Act 1984, there are still a number of advantages associated with leases. These are attributable in part to the ability to spread cash payments over the lease period instead of making a one-off lump sum payment. They include the following:

- Cosh flow management. If cash is used to purchase non-current assets, it is not available for the normal operating activ ities of a companv.
- Conservation of capital. Lines of credit may be kept open and may be used for purposes where finance might not be available easilv (e.g. financing working capital).
- Continuity. The lease agreement is itself a line of credit that cannot easilv be withdrawn or terminated due to external (actors, in contrast to an overdraft that can IK called in by the lender.
- Flexibility of the asset base. The asset base can be more easilv expanded and contracted. In addition, the lease payments can be structured to match the income pattern of the lessee.

Copyrighted material

• Off balance sheet financing. Leasing provides ihe lessee with the possibility of off* balance sheet financing,[4] whereby a company has the use of an economic resource that does not appear in the balance sheet, with the corresponding omission of the liability.

16.2.4 Why was IAS 17 necessary?

As with many of the standards, action was required because there was no uniformity in the treatment and disclosure of" leasing transactions. The need became urgent following the massive growth in the leasing industry and the growth in off balance sheet financing. In the former case, leasing had become a material economic resource; in the latter case, the accounting treatment of the lease transaction was seen to distort the financial reports of a company so that they did not represent a true and fair view of its commercial activities.

However, for the lirst time attention was paid to the economic consequences of introducing a standard, the ASC in the UK expressing a concern that the standard might have undesirable economic consequences/ (The UK standard, SSAP 21, was similar in principle to IAS 17.) The inclusion of the lease obligation might affect the lessee company's gearing adversely and, indeed, cause it to exceed its legal borrowing powers under the Memorandum and Articles or under a loan agreement. The Memorandum and Articles might, for example, have a stipulation that the total borrowings should not exceed the total shareholders' funds. In the event, the commercial reasons for leasing and the capacity of the leasing industry to structure lease agreements to circumvent the standard have prevented a reduction in lease activity. Evidence of lessors varying the lerm of the lease agreements is supported by Cranficld" and by Abdcl-Khalik *et al?*

Macdonald[s] made the point that most transactions will IK* undertaken with a commercial purpose; some ma\ be undertaken, or undertaken in a particular form, so as to change materially the accounting message communicated by the accounts; even those commercially motivated may be accounted for in one way rather than another so as to improve the accounting message. Macdonald also observed that, while it might IK thought that the overriding requirement of the fair view could cope with such pressures, this was prevented by the lack of auditor independence, the inadequacy of qualified reports as opposed to revised accounts, and the absence of a codified conceptual framework with which to constrain auditor judgement.

A standard was necessary to ensure uniform reporting and to prevent the accounting message being manipulated.

16.3 IAS 17 (and its national equivalents) - the controversy

This section considers the development of IAS 17, its main thrust and why it was so controversial. It also discusses how the accounting and legal professions differ in their approach to the reporting of lease transactions.

16.3.1 Development of IAS 17

IAS 17 and its national equivalents proved to be extreme!} controversial accounting standards. The extent of the controversy is shown by the time that many took to become standards.

IAS 17 was original!) issued in September 1982 (the latest revision was in 20(14 effective 1 January 2005) and was effective for periods beginning on or after 1 January 1984. This followed the development of a standard in the USA, Financial Accounting Standard 13 (SI'AS 13), which was issued in 1977.

Copyrighted materia

In the UK I he standard SSAP 21 was not issued until 1V84, and this was onh issued after a three-year exposure period. Prior to the exposure draft being issued there had been a five-year discussion period about the approach taken b\ the standard.

16.3.2 What is the main thrust of IAS 17?

First, IAS 17 distinguishes between two types of lease - finance and operating — and recommends different accounting treatment for each. In brief, the definitions were as follows;

- Finance lease: a lease that transfers substantially all the risks and rewards of ownership of an asset. Title mav or mav not eventually be transferred.
- Operating lease: a lease other than a finance lease.

The accounting treatment and definition of each lease will be explored in greater depth in sections Hi.4 and 16.5 below.

Second, the standard requires finance leases to be capitalised in the lessee's accounts. This means that the leased item should !>c recorded as an asset in the balance sheet, and the obligation for future payments should be recorded as a liability in the balance sheet. It is not permissible for the leased asset and lease obligation to IK left out of the balance sheet. In the case of operating leases, the lessee is required only to expense the annual payments as a rental through the income statement.

16.3.3 Why was the IAS 17 approach so controversial?

The proposal to classify leases into finance and operating leases, and to capitalise those which are classified as finance leases, appears to be a feasible solution to the accounting problems that surround leasing agreements. So, xvhx did the standard setters encounter so much controversy in their attempt to stop the practice of charging all lease payments to the income statement?

The whole debate centres on one accounting policy: substance over form. Although this is not cited as an accounting concept in the IASC *Framework,* para. 35 states:

> If information is to represent faithful!) the transactions and other events thai it purports to represent, it is necessary that they are accounted for and presented in accordance with their substance and economic reality and not mereh their legal form.

The real sticking point was that IAS 17 invoked a substance oxer form approach to accounting treatment that was completely different to the traditional approach, which has strict regard to legal ownership. The IASC argued that in reality there were two separate transactions taking place. In one transaction, the company was borrowing funds to be repaid over a period. In the other, it was making a payment to the supplier for the use of an asset.

The correct accounting treatment for the borrowing transaction, based on its substance, was to include in the lessee's balance sheet a liability representing the obligation to meet the lease payments, and the correct accounting treatment for the asset acquisition transaction, based on its substance, was to include an asset representing the asset supplied under the lease.

IAS 17, para. 10, states categorically that 'whether a lease is a finance lease or an operating lease depends on the substance of the transaction rather than the form of the contract*.

Copyrighted material

16.3.4 How do the accounting and legal professions differ in their approach to the reporting of lease transactions?

The accounting profession sees itself as a service industry thai prepares financial reports in a dynamic environment, in which the user is looking for reports that reflect commercial reality. Consequently, the profession needs to IK sensitive and responsive to changes in commercial practice.

There was still some opposition within the accounting profession to the inclusion of a finance lease in the balance sheet as an *asset\ The opposition rested on the fad thai the item that was the subject of the lease agreement did not satisfy the existing criterion lor classification as an asset because it was not 'owned' by ihe lessee. To accommodate this, the definition of an asset has been modified from *ow nership* to 'control[1] and 'the ability to contribute to llie cash flows of the enterprise*.

The legal profession, on the other hand, concentrates on the strict legal interpretation of a transaction. The w hole concept of substance over form is contrary to its normal practice.

It is interesting to reflect that, whereas an equity imestor might prefer the economic resources to he included in the balance sheet under the substance over form principle, this is not necessarily true for a loan creditor. The equity shareholder is interested in resources available for creating earnings; the lender is interested in the assets available as seeurin.

Another way to view the asset is to think of it as an asset consisting of the ownership of the right to use the facility as opposed to the ownership of the physical item itself. In a way this is similar to owning accounts recei\able or a patent or intellectual property. You do not have a physical object but rather a valuable intangible right.

16.4 IAS 17 - classification of a lease

As discussed earlier in the chapter. IAS 17 provides definitions for classifying leases as finance or operating leases, then prescribes ihe accounting and disclosure requirements applicable to the lessor and the lessee for each t\pe of lease.

The crucial decision in accounting for leases is whether a transaction represents a finance or an operating lease. We have already defined each t\ pe of lease, but we must now consider the risks and rewards of ownership.

IAS 17 provides in paragraph 10 a list of the factors that need to be considered in the decision whether risks and rewards of ownership have passed to the lessee. These factors are considered individually and in combination when making the decision, and if met would normalK indicate a finance lease:

(a) the lease transfers ownership of the asset to the lessee In the end of the lease term;

(h) the lessee has the option to purchase the asset at a price that is expected to be sufficiently lower than the fair value at the date the option becomes exercisable for it to be reasonably certain, at the inception of the lease, that the option will be exercised;

(c) the lease term is for the major part of the economic life of the asset even if title is not transferred;

(d) at the inception of the lease the present \alue of the minimum lease payments amounts to at least substantial^ all of the fair value of the leased asset; and

(e) the leased assets are of such a specialised nature that onl> the lessee can use them without major modifications.

Copyrighted materia

The following is an extract from the Tulloxx Oil pic restated 2IMW accounts illustrating that the classification under IAS 17 has additional criteria to that applied in the UK:

While this arrangement did not fall to IK treated as a finance lease under L K GAAP, IAS 17 imposes additional conditions which mean that FPSO is classified as a finance lease by reference to the following specific criteria in IAS 17:

- at the inception of the lease the present value of the minimum lease payments amounts to at least substantially all the lair value of the leased asset; and
- the leased assets are of such a specialised nature that only the lessee can use them without major modifications.

Lease classification is made at the inception of the lease and changes of estimates (e.g. of the economic life or residual value of the asset), or changes in circumstances (e.g. default by the lessee) do not alter the classification.

Leases of land

If land is leased and legal title is not expected to pass at the end of the lease the lease will be an operating lease. The reason is that the lease can never IK for the substantial part of the economic life of the asset (criterion (c) above). This means that if a land and buildings lease is entered into it should be classified as two leases, a land lease which is an operating lease and a buildings lease which could be an operating or a finance lease. The lease payments should be allocated between the land and buildings elements in proportion to the relative fair values of the land element and the buildings element of the lease at its inception.

This split is not required b\ lessees if the land and buildings are an investment property accounted for under IAS 40, and where the fair value model has been adopted.

IAS 17 (revised 1997) included a helpful flow chart, prepared by the IAS secretariat, which represents examples of some possible positions that would normal!) be classified as finance leases (Figure 16.1).

16.5 IAS I 7 - accounting for leases by lessees

16.5.1 Accounting requirements for operating leases

The treatment of operating leases conforms to the legal interpretation and corresponds to the lease accounting practice that existed before IAS 17. No asset or obligation is shown in the balance sheet; the operating lease rentals payable are charged to the income statement on a straight-line basis.

16.5.2 Disclosure requirements for operating leases

IAS 17 requires that the total of operating lease rentals charged as an expense in the income statement should be disclosed, and these rentals should be broken down for minimum lease payments, contingent costs, and sublease payments. Disclosure is required of the payments that a lessee is committed to make during the next year, in the second to fifth years inclusi\e, and oxer fixe xcars.

EXAMPLE • OPERATING LEASE Clifford pic is a manufacturing companx. It negotiates a lease to begin on 1 Januarx 20X1 with the fiilloxxing terms:

Copyrighted material

Figure 16.1 IAS **17 aid to categorising operating and finance leases**

Term of lease	4 years
Kstimated useful life of machine	9 vears
Age of machine on inception of lease	4 years
Purchase price of new machine	£75,000
Annual payments	£8,000

This is an Operating lease as it applies only to a part of the asset's useful life, and the present value of the lease payments does not constitute substantially all of the fair value.

The amount of the annual rental paid - £8,(100 p.a. - will be charged to the income statement and disclosed. There will also be a disclosure of the ongoing commitment with a note that £8,000 is payable within one year and £24,000 within two to five vears.

16.5.3 Accounting requirements for finance leases

\\ e follow a step approach to illustrate the accounting entries in both the balance sheet and the income statement.

When a lessee begins a finance lease, both the leased asset and the related lease obligations need to be shown in the balance sheet.

Calculate (be fair value:
Fair value of asset = £16,500

Calculate the present value of minimum lease payments:

£6,000 + $\frac{\text{\& 0 M}}{1.1}$ $\frac{\text{£6,000}}{(1.1)'}$, / 1 6 4 1 3 * I M "

- Compare the fair value and the present value. It is a finance lease because PY of the lease payments is substantially all of the fair value of the asset.

Balance sheet steps for a finance lease

Step 1 Capitalise lease at lair value (present value is immaterially different):
Asset value = £16,500

Step 2 Calculate depreciation (using straight-line method):
£16,500/3 = £5,500

Step 3 Reduce the asset:

Balance sheet (extract) as at		.?/ *Dec 20X1*	.?/ *Dec 20X2*	*31 Dec 20X3*
ASSET	Opening value	16,500	11,(MM)	5,500
(Right to	Depreciation	5,500	5,500	5,500
use asset)	Closing value	11,000	5,500	

Or if we keep the asset at cost as in published accounts:

ASSKT	Cost	16,500	16,500	16,500
(Right to	Depreciation	5,000	11,000	16,500
use asset)	Net book value	11,000	5,500	

Step 4 Obligation on inception of finance lease:
Liability = £16,500

Step 5 Finance charge:

Total payments	3 X £6,000	= £18,000
Asset value		= £16,500
		£1.500

Finance charge
Allocated using sum of digits;

Year 1 = 2/(1 + 2) X £1,500 = (£1,000)
Year 2 = 1/(1 + 2) X £1,500 - (£500)

Note that the allocation is only over two periods because the instalments are being made in ad\ ancc. If the instalments were being made in arrears, the Iiabilitv would continue over three vears and the allocation would be over three vears.

Step 6 Reduce the obligation:

Bulance sheet (extract) as at		*31 Dec 20X1*	*31 Dec 20X2*	.?/ *Dec 20*
I .iuhility	Opening value	16,500	11,500	6,(MHI
(Obligation	Lease payment	6.000	6,000	6,000
under finance		10,500	5,500	
lease)	Finance charge	1,000	500	–
	Closing value	11,500	6,(MM(	–

Copyrighted material

Note that the closing balance on the asset represents unexpired service potential and the closing balance on the liability represents the capital amount outstanding at the balance sheet date.

Income statement steps for a finance lease

Step 1 A depreciation charge is made on the basis of use. The charge would be calculated in accordance with existing company policy relating to the depreciation of that type of asset.

Step 2 A finance charge is levied on the basis of the amount of financing outstanding.

Hoth then appear in the income statement as expenses of the period:

hit time' statement (extract) for year ending

	31 Dec 20X1	*31 Dec 20X2*	*31 Dec 20X3*
Depreciation	5,500	5,500	5,500
Finance charge	1,000	5(H)	—
Total	6,500	6.000	5,500

In the Clifford example, we used the sum of the digits method to allocate the finance charge over the period of the repayment. In the following example, we will illustrate the actuarial method of allocating the finance charge.

EXAMPLE • FINANCE LEASE Witts pic negotiates a four-year lease for an item of plant with a cost price of £35,000. The annual lease payments are £10,000 payable in advance. The cost of borrowing for Witts pic is I5"<>.

First we need to determine whether this is a finance lease. Then we need to calculate the implicit interest rate and allocate the total finance charge over the period of the repa\menis using the actuarial method.

- Categorise the transaction to determine whether it is a finance lease.

Fair value of asset	= £35,000
PV of future lease payments:	
£10,000 + (10,000 X $aj_{1\$}$)	
£10,000 + (10,000 x 2.283)	= £32,830

The PV of the minimum lease payments is substantially the fair value of the asset. The lease is therefore categorised as a finance lease.

- Calculate the Interest rate implicit in the lease'.

Fair value	= Lease payments discounted at the implicit interest rate
£35,000	= £10,000 + (10,000 X $_{tfj\}|}$)
$<i_{3f}$	= £25,000/10,000 = 2.5
i	= 9.7%

- Allocate the finance charge using the actuarial method.

Figure 16.2 shows that the finance charge is levied on the obligation during the period at 9.7%, which is the implicit rate calculated above.

Copyrighted material

Figure 16.2 Finance charge allocation using actuarial method

16.5.4 Disclosure requirements for finance leases

IAS 17 requires that assets subject to finance leases should be identified separately and the net carrying amount disclosed. This can be achieved either by separate entries in the property, plant and equipment schedule or by integrating owned and leased assets in this schedule and disclosing the breakdown in the notes to the accounts.

The obligations relating to finance leases can also be treated in two different ways. The leasing obligation should either be shown separately from other liabilities in the balance sheet or integrated into 'current liabilities' and 'non-current liabilities' and disclosed separately in the notes to the accounts.

The notes to the accounts should also analyse the leasing obligations in terms of the timing of the payments. The analysis of the amounts payable should be broken down into those obligations falling due within one >car, two to five \ears, and more than *fixe* years.

Note that Figure 16.2 also provides the information required for the balance sheet. For example, at the end of year 1 the table shows, in the final column, a total obligation of £27,425. This can be further subdivided into its non-current and current components by using the next item in the final column, which represents the amount outstanding at the end of year 2. This amount of £19,115 represents the non-current element, and the difference of £8,310 represents the current liahilitx element at the end of year 1.

This method of calculating the current liability from the table produces a different current figure each year. For example, the current liability at the end of year 2 is £9,115, being £19,115 - £10,000. This has been discussed in *External Financial Reporting,* where the point was made that the current liability should be the present value of the payment that is to be made at the end of the next period, i.e. £10,000 discounted at 9.7"", which gives a present value for the current liability of £9,115 for inclusion in the balance sheet each year until the liability is discharged." We use (he conventional approach in working illustrations and exercises, but you should bear this point in mind.

EXAMPLE • DISCLOSURE REQUIREMENTS IN THE LESSEE'S ACCOUNTS It is interesting to refer to the disclosures found in published accounts as illustrated by the Nestle Group accounts.

Extract from the Nestle Group - Annual Report and Accounts 2(H)3

Accounting policies

Leased assets

Assets acquired under long-term finance leases are capitalised and depreciated in accordance with the Group's policy on property, plant and equipment. The associated obligations are included in financial liabilities.

Rentals payable under operating leases are charged to the income statement as incurred.

Other notes

Lease commitments

The following charges arise from these commitments:

Operating leases

In millions of CI IF	21MM	2(102
	Minimumi lease payments	fm ure value
\\ ithin one year	**458**	450
In the second Year	378	382
In the third to fifth year inclusive	705	753
After the fifth year	89J	1.395
	2,434	2,980

Finance leases

In millions of C.HI"	2003		2(M)2	
	Minimum ful ure payments			
	Present value	Future \aluc	Present value	1Hit ure value
Within one year	48	64	52	**64**
In the second vear	42	53	43	52
In the third to fifth year inclusive	76	urn	63	86
After the fifth year	**106**	**137**	138	191
	272	**360**	29ft	393

The difference between the future \aluc of the minimum lease payments and their present value represented the discount on the lease obligations.

16.6 Accounting for the lease of land and buildings

Land and buildings are dealt with separately. Kach has to IK reviewed to determine whether to classify as an operating or finanee lease. This is illustrated in the Warehouse Company example.

I-el us assume thai

- The Warehouse Company I.id, uhose borrowing rate was 10% per annum, entered into a ten-year lease under which it made payments of SlOft.NSo annually in advance.
- The present \alue of the land was $500,000 and of the buildings was $500,000.
- The value of the land at the end often >cars was $o~0,(H)0 and (he \aluc of the buildings was $50,000.

Classifying the land segment of the lease

We first need to classify the land lease. As there is no contract to pass title at the end of the contract and the land is expected to increase in value, it is clear that the land segment of the contract docs not involve the lessor transferring the risk and benefits to the lessee. This means thai the lessee has to account for the lease of the land as an operating lease.

Copyrighted material

Classifying the building segment of the lease

The building segment of the lease is different The residual value has fallen to $50,000 which has a present value of $19,275 (50,000 X 0.3855). This means that 96% of the benefit has been transferred (500,000 - 19,275) and the building segment is, therefore, a finance lease.

How to apportion the lease payment in the income statement

The payment should be split at the commencement of the lease according to the fair \alue of the components covered by the lease. In the case of the land, the present value of the land is **8500,000 of which** $258,285 (670,000 X 0.3X55) represents the present value of the land at the end of the contract so the balance of $241,715 represents the present value of the operating lease. Similarly the amount covered by the finance lease is S480,725. Splitting the lease payment of $106,886 in those proportions (241,715:480,725) gives $35,763 for the land component and S7I.I23 for the finance lease representing the buildings leased.

How to report in the balance sheet

For the finance lease covering the building the lessee will have to show a $480,725 asset initially which will be depreciated over the ten years of the lease according to the normal policy of depreciating buildings which are going to last ten years. At the same time a liability representing an obligation to the legal owner of the buildings (the lessor) for the same amount will be created. As lease payments are made the interest component will be treated as an expense and the balance will be used to reduce the liability.

In this example the risk and rewards relating to the building segment were clearly transferred to the lessee. If the residual value had been say, $350,000 rather than S50.000 then the present value at the end of the lease would ha\e been S134,°25 which represents 27°o of the value. This does not indicate that substantially all the benefits of ownership have been transferred and hence it would be classified as an operating lease. The lessee would not, therefore, capitalise the lease but would charge each period with the same leasing expense.

16.7 Leasing - a form of off balance sheet financing

Prior to IAS 17, one of the major attraetions of leasing agreements for the lessee was the off balance sheet nature of the transaction. However, the introduction of IAS 17 required the capitalisation of finance leases and rcmo\cd part of the benefit of off balance sheet financing.

The capitalisation of finance leases cflecthely means that all such transactions will affect the lessee's gearing, return on assets and return on investment. **Consequently,** IAS 17 substantial alters some of the ke\ accounting ratios which are used to analvse a set of financial statements.

Operating leases, on the other hand, are not required to be capitalised. This means that operating leases still act as a form of olT balance sheet financing.[1]" I lence they are extremely attractive to many lessees. Indeed, leasing agreements are increasingly being structured specifically to be elassified as operating leases, even though they appear to be more financial in nature."

An important conclusion is that some of the key ratios used in financial analysis become distorted and unreliable in instances where operating leases form a major part of a company's financing.[12]

To illustrate the effect of leasing on the financial structure of a company, we present a buy versus leasing example.

Copyrighted material

At a very simple level. Leaseguard has retainer agreements with its clients which are typically between two and four years' duration. Under any sensible extension of ASB's logic these should be capitalised rather than treated as revenue items. Imagine a world, however, where just about every contract for the provision of future services or assets that an organisation enters into is scrutinised for its asset and liability content

Discuss whether this is a valid argument for not treating all leases in the same manner.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (*).

* Question I

On I January 20X8. Grabbit pic entered into an agreement to lease a widgetmg machine for general use in the business. The agreement, which may not be terminated by either party to it, runs for six years and provides for Grabbit to make an annual rental payment of £92300 on 31 December each year. The cost of the machine to the lessor was £350.000. and it has no residual value. The machine has a useful economic life of eight years and Grabbit depreciates its property, plant and equipment using the straight-line method.

Required:

(a) Show how Grabbit pic will account for the above transaction in its balance sheet at 31 December 20X8, and in its income statement for the year then ended, if it capitalises the leased asset in accordance with the principles laid down in IAS 17.

(b) Explain why the standard setters considered accounting for leases to be an area in need of standardisation and discuss the rationale behind the approach adopted in the standard.

(c) The lessor has suggested that the lease could be drawn up with a minimum payment period of one year and an option to renew. Discuss why this might be attractive to the lessee.

* Question *2*

(a) When accounting for finance leases, accountants prefer to overlook legal form in favour of commercial substance.

Required:

Discuss the above statement in the light of the requirements of IAS 17 Leases.

(b) State briefly how you would distinguish between a finance lease and an operating lease.

(c) Smarty pic finalises its accounts annually on 31 March. It depreciates its machinery at 20% per annum on cost and adopts the 'Rule of 78" for allocating finance charges among different accounting periods. On I August 20X7 it acquired machinery on a finance lease on the following agreement:

(i) a lease rent of £500 per month is payable for 36 months commencing from the date of acquisition:

(ii) cost of repairs and insurance are to be met by the lessee:

(iii) on completion of the primary period the lease may be extended for a further period of three years, at the lessee's option, for a peppercorn rent.

The cash price of the machine is £15.000.

Required:

(1) Sec out how all ledger accounts reflecting these transactions will appear in each of the four accounting periods 20X7/8. 20X8/9. 20X9/Y0 and 20Y0/YI.

(2) Show the income statement entries for the year ended 31 March 20X8 and balance sheet extracts as at that **date.**

Question 3

The Mission Company Ltd. whose year-end is 31 December, has acquired two items of machinery on leases, the conditions of which are as follows:

Item Y: Ten annual instalments of £20.000 each, the first payable on I January 20X0. The machine was completely installed and first operated on I January 20X0 and its purchase price on that date was £1 60.000. The machine has an estimated useful life often years, at the end of which it will be of no value.

Item Z: Ten annual instalments of £30.000 each, the first payable on I January 20X2. The machine was completely installed and first operated on I January 20X2 and its purchase price on that date was £234,000. The machine has an estimated useful life of 12 years, at the end of which it will be of no value.

The Mission Company Ltd accounts for finance charges on finance leases by allocating them over the period of the lease on the sum of the digits method.

Depreciation is charged on a straight-line basis. Ignore taxation.

Required:

(a) Calculate and state the charges to the income statement for 20X6 and 20X7 if the leases were treated as operating leases.

(b) Calculate and state the charges to the income statement for 20X6 and 20X7 if the leases were treated as finance lease and capitalised using the sum of the digits method for the finance charges.

(c) Show how items Y and Z should be incorporated in the balance sheet, and notes thereto, at 31 December 20X7. if capitalised.

Question 4

X Ltd entered into a lease agreement on the following terms:

Cost of leased asset	£100.000
Lease term	5 years
Rentals six-monthly in advance	£ 12.000
Anticipated residual on disposal of the assets at end of lease term	£ 10.000
Lessee's interest in residual value	97%
Economic life	8 years
Inception date	I January 20X4
Lessee's financial year-end	31 December
Implicit rate of interest is applied half-yearly	4.3535%

Required:

Show the income statement entries for the years ended 31 December 20X4 and 20X7 and balance sheet extracts at those dates.

Copyrighted material

17.1 Introduction

In this chapter we consider the accounting treatments of the following:

- Research and development
- Goodwill and intangible assets
- Brands

and consider intellectual property.

17.2 Accounting treatment for research and development

Under IAS 38 *Intangible Assets,* the accounting treatment for research and development (R&D) differs depending on whether the expenditure relates to research expenditure or development expenditure. Broadly speaking, research expenditure must always IK* charged to the income statement and development expenditure should be capitalised provided a Strict set of criteria are met. In this section we will consider why there is pressure to write off R&D expenditure, the accounting requirements for R&D, and how development costs

are defined.

17.2.1 Why is there a pressure to write off R&D expenditure?

Many readers will think of R&D as an investment rather than as a cost. They may well perceive it as a strategic investment that is essential if we are to be competitive in world markets. This applies particular!) to an advanced technical industry such as chemicals, where a sustained high level of R&D investment is required.

The '2004 R&D Scoreboard*' prepared for the DTI by Company Reporting analysed the results for figures published in annual reports up to 31 May 2004. It was reported that the UK had the next to lowest ratio of R&D to sales of any large industrialised country. According to the figures, average R&D-to-sales figures for individual countries were:

	2004	2005
USA	4.9%	4.5%
Germany	4.3%	4.1%
Japan	4.2%	4.0%
Prance	3.1%	2.69b
UK	2.3%	2.0%

In the tabic of'Top 12 International Companies by R&D Expenditure', only one UK company features. An extract, which includes a comparison with each of the top US, German and Japanese companies, is shown below:

Position	*Company*	*Country*	*R&D expenditure* GCbn)
1	Daimler Chrysler	Germany	4.0
3	Ford	USA	3.9
4	Toyota	Japan	3.8
11	GlaxoSmithKline	UK	2.8

One publication mentioned that the recognition of R&D as an asset had appeared in a report from the House of Lords Select Committee on Science and Technology, stating that 'R&D has to be regarded as an investment which leads to growth, not a cost*.[3] Unfortunately, two constraints militate against companies incurring high levels ofexpendi ture. First, there is a commercial constraint: it is felt that a company which pursues a commitment to R&D is vulnerable to takeover bids. It is perhaps an irony that the threat comes from companies that have not had such a commitment. There is presumably an attraction for the company with the lower R&D commitment to mount a takeover with the prospect of a short-term increase in its earnings per share merely by reducing R&D by, say, 25^0. That would show an immediate increase in disclosed trading profit.

So why might companies wish to write off all of their research and development costs to the profit and loss account in the year in w hich the cost arises? It could be that directors have been pleased to take the expense in a year when they know its impact rather than carry it forward. They arc aware of profit levels in the year in which the R&D arises and could find it embarrassing to take the loss in a subsequent year when profits were lower or the company even reported a trading loss.

This brings us to our second constraint: the difficulty of being reasonably certain that the intended economic benefits of R&D activities will flow to the enterprise. Because of this uncertainty, the accounting profession has traditional!) considered it more prudent to write off the investment in research as a cost rather than report it as an asset in the balance sheet.

The development of an accounting standard in this area has been subject to the conflicting demands of the accruals concept (which would favour capitalisation if future benefits could be foreseen) and the prudence concept (which would favour immediate write-off). SSAP 13, issued in 1977, represented somewhat of a compromise between these two positions. Research expenditure had to be written off to the income statement as it arose. However, a choice of treatments was available for development expenditure. Provided certain criteria were satisfied, companies were permitted (but *not* required) to capitalise development expenditure as an intangible fixed asset and amortise it over the periods expected to benefit from the expenditure. This element of choice is seen b> many analysis as a significant weakness of the standard.

In its *Statement of Intent: Comparability ofFinancial Statements** the IASC proposed that the choice should be removed and that, if development costs meet the conditions tor capitalisation, they must be capitalised and depreciated. This is the approach that has since been adopted by IAS 9[5] and IAS 38[6] which superseded IAS 9 in 1998.

There has been some research on both analysts*[1] and accountants'* reactions to R&D expenditure. Nixon'' found that: 'Two important dimensions of the corporate reporting accountants* perspecli\e emerge: first, disclosure is seen as more important than the accounting treatment of R&D expenditure and, second, the financial statements are not viewed as the primary channel of communication for information on R&D.'

Copyrighted material

17.3 Research and development

IAS 38 has given a definition of development costs and also sets out the conditions thai need to be met in order to capitalise.

17.3.1 Research defined

IAS 38 states'" 'expenditure on research shall be recognised as an expense when it is incurred'. This means that it cannot be included as an intangible asset in the balance sheet. The Standard gives examples of research activities[1]' as:

(a) activities aimed at obtaining new knowledge;

(b) the search for, evaluation and final selection of, applications of research findings or other knowledge;

(c) the search for alternatives for materials, devices, products, processes, systems and services;

(d) the formulation, design, evaluation and final selection of possible alternatives for new or improved materials, devices, products, processes, systems or services.

Normally, research expenditure is not related directly to any of the company's products or processes. For instance, development of a high temperature material, which can be used in any aero engine, would be 'research', but development of a honeycomb for a particular engine would be 'development[1]. Whilst it is in the research phase, the IAS position[12] is that an entity cannot demonstrate that an intangible asset exists that will generate probable future economic benefits. It is this inability that justifies the IAS requirement for research expenditure not to be capitalised but to IK* charged as an expense when it is incurred.

17.3.2 Development defined

Expenditure is recognised[11] as development if the entity can identify an intangible asset and demonstrate that the asset will generate probable future economic benefits. The Standard gives examples of development activities:[14]

(a) the design, construction and testing of pre-production and pre-use prototypes and models;

(b) the design of tools, jigs, moulds and dies involving new technology;

(c) the design, construction and operation of a pilot plant that is not of a scale economical!) feasible for commercial production;

(d) the design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services.

17.3.3 Activities that are neither research **nor** development

The UK accounting standard SSAP 13 says"'* that there are activities that are related to research and to development but which are not classified as either for the purposes of the standard. These include:

- engineering follow-through in an early phase of commercial production;
- quality control during commercial production, including routine testing of products;
- troubleshooting in connection with breakdowns during commercial production;

Copyrighted material

- routine efforts to refine, enrich or otherwise improve on the qualities of an existing product;
- adaptation of an existing capability to a particular requirement or customer's need as part of a continuing commercial activity; seasonal or other periodic design changes to existing products;
- routine design of tools, jigs, moulds and dies, and activities, including design and construction engineering, related to the construction, relocation, rearrangement or start-up of facilities or equipment other than facilities whose sole use is for a particular R&D development project.

IAS 38 does not provide this guidance, hut it is apparent that such guidance would be useful in deciding whether expenditure can be capitalised under the rules identified in the standard.

17.3.4 Capitalising development costs

The important paragraph of IAS *3H* (para. 57) says an intangible asset lor development expenditure shall be recognised if and only if an entity can demonstrate all of the following;

(a) the technical feasibility of completing the intangible asset so that it will IK available for use or sale;

(b) the intention to complete the intangible asset and use or sell it;

(c) its abilit) to use or sell the intangible asset;

(d) how the intangible asset will generate probable future economic benefits;

(e) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset;

(f) its ability to measure reliably the expenditure attributable to the intangible asset during its development.

It is important to note that if the answers to all the conditions (a) to (f) above are 'Yes' then the entity must capitalise the development expenditure. With the UK Standard, if the answers to all the questions are [1]Ves\ then the entity may capitalise the development expenditure.

This is a significant difference between the International and UK Standards. However, in practice, the difference between the International and UK Standards may be less than imagined. If a compam does not want to capitalise its development expenditure, it could argue that there is sufficient uncertainty about future development costs, being able to develop the product and/or making profits from future sales, and thus answer 'No* to one of the questions above. Then development expenditure would not be capitalised.

What IAS 38 is saying is that if future profits from the sale of the product exceed the development cost, all the development cost should be included as an intangible asset in the balance sheet. For example, assuming that development costs are S80 million:

(a) if luture profits are S100 million, then $80 million should be included in the balance sheet as development expenditure at the start of sales;

(b) if future profits are S50 million, then $50 million should be included in the balance sheet as development expenditure at the start of sales (applying IAS 36 Impairment of Assets);

(c) if there are no future profits, then no asset should be included in the balance sheet ai the start of sales.

Copyrighted material

What costs can be included?

The costs that can be included in development expenditure are similar to those used in determining the cost of inventory (IAS 2 *Inventories}.* It is important to note that only expenditure incurred after the project satisfies the IAS 38 criteria can IK capitalised - all expenditure incurred prior to this dale must be written off as an expense in the income statement,

How is the amortisation charge calculated?

The intangible asset of development costs is usually amortised over the sales of the product (i.e. the charge in 20X5 would be; 20X5 sales/total estimated sales X capitalised development expenditure).

17.3.5 Disclosure of R&D

R&D is important to many manufacturing companies, such as pharmaceutical companies who develop drugs, car and defence manufacturers. Disclosure is required of the aggregate amount of research and development expenditure recognised as an expense during the period."[1] Normally, this total expenditure will be;

(a) research expenditure,

(b) development expenditure amortised,

(c) development expenditure not capitalised, and

(d) impairment of capitalised development expenditure.

Under IAS :K more companies may capitalise R&D expenditure, although many **will** avoid capitalisation b\ saying the\ cannot he certain to make future profits from the sale of the product. Although R&I) is a popular topic for intellectual study and examination questions, most companies do not capitalise development expenditure.

17.3.6 Expensing development costs

As an illustration, the following is the R&D policy extract from the Rolls-Royce Annual Report for the year ended 31 December 2005;

> Research and development
> In accordance with IAS 3S 'Intangible Assets', expenditure incurred on research and development, excluding known recoverable amounts on contracts, and contributions to shared engineering programmes, is distinguished as relating either to a research phase or to a development phase.
>
> All research phase expenditure is charged to the income statement. For development expenditure, this is capitalised as an inlernalb generated intangible asset, onl\ if it meets strict criteria, relating in particular to technical feasibilitx and generation of future economic benefits.
>
> Expenditure that cannot be classified into these two categories is treated as being incurred in the research phase. The Group considers that, due to the complex nature of new equipemnt programmes, it is not possible to distinguish reliabh between research and development activities until relatively late in the programme.
>
> Expenditure capitalised is amortised over its useful economic life, up to an maximum of 15 \ears from the entrv-into-service of the product. The intangible assets are assessed for impairment hi-annually, or earlier if there are indications ol impairment.

Copyrighted material

The financial statements (of Rolls-Royce for the year ended 31 December 2005) show capitalised development expenditure of £265 million at the year end, *£J()* million additions and £13 million amortisation in the year,

17.3.7 The capitalisation of R&D expenditure

When a company incurs R&D expenditure, it makes payments for wages, materials and other expenses (Cr cash). The question is 'where does the debit entry go'? If the entity decides to treat these payments as an expense, then the entry is Dr Income Statement. However, if it decides to capitalise the expenditure, the entry is Dr R&D asset in the balance sheet. The early Accounting Standards decreed that only development expenditure could be capitalised, and only if it was expected to make a profit. IAS 38 says this profitable development expenditure must be capitalised, whereas earlier standards often gave the option of either capitalising the expenditure or charging it as an expense.

Is capitalisation acceptable?

The question is whether it is 'right' to capitalise this expenditure. The IASB's *Framework for the Preparation and Presentation of financial Statements* says 'an asset is recognised in the balance sheet when it is probable that the future economic benefits will How to the entity and the asset has a cost or value that can be measured reliablv'. I .et us consider these conditions further.

Cost incurred to date

Certainly (he capitalised cost of R&I) can be 'measured reliably* as it comprises the wages, materials and other costs which have been incurred in the development activity and are available from the accounting system. The problem, however, with R&D is whether 'it is probable that future economic benefits will flow to the entity*.

In the early stages of a development project, usually there are uncertainties over:

(a) whether the project can be completed successfully, and

(b) the costs of developing the product.

Experience tends to indicate that people who develop products are notoriously optimistic. In practice, they encounter many more problems than they imagined and the cost is much greater than estimates. This means that the development project will probably be approaching completion before future development costs can be estimated rcliahlv.

Profit measurement - estimating future sales

Once development has been completed, it is necessary to check whether sales of the product will IK- profitable. Sales value is the product of the selling price and quant in sold and there are uncertainties about both of these figures. For some high technology products the selling price might initially be high, but subsequently it will decline. For instance, high speed microprocessors will command a high price when they are released, but they will decline quite quickly as competitors develop faster microprocessors. Also, there is a relationship between quantity sold and the selling price - lowering the selling price will increase sales. This discussion highlights the problems of estimating future sales value.

Profit measurement - estimating future costs

Production costs might initially be high because of'learning*, but they are likely to reduce w hen production quantities increase - but by how much? These factors show how uncertain it is that a product will be profitable, and the potential inaccuracies in estimating this figure.

Copyrighted material

So, it may be very difficult to satisfy the Framework's statement of an asset as being 'recognised in the balance sheet when it is probable that the future economic benefits will How to the entity[1]. If this statement cannot be satisfied, then the development expenditure cannot be included as an asset in the balance sheet.

17.4 Introduction to goodwill and intangible assets

The discussion of goodwill and intangibles proceeds as follows:

- the current position is considered briefly;
- historical developments are considered;
- intangibles and goodwill are introduced along with an illustration of their accounting treatment;
- the economic consequences of accounting for goodwill are discussed;
- the amortisation ot goodwill is discussed;
- the main requirements of IFRS 3 *Business Combinations* and IAS 38 *Intangible Assets* are set out and evaluated.

17.5 Accounting for goodwill under IFRS 3

17.5.1 Definition of goodwill

IFRS 3 defines goodwill[1]' as: 'Future economic benefits arising from assets that are not capable of being individually identified and separately recognised[1]. The definition effectivelv affirms that the value of a business as a whole is more than the sum of the accountable and identifiable net assets. Goodwill can arise cither through the normal operations of an existing business (internally generated goodwill, discussed in IAS 38) or as a result of a business combination that results in an enlarged business (purchased goodwill, discussed in **IFRS** 3).

17.5.2 Internally generated goodwill

IAS 38 states clearly that 'Internally Generated Goodwill (or 'self generated goodwill') shall not be recognised as an asset\

In about 1990, a number of companies, including Ranks Hovis McDougall, capitalised their self-generated brands. However, IAS 38 prohibits[1]* this by saying 'Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance shall not be recognised as intangible assets'.

If companies \\ ere allowed to include these items as an asset in the balance sheet, it would:

(a) 'boost* assets and produce a more favourable balance sheet (e.g. by reducing gearing),

(b) if the credit entry was directly to the profit and loss account reserve (retained earnings) or a capital reserve in the balance sheet, there would be no effect on reported profit, but

(c) if the credit entry was to the income statement, this would 'boost' the profit for the year. This would allow the manipulation of reported profit.

Copyrighted material

(i.e. the balance sheet showed the company had negative net worth). As treatment 1 reduces shareholders' funds, it increases the capital gearing of the compam (i.e. loans/shareholders* kinds) and it could lead to a breach of loan covenants and banks and other investors being unw illing to pro\ ide loans to the emit).

It was possible to write off the goodwill in the year of acquisition to the income statement (option (e)). However, verv few companies would have taken this option as it would result ifl a ver\ substantial reduction in profit.

The initial **IAS** 22 **treatment**

Unlike the UK's SSAP 22, IAS 22 *Business Combinations* (revised 1998) did not allow goodwill to be written off against reserves in the year of acquisition, so all companies were then required to amortise goodwill to the income statement over its useful life (option (d)), thus reducing profits.

The IFRS 3 treatment

IFRS .i *Business (lombinutions* treats goodwill as it it has an indefinite lile. So, it tests goodwill annually for impairment. An impairment charge is made if the earning value is greater than the recoverable value of the goodwill. IFRS 3 prohibits the amortisation of goodwill.

The effect of this is that IFRS *S* is one of the International Accounting Standards that can have a substantial positive effect on reported profit. For example, under IAS, the reported profit of Yodafonc was increased bv £6.8 billion, because the previous charge for amortisation of goodwill was eliminated under IAS.

Whereas goodwill amortisation gave an annual charge, impairment losses will arise at irregular intervals. This means that the profit lor the year figure will become more volatile. Companies and analvsts might, therefore, relv more on the KUITDA (earnings before tax. depredation and amortisation) when assessing a company's performance, assuming that this is a better indication of maintainable profits. The following is an extract from the 2005 Molins pie annual report which adopts such a treatment of impairment charges:

Consolidated income statement for the vear ended 31 December 2005

	Before goodwill impairment and reorganisation costs in	Goodwill impairment m	Reorganisation Costs m	Toi.il **m**
Revenue	121.4	-	-	121.4
Cost of sales	(85.8)	-	(1.2)	(S7.0)
Ciross profit	35.6	—	(1.2)	34.4
Other operating income	0.3	-	-	0.3
Distribution expenses	(9.8)	-	<».2)	(10.0)
Administrative expenses	(18-7)	—	(0.3)	(19.0)
Other operating expenses	(1.2)	(6.7)	(0.5)	(S.4)
Operating prorit/(loss)	(>.2	(6.7)	(2.2)	(2.7)

17.5.5 Transition to IFRS 3 *Business Combinations*

Prior to II'RS 3, IAS 22 required goodwill to be capitalised and amortised in the profit and loss account over its useful life. **IFRS** 3 has been introduced for accounting periods starting

Copyrighted material

In issuing recent International Standards, the IASB has not only aimed to produce 'world-wide' Standards but also Standards which are acceptable to US Standard setters. The IASB wanted their Standards to IK acceptable lor listing on the New York Stock Kxchangc (NYSK), so there w as strong pressure on the I ASH to make their Standards similar to US Standards. The equivalent US Standard to IFRS 3 uses impairment of goodwill as the charge against profits (rather than amortisation). Thus, IFRS 3 uses the same method and it prohibits amortisation.

A further pressure for impairment rather than amortisation comes from listed companies. Ksscntially, listed companies want to maximise their reported profit, and amortisation reduces profit. For most of the time, companies can argue that the 'future economic benefit' of the goodwill is greater than its original cost (or earning value if it has been previously impaired), and thus avoid a charge to the income statement. Also, companies could argue that the 'impairment charge' is an unexpected event and charge it as an exceptional item. In the UK. most companies publicise their 'profit before exceptional items' which will avoid charging the 'exceptional impairment charge'. As mentioned above, it was reported that the UK teleeoms company Vodaibnc had increased its reported profit by /X>.S billion (i.e. j£6,<S(H) million) when it changed to International Standards avoiding amortisation of its goodwill.

Note that under IAS 38 an intangible asset with an 'indefinite' useful life is not amortised but subject loan annual impairment cheek (and written down to its impaired \alue if this is less than its carrying value). This treatment is similar to the treatment of purchased good will under IFRS 3 *Business Combinations.* 1FRS 3 justifies its treatment of purchased goodwill (in a business combination) by sa\ing it (always) has an indefinite useful life this seems more of a justification for the accounting treatment than reflecting the substance.

17.6.1 Effect of different methods on financial statements

The financial statements of C\Y Group for the year ended 31 December 20\2 are shown in Figure 17.1. The last three columns show the consolidated balance sheet and profit and loss account using:

- IFRS 3 where it is assumed that the goodwill remains worth at least £11)0,1111(1, and no impairment provision is required;
- writing off goodwill at acquisition to accumulated profits;
- IAS 22 where goodwill is amortised over tucnt) years (i.e. at £5,000 a year).

In this example, the effect is relatively small. I low ever,

- Under IFRS 3, shareholders* funds and profits are maximised. The profit margin (i.e. profit before tax/shareholders' funds) is slightly lower than for immediate write-off, as immediate write-off gives lower shareholders' funds. The gearing is lowest under this method.
- Immediate write-off gives the highest profit margin, but the highest gearing, as the write-off reduces shareholders[1] funds.
- IAS 22 (amortisation) gives the lowest profit margin, because of the amortisation charge for goodwill. The gearing is slight!) higher than for IFRS 3 because shareholders* funds have been reduced by the amortisation charge.

17.6.2 Economic consequences of each method

We have seen that amortisation has an effect on future MPS, while immediate write-off has an effect on the balance sheet structure. If there is no impairment of goodwill, IFRS 3 produces

Copyrighted material

Figure 17.1 Effect of **IFRS 3**

Copyrighted image

the same profit (and F.PS) as immediate write-off, and slightly higher shareholders' funds than amortisation. Writing offgoodwill against reserves acts to distort some of the primary ratios, since it reduces the shareholders' rcsencs and therefore the capital employed as well. This has important effects on inter-firm comparison. As an example, let us compare WPP's UK accounts with its US-ad justed accounts. If we concentrate purely on the goodwill adjust-ments, what is the effect on the return on capital employed (ROCK) ratio as per the above?

Copyrighted material

In brief, ihc profit in the USA is decreased by the annual amortisation charge and the capital employed is increased by the capitalised value of goodwill (which had been written ofTin the UK). This will reduce the US ROCK. For comparability, the accounts need to be adjusted so that they use exactly the same goodwill policy.

Gearing ratios are also affected by writing off goodwill against reserves. These ratios include:

$$\text{Clearing ratio} = \frac{\text{Total liabilitv - Current liability}}{\text{Capital employed}}$$

The gearing ratio measures the proportion of capital employed which has been raised by fixed-interest debt. A highh geared company has a high proportion of borrowings, while a company with low gearing relies more on shareholders' funds and equity. The gearing ratio is interpreted in different ways by different users: shareholders might seek higher ratios because this will increase the KPS; creditors might prefer lower ratios as this means that there are fewer secured claims against the company's assets.

We have discussed the choices available for dealing with goodwill and have demonstrated the effect of each on the accounts.

17.7 Accounting for intangible assets under IAS 38

IAS 38 gives the following examples of classes of intangible assets:[20]

- brand names;
- mastheads and publishing titles;
- computer software;

The following is an extract from the 2005 Skandia Annual Report:

> Other intangible assets
> In the consolidated financial statements, other intangible assets are reported at their cost less accumulated amortization and impairment losses. These assets consist primarily of proprietary and purchased software which is judged to have significant value for the operations in the coming years... . The amortization schedule is based on estimated useful life, which for software as a rule varies from 3 to 5 years.

- licences and franchises;
- copyrights, patents and other industrial property rights, services and operating rights;
- recipes, formulae, models, designs and prototypes; and
- intangible assets under development.

17.7.1 Definition and scope

IAS 38 defines an intangible asset as *an identifiable non-monetary asset without physical substance'. The standard does not apply to:

- intangible assets held by an entity for sale in the ordinary course of business (IAS 2 *Inventories* or IAS 11 *Const ruction Contracts* applies here);
- deferred tax assets;
- leases;

- assets arising from employee l>cncfits;
- financial assets as defined in IAS 39 *Financial Instruments: Recognition ami Measurement;*
- goodwill acquired in a business combination (as we have already seen, IFRS 3 applies here);
- assets arising from an insurer's contractual rights under an insurance contract;
- non-CUITCnt intangible assets classified as held for sale.

17.7.2 Recognition criteria

IAS 38 states that an asset is recognised in respect of an intangible item if the asset is:

Identifiable

One of the difficulties that are faced when considering intangible items is their existence. This is what IAS 38 is examining here. The standard states that for an intangible asset to exist (or be identifiable) it must cither be separable or arise from contractual or other legal rights, whether or not the asset can be separately disposed of. This means that in theory a large number of intangible items could create assets.

Controlled by the entity

Control is one of the central features of the Framework definition of an asset. If the entity cannot exercise control over the potential future economic benefits inherent in an item then no asset should be recognised. Therefore IAS 38 does not normally allow an entity to recognise the potential 'asset[1] that could be said to exist because of the inherent skills in an assembled workforce. There is generally insufficient control over the workforce to allow asset recognition.

Future economic benefits

Again, it is inherent in the Framework definition of an asset that the potential future economic benefits can be identified with reasonable certainty. If the idcntifiability and control tests are satisfied then IAS 38 allows recognition of an intangible asset if:

- it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and
- the cost of the asset can be measured reliably.

17.7.3 Meaning of'cost*

IAS 38 states that this depends on the way in which the asset arose.

Separate acquisition

In such circumstances 'cost' has its normal meaning - as long as the other tests are satisfied recognition of an asset is perfectly possible. An example of such an asset would be a pay ment for a production licence.

Acquired as part of a business combination

In such a case a single payment has been made for the whole business and in order to complete the accounting it is necessary to allocate the cost as far as possible to the identifiable net assets, with the balance being goodwill accounted for under IFRS 3 (see earlier in the

Copyrighted material

chapter). It is here th.it the concept of 'identifiabilit)* can he applied to intangible items such as:

- customer lists;
- order or production backlogs;
- customer relationships (whether contractual or non-contractual);
- domain names.

If items such as the above have a reliable fair value at the date of acquisition then they can be recognised as separate assets in the balance sheet of the acquiring company or group.

Internally developed

Based on the reliability criterion, IAS 38 states that only development projects (see earlier in the chapter) that satisfy the stringent criteria laid out in paragraph 57 of the standard can be recognised as internally de\eloped intangibles.

17.7.4 Accounting treatment subsequent to initial recognition

IAS 38 states that recognised intangible non-current assets should be recognised at cost less aecumulated amortisation. Revaluation is on!) permitted if there is an active market in the intangible item. This is relatively unusual for intangible items so revaluations are quite rare.

The asset should be amortised oxer its estimated useful economic life, in a manner that is very similar to the treatment of property, plant and equipment under IAS 16. Where the estimated useful economic life is indefinite, then no amortisation is required but IAS 38 requires that the asset be subject to annual impairment reviews.

17.8 Disclosure of intangible assets under IAS 38

IAS 38 requires the disclosure of the following for eaeh type of intangible asset:[21]

(a) Whether useful lives are indefinite or finite. For finite useful lives, the useful li\es or amortisation rates used.

(b) The amortisation methods used for intangible assets with finite useful lives.

(e) Where amortisation of intangible assets is included in the income statement.

(d) The gross carrying amount and accumulated amortisation at the beginning and end of the period.

The following is an extract from the 2006 SABMiller annual report:

> Intangible assets
>
> Intangible assets are stated at cost less aecumulated amortization on a straight-line basis (if applicable) and impairment losses. ... Amortisation is included within net operating expenses in the income statement. ... Intangible assets with finite lives are amortised over their estimated useful economic lives, and only tested for impairment where there is a triggering event.

Some companies state the estimated lives for individual types of intangible asset as in the 2006 Kingston Communications (IIUI.I-) annual report:

Copyrighted materia

Intangible assets - Amortisation

The estimated useful lives are as follows:

Customer relationships	up to 8 years
Favourable contracts	period of contract up to 6 years
Order backlog	period to commencement of billing
Brand & Technology	up to 10 years

(e) A reconciliation of the carrying value at the beginning and end of the period, showing:

- additions, showing separately those from internal development, acquired separately and those acquired through business combinations;
- assets classified as held for sale or included in a disposal group classified as held for sale;
- increases or decreases resulting from revaluations and from impairment losses recognised or reversed directly in equity (IAS 36 *Impairment of Assets);*
- impairment losses recognised in the income statement in the period;
- impairment losses reversed in the income statement in the period;
- the amortisation charge;
- exchange differences;
- other changes in the carrying value in the period.

Where an intangible asset is assessed as having an indefinite useful life, the carrying \alue of the asset must be stated** and the reasons for supporting the assessment of an indefinite life.

As stated in the section on R&D, the financial statements must disclose the charge for research and development in the period.[21]

17.8.1 Intangible assets: extracts of accounting policies

In the 2006 financial statements of Kingston Communications (HULL) pic, the accounting policies state:

> Internally-generated intangible assets arc amortised on a straight-line basis over their useful lives.

The financial statements disclose the carrying value of intangible assets as:

Other intangible assets - Consolidated

	000s
Development costs	241
Software	**11,623**
Customer and supplier relationships	24,160
Technology & Brands	3,426
Total	39,450

In the 2005 financial statements of the Pearson publishing group, the financial statements disclose the carrying value of intangible assets as:

	million
Goodwill	3,654
Software	68
Acquired publishing rights	63
Other intangibles acquired	69
Total	3,854

Copyrighted material

Howc\cr, ihc information is limited in that only acquired brands can be reported on the balance sheet, which gives an incomplete picture of an entity's value. Kven with acquired brands, their value can only remain the same or be revised downward following an impairment review. This means that there is no record of any added value that miuht have been achieved by the new owners to allow shareholders to assess the current stewardship.

Prior to IAS 38, brand accounting emerged for two main reasons.

- For acquisitive companies it could be attributed to the accounting treatment required for measuring and reporting goodwill. The London Business School carried out research into the 'brands phenomenon' and found that *a major aim of brand \aluation has been to repair or pre-empt equity depletion caused b\ UK goodwill accounting rules'.[21]
- Non-acquisitive companies do not incur costs for acquiring goodwill, so their reserves are not eroded by writing off purchased goodwill. However, these companies may have incurred promotional costs in creating home-grown brands and it would strengthen the balance sheet if they were permitted to include a valuation of these brands.*[3]

Justifications for brand accounting

We now consider some other justifications that have been put forward for the inclusion of brands as a separate asset in the balance sheet.

Effect *on shareholders' funds*

Immediate goodwill write-off results in a fall in net tangible assets as disclosed b\ the balance sheet, even though the market capitalisation ofa company increases. One way to maintain theasset base and avoid such a depletion of companies' resents is to divide the purchased goodwill into two parts: the amount attributable to brands and the remainingamount attributable to pure goodwill. For instance, WPP have capitalised tWOOOrporate brand names (J, Walter Thompson; I lilt and know lton) which were originally valued in 1988 at *C$51)* million (and remain at that amount in the balance sheet). Without this capitalisation, the share owners[1] funds of *C*187.7 million in the 1998 accounts would IK-reduced b\ £350 million to a negative figure of {/J 62.3 million).

Effect *on borrowing powers*

The borrowing powers of public companies may be expressed in terms of multiples of net assets. In Articles of Association there may be strict rules regarding the multiple that a Company must not exceed. In addition, borrowing agreements and Stock Exchange listing agreements are generally dependent on net assets.

Effect on ratios

Immediate goodwill write-off distorts the gearing ratios, but the inclusion of brands as intangible assets minimised this distortion b\ providing a more realistic value for shareholders* funds. Guinness pic provided information on its gearing ratio in its five-year financial summary:

	.?/ *December*				
Gearing ratio	*1992*	*1993*	*1994*	*1995*	*1996*
Including cost of acquired brands	56%	49%	35%	28%	34%
Excluding cost of acquired brands	140%	111%	63%	49%	58%

Effect on management decisions

It is claimed that including brands on the balance sheet leads to more informed and improved management decision making. The quality of internal decisions is related to the

Copyrighted material

qualit} of information available to management.[23] As brands represent one of the most important assets of a company, management should be aware of the success or failure of each individual brand. Knowledge about the performance of brands ensures that management reacts according!) to maintain or improve competitive advantage.

There is also evidence'* that companies with valuable brand names are not including these in their balance sheets and are not, therefore, taking account of the assets for insurance purposes.

17.9.1 The importance of brands

It is interesting to note that certain sectors have high global brand valuations. For example, the Hcst Global Brands Report 200ft'[9] showed beverages (Coca-Cola), computer software (Microsoft), computer services **(IBM),** computer hardware (Intel), telecoms (Nokia), automotive (Ford), entertainment (Disney), restaurants (McDonald's) and financial services (Citi) as leading global brands.

The Report ranked the top 100 by brand valuation and showed how valuable brands can be, with the top three **exceeding S45,(KH)m** (Coca-Cola Sft7,0()0m, Microsoft S5ft,°2ftm and IBM $48,907m) and even the hundredth exceeding **82,500m** (Levi's 12,609m).

This indicates the importance of investors having as much information as possible to assess management's stewardship of brands. If this cannot be reported on the face of the balance sheet then there is an argument for having an additional statement to assist shareholders including the information that the directors consider when managing brands.

The **KASB** has been active in developing global financial reporting standards and working with the FASH towards convergence of IASB and US standards. There is the same requirement for the valuers of intangible assets such as brands, licences, patents, know-how, customer contracts and customer relationships to adopt a global approach to the setting of global standards for valuers. The International Valuation Standards Committee has, therefore, set up a working party (see http://lVSC.Org) to draft a valuation standard with implementation guidance to avoid the variety of approaches to valuation that exists.

17.10 Intellectual property

According to the World Intellectual Property Organization (WIPO), intellectual property refers to creations of the mind: inventions, literary and artistic works and symbols, names, images and designs used in commerce. Intellectual property is divided into two categories, namely:

- industrial property which includes inventions (patents), trademarks, industrial designs and geographic indications of source; and
- copyright which includes literarv and artistic works such as novels, poems, plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs. Rights related to copyright include those of performing artistes in their performances, producers of phonograms in their recordings, and those of broadcasters in their radio and television programmes.

WIPO[10] is an international organisation dedicated to promoting the use and protection of works of the human spirit. These works - intellectual property - are expanding the bounds of science and technology and enriching the world of arts. Through its work, WIPO plays an important part in enhancing the quality and enjoyment of life as well as creating real wealth for nations. With headquarters in Geneva, Switzerland, WIPO is one of the sixteen

Copyrighted material

Specialised agencies of the United Nations system of organisations. It administers twenty-one international treaties dealing with different aspects of intellectual property protection. The organisation counts 175 nations as member states. Its importance is recognised in the following comment by Peter Oruckcr:

> Knowledge has become the 'key resource' of the world economy. The traditional factors of production - land, labour, capital - are becoming restraints rather than driving forces.

and in the UK, a lWi White Paper placed 'know-how' at the heart of competitiveness.*[1]

> Our competitiveness depends on making the most of our distinctive and valuable assets which competitors find hard to imitate. In a modern economy those distinctive assets are increasingl\ knowledge, skills and creativity rather than traditional factors.

In looking at the relative importance of asset values in businesses, in the l*>Sl>s 70% was attributed to tangible assets and 30% to intangible assets. In the mid-1990s, the situation reversed and *MY*o* was tangible assets and 70% intangible assets. More recently 95% has been attributed to intangible assets and 5% to physical and financial assets.

The rise of the new economy

This has been principally driven by information and knowledge. It has been identified by the Organization for Kconomic Q>-operation and Development (OKCD) as explaining the increased prominence of intellectual capital as a business and research topic. *

Through a brief examination of the period since the industrial revolution, the following chain of events is observable:"

(a) Capital and labour were brought together and the factors of production became localised and accessible.

(b) Firms pushed to increase volumes of production to meet the demands of growing markets.

(c) Firms began to build intangibles like brand equity and reputation (goodwill) in order to create a competitive advantage in markets where new entrants limited the profit-making potential of a strategy of mass production.

(d) Firms invested heavily in information technology to increase the quality of products and improve the speed with which those products could be brought to market.

(e) Firms realised the value of information and worked at managing information and transforming it into the intellectual capital needed to drive the organisation.

At each state of this corporate evolution fixed assets became less important, in relative terms, compared with intangible assets in determining a company's success. Accounting and financial reporting practices, however, have remained largely unchanged.

Guthrie, while arguing[14] that accountants must find a way to incorporate accurate measures and values of intellectual capital in formal company reports or they will become irrelevant, suggests that the importance of intellectual capital is specifically emphasised in

- the revolution in information tcchnologv and the information society;
- the rising importance of knowledge and the knowledge-based economy;
- the changing patterns of interpersonal activities and the network society;
- the emergence of innovation and creativity as the principal determinant of competitiveness.

Copyrighted material

In a world of dot.com companies, virtual corporations and a nourishing service industry, book values correlate poorly with market capitalisation.

The OECD definition

The OECD describes intellectual capital" as

> the economic value of two categories of intangible assets of a company:
> (a) organisational ('structural') capital and
> ib) human capital.

Structural capital refers to things like proprietary software systems, distribution networks and supply chains. Human capital includes human resources within the organisation (i.e. staff resources) and resources external to the organisation (namely, customers and suppliers). The term intellectual capital has often been treated as being synonymous with intangible assets. The definition by the OECD makes a distinction by identifying intellectual capital as a subset of rather than the same as the intangible assets base of a business.

Traditionally, accounting reports have been prepared on the basis of historical cost. This does not provide for the identification and measurement of intangibles in organisations - especially knowledge-based organisations. The limitations of the existing financial reporting systems have resulted in a move towards finding new ways to measure and report on a company's intellectual capital.

The legal view

As Ciallafcnt, Eastaway and Dauppe suggest,[3]* the principal characteristic of all forms of intellectual property is the so-called 'incorporeal* nature of that property. It is an abstraction, intangible and as such more difficult to protect than other less nebulous forms of property. To be eligible for legal protection, the author's or inventor's work must have been rendered into some tangible form. The term 'intellectual property' denotes the rights over a tangible object of the person whose mental efforts created it. The high-speed development in communications initially left the practical application of cop) right law in disarray as in the recent example of the *Napster* case (www.riaa.com-ncws-filings-pdf-napstcr-PlaintiffsSJM.pdf.url). The new technology of genetic engineering and the genome project leaves this area wide open.

The bankers* view

From about 1945 until 1975, bankers traditionally thought of intangibles as worthless and deducted them from net worth to arrive at tangible net worth. Liquidation analysis assumes that a loan will be repaid solely from the proceeds of sale of assets at forced sale prices. It stressed the value of the collateral as the main reason for lending.

By the early 1980s credit analysts from American banks in London began to input some value to some intangible assets, at first on a case-bv-case judgement. The major change in the attitude to intangibles arose from the wave of acquisitions and particularly leverage-acquisitions. Donaldson suggests the following principles;[3']

- An asset which generates cash in ways that can be understood and forecast has value to its owner.
- Where the asset and cash flow can be sold, a market price higher than the valuation of actual cash flow suggests that the owner is failing to extract the maximum value from the asset. The cash flow valuation mav underestimate the real value.
- The cost to replace an asset provides a useful check on other methods of value.

Copyrighted material

- Given thai valuation techniques are likely to remain underdc\eloped for some time il \\ill often be possible to give a range rather than pinpoint value.
- Value is the eritieal element, not cost. Where money is spent creating an asset it is well spent only if the asset has value, i.e. it is the value of the asset rather than the cost reflected in the balance sheet.
- Once established an asset should IK depreciated in wa\s to reflect the facts of each case.
- A tendency to lose value in liquidation is one factor to consider in assessing overall value. The ability to generate cash which helps to avoid liquidation remains important at all times.

17.10.1 Financial reporting models

Principal among the new reporting models are:

- the Intangible Asset Monitor (S\ciby; Celemi)[!s]
- the Balanced Scorecard (Kaplan and Norton)*[9]
- the Skandia Value scheme (F.dvinsson and Malone)[4"]
- the Intellectual Capital Accounts (DATI).[41]

At the OF.CD symposium referred to abo\e (see note 34 in the References) the focus of reported issues was on four issues:

(a) assessing what motivates firms to want to measure their intellectual capital;

(b) examining who within an organisation is best positioned to measure and manage intellectual capital;

(e) determining the potential effects that the reporting of intellectual capital is expected to have; and

(d) improved methods of measuring intellectual capital.

The findings of almost twent\ national research studies cover some common ground ;is follows:

- Organisations are motivated to
  - measure their intellectual capital to assist with competitive benchmarking exercises;
  - create a consciousness within the organisation that intellectual capital and human resources in particular do matter;
  - provide structured information to the capital and labour markets that may enhance perceptions of the company.
- There was agreement that everyone in an organisation needs to be committed to the task of measuring and managing intellectual capital if a company is to do so successfully.
- The effects of reporting intellectual capital included improved employee morale, lower staff turnover, increased investment in developing intellectual capital, a higher value being attributed to a company\ intellectual capital by senior corporate officers than previously and an improved understanding of what specific factors are crucial to continued growth and development.

Techniques commonly used by public and private sector organisations to measure their intellectual capital included Kaplan and Norton's Balanced .Scorecard and Karl-Krik Sveiby's Intangible Asset Monitor. Two innovative approaches are those followed by Celemi and Skandia which are described below.

Copyrighted material

The Celemi experience

Cclemi is a Swedish-based company specialism;.: in facilitating a learning process within other organisations. It was one of the first to open its eyes to the wisdom of measuring the value of its intellectual capital. Cclemi published in 1995 what has been described as the world's first audit of intangible assets as part of the company annual report. Cclemi uses the Sveiby framework to classify its intangibles into three groups: individual competence, external structure and internal structure. Celemi's reports provide answers to three questions asked by stakeholders: first, the overall si/e of the balance sheet (what type of assets does Celemi have) and second, are intangibles increasing or decreasing and are they being utilised efficiently?

As regards individual competence, Celemi views its employees and their competencies (its knowledge base) as its most important strength in business. Celemi uses non-financial metrics lo assess the value represented bv its employees. The idea is to report the same metrics each year to facilitate benchmarking over time. This reveals whether the human capital is improving or declining.

The Skandia experience

Skandia started work on developing a system tor reporting the value of its knowledge capital in 1991. While early reports by Skandia adopted the same format as Cclemi, it has more recent!) developed a management and reporting model called the Skandia Navigator. This creates a balance between the past (financial focus), the present (customer focus, process focus and human focus) and future (renewal and development focus).

The measurement of the past, financial focus, includes performance ratios, balance sheet and profit and loss account. The customer focus is assessed in lerms of market penetration. The human focus deals with levels of employee training, leadership training and teaming. The process focus looks at operational methods used and the levels of information technology support. The renewal and development focus measures the extent to which resources are being directed towards the work of teams and methods of the future. A unique aspect of the Navigator is the measure of the extent to which human capital is converted to structural capital, i.e. retained to provide corporate value.

The company subsequently developed a further model, the Intellectual Capital Index. Skandia was acquired bv Old Mutual pic in 2006.

17.10.2 Knowledge management

Another term that is currently being bandied about is knowledge management (KM). It has been described as developing business praciices and processes that ensure that a business creates, accesses and embeds the knowledge that it needs. Hinney[4]- sees different elements of the knowledge management spectrum, namely:

- transactional knowledge management
- analytical knowledge management
- asset knowledge management
- process knowledge management
- innovation/crcation-bascd know ledge management
- developmental knowledge management.

In transactional KM the use of knowledge is embedded in the system. Knowledge is presented to the user of a system in the course of completing a transaction or a unit of work such as entering an order or handling an enquiry from a customer.

Copyrighted material

2 To minimise impairment charges. Acquired intangible assets must be tested for impairment annually. Any increase ma) not IK- recognised but a tall in value must be reported - implicating management lor poor performance. Goodwill also has to be tested for impairment, but the criteria are not so stringent.

3 Lack of specialist skills. As this is the first time that companies have been required to report the \alue of acquired intangibles, thev mav lack the specialist skills and know ledge required. They may also lack the confidence to value them accurately.

4 Failure to see the big picture. As there are so many regulations to comply with and the rules are so complex, there is a danger that companies get so bogged down in the detail that they tail to reassess overall what the business acquisition was about. They fail to see the wood for the trees.

Examples of inadequate **reporting**

There are many examples of this inadequate reporting, including:

1 Standard Chartered: In April 2005, Standard Chartered acquired Korea First Bank lor S3.4bn. Korea First Hank was clearly a substantial business, with 407 branches, 2100 ATMs and 7km of signage. And although Standard Chartered admits to the significance of Korea First Hank's brand and customers, they only accounted for 7% of the deal value. (ioodwill accounted tor over half of the acquisition value and is largely unexplained.

2 **WPP:** In March 2005, WPP, one of the world's largest marketing services companies purchased Grey Global Group, for £928m and allocated no value to its brand. What value was allocated to intangible assets was not broken out - as IFRS 3 stipulates and as WPP has done in the past for acquisitions of similar brands such as JWT, Mill & Knowhon, Ogilvv & Mather and Young and Kubicam Group.

3 Aviva: In March 2005, A\i\a bought the RAC for £1.1bn. The RAC has 7 million customers and is one of the most trusted brands in the UK. The brand and customer relationships should most likely have accounted for the majority of the acquisition price whereas thev were reported as being worth onlv *£2M)m* and £]32m respectively, 35°o of the total cost. Goodwill dominates and is unexplained.

4 Kingfisher: In June 2005 Kingfisher bought OHI, a chain of 13 DIY superstores in China, for its H&Qbrand for /[144m. placing no value whatsoever on its brand or customer relationships

How to define goodwill

Some of the reasons for this inadequate reporting have already been discussed. Hut how can goodwill be broken out and valued? Assuming the most common intangible assets, such as brands and customer relationships (which the brand often subsumes anvwav), have been valued to reflect reality, the remaining intangibles which are dumped into goodwill can still be valued. In fact, the recognition criteria under IFRS 3 are so broad that it is unlikelv that much could actually be included in goodwill. And even if there are such assets, IFRS 3 requires full disclosure and reasons whv thev have not been valued. This was usuallv not seen.

There are a number of ways in which goodwill can IK* identified and valued, some of which are:

1 Workforce in place: A businesses workforce may not be valued under IFRS 3. Its value, therefore, must be recognised within goodwill. Although difficulties exist in valuing people, it is still possible under certain circumstances.

Copyrighted material

2 Synergies: Synergies are one of the main motivations for acquisitions - being able to strip out certain costs which will increase the efficiency of the acquired company and the acquiring company as well. Such as:

(a) Cost synergies: Cost synergies can be rigorous!) analysed, such as the duplication of head offices or a sales force.

(b) Sales synergies: Combining two portfolios of products can achieve synergies through cross-selling, or leveraging the combined portfolio. This can be quantified,

The implications

The implications of this inadequate reporting are far reaching. It renders annual reports more useless than they currently are, it makes a standard ineffective when applied and also the financial bodies that govern them, it sets a dangerous precedent for future \cars and it opens a new era of creative accounting that distances shareholders and investors further from reality.

With a year's experience of implementing IFRS 3 and with a greater understanding of the potential pitfalls, next >ear*s reporting under IFRS .i will hopcfulb be executed more accurately. And if this is achieved then more assets will be identified, more intangibles valued and half of what is spent on acquisitions will be better understiHtd and managed.

I In connection with IAS 38 *Intangible Assets:*

(a) Define 'applied research' and 'development'.

(b) Why is it considered necessary to distinguish between applied research and development expenditure, and how does this distinction affect the accounting treatment?

(c) State whether the following are included within the IAS 38 definition of research and development. and give your reasons:

(i) market research

(II) testing of preproduction prototypes

(iii) operational research

(iv) testing in search of process alternates.

2 Describe the problems encountered when accounting for

(a) tangible non-current assets;

(b) leasing (in lessees' accounts);

(c) research and development:

and outline the recommended accounting treatment given in the relevant International Accounting Standards (lASs). How effective are the lASs m limiting the use of different accounting treatments of the above areas?

3 Discuss the suggestion that the requirement for companies to write off research investment rather than showing it as an asset exposes companies to short-term pressure from acquisitive companies that *are* damaging to the country's interest.

4 *Here* is an extract from the Reckitt Benckiser 2005 Annual Report:

	2004	2005
Non-current assets	£m	iCm
Intangible assets		
Brands	1,521	1.623
Goodwill	62	66
Tangible assets	473	485
	2.056	2.174
Total shareholders* funds	1.676	1.856

The accounting poky states:

An acquired brand is only recognised on the balance sheet as an intangible asset where ft is supported by a registered trademark, is established in the market place, brand earnings are separately identifiable, the brand could be sold separately from the rest of the business and where the brand achieves earnings in excess of those achieved by unbranded products. The value of an acquired brand is determined by allocating the purchase consideration of an acquired business between the underlying fair values of the tangible assets, goodwill and brands acquired.

Brands are not amortised, as it is considered that their useful economic lives are not limited. Their carrying values are reviewed annually by the directors to determine whether there has been any permanent impairment in value and any such reductions in their values *are* taken to the profit and loss account.

Given the materiality of the brands (these include products such as Dettol, Air Wick. Calgonit-2-in-l, Lysol. Dettox. Finish, Vanish. Harpic) in relation to the total shareholders' funds, discuss the information that you consider appropriate to be disclosed in the annual report in order to assess the level and nature of risk to an investor.

5 The following is an extract from the 2005 Cadbury Schweppes Annual Report:

i) Brands and other intangibles

Brands and other intangibles that are acquired through acquisition are capitalised on the balance sheet. These brands and other intangibles are valued on acquisition using a discounted cash flow methodology and we make assumptions and estimates regarding future revenue growth, prices, marketing costs and economic factors in valuing a brand. These assumptions reflect management's best estimates but these estimates involve inherent uncertainties, which may not be controlled by management

Upon acquisition we assess the useful economic life of the brands and intangibles. We do not amortise over 99% of our brands by value. In arriving at the conclusion that a brand has

Copyrighted material

an indefinite life, management considers the fact that we are a brands business and expects to acquire, hold and support brands for an indefinite period. We support our brands through spending on consumer marketing and through significant investment in promotional support. which is deducted in arriving at Revenue. Many of our brands were established over 50 years ago and continue to provide considerable economic benefits today. We also consider factors such as our ability to continue to protect the legal rights that arise from these brand names indefinitely or the absence of any regulatory, economic or competitive factors that could truncate the life of the brand name. Where we do not consider these criteria to have been met as was the case with certain brands acquired with Adams, a definite life is assigned and the value is amortised over the life.

Discuss the implication for ratios of maintaining brands at historical cost with the growing emphasis on the use of fair values in financial reporting.

6 Discuss the advantages and disadvantages of the proposal that there should be a separate category of asset in the balance sheet clearly identified as 'research investment - outcome uncertain*.

7 The Chloride 2005 Annual Report included the following accounting policy for goodwill:

> Goodwill is subject to review at the end of the year of acquisition and at any other time when the directors believe that impairment may have occurred. Any impairment would be charged to the profit and loss account in the period m which the loss occurs.

(a) Explain the indications that a review for impairment is required
(b) Once there are indications of impairment, how is impairment measured?

8 How is Value in use' calculated for an impairment review? What are the areas of subjectivity?

9 Crrtically evaluate the basis of the following assertion: 'I am sceptical that it [the impairment test] will work reliably m practice, given the complexity and subjectivity that lie within the calculation.*[43]

10 IFRS 3 has introduced a new concept into accounting for purchased goodwill - annual impairment testing, rather than amortisation. Consider the effect of a change from amortisation of goodwill (in IAS 22) to impairment testing and no amortisation in IFRS 3. and in particular

- the effect on the financial statements;
- the effect on financial performance ratios;
- the effect on the annual impairment or amortisation charge and its timing;
- which method gives the fairest charge over time for the value of the goodwill when a business is acquired;
- whether impairment testing with no amortisation complies with the IASC's *Framework for* the *Preparation and Presentation ofFmanoai Statements:*
- why there has been a change from amortisation to impairment testing - is this pandering to pressure from the US FASB and/or listed companies?

11 A research report into the use of IFRS 3 (http://wvvw.intangiblebusinessxom/Content/24'11) concluded:

> However IFRS 3 has not been followed, through undervaluing intangible assets acquired with a corresponding exaggeration of goodwill. Throughout there is a lack of disclosure. So the rationale justifying acquisitions is inadequate and £21 billion has been lost in an accounting black hole called goodwill.

Discuss reasons for the undervaluing of intangibles and exaggeration of goodwill.

Copyrighted material

Required:

Prepare a report for the board outlining the principles involved in accounting for research and development and showing what accounting entries will be made in the company's accounts for each of the years ending 30 September 20X1-20X7 inclusive.

Indicate what factors need to be taken into account when assessing each research and development project for accounting purposes, and what disclosure is needed for research and development in the company's published accounts.

* Question 3

Oxlag pic, a manufacturer of pharmaceutical products, has the following research and development projects on hand at 31 January 20X2:

(A) A general survey into the long-term effects of its sleeping pill Chalcedon upon human resistance to infections. At the year-end the research is still at a baste stage and no worthwhile results with any particular applications have been obtained.

(B) A development for Meebach NV m which the company will produce market research data relating to Meebach's range of drugs.

(C) An enhancement of an existing drug. Euboia. which will enable additional uses to be made of the drug and which will consequently boost sales. This project was completed successfully on 30 April 20X2. with the expectation that all future sales of the enhanced drug would greatly exceed the costs of the new development.

(D) A scientific enquiry with the aim of identifying new strains of antibiotics for future use. Several possible substances have been identified, but research is not sufficiently advanced to permit patents and copyrights to be obtained at the present time.

The following costs have been brought forward at I February 20X1:

Project	*A*	B	C	D
		£000		
Specialised laboratory				
Cost	—	—	500	^ ^
Depreciation		—	25	—
Specialised equipment				
Cost	—	-	75	50
Depreciation		-	15	10
Capitalised development costs			200	1 M
Market research costs	—	250	—	—

The following costs were incurred during the year

Project	*A*	*&*	*C*	*D*
		£000		
Research costs	25	—	265	78
Market research costs		75		
Specialised equipment cost	50			50

Depreciation on specialised laboratories and special equipment is provided by the straight-line method and the assets have an estimated useful life of 25 and five years respectively. A full year's depreciation is provided on assets purchased during the year.

Copyrighted material

Required:

(i) Write up the research and development, fixed asset and market research accounts to reflect the above transactions in the year ended 31 January 20X2.

(ii) Calculate the amount to be charged as research costs in the profit and loss account of Oxlag pic for the year ended 31 January 20X2.

(iii) State on what basis the company should amortise any capitalised development costs and what disclosures the company should make in respect of amounts written off in the year to 31 January 20X3.

(iv) Calculate the amounts to be disclosed in the balance sheet in respect of fixed assets, deferred development costs and work-in-progress.

(v) State what disclosures you would make in the accounts for the year ended 3 I January 20X2 in respect of the new improved drug developed under project C. assuming sales begin on I May 20X2, and show strong growth to the date of signing the accounts, 14 July 20X2. with the expectation that the new drug will provide 25% of the company's pre-tax profits in the year to 31 January 20X3.

Question 4

International Accounting Standards IFRS 3 and IAS 38 address the accounting for goodwill and intangible assets.

Required;

(a) Describe the requirements of IFRS 3 regarding the initial recognition and measurement of goodwill and intangible assets.

(b) Explain the proposed approach set out by IFRS 3 for the treatment of positive goodwill in subsequent years.

(c) Territory pic acquired 80% of the ordinary share capital of Yukon Ltd on 31 May 20X6. The balance sheet of Yukon Ltd at 31 May 20X6 was:

Yukon Ltd - balance sheet at 31 May 20X6

	£000
Non-current assets	
Intangible assets	6,020
Tangible assets	38.300
	44.320
Current assets	
Inventory	21.600
Receivables	23.200
Cash	8,800
	53,600
Current liabilities	24,000
Net current assets	29.600
Total assets less current liabilities	73.920
Non-current liabilities	12,100
Provision for liabilities and charges	3,586
	58,234
Capital reserves	
Called-up share capital (ordinary shares of *C*I)	10.000
Share premium account	5,570
Retained earnings	42.664
	58.234

Copyrighted material

potentially corrosive to the whole basis of financial reporting and that to allow brands - whether acquired or home-grown - to continue to be included in the balance sheet would be highly unwise'.[45]

Required:
Consider the arguments for and against brand accounting. In particular, consider the issues of brand valuation; the separability of brands; purchased vs home-grown brands; and the maintenance/substitution argument.

Question 6

Brands pic are preparing their accounts for the year ended 31 October 20X8 and the following information is available relating to various intangible assets acquired on the acquisition of Countrywide p!c

(a) A milk quota of 2.000.000 litres at 30p per litre. There is an active market trading in milk and other quotas.
(b) A government licence to experiment with the use of hormones to increase the cream content of milk had been granted to Countrywide shortly before the acquisition by Brands pic. No fee had been required. This is the first licence to be granted by the government and was one of the reasons that Brands acquired Countrywide. The licence is not transferable but the directors estimate that it has a value to the company based on discounted cash flows for a five-year period of £1 million.
(c) A full cream yoghurt sold under the brand name 'Naughty but Nice' was valued by the directors at £2 million. Further enquiry established that a similar brand name had been recently sold for £1.5 million.

Required:
Explain how each of the above items would be treated in the consolidated financial statements using IAS **38.**

Question 7

IAS 38 - *Intangible* Assets - was primarily issued m order to identify the criteria that need to be present before expenditure on intangible items can be recognised as an asset. The standard also prescribes the subsequent accounting treatment of intangible assets that satisfy the recognition criteria and are recognised in the balance sheet.

Required
(a) Explain the criteria that need to be satisfied before expenditure on intangible items can be recognised in the balance sheet as intangible assets.
(b) Explain how the criteria outlined in (a) are applied to the recognition of separately purchased intangible assets, intangible assets acquired in a business combination, and internally generated intangible assets. You should give an example of each category discussed.
(c) Explain the subsequent accounting treatment of intangible assets that satisfy the recognition criteria of IAS 38.

lota prepares financial statements to 30 September each year. During the year ended 30 September 20X6 lota (which has a number of subsidiaries) engaged in the following transactions:

I On I April 20X6 lota purchased all the equity capital of Kappa and Kappa became a subsidiary from that date. Kappa sells a branded product that has a well-known name and the directors of lota have obtained evidence that the fair value of this name is $20 million and that it has a useful economic life that is expected to be indefinite. The value of the brand name is not included in the balance sheet of Kappa as the directors of Kappa do not consider that it satisfies the recognition

Copyrighted material

criteria of IAS 38 for internally developed intangible assets. However, the directors of Kappa have taken legal steps to ensure that no other entities can use the brand name.

2 On I October 20X4 lota began a project that sought to develop a more efficient method of organising its production. Costs of $10 million were incurred in the year to 30 September 20X5 and debited to the income statement in that year. In the current year the results of the project were extremely encouraging and on I April 20X6 the directors of lota were able to demonstrate that the project would generate substantial economic benefits for the group from 31 March 20X7 onwards as its technical feasibility and commercial viability were clearly evident Throughout the year to 30 September 20X6 lota spent $500,000 per month on the project.

Required

(d) Explain how both of the above transactions should be recognised in the financial statements of lota for the year ending 30 September 20X6. You should quantify the amounts recognised and make reference to relevant provisions of IAS 38 wherever possible.

References

1 IAS 38 *Intangible Assets*, IASQ re* ised March 2004.
2 'The 2005 R&D Scoreboard', *DTI$_t$* October 2005.
3 B. Nixon and A. Lonic, 'Accounting for R&D: the need for change[1]. *Accountancy*, February 1990, p. 91; B. Nixon, 'R&D disclosure: SSAP 13 and after'. *Accountancy*, February 1991, pp. 72-73.
4 *Statement of Intent; Comparability of Financial Statements*, IASC, 1990.
5 IAS 9 (revised). *Research and Development Costs*, IASC, December 1993.
6 IAS 38 *Intangible Assets*, IASC, revised March 2004.
7 A. Goodacre and J. McGrath, 'An experimental study of analysts* reactions to corporate R&D expenditure*, *British Accounting Review*, 1997,29, pp. 155—179.
8 B. Nixon, 'The accounting treatment of research and development expenditure: views of L'K company accountants', *European Accounting Review*, 1997, vol, 6, no. 2, pp. 265-277.
9 *Ibid.*
10 IAS 38 *Intangible Assets.* IASC, revised March 2004. para. 54.
11 *Ibid.*, para. 56.
12 *Ibid*,, para. 55.
13 *Ibid.*, para. 58.
14 ft&,para. 59.
15 SSAP 13 *Accounting for Research and Development*, ASH, reused 1989, para. 7.
16 IRS 38 *Intangible Assets*, IASC, revised March 2004, para. 126.
17 IFRS 3 *Business Combinations*, IASB. 2004, para. 51.
18 IAS 38 *Intangible Assets*, IASC, revised March 2004, para. 63.
19 *The Framework for the Preparation and Presentation of Financial Statements*, IASB, April 2001, para 94.
20 *Ibid.*, para. 119.
21 *Ibid.*, para. 118.
22 *Ibid., pan.* 122.
2^ *Ibid*, para. 126.
24 P. Bar wise, C. Iligson, A. Likierman and P. Marsh, *Accounting for Brands*, ICAKW, June 1989; M. Cooper and A. Carey, 'Brand valuation in the balance*. *Accountancy*, June 1989.
25 A. Pizzcy, 'Healing the rift'. *Certified Accountant*, October 1990.
26 'Finance directors say yes to brand valuation'. *Accountancy*, January 1990, p. 12.
27 M. Moorhousc, 'Brands debate: wake up to the real world*. *Accountancy*, July 1990, p. 30.
28 M. Gerry, 'Companies ignore value of brands'. *Accountancy Age*, March 2000, p. 4.
29 hitp://www.ourfishbowl.com/imagcs/survcys/IKiIt06Report_072706.pdf.
30 www.wipo.org.

Copyrighted material

31 Great Britain, White Paper, *Our Competitive Future: Building the Knowledge Driven Economy,* London, HMSO, 1998.

52 ()ECI). *Final Report; Measuring ami Reporting Intellectual Capital: Experience, issues ami Prospects,* Paris: OECD, 2000.

33 J- Guthrie and R. Petty, 'Knowledge management: the information revolution has ereated the need lor a codified system of gathering and controlling knowledge". *Company Secretary,* January 1999, vol. 9, no. I, pp. 38-41; R. Tissen *et* */,, *Value-Baud Knowledge Management,* Longman Ncdcrland BV, 1998, pp. 25-44.

34 J. Guthrie. 'Measuring up to change', *Financial Management,* December 2(HM), (LIMA, London, p. II.

35 OECD, 'Guidelines and instructions for OECD Symposium', International Symposium Measuring and Reporting Intellectual Capital: Experiences, Issues and Prospects, June 1999, Amsterdam, OECD. Paris.

36 R.J. Gallatent, N.A. Eastaway and \-A. Dauppe. *Intellectual Property Law and Taxation,* Longman. London, 1992.

37 T.I I. Donaldson, *The Treatment oj Intangibles: A Hunker's View,* St Martin's Press, New York, 1992.

38 K.E. Svciby, *Ihe New Annual Report in Swedish,* Stockholm, 1988: see www.svciby.com.au for English translation; Celemi, 1999. 'Growing a knowledge company', www.celemi.com (site includes Cclcmi Intangible Assets Monitor).

39 R.S. Kaplan and D.P. Norton, 'The Balanced Scorecard - measures that drive performance', *Harvard Business Review,* 1992, vol. 70, no. 1, pp. 71 79; R.S. Kaplan and D.P. Norton, 'Using the Balanced Scorecard as a strategic management system'. *Harvard Business Review,* 1996, vol. 70, no. 1.

40 L. Edvinsson and M. Malonc, *Intellectual Capital: Realising Your Company's True Value by Finding Its Hidden Power,* New York, I larperCoIlins, 1997; L. Edvinsson, 'Developing Intellectual Capital at Skandia', *Lung Range Planning,* 1997, vol. 30, no. 3, pp. 266-373.

41 Danish Agency for Trade and Industry (DATI), English version, 'Intellectual (Capital Accounts: new tool for companies*. DTI Council, Copenhagen, 1998; Danish Agency for Trade and Industry, *Developing Intellectual Capital Accounts: Experiences from 19 Companies,* Copenhagen: Ministn of Business and Industn, 1999.

42 Derek Binney, 'The knowledge management spectrum - a technique for optimising knowledge management strategies'. *Journalof Know/edge Management,* vol. 5, no. 1, 2001, pp. 33-42.

43 R. Paterson, *\\ ill FRS 10 hit the target/',. *Iccountancy,* February 1998, pp. 74-75.

44 M. Moorhouse, 'Brands debate: wake up to the real world*, *.iccountancy,* July 1990. p. 30.

45 P. Barwisc, C, Migson, A. Likicrman and P. Marsh, *Accountingfor Brands,* ICAEW, June 1989.

Copyrighted material

i o.i introduction

This chapter explains the accounting principles involved in the valuation of inventory, and how this impacts not only on balance sheet valuation, but also on the computation of annual profit.

We attempt to combine mechanics with a theoretical understanding of the accounting principles and illustrate this with practical examples showing how the interpretation of financial statements can be affected by differing treatments. In this chapter we consider:

- Inventory defined and the controversy
- The requirements of IAS 2
- Inventory valuation (including work-in-progress)
- Inventory control
- Creative accounting
- Audit of year-end physical inventory count
- Published financial statements
- The special considerations applied to agricultural activity,

18.2 Inventory defined

IAS 2 *Inventories* defines inventories as assets:

(a) held for sale in the ordinary course of business;
(b) in the process of production for such sale;
(c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.[1]

The valuation of inventory involves:

(a) the establishment of physical existence and ownership;
(b) the determination of unit costs;
(c) the calculation of provisions to reduce cost to net realisable value, if necessary.[2]

The resulting evaluation is then disclosed in the financial statements.

These definitions appear to be very precise. Wc shall see, however, that although IAS 2 was introduced to bring some uniformity into financial statements, there are many areas

where professional judgement must be exercised. Sometimes this may distort the financial statements to such an extent that we must question whether they do represent a 'true and fair' view.

18.3 The controversy

The valuation of in vent or \ has been a controversial issue in accounting for many years. The inventory value is a crucial clement not only in the computation of profit, but also in the valuation of assets for balance sheet purposes.

Figure 18.1 presents information relating to Coats Viyella pic. It shows that the inventory is material in relation to total assets and pre-tax profits. In relation to the profits we can sec that an error of 4"o in the 2(X)1 interim report inventory value would potentially cause the profits for the group to change from a pre-tax profit to a pre-tax loss. As inventory is usually a multiple rather than a fraction of profit, inventory errors may have a disproportionate effect on the accounts. Valuation of inventory is therefore crucial in determining earnings per share, net asset backing for shares and the current ratio. Consequently, the basis of valuation should be consistent, so as to avoid manipulation of profits between accounting periods, and comply with generally accepted accounting principles, so that profits are comparable between different companies.

Unfortunately, there are many examples of manipulation of inventory values in order to create a more favourable impression. H\ increasing the value of inventory at the year-end, profit and current assets are automatically increased (and vice versa). Of course, closing inventory of one year becomes opening inventory of the next, so profit is thereby reduced. Hut such manipulation provides opportunities for profit-smoothing and may be advantageous in certain circumstances, e.g. if the company is under threat of takeover.

Figure 1X.2 illustrates the point. Simply by increasing the value of inventory in year 1 by £10,000, profit (and current assets) is increased by a similar amount. Even if the two values are identical in year 2, such manipulation allows profit to be 'smoothed[1] and £10,000 profit switched from vear 2 to year 1.

According to normal accrual accounting principles, profit is determined by matching costs with related revenues. If it is unlikely that the revenue will in fact be received, prudence dictates that the irrecoverable amount should be written off immediately against current rc\enuc.

It follows that inventory should be valued at cost less any irrecoverable amount. Hut what is cost? Kntities have used a variety of methods of determining costs, and these are explored later in the chapter. There have been a number of disputes relating to the valuation of inventory which affected profits (e.g. the AKI/CiEC merger of 1%7).[5] Naturally, such circumstances tend to come to light with a change of management, but it was considered important that a definitive statement of accounting practice be issued in an attempt to standardise treatment.

Figure 18.1 Coats Viyella pic

Figure 18.2 Inventory values manipulated to smooth income

18.4 IAS 2 *Inventories*

No area of accounting has produced wider differences in practice than the computation of the amount at which inventory is stated in financial accounts. An accounting standard on the subject needs to define the practices, to narrow the differences and variations in those practices and to ensure adequate disclosure in the accounts.

IAS 2 requires that the amount at which inventory is stated in periodic financial statements should be the total of the lower of cost and net realisable value of the separate items of inventor} or of groups of similar items. The standard also emphasises the need to match costs against revenue, and it aims, like other standards, to achieve greater uniformity in the measurement of income as well as improving the disclosure of inventory valuation methods. To an extent IAS 2 relies on management to choose the most appropriate method of inventory valuation for the production processes used and the company's environment. Various methods of valuation are theoretically available, including FIFO, LIFO and weighted average or any similar method (sec below). In selecting the most suitable method, management must exercise judgement to ensure that the methods chosen provide the fairest practical approximation to cost. IAS 2 does not allow the use of LIFO because it often results in inventory being stated in the balance sheet at amounts that bear little relation to recent cost levels.

At the end of the day, even though there is an International Accounting Standard in existence, the valuation of inventory can provide areas of subjectivity and choice to management. We will return to this theme many times in the following sections of this chapter.

18.5 Inventory valuation

The valuation rule outlined in IAS 2 is difficult to apply because of uncertainties about what is meant by cost (with some methods approved by IAS 2 and others not) and what is meant bv net realisable value.

18.5.1 Methods acceptable under IAS 2

The acceptable methods of inventory valuation include FIFO, AVCO and standard cost.

First-in-first-out (FIFO)

Inventory is valued at the most recent *cost\ since the cost of oldest inventory is charged out first, whether or not this accords with the actual physical flow. FIFO is illustrated in Figure IS.3.

Average cost (AVCO)

Inventory is valued at a 'weighted average cost', i.e. the unit cost is weighted by the number of items carried at each [4]cost\ as shown in Figure 18.4. This is popular in manufacturing and in organisations holding a large volume of inventory at fluctuating 'costs'. The practical problem of actually recording and calculating the weighted average cost has been overcome by the use of sophisticated computer software.

Standard cost

In many cases this is the only way to value manufactured goods in a high-volume/high-turnover environment. However, the standard is acceptable only if it approximates to actual cost. This means that variances need to be reviewed to see if they affect the standard cost and for inventory evaluation.

IAS 2 recognises that an acceptable method of arriving at cost is the use of selling price, less an estimated profit margin. This method is only acceptable if it can be demonstrated that the method gives a reasonable approximation of the actual cost. It is the method employed by major retailers, e.g. Tcsco 2003 Annual Report states in its accounting policies:

> Inventory comprises goods held for resale and development properties and are valued at the lower of cost and net realisable value. Inventory in stores is calculated at retail price and reduced by appropriate margins to the lower of cost and net realisable value.

Figure 18.3 First-in-first-out method **(FIFO)**

Figure 18.4 Average cost method (AVCO)

And Somerfield pic's 2003 accounting policy states:

> Inventory is valued al the lower of cost or net realisable value. Cost represents invoiced cost or selling price less the relevant profit margin to reduce it to estimated cost, including; an appropriate element of overheads. Inventory at warehouses is valued at weighted average cost and inventory at stores on a first-in-first-out basis.

IAS 2 does not recommend any specific method. This is a decision for each organisation based upon sound professional advice and the organisation's unique operating conditions.

18.5.2 Methods rejected by IAS 2

Methods rejected by IAS 2 include LIFO and (by implication) replacement cost.

Last-in-first-out (LIFO)

The cost of the inventory most recently received is charged out first at the most recent "cost*. The practical upshot is that the inventory value is based upon an 'old cost*, which may bear little relationship to the current 'cost*. LIFO is illustrated in Figure 18.5.

US companies commonly use the LIFO method, as illustrated in the following extract from the Eastman Kodak Company Annual Report 2003:

> Inventories are stated at lower of cost and market. The cost of most inventories in the USA is determined by the last-in, first-out' (LIFO) method. The cost of all of the Company's remaining inventory in and outside the USA is determined by the 'first-in, first-out* (FIFO) or average cost method, which approximates current cost. The Company provides inventor}- reserves for excess, obsolete or slow-moving inventory based on changes in customer demand, technology developments or other economic factors.

Where LIFO is used the effect of using FIFO is quantified as in the Wal-Mart Stores Inc. Annual Report:

	2001 Sm	20(H) Sm
Inventories at replacement cost	21,644	20,171
Less LIFO reserve	202	378
Inventories at LIFO cost	21,442	19,793

The company's summary of significant accounting policies states that the company uses the retail LIFO method. The LIFO reserve shows the cumulative, pre-tax effect on income

Figure 18.5 Last-in-first-out method (LIFO)

between the results obtained using L1FO and the results obtained using a more current cost inventory valuation method (e.g. FII'O) - this gives an indication of how much higher profits would be if FIFO were used.

Replacement cost

The inventory is valued at the current cost of the indi\ idual item (i.e. the cost to the organisation of replacing the item) rather than the actual cost at the time of manufacture or purchase. This is an attractive idea since the 'value' of inventory could IK* seen as the cost at which a similar item could be currently acquired. The problem again is in arriving at a 'reliable* profit figure for the purposes of performance evaluation. Wild fluctuation of profit could occur simplx because of such factors as the lime of the year, the vagaries of the world weather system or the manipulation of market forces. Let us take three examples, involving coffee, oil and silver.

Coffee. Wholesale prices collapsed over three years (1999-2002) from nearly S2.40 per pound to just under 50 cents. This was the lowest level in thirty years and. allowing for the effects of inflation, coffee became uneconomic to sell and farmers resorted to burning their crop for fuel. The implication for financial reporting was that the objective was to increase the inxentory unit cost by 100% by forcing the price back above SI per pound. What value should be attached to the coffee inventory? 50 cents or the replacement cost of SI which would create a profit equal to the existing inventory \alue?

Oil. When the Gulf Crisis of 1990 began, the cost of oil moved from around $13 per barrel to a high of around S29 per barrel in a short time, [foil companies had used replacement cost, this would have created huge fictitious profits. This might have resulted in higher tax payments and shareholders demanding diudends from a profit that existed only on paper. When the Gulf Crisis settled down to a quiet period (before the 1991 military action), the market price of oil dropped almost as dramatically as it had risen. This might have led to fictitious losses for companies in the following financial year with an ensuing loss of business confidence.

This scenario was not unique to the Gulf Crisis and we see the same situation arising w ith fluctuations in the price of Arab Light which moved from S8.74 per barrel on .>1 December 1998 to S24.55 per barrel on 31 December 1999 and down to $17.10 on 31 December 2001 (www.eia.doe.gov).

Silver. In the early 1980s a Texan millionaire named Bunker I lunt attempted to make a 'killin;/ on the silver market In buving siher to force up the price and then selling at the high price to make a substantial profit. This led to remarkable scenes in the UK, with long lines of people outside jewellers wanting to sell items at much higher prices than their 'real' cost. Companies using siher as a raw material (e.g. jewellers, mirror manufacturers, and electronics companies, which use silver as a conductive element) would have been badly affected had the) used replacement cost in a similar way to the preceding two cases. The 'price' of silver in effect doubled in a short time, but the Federal Authorities in the USA stepped in and the plan was defeated.

The use of replacement cost is not specifically prohibited by IAS 2 but is out of line with the basic principle underpinning the standard, which is to value inventory at the actual costs incurred in its purchase or production. The **1ASC** *Framework' for the Preparation and Presentation of Financial Statements* describes historical cost and current cost as two distinct measurement bases and w here a historical cost measurement base is used for assets and liabilities the use of replacement cost is inconsistent.

Although I.Il-'O docs not have IAS 2 approval it is still used in practice. For example, LUX) is commonly used by UK companies with US subsidiaries, since LIFO is the main method of inventorv valuation in the USA.

18.5.3 Procedure to ascertain cost

I laving decided upon the accounting policy of the company, there remains the problem of ascertaining the cost. In a retail environment, the 'cost* is the price the organisation had to pay to acquire the goods, and it is readilv established by reference to the purchase invoice from the supplier. However, in a manufacturing organisation the concept of cost is not as simple. Should we use prime cost, or production cost, or total cost? IAS 2 attempts to help by defining cost as 'all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition*.

In a manufacturing organisation each expenditure is taken to include three constituents: direct materials, direct labour and appropriate overhead.

Direct materials

These include not only the costs of raw materials and component parts, but also the costs of insurance, handling (special packaging) and am import duties. An additional problem is waste and scrap. For instance, if a process inputs KM) tonnes at £45 per tonne, yet outputs onl> 911 tonnes, the output's inventory value must IK £4,5(10 (£45 X KM)) and not £4,(150 (90 X £45). (This assumes the 10 tonnes loss is a normal, regular part of the process.) An adjustment may be made for the residual value of the scrap/waste material, if any. The treatment of component parts will be the same, provided they form part of the finished product.

Direct labour

This is the cost of the actual production in the form of gross pay and those incidental costs ot employing the direct workers (employer's national insurance contributions, additional pension contributions, etc.). The labour costs will be spread over the goods' production.

Appropriate overhead

It is here that the major difficulties arise in calculating the true cost of the product for inventory valuation purposes. Normal practice is to classify overheads into five types and decide whether to include them in inventory. The five types are as follows:

Copyrighted material

- Direct overheads —subcontract work, royalties.
- Indirect overheads - the cost of running the factory and supporting the direct workers, and the depreciation of capital items used in production.
- Administration overheads - the office costs and salaries of senior management
- Selling and distribution overheads - advertising, delivery costs, packaging, salaries of sales personnel, and depreciation of capital items used in the sales function.
- Finance overheads - the cost of borrowing and servicing debt.

We will look at each of these in turn, to demonstrate the difficulties that the accountant experiences.

Direct overheads. These should normally be included as part of[4] cost\ But imagine a situation where some subcontract work has been carried out on *some* of a company's products because of a capacity problem (i.e. the factory could normallv do the work, but due to a short-term problem some of the work has been subcontracted at a higher price/cost). In theory, those items subject to the subcontract work should have a higher inventor) value than 'normal* items. 1 low ever, in practice, the difficult) of identifying such 'subcontracted[1] items is so great that many companies do not include such non-routine subcontract work in the inventory value as a direct overhead. For example, if a factory produces 1,000,000 drills per month and 1,000 of them have to be sent out because of a machine breakdown, since all the drills are identical it would be very costly and lime-consuming to treat the 1,000 drills different!) from the other 99[U],(HHI. Hence the subcontract work would *not* form part of the overhead for inventory valuation purposes (in such an organisation, the standard cost approach would be used when valuing inventory). On the other hand, in a customised car firm producing tvveniv vehicles per month, special subcontract work would form part of "the inventory value because it is readilv identifiable to individual units of inventory.

To summarise, am regular, routine direct overhead will be included in the inventor) valuation, but a non-routine cost could present difficulties, especial!) in a high-volume/ high-turnover organisation.

Indirect overheads. These always form part of the inventory valuation, as such expenses are incurred in support of production. The) include factory rent and rates, factor) power and depreciation of plant and machinery; in fact, any indirect factor)-related cost. including the warehouse costs of storing completed goods, will be included in the value of imentorv.

Administration overheads. This overhead is in respect of the whole business, so only that portion easilv identifiable to production should form part of the inventor) valuation. For instance, the costs of the personnel or wages department could be apportioned to production on a head-count basis and thai element would be included in the inventorv valuation. Any production-specific administration costs (welfare costs, canteen costs, etc.) would also he included in the inventor) valuation. If the expense cannot be identified as forming part of the production function, it will not form part of the inventorv valuation.

Selling and distribution overheads. These costs will not normall) he included in the inventory valuation as the) are incurred after production has taken place. However, if the goods are on a 'sale or return* basis and are on the premises of the customer but remain the supplier's property, the delivery and packing costs will be included in the inventorv value of goods held on a customer's premises.

An additional difficult) concerns the modern inventor) technique of'just-in-time[1] **(JIT).** I lere, the customer does not keep large inventories, but simply *calls off* inventory from the

Copyrighted material

supplier and is invoiced for the items delivered. There is an argument for the inventory still in the hands of the supplier to bear more of this overhead within its valuation, since the only selling and distribution overhead to be charged/incurred is delivery. The goods have in fact been sold, but ownership has not yet changed hands. As JIT becomes more popular, this problem may give accountants and auditors much scope for debate.

Finance overheads. Normally these overheads would never be included within the inventory valuation because (hey are not normally identifiable with production. In a job-costing context, however, it might be possible to use some of this overhead in inventory valuation. Let us take the case of an engineering firm being requested to produce a turbine engine, which requires parts/components to be imported. It is logical for the financial charges for these imports (e.g. exchange fees or fees for letters of credit) to be included in the inventory valuation.

Thus it can be seen that the identitieation of the overheads to be included in inventory valuation is far from straightforward. In many cases it depends upon the judgement of the accountant and (he unique operating conditions of the organisation.

In addition to the problem of deciding whether the five types of overhead should he included, there is the problem of deciding how much of the total overhead to include in the inventory \aluation at the \car-end. IAS 2 stipulates the use of 'normal acthitv' when making this decision on overheads. The vast majority of overheads are 'fixed*, i.e. do not vary with activity, and it is customary to share these out over a normal or expected output.

The following is an extract from the Sud/.ucker AG 2004 Annual Report:

> Inventories are staled at acquisition or production cost using average cost or (he lirst-in, first-out method. As set out in IAS 2, the production cost of work-in-progress and finished goods includes direct costs and a reasonable proportion of material and production overheads, including depreciation of production machinery assuming normal levels of production capacity, and a proportion of administrative costs.

If this expected output is not reached, it is not acceptable to allow the actual production to bear the full overhead for inventory purposes. A numerical example will illustrate this:

Overhead for the year	£200,000		
Planned activity	10,000	units	
Closing inventory	3,000	units	
Direct costs	£2	per unit	
Actual activity	6,000	units	
Inventory value based on actual activity			
Direct costs	3,000 x £2		£6,000
Overhead	3.0(H) X £200,000 / 6,000		£100,000
Closing inventory value			£106,000
Inventory value based on planned or normal at tivity			
Direct cost	3,000 x £2		£6,000
Overhead	3,000 x £200,000 / 10,000		£60,000
Closing inventory value			£66,000

Comparing the value of inventory based upon actual activity with the value based upon planned or normal activity, we have a £40,000 difference. This could he regarded as

Copyrighted material

be done on each. Of course, sophisticated software makes the accountant's job mechanically easier.

This technique is particularly useful in processing industries, such as petroleum, brewing, dairy products or paint manufacture, where it might be impossible to identify \\ IP items precisely. The role of the auditor in validating such practices is paramount.

EXAMPLE 2 • A custom-car com pan \ making sports cars has the following costs in respect of No. 821/C, an unfinished car, at the end of the month:

Materials charged to job 821/C	£2,100
Labour 120 hours *(a* £4	£480
Overhead £22/DLH X 120 hours	£2,640
WIP value of 821/C	£5,220

This is an accurate WIP value provided *all* the costs have been accuratel) recorded and charged. The amount of accounting work involved is not great as the information is required by a normal job cost system. An added advantage is that the figure can be formally audited and proven. Work-in-progress valuation has its difficulties, but they are not insurmount-able, given the skill of an accountant and a good working knowledge of the production process.

18.7 Inventory control

The way in which inventory is physically controlled should not be overlooked. Discrepancies are generally of two tvpes: disappearance through theft and improper accounting.[4] Management will, of course, be responsible for adequate systems of internal control, but losses may still occur through theft or lack of proper controls and recording. Inadequate systems of accounting may also cause discrepancies between the physical and book inventories, with consequent correcting adjustments at the year-end.

Many companies are developing in-house computer systems or using bought-in packages to account for their inventories. Such systems are generally adequate for normal recording purposes, but the) are still v ulnerable to year-end discrepancies arising from errors in estab-lishing the phvsical inventory on hand at the year-end, and problems connected with the paperwork and the physical movement of inventories.

A major cause of discrepancy between physical and book inventory is the 'cut-ofT date. In matching sales with cost of sales, it mav be difficult to identify exactly into which period of account certain inventory movements should be placed, especially when the annual inventory count lasts manv davs or occurs at a date other than the last dav of the financial year. It is cus-lomary to make an adjustment to the inventor) figure, as shown in Figure 18.6. This depends on an accurate record of movements between the inventory count date and the financial year-end.

Auditors have a special responsibility in relation to inventory control. They should look careful I) at the inventory counting procedures and satisfy themselves that the accounting arrangements arc satisfactory. For example, in September 1987 Harris Queens way announced an inventory reduction of some £15 million in projected profit caused by write-downs in its furniture division. It blamed this on the inadequacy of control systems to 'identify ranges that were selling and ensure their replacement*. Interestingly, at the pre-ceding AGM, no hint of the overvaluation was given and the auditors insisted that 'the company had no problem from the accounting point of view'/

In many cases the auditor will be present at the inventor) count. Even with this apparent safeguard, however, it is widely accepted that sometimes an accurate physical inventory take

Copyrighted material

Figure 18.6 Adjusted inventory figure

is almost impossible. The value of inventory should nevertheless be based on the best information available; and the resulting disclosed figure should be acceptable and provide a true and fair view on a going concern basis.

In practice, errors may continue unidentified for a number of years," particularly if there is a paper-based system in operation. This was evident when T.J. Hughes reduced its profit for the year ended Januan 2001 by £2.5—3 million from a forecast £8 million.

18.8 Creative accounting

No area of accounting provides more opportunities for subjectivity and creative accounting than the \aluation of inventory. This is illustrated by the report *Fraudulent Financial Reporting: 1987-1997- An Analysis of U.S. Public Companies* prepared by the Committee of Sponsoring Organizations of the Tread way Commission.' This report, which was based on the detailed analysis of approximately 200 cases of fraudulent financial reporting, identified that the fraud often involved the overstatement of revenues and assets with inventorv fraud featuring frequently - assets were overstated by understating allowances for receivables, overstating the value of inventory and other tangible assets, and recording assets that did not exist.

This section summarises some of the major methods employed.

18.8.1 Year-end manipulations

There are a number of stratagems companies ha\e followed to reduce the cost of goods sold by inflating the inventory figure. These include:

Manipulating cut-off procedures

Goods arc taken into inventory but the purchase invoices arc not recorded.

The authors of *Fraudulent Financial Reporting: I987-1W7 - An Analysis of U.S. Public Companies* found that over half the frauds involved overstating revenues by recording revenues prematurely or fictitiously and that such overstatement tended to occur right at the end of the year - hence the need for adequate cut-oft procedures. This was illustrated by Ahold's experience in the USA where subsidiary companies took credit for bulk discounts allowed by suppliers before inventory was actually received.

Fictitious transfers

Year-end inventorv is inflated by recording fictitious transfers of non-existent inventory, e.g. it was alleged by the SECI that certain officers of the Miniscribe Corporation had increased the company's inventory by recording fictitious transfers of nonexistent inventory from a Colorado location to overseas locations where physical inventory counting would be more difficult for the auditors to verify or the goods are described as being 'in transit'/

Including obsolete inventory at cost

This practice was alleged to have been followed in the case of the Miniscribe Corporation, e.g. by the repackaging of scrap and obsolete inventory and treating it as an asset instead of expensing it.

Inaccurate inventory records

Where inventory records are poorly maintained it has been possible for senior management to fail to record material shrinkage due to loss and theft as in the matter of Rite Aid Corporation.[4]

Journal adjustments

In addition to suppressing purchase invoices, making fictitious transfers, failing to write off obsolete inventory or recognise inventory losses, the senior management may simply reduce the cost of goods sold by adjusting journal entries, e.g. when preparing quarter!) reports by crediting cost of goods and debiting accounts payable.

18.8.2 Net realisable value (NRV)

Although the determination of net realisable value is dealt with extensively in the appendix to IAS 2, the extent to which provisions can be made to reduce cost to NRV is highly subjective and open to manipulation. A provision is an effective smoothing device and allows overcautious write-downs to be made in profitable years and consequent write-backs in unprofitable ones.

18.8.3 Overheads

The treatment of ov erheads has been dealt vv ith extensivel) above and is probably the area that gives the greatest scope for manipulation. Including overhead in the inventory valuation has the effect of deferring the o\ er head's impact and so boosting profits. IAS 2 allows expenses incidental to the acquisition or production cost of an asset to be included in its cost. We have seen that this includes not only directly attributable production overheads, but also those which are indirectly attributable to production and interest on borrowed capital. IAS 2 provides guidelines on the classification olov erheads toachievcan appropriate allocation, but in practice it isdifhcult to make these distinctions and auditors will find it difficult to challenge management on such matters.

The statement suggests that the allocation of overheads included in the valuation needs to be based on the company's normal level of activity. The cost of unused capacity should be written off in the current year. The auditor will insist that allocation should be based on normal activity levels, but if the company underproduces, the overhead per unit increases and can therefore lead to higher year-end values. The creative accountant will be looking for ways to manipulate these year-end values, so thai in bad times costs are carried forward to more profitable accounting periods.

18.8.4 Other methods of creative accounting

A simple manipulation is to show more or less inventory than actually exists. If the commodity is messy and indistinguishable, the auditor may not have either the expertise or the w ill to verify measurements taken by the client's ow n emplov ees. This lack of auditor measuring knowledge and involvement allowed one of the biggest frauds ever to take place, which became known as 'the great salad oil swindle'.[10]

Copyrighted material

auditor must be aware that the recording of accounting transactions may not coincide with the physical flow of inventory. Inventory may be in one of two locations: included as part of inventory; or in the loading bay area awaiting dispatch or receipt. Its treatment will depend on several factors (see Figure 18.7). The auditor must be aware of all these possibilities and must be able to trace a sample of each inventory entry through to the accounting records, so that:

- if purchase is recorded, but not sale, the item must be in inventory;
- if sale is recorded, purchase must also be recorded and the item should not be in inventory.

18.9.3 Physical condition of inventory items

Inventory in premium condition has a higher value than damaged inventory. The auditor must ensure that the condition of inventory is recorded at inventory count, so that the correct value is assigned to it. Items that are damaged or have been in inventory for a long period will be written down to their net realisable value (which may be nil) as long as adequate details are given by the inventory counter. Once again, this is a problem of identification, so the auditor must be able to distinguish between, for instance, rolls of first quality and faulty fabric. Similarly, items that have been in inventory for several inventory counts may have little value, and further enquiries about their status should be made at the time of inventory count.

18.10 Published accounts

Disclosure requirements in IAS 2 have already been indicated. The standard requires the accounting policies that have been applied to be stated and applied consistently from year to year. Inventory should be sub-classified in the balance sheet or in the notes to the financial statements so as to indicate the amounts held in each of the main categories in the standard balance sheet formats. Hut will the ultimate user of those financial statements be confident that the information disclosed is reliable, relevant and useful? We have already indicated many areas of subjectivity and creative accounting, but are such possibilities material?

In 1982 West wick and Shaw examined the accounts of 125 companies with respect to inventory valuation and its likely impact on reported profit.[1 J] The results showed that the effect on profit before tax of a 1% error in closing inventory valuation ranged from a low of 0.18% to a high of 25.9**0 (in one case) with a median of 2.26%. The industries most vulnerable to such errors were household goods, textiles, mechanical engineering, contracting and construction.

Figure 18.7 Treatment of inventory items

Clearly, the existence of such variations has repercussions for such measures as ROCE, EPS and the current ratio. The research also showed that, in a sample of audit managers, 85% were of the opinion that the difference between a pessimistic and an optimistic valuation of the same inventory could be more than 6%.

IAS 2 has since been strengthened and these results may not be so indicative of the present situation. However, using the same principle, let us take a random selection of eight companies' recent annual accounts, apply a 5% increase in the closing inventory valuation and calculate the effect on EPS (taxation is simply taken at 35% on the change in inventory).

Figure 18.X shows that, in absolute terms, the difference in pre-tax profits could be as much as &>!! million and the percentage change ranges from 2.7% to 249b. Of particular note is the change in EPS, which tends to be the major market indicator of performance. In the case of the electrical retailer (company I), a 5% error in inventory valuation could affect EPS by as much as **279b.** The inventory of such a company could well be vulnerable to such factors as changes in fashion, technology and economic recession.

18.11 Agricultural activity

18.1 I.I The overall problem

Agricultural activity is subject to special considerations and so is governed by a separate IFRS, namely IAS 41. IAS 41 defines agricultural activity as *thc management by an entity

Figure **18.8 Impact** of **a** 5% change in closing inventory

of the biological transformation of biological assets for sale, into agricultural produce or Into additional biological assets'. A biological asset is a living animal or plant.

The basic problem is that biological assets, and the produce derived from them (referred to in IAS 41 as "agricultural produce'), cannot be measured using the cost-based concepts that form the bedrock of IAS 2 and IAS 16. This is because biological assets, such as cattle for example, are not usualh purchased, they are born and develop into their current state. Therefore different accounting methods are necessary.

18.1 1.2 The recognition and measurement of biological assets and agricultural produce

IAS 41 slates that an emit} should recognise a biological asset or agricultural produce when:

- the entity controls the asset as a result of a past event;
- it is probable that future economic benefits associated with the asset will flow to the entity;
- the fair value or cost of the asset can be measured reliably.

Rather than the usual cost-based concepts of measurement that are used for assets, IAS 41 states that assets of this type should be measured at their fair value less estimated costs of sale. The only (fairly rare) exception to this general measurement principle is if the asset's fair \alue cannot be estimated reliably. In such circumstances a biological asset is measured at cost (if available). However market \alues would usualh be available for biological assets and agricultural produce.

The following is an extract from the 2005 Holmen Alt annual report:

> Past practice was for I lolmen's forest assets to be stated at acquisition cost adjusted for revaluations. According to IFRS, forest assets are to be divided into growing forest, which is stated in accordance with IAS 41, and land, which is staled in accordance with IAS Id. The application of IAS 41 means that growing forest is to be valued and stated at its fair \alue on each occasion the accounts are finali/ed. Chanues in fair \alue are taken into the income statement. In the absence of market prices or other comparable values, biological assets are to be valued at the present value of the future cash flow from the assets. The land on which the trees are growing is valued at acquisition cost in accordance with IAS 16.

The change in financial reporting restatement can have a significant impact on the earning \aluc in the balance sheet as shown in the I lolmen 2004 restated balance sheet:

Balance sheet (MSEK)	31.12.2004	IFRS 3	IAS 41	Total
Assets				
Intangible lived assets				
Goodwill	491	32		523
Other	36			36
Tangible fixed assets	12,153			12,153
Biological assets	6,201		2,421	8,622

An implication of the measurement principle that is used is that gains or losses on re-measurement will regularly arise. IAS 41 requires that these be taken to the income statement in the relevant period. Income statement amounts can arise from:

- the initial recognition of a biological asset or agricultural produce;
- the change in fair value of previously recognised amounts;
- the costs associated with the agricultural activity.

Copyrighted material

The following extracts are from the Precious Woods Group's 2CKI5 Annual Report:

General Valuation Principles according to IAS 41
According to IAS 41, biological assets - in the case of Precious Woods, tree plantations - are to be valued annuallv at fair value. The gain or loss in fair value of these biological assets is reported in net profit. The measurement of biological growth in the field is an important element of this valuation. Initially, at the start of the plantation cycle, the fair \alue is equal to the standard costs of preparing and maintaining a plantation including the appropriate cost of capital, assuming efficient operations. Toward the end of the plantation cycle the fair value depends solely on the discounted vale of the expected harvest less estimated point-of-sale costs.

The balance sheet values of the biological assets have developed as follows:

	S
Carrying amount at beginning of year	32,91*),820
Net change in fair value of biological assets before harvest	3,743,6b0
Fair value biological assets harvested 2005	(133,623)
Personnel costs incurred during the year	1,186,661
Depreciation expense	120,267
Other general costs incurred during the vear	387,41b
Carrying amount end of year	38,224,201

18.1 1.3 An illustrative example

A farmer owned a dairy herd. At the siart of the period the herd contained 100 animals that were two years old and fifty ncvvly born calves. At the end of the period a further thirty calves were born. None of the herd died during the period. Relevant fair value details were as follows:

	Start of period	Knd of period
	S	S
Neulv born calves	50	55
One-year-old animals	60	65
Two-_\ ear-old animals	70	75
I'lirec-vear-old animals	75	80

The change in the fair value of the herd is $3,400, made up as follows:

Fair value at end of the year = 100 X S80 + 50 X $65 + 30 X $55 = $12,900
Fair value at start of the year = 100 X $70 + 50 X $50 = 59,500

IAS -41 requires tbat the change in the fair value of the herd be reconciled as follows:

	S
Price change - opening nevvly born calves: 50(S55 - $50)	250
Physical change of opening nevvlv born calves: 50(S65 - S55)	5(H)
Price change of opening two-year-old animals: 100{$75 — $70)	500
Physical change of opening two-year-old animals: 100($80 - $75)	500
Due to birth of new calves: 30 X $55	1,050
Total change	3,4(H)

The costs incurred in maintaining the herd would all be charged in the income statement in the relevant period.

Copyrighted material

18.11.4 Agricultural produce

Examples of agricultural produce would be milk from a dairy herd or crops from a cornfield. Such produce is sold by a farmer in the ordinary course of business and is inventory. The initial carrying value of the inventory ai the point of 'harvest' is its fair value less costs to sell at that date. Agricultural entities then apph IAS 2 to the inventory using the initial carrying value as 'cost'.

18.11.5 Land

Despite its importance in agricultural activity, IAS 41 does not apply to agricultural land, which is accounted for in accordance with IAS 16. Where biological assets are physically attached to land (e.g. crops in a field) then it is often possible to compute the fair value of the biological assets by computing the fair value of the combined asset and deducting the fair value of the land alone.

18.11.6 Government grants relating to biological assets

As mentioned in Chapter 15 such grants are not subject to IAS 20 - the general standard on this subject. Under IAS 41 the IASH view is more consistent with the principles of the *Framework* than the provisions of IAS 20. Under IAS 41 grants are recognised as income when the entity becomes entitled to receive it. This removes the fairly dubious credit balance 'Deferred income* that arises under the IAS 20 approach and does not appear to satisfv the *Framework* definition of a liability.

1 Discuss why some form of theoretical pricing model is required for inventory valuation purposes.

2 Discuss the acceptability of the following methods of inventory valuation: LIFO; replacement cost-

3 Discuss the application of individual judgement in inventory valuation, e.g. changing the basis of overhead absorption.

4 Explain the criteria to be applied when selecting the method to be used for allocating costs.

5 Discuss the effect on work-in-progress and finished goods valuation if the net realisable value of the raw material is lower than cost at the balance sheet date.

6 Discuss why the accurate valuation of inventory is so crucial if the financial statements are to show a true and fair view.

7 The following is an extract from the Interbrew 2003 Annual Report:

> Inventories *are* valued at the lower of cost and net realisable value. Cost is determined by the weighted average method. The cost of finished products and work-in-progress comprises raw materials, other production materials, direct labour, other direct cost and an allocation of fixed and variable overhead based on normal operating capacity. Net realisable value is the estimated selling price m the ordinary course of business, less estimated costs of completion and selling costs.

Discuss the possible effects on profits if the company did not use normal operating activity. Explain an alternative definition for net realisable value and discuss the criterion to be applied when making a policy choice.

8 The following is *ar* extract from the Sudzucker AG 2003 Annual Report;

> Inventories are stated at acquisition or production cost using average cost or first-in, first-out. As set out in IAS 2 the production cost of work in progress and finished goods includes ... a proportion of administrative expenses.

Explain (a) why the company is using both the average cost and first-m-first-out methods and (b) the expenses that might be included under the administrative expenses heading.

An extract from the solution is provided m the Appendix at the end of the text for exercises marked with an asterisk (*).

Question I

Sunhats Ltd manufactures patent hats. It carries inventory of these and sells to wholesalers and retailers via a number of salespeople. The following expenses are charged in the profit and loss account

Woges *of:* Storemen and factory foremen
Shanes of Production manager, personnel officer, buyer, salespeople, sales manager, accountant, company secretary

Other. Directors' fees, rent and rates, electric power, repairs, depreciation, carriage outwards, advertising, bad debts, interest on bank overdraft development expenditure for new type of hat

Required:
Which of these expenses can reasonably be included in the valuation of inventory?

* Question 2

Purchases of a certain product during July were:

July	I	100 units®	£10.00
	12	100 units®	£9.80
	15	50 units®	£9.60
	20	100 units®	£9.40

Units sold during the month were:

July	10	80 units
	14	100 units
	30	90 units

Required:
Assuming no opening inventories:

(i) Determine the cost of goods sold for July under three different valuation methods.

(ii) Discuss the advantages and/or disadvantages of each of these methods.

(iii) A physical inventory count revealed a shortage of five units. Show how you would bring this into account.

* Question 3

Alpha Ltd makes one standard article. You have been given the following information:

I The inventory sheets at the year-end show the following items:

Row *materials:*
100 tons of steel:
Cost £ 140 per ton
Present price £ 130 per ton

Finished goods:
(*00 finished* units:
Cost of materials £50 per unit
Labour cost £ 150 per unit
Selling price £500 per unit

40 semi-finished units
Cost of materials £50 per unit
Labour cost to date £ 100 per unit
Selling pnce £500 per unit (completed)

I 0 damaged ftn<shed units:
Cost to rectify the damage £200 per unit
Selling price £500 per unit (when rectified)

Copyrighted material

Note - accounting policies

Bottom has used the LIFO method of inventory valuation but the directors wish to assess the implications of usmg the FIFO method. Relevant details of the inventories of Bottom are as follows:

Dote	*inventory valuation under*	
	FIFO	*UFO*
	$000	*$000*
I February 20X1	9.500	9.000
31 January 20X2	10.200	9,300

Requirement:

Re-draft the income statement of Bottom using the FIFO method of inventory valuation and explain how the change would need to be recognised in the published financial statements, if implemented.

Question 6

Agriculture is a key business activity in many parts of the world, particularly in developing countries. Following extensive discussions wrth, and funding from, the World Bank, the International Accounting Standards Committee (IASC) developed an accounting standard relating to agricultural activity. IAS 41 *Agriculture* was published in 2001 to apply to accounting periods beginning on or after I January 2003.

Sigma prepares financial statements to 30 September each year. On I October 2003 Sigma carried out the following transactions:

- Purchased a large piece of land for $20 million.
- Purchased 10,000 dairy cows (average age at I October 2003, two years) for $1 million.
- Received a grant of $400,000 towards the acquisition of the cows. This grant was non-returnable.

During the year ending 30 September 2004 Sigma incurred the following costs:

- $500,000 to maintain the condition of the animals (food and protection).
- $300,000 in breeding fees to a local farmer.

On I April 2004. 5.000 calves were born. There were no other changes in the number of animals during the year ended 30 September 2004. At 30 September 2004. Sigma had 10.000 litres of unsold milk in inventory. The milk was sold shortly after the year end at market prices.

Information regarding fair values is as follows:

Item	Fair value less point of sale costs		
	1 October 2003	1 April 2004	30 Septemb<
	$	$	$
Land	20 m	22 m	24 m
New born calves (per calf)	20	21	22
Six-month-old calves (per calf)	23	24	25
Two-year-old cows (per cow)	90	92	94
Three-year-oW cows (per cow)	93	95	97
Milk (per litre)	0.6	0.55	0.55

Required:

(a) Discuss how the IAS 41 requirements regarding the recognition and measurement of biological assets and agricultural produce are consistent with the IASC Framework for the Preparation and Presentation of Financial Statements.

Copyrighted material

19.1 Introduction

IAS 11 *Construction Contracts* defines a construction contract as

> A contract speciticall) negotiated for the construction of an asset or a combination of assets that are closely inter-related or intcr-depcndcnt in terms of their design, technology and function or their ultimate purpose or use.

Some construction contracts are fixed-price contracts, where the contractor agrees to a fixed contract price, which in some cases is subject to cost escalation clauses. Other contracts are cost-plus contracts, where the contractor is reimbursed for allowable costs, plus a percentage of these costs or a fixed fee.

Construction contracts are normall) assessed and accounted for individually. However, in certain circumstances construction contracts may be combined or segmented. Combination or segmentation is appropriate when:

- A group of contracts is negotiated as a single package and the contracts are performed together or in a continuous sequence (combination).
- Separate proposals have been submitted for each asset and the costs and revenues of each asset can be identified (segmentation).

A key accounting issue is when the revenues and costs (and therefore net income) under a construction contract should be recognised. There are two possible approaches:

- Only recognise net income when the contract is complete - the *completed contracts method.*
- Recognise a proportion of net income over the period of the contract - the *percentage of completion method.*

IAS 11 fa\ours the latter approach, provided the overall contract result can be predicted with reasonable certainty.

19.2 Identification of contract revenue

Contract re\enuc should comprise:

(a) The initial amount of revenue agreed in the contract; and

(b) Variations in contract work, claims and incentive pa\ments, to the extent that

  (i) it is probable that they will result in revenue;

  (ii) they are capable of being reliably measured.

Variations to the initially agreed contract price occur due to events such as:

- cost escalation clauses;
- claims for additional revenue b\ the contractor due to customer-caused dcla\s or errors in specification or design;
- incentive payments where specified performance standards are met or exceeded.

However they occur, the basic criteria of probable receipt and mcasurabilit) need to be satisfied before variations can be included as revenue.

19.3 Identification of contract costs

IAS 11 classifies costs that can be identified with contracts under three headings:

Costs that directly relate to the specific contract, such as:

- site labour;
- costs of materials;
- depreciation of plant and equipment used on the contract;
- costs of moving plant and materials to and from the contract site;
- costs of hiring plant and equipment;
- costs of design and technical assistance that are directly related to the contract;
- the estimated costs of rectification and guarantee work;
- claims from third parties.

Costs that are attributable to contract acti\ it) in general and can be allocated to specific contracts, such as:

- insurance;
- costs of design and technical assistance that are not directly related to a specific contract;
- construction overheads.

Costs of this nature need to be allocated on a systematic and rational basis, based on the normal level of construction activity.

Such other costs as are specifically chargeable to the customer under the terms of the contract. Examples of these would be general administration and development costs for which reimbursement is specified in the terms of the contract.

Contract costs normally include relevant costs from the date the contract is secured to the date the contract is finally completed. If they can bescparatel) identified and reliabb measured then costs that are incurred in securing the contract can also be included as part of contract costs. However, where such costs were previously recognised as an expense in the period in which they were incurred then they are not included in contract costs when the contract is obtained in the subsequent period.

Care needs to be taken to ensure that non-contract costs are not attributed to a contract causing the profit for the year to be inflated. For example, the following is an extract from **the** Cray Inc 2005 Annual Report:

> Cray has determined that certain costs were incorrectly charged to the product development contract in 2004; this contract is accounted for under the percentage of completion method. This restatement will decrease 2004 revenue by S3.3 million,

Copyrighted material

decrease cost of product revenue by S3.1 million, increase research and development expense by $3.1 million and increase net loss by S3.3 million. There was no impact on cash or short-term investment position.

19.4 Recognition of contract revenue and expenses

IAS II states that the revenue and costs associated with a construction contract should be recognised in the income statement as soon as the outcome ol the contract can be estimated reliably. This is likely to be possible when:

- the total contract revenue can be measured reliably and it is probable that the related economic benefits will Mow to the enterprise;
- the total contract costs (both those incurred to date and those expected to be incurred in the future) can be measured reliably;
- the stage of completion of the contract can be accurately identified.

As stated in section 19.1 above the method of accounting for construction contracts that is **laid** down in IAS 11 is the percentage of completion method, which, as we have seen, involves, *inter alia,* identifying the stage of completion of the contract. IAS 11 docs not identify a single method that may be used to identify the stage of completion. For many contracts this may involve an external expert (e.g. an architect) confirming that the contract has reached a particular stage of completion. However, alternative methods that might be appropriate include:

- the proportion that contract costs incurred for work performed to date bear to total contract costs;
  - this is the method used, for example, by Johnson Matthey in their 2006 annual report:

    Construction contracts
    Where the outcome of a construction contract can be estimated reliably, revenue and costs are recognized by reference to the stage of completion. This is normally measured by the proportion that contract costs incurred to date bear to the estimated total contract costs.

- completion of a physical proportion of the contract work.

The appropriate method for recognising net income on a construction contract is to recognise the relevant proportion of total contract income as revenue and the relevant proportion of total contract costs as expenses. Clearly under this process the proportion of net income that is attributable to the work performed to date will be credited in the income statement.

If, exceptionally, the contract is expected to show a loss then the total expected loss is recognised immediately on the grounds of prudence. Where the contract is at too early a stage for an accurate prediction of the overall result then IAS 11 forbids enterprises from recognising any profit. In such circumstances, provided there is no reason to expect that the contract will make an overall loss, then the revenue that is recognised should be restricted to the costs incurred during the year that relate to the contract, which should in turn be recognised as an expense. Clearl\ in such circumstances the net income recognised is nil.

This is the policy stated in the 200(> Johnson Matthey annual report:

Where the outcome of a construction contract cannot IK* estimated reliably, contract revenue is recognised to the extent of contract costs incurred that it is probable will be

Copyrighted material

	Contract A	Contract B
	£000	£000
Costs incurred to dale	14,000	15,000
Add: recognised profits less recognised losses	3,000	(4,000)
Less: progress hillings	(12,000)	(10,000)
Gross amounts due from customers	5,000	1,000

19.5 Public-private partnerships (PPPs)

PPPs have become a common government policy for public bodies to enter into contracts with private companies which have included contracts for the building and management of transport infrastructure, prisons, schools and hospitals. There are inherent risks in any project and the intention is that the government, through a PPP arrangement, should transfer some or all of such risks to private contractors. For this to work equitably there needs to be an incentive for the private contractors to be able to make a reasonable profit provided they are efficient whilst ensuring that the providers, users of the service, tax payers and employees also receive a fair share of the benefits of the **PPP.**

Improved public services

It has been recognised that where such contracts satisfy a value for money test it makes economic sense to transfer some or all of the risks to a private contractor. In this way it has been possible to deliver significantly improved public services with:

- increases in the quality and quantity of investment, e.g. by the private contractor raising equity and loan capital in the market rather than relying simply on government funding;
- tighter control of contracts during the construction stage to avoid cost and time overruns, e.g. completing construction contracts within budget and within agreed time - this is evidenced in a report from the National Audit Office[1] which indicates that the majority are completed on time and within budget; and
- more efficient management of the facilities after construction, e.g. maintaining the buildings, security, catering and cleaning of an approved standard for a specified number of years.

PPP defined

There is no clear definition of a PPP. It can take a number of forms, e.g. in the form of the improved use of existing public assets under the Wider Markets Initiative (WMI) or contracts for the construction of new infrastructure projects and services provided under a Private Finance Initiative (PFI).

The Wider Markets Initiative (WMI)[2]

The WMI encourages public sector bodies to become more entrepreneurial and to undertake commercial services based on the physical assets and knowledge assets (e.g. patents, databases) they own in order to make the most effective use of public assets. WMI does not relate to the use of surplus assets - the intention would be to dispose of these. However, becoming more entrepreneurial leads to the need for collaboration with private enterprise with appropriate expertise.

Copyrighted material

annual payments that cover all the costs plus a return on the investment through performance payments.

In practice the construction company and other parties such as the maintenance companies become shareholders in a project company set up specifically to tender for a concession. The project company:

- enters into the contract (the 'concession') with the public sector; then
- enters into two principal subcontracts with
  - a construction company to build the project assets, and
  - a facilities management company to maintain the asset - this is normally for a period of 5 or so years after which time it is rc-ncgotiatcd.

  NOTE: the project company will pass down to the constructor and maintenance subcontractors any penalties or income deductions that arise as a result of their mismanagement.

- raises a mixture of
  - equity and subordinated debt from the principal private promoters i.e. the construction company and the maintenance company; and
  - long-term debt.

  NOTE: The long-term debt may be up to f)0°o of the finance required on the basis that it is cheaper to use debt rather than equity. The loan would typically be obtained from banks and would be without recourse to the shareholders of the project company, As there is no recourse to the shareholders, lenders need to be satisfied that there is a reliable income stream coming to the project company from the public sector, i.e. the lender needs to be confident that the project company can satisfy the contractual terms agreed with the public sector.

  The subordinated debt made available to the project company by the promoters will be subordinated to the claims of the long-term lenders in that they will only be repaid aj'ter the long-term lenders.

- receives regular payments, usually over a twenty-five to thirty-year period, from the public sector once the construction has been completed to cover the interest, construction, operating and maintenance costs.

  *N07*E: Such payments may be conditional on a specified level of performance and the private sector partners need to have carried out detailed investigation oj past practice for accommodation type projects and or detailed economic forecasting for throughput projects.*

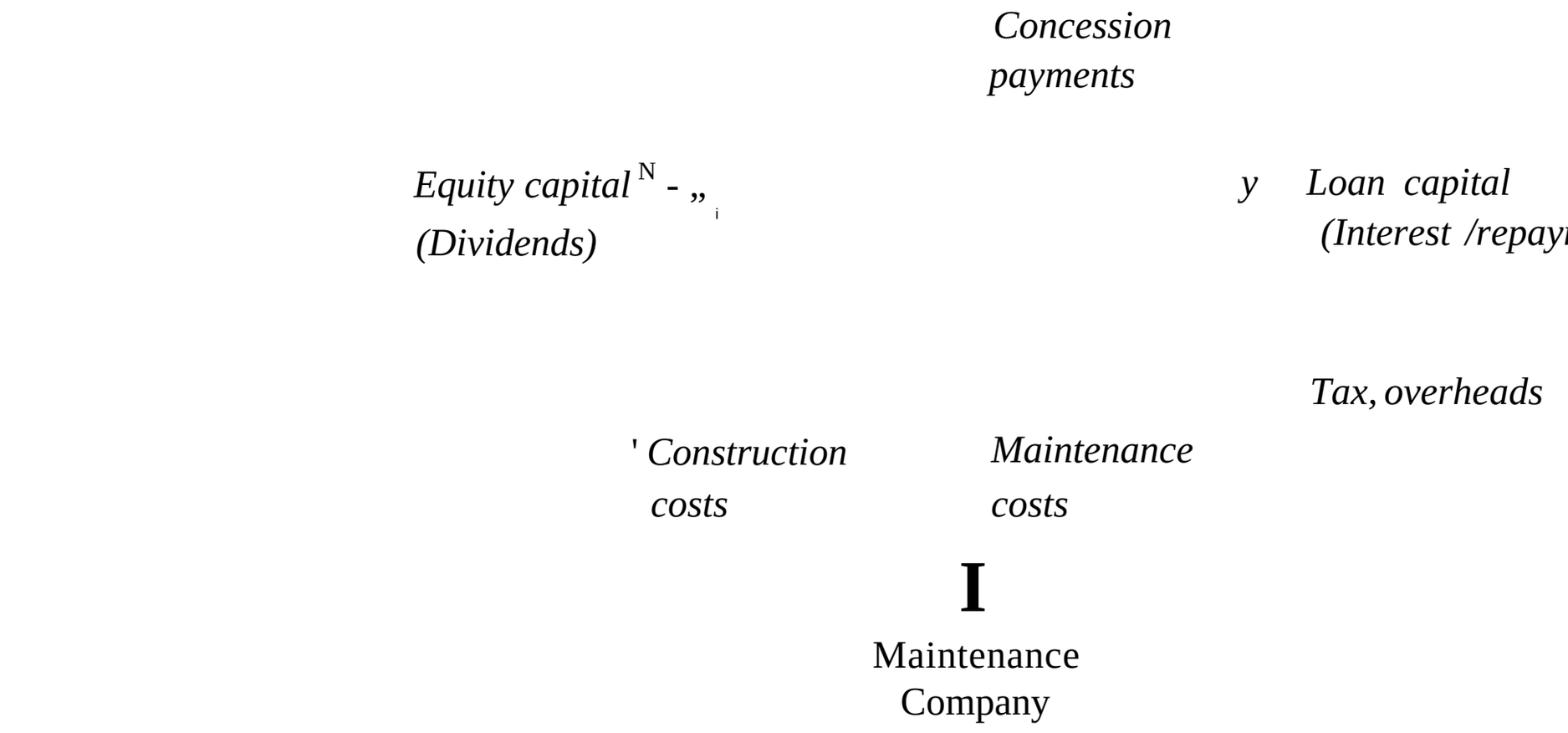
  If, for example, it is an accommodation type project (e.g. prisons, hospitals and schools) then payment is subject to the buildings being available in an appropriate clean and decorated condition - if not, income deductions can result.

  If it is a throughput project (e.g. roads, water) with payment made on basis oj throughput such as number of vehicles and litres of water, then payment would be at a fixed rate per unit of throughput and the accuracy of the jorecasf usage has a significant impact on future income.

- makes interest and dividend payments to the principal promoters.
- returns the infrastructure assets in agreed condition to the public sector at the end of the twenty-five to thirty-year contractual period.

This can be shown graphically as follows:

Copyrighted material



19.5.2 Profit and cash flow profile for the shareholders

Over a typical thirty-year contract the profit and cash flow profiles would follow different growth patterns.

Profit profile

No profits received as dividends during construction. Before completion the depreciation and loan interest charges can result in losses in the early years. As the loans are reduced the interest charge falls and profits then grow steadily to the end of the concession.

Cash flow

As far as the shareholders are concerned, cash flow is negative in the early years with the introduction of equity finance and subordinated loans. Cash begins to flow in when receipts commence from the public sector and interest payments commence to be made on the sub-ordinated loans, say from year 5, and dividend payments start to be made to the equity shareholders, sav from vcar 15.

19.5.3 How is a concession dealt with in the annual accounts of a construction company?

Income statement entries

The accounting treatment will depend on the nature of the construction company's share-holding in the project company. If it has control, then it would consolidate. Frequently, however, it has significant influence without control and therefore accounts for its invest-ment in concessions by taking to the income statement its share of the turnover, operating profit, interest and taxation of each concession, in line with IAS 28 Investments in Associates.

1 Discuss the point in a contract's life when it becomes appropriate to recognise profit and the feasibility of specifying a common point, e.g. when contract is 2596 complete.

2 'Profit on a contract is not realised until completion of the contract' Discuss.

3 "Profit on a contract that is not completed is an unrealised holding gain.' Discuss.

4 There should be one specified method for calculating attributable profit.' Discuss.

5 The Treasury state that Talk of PFI liabilities with a present value of £I 10 million is wrong. Adding up PFI unitary payments and pretending they present a threat to the public finances is like adding up electricity, gas. cleaning and food bills for the next 30 years.' Discuss.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (*).

Question I

MACTAR have a series of contracts to resurface sections of motorways. The scale of the contract means several years' work and each motorway section is regarded as a separate contract.

Required:
From the following information, calculate for each contract the amount of profit (or loss) you would show for the year and show how these contracts would appear in the balance sheet with all appropriate notes.

Mt	£m
Contract	3.0
Costs to date	2.1
Estimated cost to complete	0.3
Certified value of work completed to date	1.8
Progress billings applied for to date	175
Payment received to date	1.5

M6	*Cm*
Contract sum	2.0
Costs to date	0.3
Estimated cost to complete	I.I
Certified value of work completed to date	0.1
Progress billings applied for to date	0.1
Payments received to date	

M62	£m
Contraa sum	25
Costs to date	2.3
Estimated costs to complete	0.8
Certified value of work completed to date	1.3
Progress billings applied for to date	1.0
Payments received to date	0.75

The M62 contract has had **major** difficulties due to difficult terrain, and the contract only allows for a 10% increase m contract sum for such events.

Question 2

At 31 October 20X0. Lytax Ltd was engaged in various contracts including five long-term contracts. details of which are given below:

	/	2	3	4	5
	£000	£000	£000	£000	£000
Contraa price	1.100	950	1.400	1.300	1,200
At 31 October					
Cumulative costs incurred	664	535	810	640	1.070
Estimated further costs to completion	106	75	680	800	165
Estimated cost of post-completion guarantee rectification work	30	10	45	20	5
Cumulative costs incurred transferred to cost of sales	580	470	646	525	900
Progress billings					
Cumulative receipts	**615**	680	**615**	385	722
Invoiced					
- awaiting receipt	60	40	25	200	34
- retained by customer	75	80	60	**65**	84

It is not expected that any customers will default on their payments.

Up to 31 October 20X9, the following amounts have been included in the turnover and cost of sales figures:

	/	*2*	*3*	*4*	5
	£000	£000	£000	£000	£000
Cumulative revenue	560	340	517	400	610
Cumulative costs incurred transferred to cost of sales	460	245	517	400	610
Foreseeable loss transferred to cost of sales	—	—·	—	70	

It is the accounting policy of Lytax Ltd to arrive at contraa revenue by adjusting contraa cost of sales (including foreseeable losses) by the amount of contraa profit or loss to be regarded as recognised, separately for each contract

Copyrighted material

Required:
Show how these items will appear in the balance sheet of Lytax Ltd with all appropriate notes. Show all workings in tabular form.

* Question 3

During its financial year ended 30 June 20X7 Beavers. *ar* engineering company, has worked on several contracts. Information relating to one of them is given below:

Contract X20 J	
Date commenced	I July 20X6
Original estimate of completion date	30 September 20X7
Contract price	£240.000
Proportion of work certified as satisfactorily completed (and invoiced) up to 30 June 20X7	£ 180.000
Progress payments from Dam Ltd	£ 150.000
Costs up ro *30 June 20X7*	
Wages	£91.000
Materials sent to site	£36.000
Other contract costs	£ 18.000
Proportion of Heac Office costs	£6.000
Plant and equipment transferred to the site (at book value on I July 20X6)	£9.000

The plant and equipment is expected to have a book value of about £ 1,000 when the contract is completed.

Inventory of materials at sue 30 June 20X7	£3.000
Expected oddwional costs to complete the contract	
Wages	£10.000
Materials (including stock at 30 June 20X7)	£ 12.000
Other (including Head Office costs)	£8,000

At 30 June 20X7 it is estimated tnat work to a cost value of £ 19,000 has been completed, but not included in the certifications.

If the contract is completed one month earlier than originally scheduled, an extra £ 10.000 will be paid to the contractors. At the end of June 20X7 there seemed to be a 'good chance' that this would happen.

Required:
(a) Show the account for the contract in the books of Beavers up to 30 June 20X7 (including any transfer to the income statement which you think is appropriate).
(b) Show the balance sheet entries.
(c) Calculate the profit (or loss) to be recognised in the 20X6-X7 accounts.

Question 4

Newbild SA commenced work on the construction of a block of flats on I July 20X0.

During the period ended 31 March 20X1 contract expenditure was as follows:

Copyrighted material

Discuss how this will be dealt with in the income statement and balance sheet of the concession company.

(b) A concession company, LearnAhead. has built a school and receives income from the public sector (the grantor) based on the availability of the school for teaching.

Discuss how this will be dealt with in the income statement and balance sheet of the concession company.

Question 7

Quickbudd Ltd entered into a two-year contract on I January 20X7 at a contract price of 250.000. The estimated cost of the contract was 150,000. At the end of the first year the following information was available:

- contract costs incurred totalled 70,000
- .nventories still unused at the contract site totalled 10.000
- progress payments received totalled 60.000
- other non-contract inventories totalled 185,000.

Required:

(a) Calculate **the** Income Statement entries for the contract revenue and the contract costs.
(b) Calculate the Balance Sheet entries for the amounts due from construction contracts and inventories.

References

1 National Audit Office. PFI: Construction Performance Teh. 2003 www.nao.org.uk/publications/nao_rcports/02-03/0203371.pdf
2 *Setting government services into rider markets. Policy and Guidance Sotes** Enterprise and Growth Unit. IIM Treasure Jul> 1998 \\\v\v.hm-lreasurv.jEov.uk/rnccliasl()re/otherfilcs/sps\vm.pdf
3 Research Paper 01/0117 *Private Finance Initiative*, G. Allen, Economic Policy and Statistics Section, House of Commons, IX-cembcr 2001.
4 \vww.hm-ireasury.^ov.uk/d()cumtmts/public_|>ri\aie_parinerships/ppp_index.cfm?ptr=29

Copyrighted material

PART **4**

Consolidated accounts

20.1 Introduction

This chapter will consider:

- The definition of a group
- Consolidated accounts and some reasons for their preparation
- The definition of control
- The purchase method
- The treatment of goodwill
- The comparison between an acquisition by cash and an exchange of shares
- Minority interests
- The treatment of differences between fair value and book value
- The determination of fair values.

20.2 The definition of a group

Under IAS *11 Consolidated and Separate Financial Statements,* a group exists where one enterprise (the parent) controls, either directly or indirectly, another enterprise (the subsidiary). A group consists of a parent and its subsidiaries.[1] This book will deal only with situations where both the parent and subsidiary enterprises are companies.

20.3 Consolidated accounts and some reasons for their preparation

In most cases a parent company is required by IAS 27 to prepare consolidated financial statements. These show the accounts of a group as though that group were one enterprise. The net assets of the companies in a group will therefore be combined and any inter-company profits and balances eliminated.

Why are groups required to prepare consolidated accounts?

(i) To prevent the preparation of misleading accounts by such means as inllating the sales through selling to another member of a group.

(ii) To provide a more meaningful EPS figure. Consolidated accounts show the full earnings on a parent company's investment while parent's individual accounts only show the dividend received from the subsidiaries.

(Ui)To provide a belter measurement of the performance of a parent company's directors. In consolidated accounts the total earnings of a group can IK compared with its total assets in arriving at a group's return on capital employed (ROCE).

ROCE is regarded as important strategic information. For example, the Danish group FLS Industries A/S stated in its 1999 Financial Results Statement:

> Return on capital employed (ROCE)
> The FLS Group has decided to introduce value-based management with the overall objective of strengthening the framework for monitoring and controlling the Group's long-term capability for generating earnings. For this purpose a version of EVA™ - Economic Value Added - is used. This entails relating the financial result to the capital it requires and the risk it entails ...
>
> Although the return on capital employed is not satisfactory, over the past *ftsx* years the FLS Group has achieved an increasing return on its capital employed. In 1995, ROCE amounted to 6.6%, compared with 10.2°b in 1998 and 21.1% in 1999. Adjusted for non-recurring items, ROCE for 1999 amounts to 5.9%.
>
> In 2000 the Group will intensify the focus on optimising capital employed.

Note that in 2004 there was an operational integration of the parent company, FLS Industries A/S, and F.L.Smidth A/S now trading as FLSmidth A/S and that the ROCE for 2005 was 19%.

When may a parent company not be required to prepare consolidated accounts?

It may not be necessary for a parent company to prepare consolidated accounts if the parent is itself a holh-owned subsidiary anil the ultimate parent produces consolidated financial statements axailable for public use that comply with International Financial Reporting Standards (IFRSs).[2] This situation arises when the ultimate parent exercises control over a compam through a subsidiary company's investment as illustrated by the extract from the 200o Accounts of Eybl International:

> Consolidation principles
> The companies included in consolidation have been determined in accordance with IAS 27.12. The consolidated financial statements therefore include the annual financial statements of Eybl International Akticngcscllschaft as the controlling parent together with the annual financial statements of IS subsidiaries in which the parent company or one of its subsidiaries holds a majority of the voting rights.

For groups reporting under L'K GAAP a similar exemption applies. However the exemption is slightly wider in that the ultimate parent needs to be reporting under 'acceptable GAAP* for the exemption to apply. Therefore L'K parents with an ultimate parent reporting under, say, L'S GAAP, would not need consolidated accounts if the L'K parent was reporting under L'K GAAP.

If the parent company is a partially-owned subsidiary of another entity, then, if its other owners have been informed and do not object, the parent company need not present consolidated financial statements.

When may a parent company exclude a subsidiary from a consolidation?

IAS 27 does not allow subsidiaries to be excluded from consolidation on the grounds of se\ere long-term restrictions on control, or on the grounds of dissimilar activities. A subsidiary would be accounted for under IFRS 5 *Sou-current Assets Held for Sale ami*

Copyrighted material

Discontinued Operations if it was acquired exclusively with a view lo sale and it meets the criteria in IFRS 5. This is illustrated with the following extract from the 2005 Scrono annual report:

> Consolidation - subsidiaries
> These consolidated statements include all companies in which the group, either directly or indirectly, has more than 50% of the voting rights or over which it exercises control, unless the investments are held on a temporary basis.

Exclusion is permissible on grounds of non-materiality[1] as the International Accounting Standards are not intended to apply to immaterial items. For example, the French Group, Essilnr, with sales of €2,138 million and tangible assets of €850 million, included in its 2002 Annual Report the following statement on the scope of the consolidation:

> The consolidated financial statements include the financial statements of all entities that satisfy one of the following two criteria:
>
> - annual sales of over €3 million,
> - or tangible assets in excess of €9 million.

Exclusion on the grounds that a subsidiary's activities are dissimilar from those of the others within a group cannot be justified.'[1] This is because information is required under IAS 14 *Segment Reporting* on the different activities of subsidiaries, and users of accounts can. therefore, make appropriate adjustments for their own purposes if required.

20.4 The definition of control

Under 1FRS 3 *Business Combinations** control is defined[5] as 'the power to govern the financial and operating policies of an entity or business so as to obtain benefits from its activities'. Control is assumed when one party to the combination owns more than half of the voting rights of the other either directly or through a subsidiary. This is illustrated with the following extract from the 2005 accounts of the Wartsila Corporation:

> Principles of consolidation
> The consolidated financial statements include the parent company Wartsila Corporation and all subsidiaries in which the parent directly or indirectly holds more than 50 per cent of the voting rights or in which Wartsila is otherwise in control ...

What if the voting rights acquired are less than half?

Even in this situation, it may still be possible[6] to identify an acquirer when one of the combining enterprises, as a result of the business combination, acquires:

(a) power over more than one-half of the voting rights of the other enterprise by virtue of an agreement with other investors;

(b) power to govern the financial and operating policies of the other enterprise under a statute or an agreement;

(c) power to appoint or remove the majority of the members of the board of directors or equivalent governing body of the other enterprise; or

(d) power to cast the majority of votes at a meeting of the board of directors or equivalent governing body of the other enterprise.

An extract from the 2003 accounts of BorsodChem Rt (registered under Hungarian law),

Copyrighted material

whose consolidated financial statements have been prepared in accordance with IFRSs, states:

> Basis of consolidation
> BorsodChem Group companies are those companies in which the Company has a controlling Financial interest through direct or indirect ownership of a majority voting interest or effective managerial and contractual control.

20.5 Alternative methods of preparing consolidated accounts

Before IFRS 3 there were two main methods of preparing consolidated statements, the purchase method and the pooling of interests method. The former method was the more common and was used in all cases where one company was seen as acquiring another. The pooling method was used only where the shareholders of the two companies were seen as coming together to "achieve a continuing mutual share in the risks and benefits attaching to the combined entity such that neither party can be identified as the acquirer'.' IFRS 3 now allows only the purchase method. This should ensure greater comparability of financial statements and remove the incentive to structure combinations in such a way as to produce the desired accounting result.

The purchase method

The fair value of the parent company's investment in a subsidiary is set against its share of the fair value of the identifiable net assets in the subsidiary at the date of acquisition. If the investment is greater than the share of net assets then the difference is regarded as the purchase of goodwill - see the Rose Group example below.

EXAMPLE • THE ROSE GROUP CONSOLIDATED USING THE PURCHASE METHOD

On 1 January 20X0 Rose pic acquired 100°o of the 10,000 £1 common shares in Tulip pic for £1.50 per share in cash and gained control. The fair value of the net assets of Tulip pic at that date was the same as the book value. The individual balance sheets immediately after the acquisition and the group accounts at that date were as follows:

	Rose pic ***£***	*Tulip pic* ***£***	***Group*** ***L***	
ASSETS				
Non-current assets	**20,000**	11,000	31,000	**Note 2**
Goodwill	^—	^ ~	**1,000**	Note 1
Investment in Tulip	**15,000**	-_—	ı	
Net current assets	**8,000**	**3,000**	11.000	**Note 2**
Net assets	**43,000**	14,000	**43,000**	
Common share capital	**16,000**	**10,000**	**16,000**	**Note 3**
Retained earnings	**27,000**	**4.000**	27,000	**Note 3**
	43,000	**14,00(1**	**43.000**	

Copyrighted material

Note 1. Calculate the goodwill for inclusion in the group accounts:

		L	*L*
The parent company's investment			15*000
Less: The parent's share of the subsidiary's share capital	(100% x 10,000)	10,000	
The parent's share of accumulated profits	(100% x 4,000)	4,000	14,000
The difference is goodwill for inclusion in the consolidated balance sheet			1,000*

"This is equivalent to the 100% share of net assets, i.e. Fixed assets 11,000 + Net current assets 3,000.

Note 2. Add together the assets and liabilities of the two companies for the group accounts:

		£
Non-current assets other than goodwill	(20,000 + 11,000)	31,000
Goodwill	(as calculated in Note 1)	1,000
Net current assets	(8,000 + 3,000)	11,000
		43.000

Note 3. Calculate the consolidated share capital and reserves for the group accounts:

Share capital	(The parent company only)	16,000
Retained earnings	(The parent company only)	27,000
		43,000

Note that:

- In Note 1 the investment in the subsidiary (£15,0*00) has been set off against the parent company's share of the subsidiary's share capital and reserves (£14,000) and these cancelled inter-company balances do not, therefore, appear in the consolidated accounts.
- In Note 2 the total of the net assets in the group account is the same as the net assets in the individual balance sheet but the Tulip pic investment in Rose pic's accounts has been replaced by the net assets of Tulip pic of £14,000 plus the previously unrecorded £1,000 goodwill.
- In Note 3 the consolidated balance sheet only includes the share capital and retained earnings of the parent company, because the subsidiary's share capital and retained earnings have been used in the calculation of goodwill.

An extract from the 2003 accounts of Schoeller-Bleckmann Oilfield equipment AG states:

> Consolidation method
> All companies in the company's accounts have adopted December 31 as the balance-sheet date. Upon capital consolidation the investments in the subsidiaries were offset against the equity of the respective entities in applying the purchase method of consolidation accounting in line with International Financial Reporting Standards.

Copyrighted material

20.6 The treatment of positive goodwill

Positive purchased goodwill, where the investment exceeds the total of the net assets acquired, should be recognised as an asset with no amortisation. Goodwill must be subject to impairment tests in accordance with IAS 36 *Impairment of Assets.* These tests will be annual, or more frequently if circumstances indicate that the goodwill might be impaired.[8] Once recognised, an impairment loss for goodwill may not be reversed in a subsequent period,[9] which helps in preventing the manipulation of period profits.

20.7 The treatment of negative goodwill

The acquiring company does not always pay more than the fair value of the identifiable net assets. If it pays less then negative goodwill is said to arise.

Negative goodwill, where the fair value of the net assets exceeds the amount of the investment, can arise[10] because

(a) there ha\e been errors measuring the fair value of either the cost of the combination or the acquirec's identifiable assets, liabilities or contingent liabilities;

(b) future costs such as losses have been taken into account;

(c) there has been a bargain purchase.

Where negative goodwill apparently arises IFRS 3 requires parent companies to review the fair value exercise to ensure that no assets are overstated or liabilities understated. Assuming this review reveals no errors, then the resulting negative goodwill is recognised immediately in the income statement.

Note that in the case of negative goodwill, the UK standard FRS 10 requires that it should be recognised in the profit and loss account in the periods expected to benefit from it.

20.8 The comparison between an acquisition by cash and an exchange of shares

Shares in another company can be purchased with cash or through an exchange of shares. In the former case, the cash will be reduced and exchanged for another asset called 'Investment in the subsidiary company*. If there is an exchange of shares there will be an increase in the share capital and, probably, the share premium of the acquiring company rather than a decrease in cash. There is no effect in either case on the accounts of the acquired company. The purchase price may contain a mixture of cash and shares and possibly other assets as well.

20.9 Minority interests

A pareni company does not need to purchase all the shares of another company to gain control. The holders of the remaining shares arc collectively referred to as the minority interest. They are part owners of the subsidiary. In such a case, therefore, the parent does not own all the net assets *o(* the acquired company but does control them.

Copyrighted material

One of the purposes of preparing group accounts is to show the effectiveness of that control and of the directors of the parent company who are responsible for it. Therefore all of the net assets of the subsidiary will IK* included in the group balance sheet and the minority interest will be shown as partly financing those net assets. In the group income statement the full profit of the subsidiary is included and the minority interest in il then separate!) identified. The income statement will IK* dealt with in more detail in Chapter 22. The effect on the balance sheet is illustrated in the Bird Group example below.

EXAMPLE • THE BIRD GROUP

On 1 January 20X0 Bird pic acquired 80% of the 10,000 £] Ordinary shares in Flower pic for £1.50 per share in cash and gained control. The fair value of the net assets of Flower at that date was the same as the book value. The individual balance sheets immediately after the acquisition and the group accounts at that date were as follows:

	Bird	*Flower*	*Gump*	
	£	**£**	**t**	
ASSETS				
Non-current assets	20,000	11.0(H)	31,000	Note 3
Goodwill			SIM)	Note 1
Investment in Flower	12,000			
Net current assets	11.000	3.DIM)	14,000	Note 3
Net assets	4.1,000	14,000	45.800	
Share capital	16,000	10,000	16,000	Note 4
Retained earnings	27,000	4,000	27.0(H)	Note 4
	43,000	14,000	43.0(H)	
Minoritv interest			2,8(H>	Note 2
	43,000	14,000	45.8(H)	

Note 1. Calculate goodwill

		£	**£**
The parent company's investment in Flower			12,000
Less: The parent's share of the subsidiary's share capital	(80% x 10,000)	8,000	
The parent's share of the retained earnings	(80% x 4,000)	3.2(H)	
(Equivalent to the share of net assets, i.e. 80°n x (11,000	3,000))		11,200
The difference is goodwill			SIM)

Note 2. Calculate the minority interest

The minority interest in the share capital of Flower	(20% x 10,000)	2,01H)
The minoritv interest in the retained earnings of Flower	(20% x 4,000)	8(H)
Represents the minority interest in the net assets ol Flower		2.8(H)

In published group accounts the minority interest will be shown as a separate ilem in the equity of the group as follows:

Share capital	16,000
Retained earnings	27,000
Bird shareholders' share of equih	43,000
Minority interest	2,800
Total equity	45^800

Copyrighted material

	Bird	*Flower*	*Group*	
	£	**£**	**£**	
ASSETS				
Non-currcni assets	20,000	11,000	31,600	
Goodwill	–		320	Note 1
Investment in Mower	12,000			
Net current assets	11,000	3,000	14,000	
Net assets	43,000	14,000	45/J20	
Share capital	l(i,000	10,000	16,000	
Retained earnings	27,000	4,000	27,000	
	43,000	14,000	43,000	
Minoritv interest	–		2,920	Note 2
	43,000	14,000	45,920	

Note I. Goodwill

			L
The parent company's investment in Flower			**12,000**
Less: The parent's share of the subsidiary's share capital	(80% x 10,000)	**8,000**	
The parent's share of retained earnings	(80° n x 4,000)	3,200	
The parent's share of the revaluation	(80% x 600)	**480**	
(Kquixalcnt to the share of net assets) 80% x(11,000 + 3,000 + 6(H))			**11,680**
The difference is goodwill			**320**

Note 2. Minorin interest

			£
The minority interest in the share capital of Mower	**(20% x 10,**	–	**2,000**
The minority interest in the retained earnings of Flower	**(20% x 4,000)**	–	**800**
The minoritv interest in the revaluation of the subsidiarv's assets	(20°.. x 600)		**120**
			2,920

Note 3. Non-current assets (20,000 + 11,000 + 6(H)) = £31,600

It must be stressed that the revaluation of the subsidiarv's assets is only necessary lor the consolidated accounts. No entries need be made in the individual accounts of the subsidiary or its books of account. The preparation (if consolidated accounts is a separate exercise that in no way affects the records of the individual companies.

20.1 I How to calculate fair values

Il'RS 3 *Business Combinations* gives a definition of fair value as 'The amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's-length transaction/[1]' The detailed guidance for determining fair value is also set out in II'RS 3. The main provisions are as follows:

Copyrighted material

As from the date of acquisition, an acquirer should:

(a) incorporate into the income statement the results of operations of the acquiree; and

(b) recognise in the balance sheet the identifiable assets, liabilities and contingent liabilities of the acquiree and any goodwill or negative goodwill arising on the acquisition.

The identifiable assets, liabilities and contingent liabilities acquired that are recognised should be those of the acquirce that existed at the date of acquisition. Liabilities should not be recognised at the date of acquisition if they result from the acquirer's intentions or actions. Therefore liabilities for terminating or reducing the activities of the acquiree should only be recognised where the acquiree has, at the acquisition date, an existing liability for restructuring recognised in accordance with IAS 37 *Provisions. Contingent Liabilities and Contingent. issets.*

Liabilities should also not be recognised for future losses'[2] or other costs expected to be incurred as a result of the acquisition, whether they relate to the acquirer or acquiree.

The IFRS sets out the rules for specific assets and liabilities in Appendix B.

- Tangible non-current assets: Fair value should be based on market value or, where there is no evidence of market value, at depreciated replacement cost or at a value based on future income.
- Identifiable intangible assets: E;air value should be based on market value or, if there is no active market, the best estimate on an arm's-length basis.
- Marketable securities: At their current market values.
- Non-marketable securities: At estimated values based on performance.
- Inventories and work-in-progress:
  - Finished goods at selling prices less the cost ol disposal .*iu*\ a reasonable profit allowance, based on the profit on similar goods.
  - Work-in-progress at the selling price of finished goods less the costs to complete, the costs of sale and a reasonable profit allowance.
  - Raw materials at current replacement cost.
- Monetary assets and liabilities other than taxation: The fair value is the amount to be recehed or disbursed, discounted to present value. There is no need to discount if the dif fcrencc between the discounted amount and the actual amount is immaterial.
- Tax assets and liabilities: The fair value is the amount of the tax benefit or liability after taking into account the tax effect of restating the other identifiable assets and liabilities to their fair value. The tax benefit or liability is not discounted.
- Contingent liabilities: The fair value is the amount it would cost to discharge the obligation at the date of acquisition of the subsidiary. This amount takes into account the probability of the payment.

The reason why the net assets of the subsidiary must be revalued at the date of acquisition is to ensure that all profits, both realised and unrealised, are reflected in the value of the net assets at the date of acquisition and to prevent distortion of LPS in perunls following the acquisition.

Copyrighted material

		Consolidated balance sheet		Porenr *company balance sheet*
		L		£
Ordinary shares		140.000		140.000
Capital reserve		92.400		92.400
Retained earnings		79.884		35,280
Minority interest		12.329		
		324.613		267,680
Non-current assets				
Property		127.400		84.000
Plant and equipment		62.720		50.400
Goodwill		85.680		
Investment in subsidiary (50.400 shares)				151.200
Current assets				
Inventory	121.604		71.120	
Trade receivables	70.429		51.800	
Cash at bank	24.360			
	216.393		122,920	
Current liabilities				
Trade payables	140.420		80.920	
Income tax	27.160		20.720	
Bank overdraft			39,200	
	167,580		140.840	
Working capital		48.813		(17.920)
		324.613		267.680

Notes:

0) There was only one subsidiary called Beta Ltd.

(K) There were no capital reserves in the subsidiary.

(iii) Alpha produced inventory for sale to the subsidiary at a cost of £3.360 in May 20X2. The inventory was invoiced to the subsidiary at £4.200 and was still on hand at the subsidiary's warehouse on 30 June 20X2. The invoice had not been settled at 30 June 20X2-

(IV) The retained earnings of the subsidiary had a credit balance of £ 16.800 at the date of acquisition. No fair value adjustments were necessary.

There was a right of set-off between overdrafts and bank balances.

(vi) The parent owns 9096 of the subsidary.

Required:

(a) Prepare **the** balance **sheet** as at 30 June 20X2 of the subsidiary company from the information given above.

(b) Discuss briefly the main reasons for the publication of consolidated accounts.

* Question 7

Rouge pic acquired 100% of the common shares of Noir pic on I January 20X0 and gamed control. At that date the balance sheets of the two companies were as follows:

Copyrighted material

	Rouge *£ million*	*Noir* *£ million*
ASSETS		
Non-current assets		
Property, plant and equipment	100	60
Investment in Noir	132	
Current assets	80	70
Total assets	312	130
EQUITY AND LIABILITIES		
Comrnon £1 shares	200	60
Retained earnings	52	JO
	252	100
Current liabilities	60	JO
Total equity and liabilities	312	130

Note: The fair values are the same as the book values.

Required: Prepare a consolidated balance sheet for Rouge pic as at I January 20X0.

* **Question** 8

Ham pic acquired 100% of the common shares of Burg pic on I January 20X0 and gained control. At that date the balance sheets of the two companies were as follows:

	Ham *£000*	*Burg* *£000*
ASSETS		
Non-current assets		
Property, plant and equipment	250	00
Investment in Burg		
Current assets	100	70
Total assets	•MO	70
EQUITY AND LIABILITIES		
Capital and reserves		
£1 shares	200	100
Retained earnings	160	
	360	no
Current liabilities	JO	_60
Total equity and liabilities	•HO	170

Notes:

1. The fair value is the same as the book value.
2. £ 15.000 of the negative goodwill arises because the net assets have been acquired at below their fair value and the remainder covers expected losses of £3.000 in the year ended 31/12/20X0 and £2,000 in the following year.

Required: (a) Prepare a consolidated balance sheet for Ham pic as at I January 20X0.
(b) Explain how the negative goodwill will be treated.

Copyrighted materia

Question 11

Base pic acquired 60% of the common shares of Ball pic on I January 20X0 and gained control. At that date the balance sheets of the two companies were as follows:

	Base *£000*	Bo'/ *C000*
ASSETS		
Non-current assets		
Property, plant and equipment	250	100
Investment in Ball	90	
Cjrrent assets	100	_70
Total assets	440	170
EQUITY AND LIABILITIES		
Capital and reserves		
Share capital	200	80
Share premium		20
Retained earnings	160	
	360	UO
Current liabilities	80	_60
Total equity and liabilities	440	170

Note:

The fair value of the property, plant and eauipment in Ball at 1/1/20X0 was £120,000.

Required: Prepare a consolidated balance sheet for Base as at I January 20X0.

References

1 IAS 27 *Consolidatedand Separate Financial Statements,* IASB, 2003. para. 4.
2 *I tut.t put,* 10.
3 IAS 1 *Presentation of' FinamiaI Statements,* I ASH, 2003, para. 31.
4 IAS *21 Consolidated and Separate Financial Statements,* IASH, 2003, para. 20.
5 KFRS 3 *limitless Combinations,* 2(MH.
6 *lbid.y* para. 19.
7 IAS 22 *Business Combinations,* IASC, revised 1998, para. 8 - now replaced by [PRS 3.
8 IKRS 3 *Business Combinations,* 2004, paras 54 and 55.
9 IAS 36 *Impairment of Assets,* IASH, revised 2004. para. 124.
10 IFRS 3 *Business Combinations,* 2004. para. 57.
11 *Ibid.,* Appendix A.
12 *Ibid.,* para. 41.

Copyrighted material

21.1 Introduction

In the previous chapter we considered the application of IFRS 3 *Business Combinations* when preparing a consolidated balance sheet at the date of acquisition. We also considered the provisions of IAS 27 *Consolidated and Separate Financial Statements*[1] in relation to the scope of consolidated financial statements. In this chapter we consider the application of IAS 27 when preparing a consolidated balance sheet at the end of the first financial year - the principles, however, arc also applicable to all subsequent financial periods.

This chapter will consider:

- Pre- and post-acquisition profits/losses
- Inter-company balances
- Unrealised profit on inter-company sales
- Provision for unrealised profit affecting a minority
- Uniform accounting policies.

21.2 Pre- and post-acquisition profits/losses

Pre-acquisition profits

Any profits or losses of a subsidiary made before the date of acquisition arc referred to as pre-acquisition profits/losses in the consolidated financial statements. These are represented by net assets that exist in the subsidiary as at the date of acquisition and, as we have seen in Chapter 20, the fair values of these net assets will be dealt with in the goodwill calculation.

Post-acquisition profits

Any profits or losses made after the date of acquisition are referred to as post-acquisition profits. Because these will have arisen whilst the subsidiary was under the control of the parent company, they will be included in the group consolidated income statement and so will appear in the retained earnings figure in the balance sheet. The following example for the Bend Group illustrates the approach to dealing with the pre- and post-acquisition profits.

EXAMPLE • THE BEND GROUP illustrating the treatment of pre- and post-acquisition profits

1 January **20X1**

Bend pic acquired 80% of the 10,01)0 £1 common shares in Stretch pic for £1.50 per share in cash and so gained control.

- Investment in the subsidiary cost £12,000.
- The retained earnings of Stretch pic were £4,000.

Note that the retained earnings are required for the goodwill calculation.

- The fair value of the non-current assets in Stretch pic was £600 above book value. The fair value of the subsidiary's assets are required for the consolidated balance sheet. In the subsidiary's own accounts the assets mav be left at book values or restated at their fair values. If revalued, the) will then become subject to the requirements of IAS 16 *Property, Plant ami Equipment*[1] which states that revaluations should be made with sufficient regularity that the balance sheet figure is not materially different from the fair value at thai date. This is one reason why the fair value adjustment is usually treated simply as a consolidation adjustment each year.

At 31 December 20X1

The closing balance sheets of Bend pic and Stretch pic together with the group accounts were as follows:

	Bend	*Stretch*	*Group*	
	£	***I***	***t***	
ASSETS				
Non-current assets	26,000	12,000	38,600	Note 3
Goodwill			320	Note 1
Investment in Stretch	12,000		–	
Net current assets	13.000	4,000	17,000	Note 3
Net assets	51.000	16,000	55,920	
EQUITY				
Share capital	16,000	10,000	16,000	Note 4
Retained earnings	35.000	6,000	36.600	Note 4
	51,000	16,000	52,600	
Minority interest			3T320	Note 2
	51,000	16,000	55.920	

Note 1. Goodwill calculated as at I January **20X1**

	£	£
The cost of the parent company's investment in Stretch		12,000
Less:		
(a) Share capital		
the parent's share of the subsidiary's share capital:		
80% x share capital of Stretch	(80% x 10,000) = 8,000	
(b) Pre-acquisition profit		
the parent's share of the subsidiary's retained earnings:		
80% x retained earnings at 1 January 20X1	(80% x 4,000) = 3,200	

Copyrighted material

the other. For example, if the parent company has supplied goods invoiced at £1,500 to its subsidiary, there will be a receivable for £1,500 in the parent balance sheet and a payable for £1,500 in the subsidiary's balance sheet. These need to be cancelled, i.e. eliminated, before preparing the consolidated accounts. In accounting terminology, this would be described as offsetting.

Reconciling inter-company balances

In practice, temporary differences may arise for such items as inventory or cash in transit that are recorded in one company's books but of which the other company is not yet aware, e.g. goods or cash in transit. In such a case the records will require reconciling and updating before proceeding. In a multinational company, this can be an extremely time-consuming exercise.

The following is an extract from the Sanitec International S.A. 2004 financial statements:

> All significant inter-company balances and transactions have been eliminated in consolidation.

21.3.4 Inter-company dividends payable/receivable

If the subsidiary company has declared a dividend before the year-end, this will appear in the current liabilities of the subsidiary company and in the current assets of the parent company and must be cancelled before preparing the consolidated balance sheet. If the subsidiary is wholly owned by the parent the whole amount will be cancelled. If, however, there is a minority interest in the subsidiary, the non-cancelled amount of the dividend payable in the subsidiary's balance sheet will be the amount payable to the minority and will be reported as part ol the minority interest in the consolidated balance sheet. Where a dividend has not been declared In the year-end date there is no liability under IAS 10 *Events After the Balance Sheet Date* and there should, therefore, be no liability reported under International Accounting Standards.

21.4 Unrealised profit on inter-company sales

Where sales have been made between two companies within the group, there may be an element of profit that has not been realised by the group if the goods have not then been sold on to a third party before the year-end. We will illustrate with the Many Group which consists of a parent, Many pic, and a subsidiary. Few pic.

Intra-group sales realised by sale to a third party (not a group member)

Assume, for example, that Many pic buys £1,000 worth of goods for resale and sells them to Few pic for £1,500, making a profit of £500. At the date of the balance sheet, if Few pic still has these goods in inventory, the group has not yet made any profit on these goods and the £500 is therefore said to be 'unrealised'. It must be removed from the group balance sheet bv:

- reducing the retained earnings of Many by £500;
- reducing the inventories of Few by £500.

The £500 is called a provision for unrealised profit.

If these goods are eventually sold by Few to customers outside the group for £1,800, the profit made by the group will be £800, the difference between the original cost of the goods

to Mam, £1,000, and the eventual sales price *o(*£1,800. It follows from this that it is only necessary to provide for an unrealised profit from intra-group sales to the extent that the goods are still in the inventories of the group at the balance sheet date.

The following extract from the 1999 accounts of Haver Sobering Pharma AG is an example of consolidation policy;

> Intcr-companv profits and losses, sales, income and expenses, receivables and liabilities between companies included in the consolidation have been eliminated.

The comprehensive example below for the Prose Group incorporates the main points dealt with so far on the preparation of a consolidated balance sheet.

EXAMPLE • THE PROSE GROUP

On 1 January 20X1 Prose pic acquired 80° n of the equity shares in Verse pic for £21,100, 20% of the preferred shares for £2,000 and 10% of the bonds for £900, and gained control. The retained earnings as at 1 January 20X1 were £4,000. The fair value of the land in Verse was £1,000 above book value. During the year Prose sold some of its inventory to Verse for £3,000, which represented cost plus a mark-up of 25°«». I lalf of these goods arc still in the inventory of Verse at 31/12/20X1. Prepare a consolidated balance sheet as at 31 December 20X1. Note that depreciation is not charged on land.

Xott: Just as in the IJend pic example above, it is helpful to structure the information before-preparing your consolidation, as follows:

I January 20X1 - the date of acquisition

- Prose acquired 80% of the equity shares for £21,100 for cash and so gained control.
- Prose acquired 20°o of the preferred shares in Verse for £2,000.
- Prose acquired 10°o of the bonds in Verse for £900.
- The total cost of the investment is therefore £24,000.
- The retained earnings in Verse were £4,000, i.e. this is the pre-acquisition profit of which 80% will be included in the goodwill calculation.
- The fair value of the non-current assets in Verse was £1,000 above book value, i.e. the non-current assets of the subsidiary will be increased in the consolidated balance sheet.

During 20X1

- Prose sold some of its inventorv to Verse for £3,000, which represented cost plus a mark up of 25%.

At 31 December 20X1

- 1 lalf of the goods sold by Prose were still in the inventorv ofVcrsc, i.e. there is unrealised profit, and both the consolidated gross profit and inventories in the consolidated balance sheet will need to be reduced by the amount unrealised.
- The closing balance sheets of Prose and Verse at 31 December 20X1 together with the group accounts were as follows:

Copyrighted material

	Prose £	*I erse* £	*Croup* £	
ASSETS				
Son-current assets				
(including land)	25,920	43,400	70,320	Note 4
Goodwill		–	8,900	Note 1
Investment in Verse	24.0(10	–	–	Note 1
Current assets				
Inventories	9,600	4,000	13,300	Note 2(c)
				Note 4
\ crse current account	8,000			Note 2(a)
Bond interest receivable	35			Note 2(b)
Other current assets	1,965	3,350	5,315	Note 4
Total assets	69.520	50.750	97.S55	
EQUITY and LIABILITIES				
Equity share capital	24,000	11,000	24,000	Note 5
Preferred shares	4.000	8,000	4,(H)0	Note 5
Retained earnings	30,000	8.500	33,500	Note 5
	58.000	27,500	61,500	
Minority interest			10,500	Note 3
Son-current liabilities				
Bonds	5,000	7,000	11.300	Note 6
Current liabilities				
Prose current account		8,000		
Bond interest payable		350	315	Note 2 (b)
Other current liabilities	6,520	7,900	14,420	Note 4
	69,520	50,750	97,835	

Note 1. Calculation of goodwill (note that this calculation will he the same as when calculated at the date of acquisition)

	£	l
The cost of the parent company's investment for common shares, additional paid in capital, preferred shares and bonds		24,000
Less:		
(a) parent's share of the subsidiary's equity share capital: 80% X common shares of Verse * (80% x 11,000) =	8,800	
(b) parent's share of the subsidiary's retained earnings: 80% X retained earnings balance at 1 January 20X1 (80% X 4,000) =	3,200	
(c) parent's share of an\ change in subsidiary's hook values: 80% X revaluation of land at 1 January 20X1 (80% x 1,000) =	8(H)	
(d) parent's share of preferred shares: 20% X preferred shares of Verse (20% x 8,000) =	1,600	
(e) parent's share of bonds: 10".. X bonds of Verse (10% X 7,000) =	Too	
	15,100	
Goodwill in balance sheet	8,900	

Copyrighted material

The balance sheets of the two companies at 31/12/20XI were as follows:

	Sweden Krm	*Oslo* Krm
ASSETS		
Non-current assets		
Property, plant and equipment	264	120
Investment m Oslo	200	
Current assets	160	140
Total assets	6?4	260
EQUITY AND LIABILITIES		
Kr 10 shares	400	110
Retained earnings	104	80
Revaluation reserve	20	JO
	524	200
Current liabilities	I00	_60
Total equity and liabilities	624	260

Notes:

1. The fair values were the same as the book values on I/3/20XI.
2. There have been no movements on share capital since 1/3/20X1.
3. 20% of the goodwill is to be written off as an impairment loss.

Required:

Prepare a consolidated balance sheet for Sweden as at 31 December 20X1.

Question 2

Summer pic acquired 60% of the common shares of Winter Ltd on 30 September 20X1 and gained control. At the date of acquisition, the balance of retained earnings of Winter was £35.000.

At 31 December 20X1 the balance sheets of the two companies were as follows:

	Summer £000	Winter £000
ASSETS		
Nothcurreni assets		
Property, plant and equipment	200	200
Investment in Winter	141	
Current assets	I00	140
Total assets	441	340
EQUITY AND LIABILITIES		
Equity shares	200	180
Retained earnings	161	JO
	361	220
Current liabilities	HO	120
Total equity and liabilities	441	340

Notes:

I. The fair value is the same as the book value.

Copyrighted material

2. There have been no movements on share capital since 30/9/20XI.
3. 8.33% of the goodwill is to be written off as an impairment loss.

Required:

Prepare a consolidated balance sheet for Summer pic as at 31 December 20XI.

Question 3

On 30 September 20X0 Gold pic acquired 75% of the equity shares, 30% of the preferred shares and 20% of the bonds m Silver pic and gained control The balance of retained earnings on 30 September 20X0 was £16.000. The fair value of the land owned by Silver was £3.000 above book value. No adjustment has so far been made for this revaluation.

The balance sheets of Gold and Silver at 31 December 20X1 were as follows:

	Gold	*Silver*
	£	£
ASSETS		
Property, plant and equipment (including land)	82.300	108.550
Investment in Silver	**46.000**	–
Current assets:		
Inventory	23.200	10.000
Silver current account	20.000	
Bond interest receivable	175	
Other current assets	5.000	7.500
Total assets	176.675	126.050
EQUITY AND LIABILITIES		
Equity share capital	60.000	27.600
Preferred shares	10.000	20.000
Retained earnings	75.000	21.200
	145.000	68.800
Non-current liabilities - bonds	12.500	**17.500**
Current liabilities		
Gold current account		20.000
Bond interest payable	625	875
Other current liabilities	18.550	18.875
Total equity and liabilities	1 76,675	1 26.050

Notes:

1. 20% of the goodwill is to be written off as an impairment loss.
2. During the *year* Gold sold some of its inventory to Silver for £3.000. which represented cost plus a mark-up of 25%. Half of these goods are still m the inventory of Silver at 31/12/20XI.
3. There is no depreciation of land.
4. There has been no movement on share capital since the acquisition.

Required:

Prepare a consolidated balance sheet as at 31 December 20X1.

Copyrighted material

References

1 **IAS 27 *Consolidated and Separate Financial Statements,* I ASH,** revised 2(H)3.
2 IAS *U> Property, Plant and Equipment,* IASH, revised 2003, para. 31.
3 IAS 27, revised 2003, para. 2-1.
4 *Ibid.*, para. 28.
5 *lbid.*$_t$ paras 26 and 27.
6 *ibid.*, para. 37.

Copyrighted material

22.1 Introduction

In the previous chapter we explained the consolidation adjustments required at the end of the first financial period in which the parent had been able to exercise control over the subsidiary. The adjustments were of two kinds, namely, those that affected the protit such as unrealised profit on inter-company inventories and pre-acquisition profits, and those that affected the balance sheet such as current accounts and preferred shares held by the parent.

This chapter will consider:

- The treatment arising from the above items in the consolidated income statement
- Dividends or interest paid out of pre-acquisition profits
- I low to adjust when a subsidiary is acquired part of the way through the year.

22.2 Preparation of a consolidated income statement - the Ante Group

The following information is available:

At the date of acquisition on 1 January 20X1

Ante pic acquired 75°o of the common shares and 20% of the preferred shares in Post pie.

(Shows that Ante had controlJ

At that date the retained earnings of Post were £30,000.

(These are pre-acqiusitton profits ami should not be included in the Group profit for the year)

Ante had paid £10,001) more than the fair value of the net assets acquired.

(This represents positive goodwill)

During the year ended 31 December 20X2

Ante had sold Post goods at their cost price of £9,000 plus a mark up of one-third. These were the onlj inter-companj sales.

(Indicates that the group sales and cost of sales require adjusting)

At the end of the financial year on 31 December 20X2

I lalf of these goods were still in the inventory at the end ol the year.

(There is unrealised profit to he removed from the Gmup iiruss profit)

20% is to be written-off goodwill as an impairment loss.

Dividends paid in the year by group companies were as follows:

	Ante	Post
On ordinary shares	40,000	5,000
On preferred shares		3JKM)

Set out IK*1O\V are the individual income statements and statement of changes in equity of Ante and Post together with the consolidated income statement for the \car ended 31 December 20X2 with explanatory notes.

Income statements for the year ended 31 December 20X2

	ttiw **i**	*Post* **t**	*Consolidated* **£**	
Sales	200,000	120,000	308.0(H)	Notes 1/3
Cost of sales	60,000	60.0(H)	109,500	Notes 1/2/3
Gross profit	140,000	60,000	198,5(H)	
Expenses	59,082	40,000	99,082	Note 4
Impairment of goodwill			2,000	Note 5
Profit from operations	80,918	20,000	97,418	
Dividends received - common shares	3,750	–		Note 6
1)ividends received - preferred shares	600			Note 6
Profit before tax	85,268	20.0(H)	97,418	
Income tax expense	14,004	6.0(H)	20,004	Note 7
Profit for the period	71,264	14,000	77,414	
Attributable to:				
Ordinary shareholders of Ante (balance)			72,264	
Minority shareholders in Post (Note S)			5,150	
			77,414	

Profit realised from operations - £97,418 - see Notes 1-5

Adjustments are required to establish the profit realised from operations. This entails eliminating the effects of inter-company sales and inventory transferred within the group with a profit loading hut not sold at the balance sheet date and charging any goodwill impairment.

Notes:

1. Eliminate inter-company sales on consolidation.

   Cancel the inter-company sales of £12,000 (9,000 + JS) by.

   (i) reducing the sales of Ante from £200,000 to £188,000; and

   (ii) reducing the cost of sales of Post by the same amount from £60,000 to £48,(HHl.

2. Eliminate unrealised profit on inter-company goods still in closing inventory.

   (i) Ante had sold the g<M>ds to Post at a mark up £3,000.

   (ii) Half of the goods remain in the stock of Post at the year-end.

   (iii) From the group's view there is an unrealised profit of half of the mark-up, i.e. £1,500. Therefore:

   - deduct £1,500 from the gross profit of Ante by adding this amount to the cost of sales
   - add this amount to a provision for unrealised profit
   - reduce the inventories in the consolidated balance sheet by the amount of the pro vision (as explained in the previous chapter).

3. Aggregate the adjusted sales and cost of sales figures for items in Notes I and 2.

   (i) Add the adjusted sales ligures

Copyrighted material

((200,000 - 12,000 inier-company sales) + 120,000) = **£308,000**

(ii) Add the adjusted cost of sales figures;

60,000 + (60,000 - 12,000) + 1,500 provision = £109,500

4. Aggregate expenses

No adjustment is required to the parent or subsidiary total figures.

5. Deduct the impairment loss.

The goodwill was given as £10,000, and it has been estimated that there has been a £2,000 impairment loss.

Profit after tax-£97,418

Adjustments are required[1] to establish the profit after tax earned by the group as a whole. This entails eliminating dividends and interest that have been paid to the parent by the subsidiaries. If this were not done, there would be a double counting as these would appear in the profit from operations of the subsidiary, which has been included in the consolidated profit from operations, and again as dividends and interests received by the group.

6. Accounting for inter-company dividends

(i) The ordinary dividend £3,750 received by Ante is 75°«» of the £5,000 dividend paid by Post.

(ii) Cancel the inter-company dividend received by Ante with £3,750 dividend paid by Post, leaving the £1,250 dividend paid by Post to the minority.

(iii) The preferred dividend of £600 received by Ante is 20% of the £3,000 paid by Post.

(iv) Cancel the £600 preferred dividend received by Ante with £600 of the preferred dividend paid by Post.

(v) the balance of £2,400 remaining was paid to the minority.

7. Aggregate the taxation figures.

No adjustment is required to the parent or subsidiary total figures.

Allocation of profit to equity holders and minority interest

Adjustment is required- to establish how much of the profit after tax is attributable to equity holders of the parent. This entails allocating the minority interest in the subsidian's after-tax figure, as adjusted for any preference dividend (see note S).

8. Calculate the share of post-taxation profits belonging to the minority interest.

C

Preferred shares - dividend on these shares:

Minority shareholders hold 80% of preferred shares (80% X 3,000) = 2,400

Common shares - % of profit after tax of the subsidiary *less* preferred share dividend

Minority shareholders hold 25% of the ordinary shares 25% x (14,000 - 3,000) = 2,750

Total minority interest in the profit after tax of the subsidiary 5.151)

22.3 The statement of changes in equity (SOCE)[3]

We will prepare extracts from the consolidated statement of changes in equity for the Ante group (retained earnings columns only). In order to do this, we need the balances on retained earnings at the start of the year. These are as follows:

Copyrighted material

5. Accounting for inter-company dividends

Amount received by Tight	=	£3,600
The dividend received In Tight is apportioned on fl time basis, and the pre-acquisition element is credited to the cost of investment in Tight's balance sheet, i.e Xi x £3,600	=	(£2,700)
The post-acquisition clement is cancelled with part of the dividend paid in Loose income statement prior to consolidation.	=	(/,'(>0P)
Amount credited to consolidated income statement		NIL

6. Aggregate the tax figures.

'This includes the whole of the parent's tax and the time-apportioned part of the sub-sidiary's tax, i.e. £14,004 + (6,000 x *Hi)*	=	£15,504
The group taxation is that of Tight plus \: of Loose.		

7. Calculate the share of post-acquisition consolidated profits belonging to the minority interest.

As onl\ the post-acquisition proportion of the subsidiary's profit after tax has been included in the consolidated income statement, the amount deducted as the minority interest in the profit after lax is also time-apportioned, i.e.		
25% x(14,000 x\.)	=	£875

22.6 Published format income statement

The income statement follows the classification of expenses by function as illustrated in IAS 1:*

		£
Revenue		230,0(10
(lost of sales		75,000
Gross profit		155,000
Distribution costs	xxxxxx	
Administrative expense	xxxxxx	
		66,582
		88,418
Finance cost		2,000
		86,4 IS
Income tax expense		**15.504**
Profit for the period		**70,914**
Attributable to:		
Kquilv holders of the parent		70.039
Minority interest		875

Copyrighted material

1 Explain why the dividends deducted from the group in the statement of changes in equity *are* only those of the parent company.

2 Explain how unrealised profits arise from transactions between companies in a group and why rt is important to remove them.

3 Explain why it is necessary to apportion a subsidiary's profit or loss if acquired part-way through a financial year.

4 Explain why dividends paid by a subsidiary to a parent company are eliminated on consolidation.

5 Give five examples of inter-company income and expense transactions that will need to be eliminated on consolidation and explain why each is necessary,

6 A shareholder was concerned that following an acquisition the profit from operations of the parent and subsidiary were less than the aggregate of the indrvidual profit from operations figures. She was concerned that the acquisition, which the directors had supported as improving earnings per share, appeared to have reduced the combined profits. She wanted to know where the profits had gone.

Give an explanation to the shareholder.

An extract from the solution is provided m the Appendix at the end of the text for exercises marked with an asterisk (*).

* Question I

Bill pic acquired 8096 of the common shares and 10% of the preferred shares in Ben pic on 31 December three years ago when Ben's accumulated retained profits were £45.000. During the year Bill sold Ben goods for £8.000 plus a mark-up of 50%. Half of these goods were still m stock at the end of the year. There was goodwill impairment loss of £3,000.

The income statements of the two companies for the year ended 31 December 20XI were as follows:

	Bi/i	Ben
	£	£
Revenue	300.000	180.000
Cost of sales	90.000	90.000
Gross profit	210.000	90.000
Expenses	88.623	60.000
	121.377	30.000
Dividends received - common shares	6.000	
Dividends received - preferred shares	450	—-*
Profit before tax	127.827	30.000
Income tax expense	21.006	9.000
Profit for the period	06.821	21.000

Required:
Prepare a consolidated income statement for the year ended 31 December 20X1.

* Question *2*

Morn Ltd acquired 90% of the shares in Eve Ltd on 1 January 20X1 for £90.000 when Eve Ltd's accumulated profits were £50.000. On 10 January 20X1 Morn Ltd received a dividend of £ 10.800 from Eve Ltd out of the profits for the year ended 31/12/20X0. The summarised income statements for the year ended 31/12/20XI were as follows:

	Morn	Eve
	£	£
Gross profit	360.000	180.000
Expenses	120.000	110.000
	240.000	70.000
Dividends received from Eve Ltd	10.800	—
Proftt before tax	250.800	70.000
Income tax expense	69.000	18.000
Profit for the period	131.800	52.000

There were no inter-company transactions, other than the dividend. There was no goodwill.

Required:
Prepare a consolidated income statement for the year ended 31 December 20X1.

Question 3

River ptc acquired 90% of the common shares and 10% of the 5% bonds in Pool Ltd on 31 March 20X1. All income and expenses are deemed to accrue evenly through the year. On 31 January 20X1 River sold Pool goods for £6.000 plus a mark up of one-third. 75% of these goods were still in stock at the end of the year. There was a goodwill impairment loss of £4,000. Set out below are the individual income statements of River and Pool:

Income statements for the year ended 31 December 20XI

	Rjver	*Pool*
	L	*C*
Net turnover	100.000	60.000
Cost of sales	30.000	30.000
Gross profit	70.000	30.000
Expenses	20.541	15,000
Interest payable on 5% bonds		5.000
Interest receivable on Pool Ltd bonds	500	
	49.959	10.000
Dividends received	2.160	NIL
Profit before tax	52.119	10.000
Income tax expense	7.002	3.000
Profit for the period	45.117	7.000

Required:

Prepare a consolidated income statement for the year ended 31 December 20X1.

Question 4

The balance sheets of Mars pic and Jupiter pic at 31 December 20X2 are as follows:

	Mars	*Jupiter*
	i	*I*
ASSETS		
Non-current assets at cost	550.000	225.000
Depreciation	220.000	67.500
	330,000	157.500
Investment in Jupiter	187.500	
Cur rem assets		
Inventories	225.000	67.500
Trade receivables	180.000	90.000
Current account - Jupiter	22.500	
Bank	36.000	18.000
	463.500	175.500
Total assets	**981,000**	**333,000**

Copyrighted material

EQUITY AND LIABILITIES		
Capital and reserves		
£1 common shares	196.000	90.000
General reserve	245.000	31.500
Retained earnings	225.000	135.000
	666.000	256.5CO
Current liabilities		
Trade payables	283.500	40.500
Taxation	31.500	13.500
Current account - Mars		22.500
	315.000	76.500
Total equity and liabilities	981,000	333,000

Income statements for the year ended 31 December 20X2

	C	*C*
Sales	1.440.000	270.000
Cost of sales	1.045.000	135.000
Gross profit	395.000	135.000
Expenses	123.500	90.000
Dividends received	9,000	NIL
Profit before tax	280.500	45.000
Income tax expense	31.500	13.500
	249.000	31.500
Dividends paid	180.000	11,250
	69.000	10.250
Retained earnings brought forward from previous years	156.000	114.750
	225.000	135.000

Mars acquired 80% of the shares in Jupiter on I January 20X0 when Jupiter's retained earnings were £80.000 and the balance on Jupiter's general reserve was £18.000. During the year Mars sold Jupiter goods for £18.000 which represented cost plus 50%. Half of these goods were still in stock at the end of the year.

During the year Mars and Jupiter paid dividends of £180.000 and £11.250 respectively. The opening balances of retained earnings for the two companies were *C*156.000 and £114.750 respectively.

Required:

Prepare a consolidated income statement for the year ended 31/12/20X2. a balance sheet as at that date, and a consolidated statement of changes in equity. Also prepare the retained earnings columns of the consolidated statement of changes in equity for the year.

Copyrighted material

Question 5

The balance sheets of Red Ltd and Pink Ltd at 31 December 20X2 are as follows:

	Red	Pink
	$	$
ASSETS		
Non-current assets	200.000	100.000
Depreciation	80.000	30.000
	120.000	70,000
Investment in Pink Ltd	110.000	
Current assets		
Inventories	100.000	30.000
Trade receivables	80.000	40.000
Current account - Pink **Ltd**	10.000	
Bank	I6.0C0	8.000
	206.000	78.000
Total assets	**436,000**	148,000
EQUITY AND LIABILITIES		
Capital ami reserves		
$1 common shares	176.000	40.000
General reserve	20.000	14.000
Retained earnings	100.000	60.CO0
	296.000	114.000
Current liabilities		
Trade payables	125.996	18.000
Taxation payable	14.004	6.000
Current account - Red Ltd		10.000
	140.000	34.000
Total equity and liabilities	**436,000**	**148,000**

Income statements for the year ended 31 December 20X2

	$	S
Sales	200.000	120.000
Cost of sales	60.000	60.000
Gross profit	140.000	60.000
Expenses	59.082	40.000
Dividends received	3.750	NIL
Profit before tax	84.668	20.000
Income tax expense	14.004	6.000
	70.664	14.000

Red Ltd acquired 75% of the shares in Pmk Ltd on I January 20X0 when Pink Lid's retained earnings were $30,000 and the balance on Pink's general reserve was $8,000.

During the year Pink sold Red goods for $9,000 plus a mark-up of one-third. Half of these goods were still m inventory at the end of the year. Goodwill suffered an impairment loss of 20%

Required:

Prepare a consolidated income statement for the year ended **31/1**2/20X2 and a balance sheet as at that date.

Copyrighted material

Question 6

Alpha has owned 80% of the equity shares of Beta since the incorporation of Beta. On I July 20X6 Alpha purchased 60% of the equity shares of Gamma. The income statements and summarised statements of changes in equity of the three entities for the year ended 31 March 20X7 are given below:

Income statements

	Alpha	*Beta*	*Gamma*
	$'000	*$'000*	*$'000*
Revenue {Note I)	180.000	120.000	106.000
Cost of sales	(90.000)	(60.000)	(54.000)
Gross profit	90,000	60.000	52.000
Distribution costs	(9.000)	(8.000)	(8.000)
Administrative expenses	(10.000)	(9.000)	(8.000)
Investment income (Note 2)	26.450	N.I	N.I
Finance cost	(10.000)	(8.000)	(5.000)
Profit before tax	87.450	35.000	31.000
Income tax expense	(21.800)	(8.800)	(7.800)
Net profit for the period	•*r* 650	26.200	23.200

SUMMARISED STATEMENTS OF CHANGES IN EQUITY

Balance at I April 20X6	152.000	11 1.000	102.000
Net profit for the period	65.650	26.200	23.200
Dividends paid on 31 January 20X7	(30.000)	(13.000)	(15.000)
Balance at 31 March 20X7	187.650	124.200	110.200

Notes to the financial statements

Note I - Inter-company sales

Alpha sells products to Beta and Gamma, making a profit of 30% on the cost of the products sold. All the sales to Gamma took place in the post-acquisition period. Details of the purchases of the products by Beta and Gamma, together with the amounts included in opening and closing inventories in respect of the products, are given below:

	Purchased /n *year* *$'000*	*Included in opening inventory* *$'000*	*included in closing inventory* *$'000*
Beta	20.000	2.600	3.640
Gamma	10.000	Nil	1,950

Note 2 - Investment income

Alpha's investment income includes dividends received from Beta and Gamma and interest receivable from Beta- The dividend received from Gamma has been credited to the income statement of Alpha without time apportionment. The interest receivable is in respect of a loan of $60 million to Beta at a fixed rate of interest of 6% per annum. The loan has been outstanding for the whole of the year ended 31 March 20X7.

Note 3 - Details of acquisition of shares in Gamma

On I Julv 20X6 Alpha purchased 15 million of Gamma's issued equity shares by a share exchange.

Copyrighted material

Alpha issued 4 new equity shares for every 3 shares acquired in Gamma. The market value of the shares in Alpha and Gamma at I July 20X6 was $5 and $5.50 respectively.

The fair values of the net assets of Gamma closely approximated to their carrying values in Gamma's financial statements with the exception of the following items:

(i) A property that had a carrying value of $20 million at the date of acquisition had a market value of $30 million. $ 16 million of this amount was attributable to the building, which had an estimated useful future economic life of 40 years at I July 20X6. In the year ended 31 March 20X7 Gamma had charged depreciation of $200,000 in its own financial statements in respect of this property.

(ii) Rant and equipment that had a carrying value of $6 million at the date of acquisition and a market value of $8 million. The estimated useful future economic life of the plant at I July 20X6 was 4 years. None of this plant and equipment had been sold or scrapped prior to 31 March 20X7.

(rii) Inventory that had a carrying value of $3 million at the date of acquisition had a fair value of $3.5 million. This entire inventory had been sold by Gamma prior to 31 March 20X7.

Note 4 - Other information

(i) Gamma charges depreciation and impairment of assets to cost of sales.

(u) On 31 March 20X7 the directors of Alpha computed the recoverable amount of Gamma as a single cash-generating unit They concluded that the recoverable amount was $150 million.

(iii) When the directors of Beta and Gamma prepared the individual financial statements of these companies no impairment of any assets of either company was found to be necessary.

Required

Prepare the consolidated income statement and consolidated statement of changes in equity of Alpha for the year ended 31 March 20X7. Notes to the consolidated income statement are not required. Ignore deferred tax.

Question 7

H Ltd has one subsidiary. S Ltd. The company has held a controlling interest for several years. The latest financial statements for the two companies and the consolidated financial statements for the H Group are as shown below:

Income statements *for the year ended 30 September 20X4*

	HLtd	*Slid*	H *Croup*
	£000	£000	£000
Turnover	4.000	2.200	5.700
Cost of sales	(1.100)	(960)	(1.605)
	2.900	1.240	4.095
Administration	(420)	(130)	(550)
Distribution	(170)	(95)	(265)
Dividends received	180	^»-	^—
Profit before tax	2.490	1.015	3.280
Income tax	(620)	(335)	(955)
Profit after tax	1.870	680	2.325
Attributable to:			
Equity shareholders of H Ltd			2.155
Minority shareholders in S Ltc1			170

Copyrighted material

23.1 Introduction

This chapter will consider:

- The definitions of associates and of significant influence
- The treatment of associated companies in consolidated accounts
- The treatment of provisions for unrealised profits
- The acquisition of an associate part-way through the year
- Joint ventrurcs.

23.2 Definitions of associates and of significant influence

An associate is an entity over which the investor has significant influence and which is neither a subsidiary nor a joint venture of the investor.[1]

Significant influence is the power to participate in the financial and operating policy decisions of the investec but is not control over these policies.'

This chapter will only consider associated companies. Note that an associated company, as such, cannot be a member of a group, i.e. it is not consolidated on a line bv line basis.

Significant influence will be assumed in situations where one company has 20% or more of the voting power in another company, unless it can be shown that there is no such influence. Unless it can be shown to the contrary, a holding of less than 20% will be assumed insufficient for associate status. The circumstances of each case must be considered.[1]

IAS 28 suggests that one or more of the following might be evidence of an associate:

(a) representation on the board of directors or equivalent governing body of the investec;
(b) participation in policy-making processes;
(c) material transactions between the investor and the investee;
(d) interchange of managerial personnel; or
(e) provision of essential technical information/

23.3 The treatment of associated companies in consolidated accounts

Associated companies will be shown in consolidated accounts under the equity method, unless the investment meets the criteria of a disposal group held for sale under ll'RS 5 ***Sou-current Asseis Held for Sale and Discontinued Operations.*** If this is the ease it will be accounted for under IFRS 5 at the lower of cam ing value and fair value less costs to sell.

The equity method is a method of accounting whereby;

- The investment is reported in the consolidated balance sheet in the non-current asset section/ It is reported initially at cost adjusted, at the end of each financial year, for the post-acquisition change in the investor's share of the net assets of the investcc.[6]
- In the consolidated income statement, income from associates is reported after profit from operations together with finance costs and finance expenses.' The income reflects the investor's share of the post-tax results of operations of the investee.*

23.4 The Brill Group •* the equity method illustrated

Brill pic had acquired 80°o of Bream pic's common shares in 20X0.

At date of acquisition of shares in associate on 1 January 20X0:

- Brill acquired 20°o of the common shares in Cod for £20,1MM), i.e. Brill was assumed to have significant influence.
- The retained earnings of Cod were £22,500 and the general reserve was £6,000.

These are pre-acquisiuon items. The group share will IK deducted from the cost of the investment to calculate the iroodwill figure.

Set out below are the consolidated accounts of Brill and its subsidiary Bream and the indi-vidua! accounts of the associated company. Cod, together with the consolidated group accounts.

23.4.1 Consolidated balance sheet

Balance sheets of the Brill Group (parent plus subsidiaries already consolidated) and Cod (an associate company) as at 31 December 20X2:

	Brill and Subsids	*Cod*	*Group*	
	I	***L***	***£***	
Non-euri'ciu assets				
Property, plant and equipment	172,500	59,250	172,500	
Goodwill on consolidation	13,400		13,400	
Investment in Cod	20,000		23,600	Note 1
Current assets				
Inventories	132,440	27,000	132,440	
Trade receivables	151,050	27,000	151,050	
Current account - Cod	2,250		2,250	Note 2
Bank	36.200	4,500	36,200	
	527.S40	117.750	531,440	

Copyrighted material

	Brill and Subsids	*Cod*	*Group*	
	I	***£***	***I***	
Current liabilities				
Trade payables	110,250	25,500	110,250	
Taxation	27,750	6,000	27,750	
Current account - Brill		2,250		
	138,000	33,750	138,000	
Total net assets	389,840	84,000	393,440	
EQUITY				
£1 common shares	187.5(H)	37,500	187,500	
General reserve	24,900	9,000	25,500	Note 3
Retained earnings	145.940	37,500	148,940	Note 4
	358,340	84,000	361,940	
Minority interest	31.5(H)		31,500	Note 5
	389,840	84,000	393,440	

Notes:

1. Investment in associate

	£	***£***
Initial cost of the 20"<> holding		20.0(H)
Share of post-acquisition reserves of Cod		
20% (37,500 - 22,500) (retained earnings) =	3,0()o	
20% (9,000 - 6.0(H)) (general reserves)	600	3,600
		23.601)

Note that (a) the assets and liabilities are not joined line by line with those of the companies in the group and (b) the j£23,6(H) comprises 20% of net assets of £84,000 plus goodwill of £6,800. The goodwill can be calculated as follows:

Investment at cost		20,000
20% x 37,500 (shares)	7,500	
20% X 6,000 (General Reserve)	1.2(H)	
20"., x 22,500 (Retained earnings)	4,500	13,200
		6,800

Note that because goodwill in an associate is not separately recognised, it is the entire carrying amount that is tested for impairment under IAS 28."

2. The Cod current account is received from outside the group and must therefore continue to IK* shown as recei\able by the group. It is not cancelled.

3. General reserve consists of:

	£
Parent's general reserve	24,900
General reserve of Cod:	
The group share of ihe post-acquisition retained profits i.e. 20% (9,(HH) - 6,000) =	600
Consolidated general reserve	25,500

4. Accumulated profits consists of:

Parent's retained earnings	145,940
Retained earnings of Cod:	
The group share of the post-acquisition retained profits, i.e. 20% (37.5(H) - 22,500) =	3,000
Consolidated retained earnings	148,940

Copyrighted material

to apply equity accounting but this would mean that equity accounting would IK applied to two different **types of investments, namely, associates in which the investor only has a significant influence and joint ventures in which it has joint control.**

23.7.5 Equity accounting method

In the UK joint ventures arc generally required to he accounted for using the equity method. IAS 31 takes a different approach in that it permits equity accounting hut actively argues against it,"[1] saying:

> Some venturers report their interests in jointly controlled entities using the equity method, as described in IAS 28. The use of the cquit\ method is supported by those who argue that it is inappropriate to combine controlled items with jointly controlled items and by those who believe that venturers have significant influence, rather than joint control, in a jointly controlled entity. This Standard docs not recommend the use of the equity method because proportional consolidation better reflects the substance and economic reality of a venturer's interest in a jointly controlled entity, that is control over the venturer's share of the future economic benefits. Nevertheless, this Standard permits the use of the equity method, as an allowed alternative treatment, when reporting interests in jointly controlled entities.

I low ever, in 2(M)6, as part of the short-term convergence project, the IASU proposed getting rid of the proportionate consolidation option.

I The following is an extract from the notes to the 1999 consolidated financial statements of the Chugoku Electric Power Company. Incorporated.

Equity method
Investments in four (three m 1998) affiliated companies (20% to 50% owned) are accounted for by the equity method and. accordingly, are stated at cost adjusted for equity in undistributed earnings and losses from the date of acquisition.

(a) What is another name for most companies which are 20% to 50% owned?
(b) What is meant by the word 'equity in the above statement?

(c) What are the entries in the income statement under the equity method of accounting?
(d) What are the differences between the equity method and consolidation?

2 Why are associated companies accounted for under the equity method rather than consolidated?

3 How does the treatment of inter-company unrealised profrt differ between subsidiaries and associated companies?

4 IAS 28. para. 17, states:

The recognition of income on the basis of distributions received may not be an adequate measure of the income earned by an investor on an investment in an associate.

Explain why this may be so.

5 Where an associate has made losses. IAS 28, para. 30. slates:

After the investor's interest is reduced to zero, additional losses are provided for. and a liability is recognised, only to the extent that the investor has incurred legal or constructive obligations or made payments on behalf of the associate. If the associate subsequently reports profits, the investor resumes recognising its share of those profits only after its share of the profits equals the share of losses not recognised.

Explain why profits are recognised only *after* its share of the profits equals the share of losses not recognised.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (•).

* Question I

The following are the financial statements of the parent company Swish pic. a subsidiary company Broom and an associate company Handle.

Income statements for the year ended 31 December 20X9

	5	:	S
Sales	225.000	120.000	75.000
Cost of sales	67.500	60,000	30.000
Gross profit	157.500	60,000	45.000
Expenses	70.500	37.500	30.000
Dividends received	7.500	NIL	7.500
Profit before tax	94.500	22.500	22.500
Taxation	22.500	5.250	6.000
Profit for the year	72.000	17.250	16.500
Dividends paid in /ear	30.000	7.500	6.000

Ant Co. acquired 80% of the shares in Bug Co. on I January 20X7 when the balance on the retained earnings of Bug Co. was $45,000 and the balance on the general reserve of Bug Co. was $ 12.000. Ant Co. also acquired 2596 of the shares in Nit Co. on I January 20X8 when the balance on Nit's retained earnings was $22,500 and the general reserve $6,000.

During the *year* Ant Co. sold Bug Co. goods for $ 12.000. which included a mark-up of one-third. 90% of these goods were still tn inventory at the end of the year,

Required:

(a) Prepare a consolidated income statement for the year ending 31/12/20X9, including the associated company Nit's results.
(b) Prepare a consolidated balance sheet at 31/12/20X9. including the associated company.

Question 3

Alpha has owned 75% of the equity shares of Beta since the incorporation of Beta. Therefore Alpha has prepared consolidated financial statements for some years. On I July 20X6 Alpha purchased 40% of the equity shares of Gamma. The income statements and summarised statements of changes in equity of the three entities for the year ended 30 September 20X6 are given below:

Income statements

	Alpha	*Beta*	*Gamma*
	$'000	*m00*	*$'000*
Revenue (Note 1)	150.000	100.000	96.000
Cost of sales	(110.000)	(78.000)	(66.000)
Gross profit	40.000	22.000	30.000
Distribution costs	(7.000)	(6.000)	(6.000)
Administrative expenses	(8.000)	(7.000)	(7.200)
Profit from operations	25.000	9.000	16.800
Investment income (Note 2)	6.450	Nil	K
Finance cost	(5.000)	(3.000)	(4.200)
Profit before tax	26.450	6.000	12.600
Income tax expense	(7.000)	(1.800)	13.600)
Net profit for the period	19.450	4.200	9.000

Copyrighted material

- No other investor is able to control the operating and financial policies of Gamma, but on one occasion since I July 20X6 Gamma made a policy decision with which Alpha did not fully agree.
- Alpha has not entered into a contractual relationship with any other investor to exercise joint control over the operating and financial policies of Gamma.
- All equity shares in Beta *carry* one vote at general meetings.
- The policy of Alpha regarding the treatment of equity investments in its consolidated financial statements is as follows:
  - Subsidiaries are fully consolidated.
  - Joint ventures are proportionally consolidated.
  - Associates are equity accounted.
  - Other investments are treated as available for sale financial assets.

Your assistant has been reading the working papers for the consolidated financial statements of Alpha for previous years. He has noticed that Beta has been consolidated as a subsidiary and has expressed the view that this must be because Alpha owns more than 50% of its shares. He has further stated that Gamma should be treated as an available-for-sale financial asset since Alpha is unable to control its operating and financial policies.

Required

(a) Prepare the consolidated income statement and consolidated statement of changes in equity of Alpha for the year ended 30 September 20X6. Notes to the consolidated income statement are not required. Ignore deferred tax.

(b) Assess the observations of your assistant regarding the appropriate method of consolidating Beta and Gamma. Your assessment need NOT include an explanation of the detailed mechanics of consolidation. You should refer to the provisions of international financial reporting standards where you consider they will assist your explanation.

Question 4

The following are the income statements of four companies for the year ended 31 October 2006. the end of their most recent financial year.

Income statement
for the year ended 31 October 2006

	Afjar	*]\kki*	*Hop\n*	*Sofnn*
	$000	*$000*	*$000*	*$000*
Revenue	8.890	4,580	4.470	2.760
Cost of sales	(3.000)	(2.200)	(1.800)	(1.700)
Gross profit	5.890	2.380	2,670	1,060
Distribution costs	(900)	(540)	(1.010)	(230)
Administrative expenses	(1.060)	(990)	(1.100)	(250)
Operating profit	3.930	850	560	580
Dividends receivable	**410**	130		
Interest receivable	230	321	150	
Interest payable	(1.188)	(455)	(380)	
Net profit before taxation	3.382	846	330	580
Income tax expense	(1.000)	(200)	(80)	(100)
Net profit after taxation	2.382	646	250	480
Earnings per share (m cents)	11.9	40	2.5	2.4

Copyrighted material

24.1 Introduction

This chapter will consider:

- The difference between conversion and translation and the definition of a foreign currency transaction
- The functional currency
- The presentation current'}
- Monetary and non-monetary items
- The rules on the recording of foreign currency transactions
- The treatment of exchange differences on foreign currency transactions
- The treatment of foreign exchange transactions in the individual accounts of companies
- The translation of the accounts of foreign operations.

24.2 The difference between conversion and translation and the definition of a foreign currency transaction

Conversion is the exchange of one currency for another while translation is the expression of another currency in the terms of the currency of the reporting operation. Only in the case of conversion is there a foreign currency transaction, which IAS 21 *The Effects of Changes in Foreign Exchange Rates* defines as follows:[1]

> A foreign transaction is a transaction, which is denominated in or requires settlement in a foreign currency, including transactions arising when an entity:
>
> (a) buys or sells goods or services whose price is denominated in a foreign currency;
> (b) borrows or lends funds when the amounts payable or rccei\ablc are denominated in a foreign currency;
> (c) otherwise acquires or disposes of assets, or incurs or settles liabilities, denominated in a foreign currency.

24.3 The functional currency

The functional currency is the currency of the primary economic environment in which the cntii\ operates.

IAS 21 sets out the factors which a repotting entity (a company preparing financial statements) will consider in determining its functional current'}.' These are:

(a) the currency:
  (i) that mainly influences sales prices for goods and services and
  (ii) of the country whose competitive forces and regulations mainly determine the sales prices of its goods and services;

(b) the currency that mainly influences labour, material, and other costs of providing goods and services.

The following factors ma) also provide evidence of an entity's functional currency:[1]

(a) the currency in which funds from financing activities are generated;

(b) the currency in which the receipts from operating activities are usually retained.

A company must also decide whether or not any of its foreign operations, such as a branch or subsidiary, has the same functional currency. In doing so the following factors will be considered:[1]

(a) Whether the activities of the foreign operation are carried out as an extension of the reporting entity, rather than being carried out with a significant degree of autonomy. An example of the former is when the foreign operation only sells goods imported from the reporting entity and remits the proceeds to it. An example of the latter is w hen the operation accumulates cash and other monetary items, incurs expenses, generates income and arranges borrowings, all substantially in its local currency.

(b) Whether transactions with the reporting entity are a high or low proportion of the foreign operation's activities.

(c) Whether cash Hows from the activities of the foreign operation directly affect the cash tlows of the reporting entity and arc readily available for remittance to it.

(d) \\ hether cash tlows Irom the activities of the foreign operation are sufficient to service existing and normally expected debt obligations without funds being made available by the reporting entity.

24.4 The presentation currency[5]

The presentation currency is the currency a reporting entity uses for its financial statements. The reporting entity is entitled to present its financial statement in any currency, so that in some cases the presentation currency may differ from the Junctional currency.

24.5 Monetary and non-monetary items

Monetary items are balances owed by or IU an entity that will be settled in cash. Examples will be payables for goods supplied, loans, cash and debtors for goods supplied. Non-monetary assets will include property, plant and equipment, inventory and amounts prepaid for goods.

Copyrighted material

	Granby ***Ltd***	***Berlin Gtnbh***
	£000	**€000**
Profit after taxation	**59,800**	26,000
Dividend paid 30.6.20X3	25,000	8,000

Balance sheets as at 30 June 20X3

	£000	€000
Non-current assets	140.0(H)	90,000
Investment in Berlin Cimhh	**4,500**	
Current assets:		
inventories	**25,000**	17,200
Trade receivables	**60,500**	20,000
Berlin Gmhh	**4,000**	
Cash	11,000	SIH)
	100.5(H)	38,000
Current liabilities:		
Trade payables	**60.0(H)**	**18,000**
Ciranbv Ltd		**8(MM)**
Taxation	**20.0(H)**	**12,000**
	80,000	38,000
Bonds	**50,000**	**16,000**
Total assets *lest* liabilities	**115,000**	**74,000**
Share capital	**45.0(H)**	**4,000**
Additional paid-in capital	7.0(H)	**2,000**
Revaluation reserve	**10.0(H)**	**12,000**
Retained earnings	**53,000**	**56,(HM1**
	115.000	**74,(HH)**

The following information is also available:

1. Non-current assets
   - Non-current assets were acquired on 1/7/20X1 when the exchange rate was €6 to the£
   - The revaluation reserve in Berlin Cimhh arose from the revaluation of non-current assets on 1/7/20X2.
2. Inventories
   - Opening inventories were acquired when the exchange rate was £\ = €3
   - (Hosing inventories were acquired when the rate was £\ = €2.5
3. I'.xchange rates were as follows:

At 31) June 20X0	£1 = €5
Average for the year ending 30 June 20X3, an approximation of the rate on the date of trading transactions and expenses	£\ = €4
At 30 June/1 July 20X2	£1 = €3.5
At 30 June 20X3*	£\ = €2

4. It is assumed that the functional currency of Berlin is the pound sterling.

Copyrighted material

5. An amount of €1,380,000 was written off goodwill as an impairment charge in the eurrent year, and €2,760,000 in previous years.

Required:

(a) Translate the aeeounts of the German company into sterling for the consolidated accounts and calculate the profit/loss on exchange differences for the consolidated accounts at 30 June 20X3.

(h) Show how the profit/loss on exchange differences arose.

<c) Prepare consolidated accounts.

The process of consolidation is as follows:

1. Translate the financial statements into the currency of the reporting concern.
2. Consolidate as previously but watch the treatment of any profit/loss on exchange differences.

24.10.1 Stage I - Translate the financial statements of Berlin Gmbh into sterling

(a) The income statement and dividend

	Berlin Gmbh income €000	*Exchange rule*	*Translated statement* £000	
Sales	140,000			
Purchases	(80,000)			
Other expenses	(4,000)			
Interest	(2,000)			
Taxation	(12,000)			
	42,000	4.0	10,500	Note 1
Opening inventories	(21,200)	3.0	(7,067)	Note 2
Closing inventories	17,200	2.5	6,880	
Depreciation	(12,000)	*$.5*	(3,429)	Note 3
Dividend	(8,000)	2,0	(4.0(H))	Note 4
Retained profit carried forward	IS.(Hill	-	2,884	

Mows:

1. Sales, purchases and expenses have been translated at an average which is an approximation of the rate when they were originalh recorded. This requirement of the IAS has been rather more loosely interpreted in the case of interest and taxation, which have been translated at the rales or approximate rates when ihc\ originally accrued. Under the wording of the IAS ii might IK more strictly correct if the taxation and interest were translated at the date thev were first recorded in the books.
2. Translated at the actual date of acquiring the inventories.
3. The rate is that applicable to the dale of revaluation rather than that at the date of acquiring the fixed assets.
4. Translated at the actual rale.

Copyrighted material

24.10.3 Stage 2 - Prepare consolidated accounts - Gran by

Balance Sheet

			£000
ASSETS			
Son-current assets			
Goodwill	(Wl)		552
Other	(I40,(M)0 + 25,714)		165,714
			166,266
Current assets	(W2)		
Inventories	(25,000 + 6,8811)	31,880	
Trade receivables	(60,500 4- 10,000)	70,500	
Hank	(11,000 +4(H))	11T4(H)	
			113,780
Total assets			280,046
EQUITY AND LIABILITIES			
Share capital			45,000
Additional paid-in irapital			7,000
Revaluation reserve	(10,000+ 2,057 (W3»		12,057
Retained earnings	(53,000 +4,419 (VV4))		
Less impairment of goodwill	828 (4140 +5) (Wl)		56,591
Minority interest			6.398
Son-current liabilities	(W2)		
Bonds	(50,000 + 8,000)		58,000
Current liabilities	(W5)		
Trade payables	(60,000 + 9,000)	69,000	
Taxation	(20,000 + 6,000)	26,000	95,000
Total equity and liabil itics			280,046

Wl Cioodwill

	€000	€000
Investment in Berlin (4,500 x 5)*		22,500
Common share in Berlin (60% x 4000)	2,400	
Retained earnings (60% I< 20,000)	12,000	
Additional paid-in capital (60% X 2,000)	1,200	
		15.6(H)
Cioodwill		6,900

Impairment loss in current year was 1,380

Impairment loss in previous year was 2,760	4.140
Balance sheet figure	2,760

The investment has been translated into euros at the da) of acquisition. The goodwill in sterling at the exchange rate on that date is £552,000 (2,760,000 + 5).

•Note that goodwill is regarded as the asset of the subsidiary. This will become relevant when the presentation currency is other than the functional currency (see section 24.11).

W2 Cancel inter-company balances:
Current accounts of 4,000

W3 Berlin Cinibh Revaluation reserve

	£000
Balance at 30/6/20X3 as per balance sheet	3,429
Minority interest 40% x 3,429	1,372
Consolidated balance sheet	2,057

Copyrighted material

\V4 Retained earnings of Berlin Gmbh		£000
Balance at 30/6/20X3 as per the balance sheet (1,667 + 2,884 + 6,814 profit on exchange)		11.365
Prc-acquisition profit	2,400	
Minority interest 40° n x 11,365	4,546	6,046
		4,419

\V5 The minoritv interest	£000
Common shares 40°o x KIM)	320
Retained earnings 40".> x 11,365	4,546
Additional paid-in capita! 40% x 400	160
Revaluation reserve 40% X *3A29*	1,372
	6,398

24.10.4 Prepare the Granby consolidated income statement

i*he consolidated income statement for the vear ended 31/6/20X3 includes the subsidiarv figures using the exchange rates as shown in section 24.10.1 above.

		£000
Sales	(43O,OO0 + [14O,O0O/4])	465,000
Cost of sales	(295,000 + [7,067+80,000/4 - 6,880])	315,187
Gross profit		149,813
Depreciation	(40,000 + 3,429)	43,429
Expenses	(10,600 + 4,000/4)	11,600
Profit on foreign exchange		(6,814)
Impairment loss	(1,380+5)	276
Interest	(7,000 + 2,000/4)	7,500
Protit before tax		93,822
Taxation	(20,000+ 12,000/4)	23,000
Profit for the period		70,822
Attributable to		
Equity shareholders in Granby		65,343
Minoritv shareholders in Berlin (40% X (2,884 + 4,000 + 6,814))		5,479
		70,822
Dividend paid		25,000

24.10.5 Group statement of changes in equity for the year ended 30 June 20X3

This statement will appear as follows (retained earnings only)

Retained earnings brought forward (Wo)	16,248
Net profit for the period	65,343
Di\idcnd pa\ahlc	(25,000)
Accumulated profit carried forward	56,591

W6 Group accumulated profits brought forward at 1/7/20X2

Granby	(53,000 - this year 34,800)	18,200
Berlin	(60°o X (1,667 - pre-acquisition 4,000 (seeWl)))	(1,400)
		16,800
Less: impairment loss		*Hi*
Accumulated profits brought forward		16,248

Copyrighted material

exchange differences are recognised in the income statement as part of the gain or loss on sale. Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

24.12 **Granby Ltd illustration** continued

Stage I. Translate the financial statements of Berlin Gmbh into sterling

(a) Income statement

This will be calculated in the same wav as was done in Section 24.10.1 above.

	€000	Translated	£000
Retained profit for year	18,000	Actual rate at date of transaction	2,884

(b) Balance sheet

	Berlin Gmbh	Exchange rate	Translated financial statements
ASSETS			
Net assets at 30/6/20X3	74,000	Closing rate 2	37,000
Share capital	4,000	5.0	800
Additional paid-in capital	2,0NH)	5.0	4(H)
Accumulated			
Profit (56,000- 18,000)	38,000	Balancing figure	11,371
	44,000	Opening rate ^.5	12,571
Revaluation reserve	12,000	Opening rate ^.5	3,429
Profit for the year	18,000	see Stage 1(a) above	2,884
Profit on exchange differences		See workings below	18,116
	74,0W)		37,000

The profit on exchange differences in the group accounts will be £18,116 of which 40°o is attributable to the minority. The differences arise because the subsidiary figures are restated at the closing rate in the consolidated balance sheet. The calculation of each difference is as follows:

(i) On the retranslation of the net non-monetary assets at 30/06/20X3

				J
Opening net assets	€44,000	*(a* opening rate 3.5		12,571
Opening net assets	€44,000	(a closing rate 2.0	=	22,000
			Gain	9^429

(ii) The difference arising because of the different rates for translation applied to the monetary assets in the income statement (see section 24.10.1(a)) and the balance sheet year-end rate

Translated at average rate	€42,000^/ 4.0 =	10,500
At closing rate	€42,000 @ 2.0 =	21,000
	Gain	10.5(H)

(iii) The difference arising because of the different rates for translation applied to the depreciation in the income statement (sec section 24.10.1(a)) and the balance sheet Year-end rate

Copyrighted material

25.1 Introduction

In this chapter we consider the following:

- Why the earnings per share figure is important
- I low it is calculated and used hv shareholders
- IAS 33 calculation of basic earnings per share (BKPS)
- BKPS when (here has been a bonus issue, share split, new issue and buy back of shares
- BF.PS when (here has been a rights issue
- Calculation of diluted KPS
- IAS 33 procedure where there are several potential dilutions, e.g. conversion rights and options
- KPS when conversion rights arc exercised
- Institute of Investment Management and Research (IIMR) definition of an alternative KPS
- the IASB Improvement Project.

25.2 Why is the earnings per share figure important?

One of the most widel\ publicised ratios lor a public company is the price/earnings or PK ratio. The PK ratio is significant because, by combining it with a forecast of company earnings, analysts can decide whether the shares are currently over- or undervalued.[1]

The ratio is published daih in the financial press and is widely employed by those making investment decisions. The following is a typical extract from the *Risk Measurement Servicer*

Breweries, Pubs and Restaurants

Company	*Pike 31/3/98*	*PE ratio*
Company A	453	12.6
Company B	340	*393*
Company C	1,125	19.6

The PK ratio is calculated by dividing the market price of a share by the earnings that the cumpam generated for that share. Alternatively, the PK figure may be seen as a multiple of the earnings per share, where the multiple represents the number of years* earnings required

to recoup the price paid for the share. For example, it would take a shareholder in Company B jusi under forty years to recoup her outlay if all earnings were to he distributed, whereas it would take a shareholder in Company A just over twelve years to recoup his outlay, and one in (Company C just under twenty years.

25.2.1 What factors affect the PE ratio?

The PK ratio for a company will reflect investors* confidence and hopes about the international scene, the national economy and the industry sector, as well as about the current year's performance of the company as disclosed in its financial report. It is difficult to interpret a PK ratio in isolation without a certain amount of information about the company, its competitors and the industry within which it operates.

For example, a high PE ratio might reflect investor confidence in the existing management team: people are willing to pay a high multiple for expected earnings because of the underlying strength of the company. Conversely, it might also reflect lack of investor confidence in the existing management, but an anticipation of a takeover bid which will result in transfer of the company assets to another company with better prospects of achieving growth in earnings than has the existing team.

A low PK ratio might indicate a lack of confidence in the current management or a feeling that even a new management might find problems that are not easily surmounted. For example, there might IK* extremely high gearing, with little prospect of organic growth in earnings or new capital inputs from rights issues to reduce it.

These reasons for a difference in the PK ratios of companies, even though they are in the same industry, are market-based and not simply a function of earnings. However, the current earnings per share figure and the individual shareholder's expectation of future growth relative to that of either companies also have an impact on the share price.

25.3 How is the EPS figure calculated?

Because of the importance attached to the PK ratio, it is essential that there is a consistent approach to the calculation of the KPS figure. IAS 33 *Earnings per Share** was issued in 1998 for this purpose.

The KPS figure is of major interest to shareholders not onh because of its use in the PE ratio calculation, but also because it is used in the earnings yield percentage calculation. It is a more acceptable basis for comparing performance than figures such as dividend yield percentage because it is not affected by the distribution policy of the directors. The formula is:

$$\text{E}\,|\,\text{>}\,\text{s} \quad \frac{\text{Earnings}}{\text{Weighted number of ordinary shares}}$$

The standard defines two KPS figures for disclosure, namely,

- basic KPS based on ordinary shares currently in issue; and
- diluted KPS based on ordinary shares currcnth in issue *plus* potential ordinary shares.

25.3.1 Basic EPS

Basic EPS is defined in **IAS** 33 as follows:[4]

- Basic earnings per share is calculated by dividing the net profit or loss for the period

Copyrighted material

attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period.

For the purpose of the BEPS definition:

- Net profit is the consolidated profit for the period after deduction of preference dividends (assuming preference shares are equity instruments)/
- The weighted average number of ordinary shares should be adjusted for events, other than the conversion of potential ordinary shares, that have changed the number of ordinary shares outstanding, without a corresponding change in resources."
- An ordinary share is an equity instrument that is subordinate to all other classes of equity instruments.'

Earnings per share is calculated on the overall profit attributable to ordinary shareholders but also on the profit from continuing operations if this is different to the overall profit for the period.

25.3.2 Diluted EPS

Diluted EPS is defined as follows:

- For the purpose of calculating diluted earnings per share, the net profit attributable to ordinary shareholders and the weighted average number of shares outstanding should be *adjusted for the effects of all dilutive potential ordinary shares**

  This means that *both* the earnings *and* the number of shares used *may* need to be adjusted from the amounts that appear in the proht and loss account and balance sheet.

  - Dilutive means that earnings in the future may be spread over a larger number of ordinary shares.
  - Potential ordinary shares arc financial instruments that may entitle the holders to ordinary shares.

25.4 The use to shareholders of the EPS

Shareholders use the reported KPS to estimate future growth which will affect the future share price. It is an important measure of growth over time. There are however limitations in its use as a performance measure and for inter-company comparison.

25.4.1 How does a shareholder estimate future growth in the EPS?

The current EPS figure allows a shareholder to assess the wealth-creating abilities of a company. It recognises that the effect of earnings is to add to the individual wealth of shareholders in two ways: first, by the payment of a dividend which transfers cash from the company's control to the shareholder; and, secondly, by retaining earnings in the company for reinvestment, so that there may be increased earnings in the future.

The important thing when attempting to arrive at an estimate is to review the profit and loss account of the current period and identify the earnings that can reasonably be expected to continue. In accounting terminology, you should identify the maintainable post-tax earnings that arise in the ordinary course of business.

Companies are required to make this easy for the shareholder by disclosing separate!), by

Copyrighted material

Step 2: The weighted average number of shares is calculated tor current year.

Step 3: The BKPS for current year is calculated.

Step 4: The previous year HKI'S is adjusted lor the bonus element of the rights issue.

Step I: Calculate the average price of shares before and after a rights issue to identify the amount of the bonus the company has granted

Assume that Mr Radmand purchased two 50p shares at a market price of £4 each in Watts pic on 1 January 20X1 and that on 2 January 20X1 the company offered a 1:2 rights issue (i.e. one new share for even two shares held) at *£5.25* per share.

[f Mr Radmand had bought at the market price, the position would simply have been:

		C
2 shares at market price of £4 each on I January 20X1	=	8.00
1 share at market price of £4.00 per share on 2 January		4.00
Total cost of 3 shares as at 2 January		12.00
Average cost per share unchanged at		4.00

However, this did not happen. Mr **Radmand** only paid £3.25 for the new share. This meant that the total cost of 3 shares to him was:

		C
2 shares at market price of £4 each on 1 January 20X1	=	8.00
1 share at discounted price of £3.25 on 2 January 20X1	=	3.25
Total cost of 3 shares	=	11.25
Average cost per share (£11.25/3 shares)		3.75

The rights issue has had the effect of reducing the cost per share of each of the three shares held by \lr Radmand on 2 January 20X1 by (£4.00 - £3.75) £0.25 per share.

The accounting terms applied are:

- Average cost per share after the rights issue (£3.75) is *the theoretical ex-rights value.*
- Amount by which the average cost of each share is reduced (£0.25) is *the bonus element.*

In accounting terminology Step 1 is described as follows:

Step 1: The bonus element is ascertained by calculating the theoretical ex-rights value, i.e. the £0.25 is ascertained by calculating the £3.75 and deducting it from £4 pre-rights market price

Step I: Theoretical ex-rights calculation

In accounting terminology, this means that existing shareholders get an element of bonus per share (£0.25) at the same time as the company receives additional capital (£3.25 per new share). The bonus element may be quantified by the calculation of a theoretical ex-rights price (£3.75), which is compared with the last market price (£4.00) prior to the issue; the difference is a bonus. The theoretical ex-rights price is calculated as follows:

		C
2 shares at fair value of £4 each prior to rights issue	=	8.00
1 share at discounted rights issue price of £3.25 each	=	3.25
3 shares at fair value after issue (i.e. ex-rights)		11.25
The theoretical ex-rights price is £11.25/3 shares	=	3.75
The bonus element is fair value £4 less £3.75	=	0.25

Copyrighted material

Figure 25.1 Formula approach to calculating weighted average number of shares

The bonus shares for the 9 months are added to the existing shares and the time apportioned new shares as follows:

		\o, of shares
Shares to date of rights issue:		
1,000,000 shares held for a full year	=	1,000,000
Shares from date of issue:		
500,000 shares held for 3 months (500,000 x 3/12)	=	125,000
Weighted average number of shares		1,125,000
Bonus share:		
66,667 shares held for 9 months (66,667/12x9)	=	50,000
		1,175,000

The same figure of 1,175,000 can be derived from the following approach using the relationship between the market price of £4.00 and the theoretical ex-rights price of £3.75 to calculate the number of bonus shares.

The relationship between the actual cum-rights price and theoretical ex-rights price is shown by the bonus fraction:

$$\frac{\text{Actual cum-rights share price}}{\text{Theoretical ex-rights share price}}$$

This fraction is applied to the number of shares before the rights issue to adjust them for the impact of the bonus element of the rights issue. This is shown in Figure 25.1.

Step 3: Calculate BEPS for current year

BEPS for 20X1 is then calculated as £1,150,000 / 1,175,000 shares = £0.979

Step 4: Adjusting the previous year's BEPS for the bonus element of a rights issue

The 20X0 BEPS of £1.15 needs to be restated, i.e. reduced to ensure comparability with 20X1.

In Step 2 above we calculated that the company had made a bonus issue of 66,667 shares to existing shareholders. In re-calculating the BEPS for 20X0 the shares should be increased by 66,667 to 1,066,667. The restated BEPS for 20X0 is as follows:

potential ordinary shares thai are dilutive, i.e. would decrease net profit per share or increase net loss from continuing operations.[1]"

25.8.2 Circumstances in which the number of shares used for BEPS is increased

*"The holders of convertible bonds, the holders of convertible preference shares, members of share option schemes and the holders of share warrants will each be entitled to receive ordinary shares from the company at some future date. Such additional shares, referred to as potential ordinary shares, *may* need to be added to the basic weighted average number *if they an dilutive.* It is important to note that if a company has potential ordinarv shares thev are not automatically included in the fully diluted KI'S calculation. There is a test to apply to see il such shares actuallv are dilutive this is discussed further in section 25.9 below.

25.8.3 Circumstances in which the earnings used for BEPS are increased

The earnings are increased to take account of the post-tax effects of amounts recognised in the period relating to dilutive potential ordinarv shares thai will no longer be incurred on their conversion to ordinarv shares, e.g. the loan interest payable on convertible loans will no longer be a charge after coin ersion and earnings w ill be increased b) the post-tax amount of such interest.

25.8.4 Procedure where there are share warrants and options

Where options, w arrants or other arrangements exist « hich inv olve the issue of shares below their fair value (i.e. at a price lower than the average for the period) then the impact is calculated by notionally splitting the potential issue into shares issued at fair value and shares issued at no value tor no consideration." Since shares issued at fair value are not dilutive that number is ignored but the number of shares at no value is employed to calculate the dilution. The calculation is illustrated for Watts pic:

Assume that Watts pic had at 31 December 20X1:

- an issued capital of 1,000,000 ordinary shares of 50p each nominal value;
- post-tax earnings for the year of £1,150,000;
- an average market price per share of £4; and
- share options in existence 51*0,000 shares issuable in 20X2 at £3.25 per share.

The computation of basic and diluted EPS is as follows:

	Per sha re	*En rithtgs*	*Shares*
Net profit for 20X1			
W eighted average shares during 2(1X1		£1,150,000	1,000.000
Basic EPS (£1.150.000/1.000.000)			
Number of shares under option	*US*		500,000
Number that would have been issued			
At lair value (500,000 x £3.25)/£4			(400.250)
Diluted EPS	*IMS*	*£/. 150,000*	*1,093.750*

Copyrighted material

25.8.5 Procedure where there are convertible bonds or convertible preference shares

The post-CU profit should be adjusted[1]-' for:

- any dividends on diluli\e potential ordinary shares that have been dedueled in arriving at the net profit attributable to ordinary shareholders;
- interest recoirnised in the period for the dilutee potential ordinary shares; and
- any other changes in income or expense that would result from the conversion of the dilutive potential ordinary shares, e.g. the reduction of interest expense related to convertible-bonds results in a higher post-tax profit but this could lead to a consequential increase in expense if there were a non-discretionary employee profit-sharing plan.

25.8.6 Convertible preference shares calculation illustrated for Watts pic

Assume that Watts pic had at *$* December 20X1:

- an issued capital of 1,000,000 ordinary shares of 50p each nominal value;
- post-tax earnings for the year of £1,150,000;
- convertible 8% preference shares of £1 each totalling £ 1,0011,1 H10, convertible at one ordinary share for even fixe convertible preference shares.

The compulation of basic and diluted 1\PS for convertible bonds is as follows:

	Per share	*framings*	*Shares*
Post-tax net profit for 20X1 (after interest)		£1,150,000	
\\ cightcd average shares during 20X1			1,000,000
***Basic** MS (£1.150,000/1,000.000)*	*£1. IS*		
Number of shares resulting from conversion			200,000
Add back the preference dividend paid in 20X1		SO.OOO	
Adjusted earnings and number of shares		1,230,000	1,200,000
***Diluted** EPS (£1.230,000/1,200.000)*	*£1.025*		

25.8.7 Convertible bonds calculation illustrated for Watts pic

Assume that Watts pic had at 31 December 20X1:

- an issued capital of 1,000,000 ordinary shares of 50p each nominal value;
- post-tax earnings after interest for the year of £1,150,000;
- convertible 10% loan of £1,000,000;
- an average market price per share of £4;

and the convertible loan is convertible into 250,000 ordinary shares of 50p each.

The computation of basic and diluted EPS for convertible bonds is as follows:

Copyrighted material

- an issued capital of 1,000,000 ordinary shares of 50p each as at 1 January 20X2;
- convertible 10% loan of £1,000,000 converted on 1 April 20X2 into 250,000 ordinary shares of SOp each;
- share options for 500,000 ordinary shares of 50p each exercised on I August 20X2.

The weighted average number of shares for BEPS is calculated as follows:

	Net profit attributable to Continuing operations	*Ordinary shares*	*Per share*	
As reported for 1JKPS	1,150,000	1,000,000	1.15	
Options		93,750		
	1,150,000	l,0*M,750	1.05	dilutive
10% convertible bonds	60,000	250,(M)0		
	1.210,000	1,343,750	0.90	dilutive
Convertible preference sh;ires	S0.000	25,000		
	1.2W.000	1,368,750	0.94	antidilu

25.11 Disclosure requirements of IAS 33

The standard[14] requires the following disclosures:

For the current year:

- Companies should disclose the basic and diluted KPS figures for profit or loss from continuing operations and for profit or loss with equal prominence, whether positive or negative, on the face of the income statement for each class of ordinary share that has a different right to share in the profit for the period.
- The amounts used as the numerators in calculating basic and diluted earnings per share, and a reconciliation of those amounts to the net profit or loss for the period.
- The weighted average number of shares used as the denominator in calculating the basic and diluted earnings per share and a reconciliation of these denominators to each other.

For the previous year (if there has been a bonus issue, rights issue or share split):

- BKI\S and diluted KPS should be adjusted retrospectively.

25.1 I.I Alternative EPS figures

In the UK the Institute of Investment Management and Research **(IIMR)** published Statement of Investment Practice No. 1, entitled *The Definition of Headline Earnings,* in which it identified two purposes for producing an EPS figure:

- as a measure of the company's maintainable earnings capacity, suitable in particular for forecasts and for inter-year comparisons, and for use on a per share basis in the calculation of the price/earnings rati));
- as a factual headline figure for historical earnings, which can be a benchmark figure for the trading outcome for the year.

The Institute recognised that the maintainable earnings figure required exceptional or

Copyrighted material

different entities and different reporting periods. The Hoard's main objective when revising was to provide additional guidance on selected complex issues such as the effects of contingently issuable shares and purchased put and call options. However, the Board did not reconsider the fundamental approach to the determination and presentation of earnings per share contained in the original IAS 33.

1 Explain: (i) basic earnings per share; (ii) diluted earnings per share: (m) potential ordinary shares: and (iv) limitation of EPS as a performance measure.

2 Why are issues at full market value treated differently from rights issues?

3 In the 1999 Annual Report and Accounts of Associated British Ports Holdings pic. the directors report earnings per share - basic, and earnings per share - underlying, as follows:

Underlying	*Goodwill amortisation*	*Exceptional* items	*Total*	*1999*	*1998*
	£m	£m	£m	*Cm*	*Cm*
Profrt on ordinary activities after tax attributable to shareholders	86.3	(3.8)	(76.9)	5.6	**84.1**
Dividends	(39.4)		^—	(39.4)	(37.2)
Retained profit/(loss)	46.9	(3.8)	(76.9)	(33.8)	46.9
Earnings per share - basic	24.6	(I.I)	(21.9)	1.6p	22.4p
Earnings per share - underlying				**24.6p**	22.4p

Note I I Reconciliation of profit used for calculating the basic and underlying earnings per share:

* Question 4

The following information relates to Simrin pic for the year ended 3(December 20X0;

	i
Turnover	700.000
Operating costs	476.000
Trading profit	224.000
Net interest payable	2.000
	222.000
Exceptional charges	77.000
	145.000
Tax on ordinary activities	66.000
Profit after tax	79.000

Simrin pic had 100.000 ordinary shares of £I each in issue throughout the year. Simrin pic has in issue warrants entitling the holders to subscribe for a total of 50,000 shares m the company. The warrants may be exercised after 31 December 20X5 at a price of £1.28 per share. The average fair value of shares was £1.10. The company had paid an ordinary dividend of £ 15.000 and a preference dividend of £9.000.

Required:

(3) Calculate the basic EPS for Simrin pic for the year ended 31 December 20X0. in accordance with best accounting practice.

(b) Calculate the diluted EPS figure, to be disclosed in the statutory accounts of Simrin pic in respect of the year ended 31 December 20X0.

(c) Briefly comment on the need to disclose a diluted EPS figure and on the relevance of this figure to the shareholders.

<d) In the past, the single most important indicator of financial performance has been earnings per share. In what way has the profession attempted to destroy any reliance on a single figure to measure and predict a company's earnings, and how successful has this attempt been?

* Question 5

Gamma pic had an issued share capital at I April 20X0 of;

- £200.000 made up of 20p shares.
- 50.000 £I convertible preference shares receiving a dividend of £2.50 per share
  these shares were convertible in 20X6 on the basis of I ordinary share for I preference share.

There was also loan capital of:

- £250.000 10% convertible loans
  the loan was convertible in 20X9 on the basis of 500 shares for each £ 1,000 of loan;
  the tax rate was 40%.

Earnings for the year ended 31 March 20XI were £5.000.000 after tax.

Required:

(a) Calculate the diluted EPS for 20X1.

(b) Calculate the diluted EPS assuming that the convertible preference shares were receiving a dividend of £6 per share instead of £2.50.

Copyrighted material

Question 6

Delia NV has share capital of €Im m shares of €0.25 each. At 31 May 20X9 shares had a market value of €1.1 each. On I June 20X9 the company makes a rights issue of I share for every 4 held at €0.6 per share. Its profits were €500,000 in 20X9 and €440,000 in 20X8. **The** year-end is 30 November.

Required:
Calculate
(a) the theoretical ex-rights price
(b) the bonus issue factor
(c) the basic earnings per share for 20X8
(d) the basic earnings per share for 20X9.

Question 7

The following information is available for X Ltd for the year ended 31 May 20XI:

Net profit after tax and minority interest	£ 18.160.000
Ordinary shares of £1 (fully paid)	£40.000.000
Average fair value for year of ordinary shares	£ 1.50

1 Share options have been granted to directors giving them the right to subscribe for ordinary shares between 20X1 and 20X3 at £1.20 per share. The options outstanding at 31 May 20X1 were 2,000,000 in number.

2 The company has £20 million of *6%* convertible loan stock in issue. The terms of conversion of the loan stock per £200 nominal value of loan stock at the date of issue were:

Conversion date	*No. of shares*
31 May 20X0	24
31 May 20X1	23
31 May 20X2	22

No loan stock has as yet been converted. The loan stock had been issued at a discount of *%.*

3 There are 1.600.000 convertible preference shares in issue. The cumulative dividend is IOp per share and each preference share can convert into two ordinary shares. The preference shares can be converted in 20X2.

4 Assume a corporation tax rate of 33% when calculating the effect on income of converting the convertible loan stock.

Required:
(a) Calculate the diluted EPS according to IAS 33.
(b) Discuss why there is a need to disclose diluted earnings per share.

Question 8

(a) The issued share capital of Manfred, a quoted company, on I November 2004 consisted of 36.000.000 ordinary shares of 75 cents each. On I May 2005 the company made a rights issue of I for 6 at $1.46 per share. The market value of Manfred's ordinary shares was $1.66 before announcing the rights issue. Tax is charged at 30% of profits.

Manfred reported a profit after taxation of $4.2 million for the year ended 31 October 2005 and $3.6 million for the year ended 31 October 2004. The published figure for earnings per share for the year ended 31 October 2004 was 10 cents per share.

Copyrighted material

(ii) if the option is exercised on I November 2008 each $100 of loan stock can be converted into 35 ordinary shares.

The following information comes from the income statement of the company for the year ended 31 October 2006:

	$
Profit before interest and tax	1.253.000
less Interest	30.000
	1.223.000
less Income tax. at 3096	366.900
Profit attributable to shareholders	856.100

You may assume that the yield on 2.5% Government consolidated stock was 7.596 on I November 2005 and *6%* on I November 2006. and that the rate of income tax is 3096 throughout. Chavboro pic's reported earnings per share for the year ended 31 October 2005 were 10 cents.

Required

(a) Calculate Chavboro pic's basic earnings per share in cents for the year ended 31 October 2006.
(b) Calculate Chavboro pic's restated earnings per share in cents for the year ended 3 I October 2005.
(c) Calculate Chavboro pic's fully diluted earnings per share in cents for the year ended 31 October 2006.
(d) Calculate Chavboro pic's fully diluted earnings per share in cents for the year ended 31 October 2005.
(e) How can an investor evaluate the quality of the earnings per share figure published in a company's financial statements?

(The Association of International Accountants)

References

1 **J. Day, 'The use of annual reports** by **UK** investment **analysts',** ***Aaountinii*** */Justness Research,* **Autumn 1986, pp. 295-307.**
2 **London Business School,** ***Risk Measurement Service,*** **April-June 199S, ISBN 0361-3344.**
3 **IAS 33** ***Earnings per Share,*** **IASH, 2003.**
4 ***Ibid.*****, para. 10.**
5 ***Ibid.*****, para. 12.**
6 ***Ibid.*****, para. 26.**
7 ***Ibid.*****, para. 5.**
8 ***I but.**** **para. 31.**
9 ***Accountancy*****\ \ o \ ember 1998, p. 73.**
10 **IAS 33, para. 31.**
11 ***ibid.*****, para. 45.**
12 ***Ibid.*****, para. ^.**
13 **//W., para. 44.**
14 **//'/./., paras 66 and 70.**
15 **Statement of Investment Practice No. 1,** ***The Definition of Headline Earnings,*** **II MR, 1993.**
16 **Coopers and l.ybrand,** *EPS* ***and Exceptional fteim,*** **1994.**

Copyrighted material

26.1 Introduction

In this chapter we consider why funds flow statements came to he replaced by cash flow statements in recent years. We analyse the application of IAS 7 and the extent to which it gives users of financial statements more information about the solvency and liquidity of companies, and enables them to make comparisons between Arms.

26.2 Development of cash flow statements

In 1977 IAS 7 *Statement of Changes in Financial Position* was issued, requiring companies to publish a funds flow statement with the annual accounts.[1] The funds flow statement explained the changes between the opening and closing balance sheet by classifying the changes in fixed assets and long-term capital under two headings:

- source of funds, comprising funds from operating and other sources such as sale of fixed assets and issue of shares and loans; and
- application of funds, comprising lax paid, dividends paid, fixed asset acquisitions and long-term capital repayments. The difference represented the net change in working capital.

In 1987 SI" AS 95 *Statement of Cash Flows* was published in the USA.[2] It concluded that a cash flow statement should replace the funds flow statement, concentrating on changes in cash rather than changes in working capital. The cash flow statement should represent all of a company's cash receipts and cash payments during a period. There was also wide-spread support for the belief that cash flow statements were more decision-useful and that they should replace the funds flow statement.

In 1992 the IASC issued IAS 7 (revised), which appeared to be based on SFAS 95.[3] It proposed that cash flow statements should replace funds flow statements in financial reporting. Guidelines were given about reporting cash flows, appropriate formats and minimum disclosure.

A report by the ICAEW Research Board and the 1CAS Research Advisory Committee, entitled *The Future Shape of Financial Reports** recommended a number of reporting reforms.[4] One of the main areas for improvement was reporting a company's cash position. Professor Arnold wrote:

> little attention is paid to the reporting entity's cash or liquidilv position. Cash is the lifeblood of even business entity. The report ... advocates that companies should provide a cash flow statement ... preferably using the direct method.'

An impori.uu issue is the relationship of cash Mows to the existing financial statements. As the following quotation illustrates, statements of cash Hows are not a substitute for the income statement:

> The emphasis on cash How s, and the emergence of the statement of cash How s as an important financial report, does not mean that operating cash flows are a substitute for, or are more important than, net income. In order to analyse financial statements correct]) we need to consider both operating cash flows and net income."

The overwhelming reason for replacing a funds flow statement with a cash flow statement was that the latter provides more relevant and useful information to users of financial statements. When used in conjunction with the accrual-adjusted data included in the income statement and the balance sheet, cash How information helps to assess liquidit), viability and financial flcxibilitv. This view is held In Henderson and Maness, who stress the need to integrate different types of anahsis to achieve an overall assessment of an organisation's financial health: 'cash flow anal}sis should be used in conjunction with traditional ratio anahsis to get a clear picture of the financial position of a firmV

The financial viability and survival prospects of any organisation rest on the ability to generate net positive cash flows, (lash flows help to reduce an organisation's dependency on external funding, service existing debts and obligations, rtnance investments, and reward the investors with an acceptable dividend policy. The end-result is that, independent of reported profits, if an organisation is unable to generate sufficient cash, it will eventually fail.

Cash How statements can also be used to evaluate am economic decisions related to the financial performance of an organisation. I)ecisions made on the basis of expected cash flows can be monitored and reviewed whenever additional cash flow information becomes available.

Finally, the quality of information contained in cash flow statements should be better than that contained in funds flow statements because it is more consistent and neutral. Cash Hows can be reliably traced to when a transaction occurred, while funds flows are distorted by the accounting judgements inherent in accrual-adjusted data.[s]

The following extract from I leath and Roscnficld's article on solvency is a useful conclusion to our analysis of the benefits of cash flow statements:

> Solvency is a monev or cash phenomenon. A solvent company is tine with adequate cash to pay its debts; an insolvent company is one with inadequate cash ... Any information that provides insight into the amounts, timings and certain!} of a company's future cash receipts and payments is useful in evaluating solvent). Statements of past cash receipts and payments are useful for the same basic reason that income statements are useful in evaluating profitability: both provide a basis for predicting future performance."

26.3 Applying IAS 7 (revised) *Cash Flow Statements*

26.3.1 IAS 7 issued

IAS 7 was revised and renamed in IW2 In the IASC to require companies to issue a cash flow statement. Its objective was to require companies to provide standardised reports on their cash generation and cash absorption tor a period. Its principal feature was the analvsis of cash flows under three standard headings of "operating activities', 'investing activities' and 'financing activities'. Accounting commentators said that Information on cash is an essential part of a company's financial statements.

Copyrighted material

Net increase in cash and cash equivalents	x
Cash and cash equivalents at the beginning of the pcriodx	
Cash and cash equivalents at the **end** of **the** period	\

The position in the cash (low statement for these items is not precisely defined in IAS 7, and choice exists in the presentation. Interest paid, and interest and dividends received, could either be classified as operating cash Hows or as financing (for interest paid) and investing cash Mows (for the receipts). Dividends paid could either be presented as financing cash Hows or as operating cash flows. However, it is a requirement that whichever presentation is adopted by an enterprise should be consistently applied from >ear to year.

26.4.2 Tyro Bruce accounts

The income statement tor the vear ended 31 March 20\2 and balance sheets as at 31 March 20X1 anil 20X2 (including the fixed asset schedule) for Tyro Bruce with explanatory notes to explain how each item is classified in the cash How **statement** are as follows:

Income statement of Tyro Bruce for the year ended 31 March 20X2

	£000	*How treated in ash flow statement*
Sales	6,000	
C>>st of sales	4,000	
Gross profit	2,<MM)	
Net operating expenses	(986)	
Operating profit before interest and tax	1,014	
Profit on sale of land	SO	
Loss on sale of plain	(54)	
(1) Profit before interest and tax	1,040	(1) Operating activities section starts here :+1,040)
(2) Interest pax able	(40)	(2) Operating activities (40)
Profit before tax	1,000	
(3) Tax	(400)	(3) Operating activities (-400)
Profit after tax	(>00	

Balance sheets for 20X1 and 2(1X2

	20X2 £000	*20X1* £000	*Change* £000	*/fair treated in cash flmr statement*
Intangible non-current asseis				
(4) R&D written off	360	840	480	(4) Operating activities non-cash expense (+480)
(5) Tangible assets	4.5%	4,136	•460	(5) The figure of 460 is not used. Refer to the PPK schedule lor Additions
(6) Inventory	2,400	1.600	800	(6) Operating activities (-800)
(7) Recehablcs	1,800	1,360	440	(7) Operating activities (-440)
(8) Government securities	30	—	30	(8) Investing activities (assumed not cash equivalents) (+30)
(<>) Cash	30	20	10	(9) Cash and cash equivalents increase (10)
(10) Payables	1,360	1,080	280	(HI) Operating activities (+280)
(11) Taxation	340	380	40	(11) ()perating activities (-40)
(12) Dividends	– *	140	140	(12) Financing activities (-140)

Copyrighted material

Working 1: Sales £6,000,000 - Receivables increase £440,000

Working 2: Cost of sales £4,000,000 - Trade payables increase £280,000 + Inventory increase £800,000 - Depreciation £204,000 - R&D £4X0,000 - Loss on sale of plant £54,000 - Profit on sale of land £80,000 + Selling and distribution expenses £600,000 + Administration costs £360,(MMI

26.4.3 Tyro Bruce cash flow statement

The cash (low statement can now be prepared for Tyro Bruce for the year ended 31.3.20X2 (using indirect method).

	£000	£(MM)
Cash Hows from operating activities		
Net profit before tax	1,000	
Adjustments for:		
Depreciation	204	
R&D amortisation charge	480	
I .oss on sale of plant	54	
Profit on sale of land	(80)	
Interest expense	40	
Operating profit before working capital changes	1,698	
Increase in trade and other receivables	(440)	
Increase in inventories	(8tHI)	
Increase in trade payables	2SO	
Cash generated from operations	738	
Interest paid *(from income statement)*	(40)	
Income taxes paid [380 + 400 - 340]	(440)	
Net cash from operating activities		258
Cash Hows from investing activities		
Purchase of property, plant and equipment	(1,120)	
Proceeds from sale of equipment and land	682	
Purchase of government securities	(30)	
Net cash used in investing activities		(468)
Cash flows from financing activities		
Proceeds from issuance of share capital	700	
Repayment of debentures	(I04J)	
I)ividcnds paid *(from income statement)*	(140)	
AW *cash from financing activities*		460
Net increase in cash and cash equivalents		250
Cash and cash equivalents at the beginning of the period		(1,336)
Cash and cash equivalents at the end of the period		(1,086)

26.4.4 Additional notes required by IAS 7

As well as the presentation on the face of the cash flow statement IAS 7 requires notes to the cash tlow statement to help the user understand the information. The notes that are required are as follows:

Copyrighted material

3 Financing activities

- Dividends paid to minority interests
  (this is calculated as minority interests in the Opening consolidated balance sheet plus minority interests in the income statement less minority interests in the closing balance sheet).

26.5.2 Adjustments to amounts

Adjustments are required if the closing balance sheet items ha\e been increased or reduced as a result of non-cash movements. Such movements occur (a) if there has been a purchase of a subsidiarv to reflect the fact that the asset and liabilities from the new suhsidiarv have not necessarily resulted from cash flows; and (b) if there are exchange differences arising on consolidating foreign subsidiaries.

(a) Subsidiary acquired during year

For example, if Tyro Bruce had acquired a subsidiary on 31 March 2(1X2 on the following terms;

Net assets acquired	£000	In consolidated cash flow the effect will be:
Working capital:		
Inventorv	10	Reduce inventory increase
Trade payables	(12)	Reduce trade payables increase
(Capital expenditure:		
Vehicles	20	Reduce capital expenditure
(^ash/bank:		
Cash	_5	Reduce amount paid to acquire subsidiary in investing section
Net assets acquired	_23	
Consideration from Tyro Bruce:		
Shares	10	Reduce share cash inflow
Premium	10	Reduce share cash inflow
Cash	_3	Payment to acquire subsidiary in investing section

The T\ro Bruce consolidated cash flow statement can then be prepared.

Cash flow statement for Tyro Bruce using indirect method

(^ash flows from operating activities	£000	£000
Net profit before tax	1,000	
Adjustments for:		
Depreciation	204	
R&D amortisation charge	4S0	
Loss on sale of plant	54	
Profit on sale of land	(SO)	
Interest expense	40	
Operating profit before working capital changes	I,698	
Increase in trade and other receivables	(440)	

Copyrighted material

Increase in inventories	(8(H))		
Less: inventory brought in on acquisition	10	(790)	
Increase in trade payables	280		
Less: trade payables brought in on acquisition	12	268	
Cash generated from operations		736	
Interest paid *(from income statement)*		(40)	
Income taxes paid *(380 + 400 - 340)*		(440)	
Net cash from operating activities			256
Cash flows from investing activities			
Purchase of property, plant and equipment	(1,121))		
Less: vehicles brought in on acquisition	20	(1«100)	
Proceeds from sale of equipment and land		682	
Purchase of government securities		(30)	
Payment to acquire subsidiary		(3)	
Cash acquired with subsidiary		5^	
Net cash used in investing activities			(446)
Cash flows from financing activities			
Proceeds from issuance of share capital	7(H)		
Less: shares issued on acquisition not for cash	(20)	680	
Repayment of debentures		(100)	
1)ividends paid *{from income statement)*		(140)	
Net cash from financing activities			440
Net increase in cash and cash equivalents			250
Cash and cash equivalents at the beginning of the period			(1,336)
Cash and cash equivalents at the end of the period			(1,086)

It there had been a disposal of a subsidiary, the same adjustments would ha\e been required except that they would have been in the opposite direction, e.g. capital expenditure on vehicles would have been increased from £1,120,000 to £1,140,000.

(b) Exchange differences arising on consolidation

If the subsidiary's accounts have been translated using the closing rate and the exchange differences taken to reserves, then the assets and liabilities in the consolidated balance sheet will contain non-cash movements. Let us assume that the non-cash differences that arose from exchange rate translation were the same amounts as those that arose on an acquisition of a subsidiary namch:

	£000	Cash flow treatment
Working capital:		
Inventory	10	Reduce stock increase
Trade payables	(12)	Reduce trade payables increase
Capital expenditure:		
Vehicles	20	Reduce capital expenditure
Cash /bank:		
Cash	5	Shown separate!) after financing section before the movement in cash and cash equivalents
Exchange gain	23	

Copyrighted material

Operating cash flows

Cash flow from operations would be the same as for the subsidiary acquired during the year, i.e. £736,000 (£738,000 - Trade payables increase of £12,000 + Inventory decrease of £10.000).

Investing cash flows

Capital expenditure would be the same as for subsidiary acquired during the year: £418,000 (£438,000 - non-current asset decrease of £20,000).

A new line. Effect of foreign rate changes, £5,000, is shown before the movement in cash and cash equivalents.

.Vo/e: The exchange gain of £23,000 would have been credited to reserves in Tyro Bruce.

26.6 Analysing a cash flow statement

Arranging cash flows into specific classes provides users with relevant and decision-useful information by highlighting operating cash flows before working capital changes, cash generated from operations after working capital changes, cash (lows from investing activities and cash flows from financing activities. The classification assists users in making informed predictions about future cash flows. It would be difficult to make these conjectures using traditional accrual-based techniques."

We will briefly comment on the implication of each classification.

26.6.1 Operating profit before working capital changes

Users look to sec if this is positive or negative. If it is positive, the next step would be to determine the trend - investors naturally hoping to invest in a company with a rising trend. If there is a downward trend or it is negative, this is a cause for concern and investors should make further enquiries to identify any proposed steps to improve the position. The operating and financial review and chairman's statement may indicate whether the company is carrying out a cost reduction programme or disposing of loss-making activities. If it is not possible to improve the trend or reverse the negative cash flow, then there could be future liquidity difficulties. Such difficulties could have an impact on future discretionary costs, e.g. the curtailment of research, marketing and advertising expenditure, on investment decisions, e.g. postponing capital expenditure, and on financing decisions, e.g. raising additional equity or loan capital.

26.6.2 Cash generated from operations after working capital changes

The cash available to meet interest charges and taxation will be affected by the impact of working capital changes. In the Tyro Bruce example we can see that, although there has been a significant increase in working capital of £960,000, this has only taken 56% of the £1,698,000.

We can see the cash implication, but would need to make further enquiries to establish the reasons for the change and the likelihood of similar cash outflow movements recurring in future years. If, for example, the increased investment in inventory resulted from an increase in turnover, then a similar increase could recur if the forecast turnover continued to increase. If, on the other hand, the increase was due to poor inventory control, then it is less likely that the increase will recur: in fact, quite the opposite as management addresses the problem.

The same comments could be made in relation lo the trade receivables and trade pavablcs. The cash flow statement indicates the cash extent of the change: additional ratios are required to allow us to evaluate the change.

The cash generated is available to pay interest and taxation, both of which are unavoidable. It is also an indication of the safety margin, i.e. how long a business could continue to pay unavoidable costs.

Interest cover

Interest cover is normally defined as the number of times the profit before interest and tax covers the interest charge: in the Tyro Bruce example, £\,(W0,00W£40,000 = 26 times.

The position as disclosed in the cash flow statement is weaker. It is the number of times the net cash (low from operating activities covers the payment, i.e. ^T^OOO/JOHMMM) = IX.45 times.

This does not allow us to assess the financing policy of the company, e.g. whether the capital was raised the optimum way. Nor does it allow us to assess whether the company would have done better to provide finance by improved control over its assets, e.g. working capital reduction.[12]

26.6.3 Evaluating the investing activities cash flows

These arise from the acquisition and disposal of non-current assets and investments.

It is useful to consider how much of the expenditure is to replace existing non-current assets and how much is to increase capacity. One way is to relate the cash expenditure to the depreciation charge; this indicates that the cash expenditure is 549°o greater than the depreciation charge calculated as follows: [(£1,120,000/£204.000) X 100]. This seems to indicate a possible increase in productive capacity. However, the cash flow statement docs not itemise the expenditure and referring to the non-current asset schedule reveals that only £120,000 of the total of £1,120,000 was spent on plant with the major outlay being on land and buildings where we sec a 25% increase.

How much relates to replacing existing non-current assets?

There has been a criticism that it is not possible to assess how much of the investing activities cash outflow related to simply maintaining operations by replacing non-current assets that were w orn out rather than to increasing existing capacity with a potential for an increase in turnover and profits. The solution proposed was that investment that merely maintained should be shown as an operating cash flow and that the investing cash flow should be restricted to increasing capacity. The IASC doubted the reliability of such a distinction but there is a view that such an analysis provides additional information, provided the breakdown between the two types of expenditure can be reliably ascertained.

26.6.4 Evaluating the financing cash flows

A comparison of the net cash outflow of £210,000 before financing with the cash inflow from financing of £468.000 indicates the extent to which the cash flow after investing has been utilised or financed, e.g. financing has contributed over 100"o and there has been no reduction in cash.

Copyrighted material

26.6.5 Free cash flow

Free cash flow - FCF

The following is an extract from the Hanson pic 2(X)5 Annual Report illustrating its definition of free cash flow:

> Free cash flow is a non-GAAP liquidity measure comprising net cash flow arising from operating acti\ities, cash flows from returns on investments and sen icing of finance, and taxation. The measure includes all cash flows required by FRSI under UK GAAP, before those in respect of capital expenditure and financial investments. We believe that this measure clarities to our investors, the cash flow over which the Group is able to exercise discretionary spend on things such as acquisitions and dividends and it is a measure that management use internally to analyse the businesses* liquidity position. The Group's definition of free cash flow may be different to that of other companies.

There is no common definition of FCF. For example, an alternative definition is that it is:

(a) a measure of financial performance calculated as operating cash flow minus capital expenditures, i.e. it is the amount of cash available for dividends that a company generates after investing in the maintenance of the company's asset base when it is a measure of the amount that a company has to expand its business and pay dividends; or

(b) after investing in the expansion of its asset base.

Under the definition in (b), a negative or depressed FCF may not be a disadvantage if it results from investment in high return investments as shown in the following extract from the 21X11 Pearson Annual Report:

> Free cash flow
> Free cash flow per share is a measure of the cash which is freely available, after the payment of interest and tax, for distribution in the form of dividends and for reinvestment in the business. The proceeds of disposals and the cost of acquisitions, together with any substantial integration costs associated with them, are excluded from the calculation. Pearson's total free cash flow has been depressed over the past several years by a high level of investment demands, on our print businesses as well as on the internet. Wc believe that these investments will help us to sustain a higher rate of sales growth in the future but we also need to ensure that dividends to shareholders are paid from the cash generated b\ the business.

In the Pearson example the investment has been based on the expected higher sales growth. It should be recognised, however, that there is a risk if a company has significant free cash flow that its managers ma\ be too optimistic about future performance. When they are not reliant on satisfying external fundcrs there could be less constraint on their investment decisions.

26.7 Critique of cash flow accounting

In this section we look at cash flow accounting from the viewpoint of users. We discuss the conflicting objectives of flexibility and uniformity, and comment on the two methods available under IAS 7.

1 The management of any enterprise may put considerable emphasis on the cash flow effects of its decisions and actions, monitoring these with the internal reporting system. Cash flow information is also relevant to those with external interests in the enterprise. Discuss the importance of cash flow information for both internal and external decisions. What internal and external user needs does cash flow reporting satisfy? Is the current cash flow information adequate for these purposes?

2 Many people preferred the direct method for cash flow preparation, but IAS 7 did not require it. Discuss possible reasons for allowing choice and the effectiveness of the IASC's encouragement to companies to use the direct method.

3 Explain the information that a user can obtain from a cash flow statement that cannot be obtained from the current or comparative balance sheets.

4 'The traditional income statement in published accounts should be replaced (or at least supplemented) by a cash flow statement'

(a) Explain what you understand by such a cash flow statement.

(b) Explain the basis on which the above view can be justified, and state any drawbacks of disclosing cash flow information.

5 Explain why the fixed assets acquired on the acquisition of a subsidiary during the year have the same effect on the consolidated cash flow statement as an exchange gam of equal amount resulting from the translation at dosing rate.

6 There is a view that if a company shows a healthy operating profrt but has low or negative operating cash flows, there is a suspicion that earnings manipulation or creative accounting has occurred. Discuss why there should be suspicion.

An extract from the solution is provided in the Appendix at the end of the text for exercises marked with an asterisk (•).

* Question I

The draft balance sheets of Example Ltd as at 31 March 20X0 and 31 March 20XI are as follows:

		20X1			*20X0*	
(£000)	*Cost*	*Depn*	*NbV*	Cost	*Depn*	*NBV*
Non-current assets	2.760	462	Z298	2,520	452	2.068
Current assets						
Inventory		1.200			800	
Trade receivables		900			640	
Government securities		20				
Cash		10			80	
		2.130			1.520	
Current *liabilities*						
Trade receivables		500			540	
Taxation		170			190	
Dividends						
Overdraft		478			8	
		U48			738	
Net current assets			982			782
			1.2 B0			2,850
Ordinary share capital			1,400			1.300
Share premium account			400			200
Retained profits at 31 Mar 20X0			1,150			**1,150**
Profit for year			180			
10% debentures repayable 20X0-X4			150			200
			3.280			2,850

The income statement of Example Ltd for the year ended 31 March 20XI ts as follows;

	£000	£000
Sales		3.000
Cost of sales		2.000
Gross profit		1.000
Selling and distribution expenses	300	
Administrative expenses	180	-460
		520
Interest payable		-20
Profit before tax		500
Tax		200
Profit after tax		300

Notes:

1 Non-current assets having a cost of £320.000 on which £92.000 of depreciation had been provided were sold during the year at a profit of £13.000.

2 The company had paid a dividend of £120,000.

3 The non-current asset schedule included the following:

Cost	£000	Depreciation	£000	*Net book value*	£000
At cost 31 Mar 20X0	2.520	At 31 Mar 20X0	452	At 31 Mar 20X0	2.068
Additions	560	IS charge	102		
	3.080		554		
Disposals	320	Disposal	92		
At 31 Mar 20X1	2.760		462	At 31 Mar 20X1	2.298

Required:

A cash flow statement using the format of IAS 7.

* Question 2

Shown below are the summarised final accounts of Martel pic for the last two financial years:

Balance sheet as at 31 December

	20X1		*20X0*	
COCO	£000	£000	£000	£000
Non-current *assets*				
Tangible				
Land and buildings	1.464		1.098	
Plant and machinery	520		194	
Motor vehicles	140		62	
		2.124		1.354
Current assets				
Inventory	504		330	
Trade receivables	264		132	
Government securities	40			
Bank	—		22	
	808		484	
Current *habttities*				
Trade payables	266		220	
Taxation	120		50	
Proposed drvidend	72		40	
Bank overdraft				
	64?		310	
Net current assets		166		174
Total assets less current liabilities		2.290		-528
Non<urrent liabilities				
996 debentures		J132)		1350)
		1.858		.178

Copyrighted material

Capital and reserves				
Ordinary shares of 50p each fully paid		900		800
Share premium account	120		70	
Revaluation reserve	360			
General reserve	100		50	
Retained earnings	378		258	
		958		378
		,858		LI/8

Summonsed income statement *[or the year endmg 3*f December

	20X1	*20X0*
	£000	£000
Operating profit	479	215
Interest paid	52	**JO**
Profit before taxation	427	185
Tax	149	_65
Profit after taxation	278	Ji2

Additional information;

I The movement in non-current assets during the year ended 31 December 20X1 was as follows:

	land and buildings	*Plant etc*	*Motor vehicles*
	£000	£000	£000
Cost at I January 20X1	3.309	470	231
Revaluation	360		—
Additions	81	470	163
Disposals		***m***	
Cost at 31 December 20XI	3.750	880	394
Depreciation at I January 20XI	2.2M	276	169
Disposals	—	(48)	^—
Added for year	75	132	_85
Depreciation at 31 December 20XI	2,286	360	254

The plant and machinery disposed of during the year was sold for £20.000.

2 During 20XI. a rights issue was made of one new ordinary share for every eight held at a pnce of £1.50.

3 A d<vidend of £36.000 £20X0 £30,000) was paid in 20XI. A dividend of £72,000 (20X0 £40.000) was proposed for 20XI. A transfer of £50.000 was made to the general reserve.

Required:

(a) Prepare a cash flow statement for the year ended 31 December 20X1, in accordance with IAS 7.

Copyrighted material

Required:

(a) Prepare the Cash Flow Statement of Maytix for the year ended 31 October 2005. Use the format required by IAS 7 'Cash Flow Statements' and show operating cash flows using the 'indirect method*.

(b) Describe the additional information that would be included in a cash flow statement showing operating cash flows using the direct method and discuss the proposition that such disclosures be made compulsory under IAS 7.

(The Association of International Accountants)

Question 5

Almost Ready Ltd had extracted the following information from the income statement and balance sheet (000s) for the year ended 30 September 20X9:

Proceeds from issue of ordinary shares 405, Dividends paid 1.923, ('-ash and cash equivalents al beginning of the period 6,539, Dividends from joint ventures 228, Purchase of investments 29, llnterest received 43, Tax paid 1,389, Purchase of property 115, Foreign exchange difference 52, Cash and cash equivalents at end of period 9,266, Proceeds from sale of other long term assets 24, Purchase of a business (net of cash acquired) 274, Interest paid 16, Payment of principal under a finance lease 11, Cash generated from operations 5,732.

Required:

Prepare a cash flow statement for the year ended 30 September 20X9.

References

1 IAS 7 *Statement of Changes in Financial Position,* IASC, 1977.
2 SPAS 95 *Statement of Cash Hows,* FASH, November 1987.
3 IAS 7 *Cash Flow Statements,* 1 ASH revised 2(H)5.
4 J. Arnold *et aL*$_t$ *The Future Shape of Financial Reports,* ICAFAY and ICAS, 1991.
5 J. Arnold, 'The future shape of financial reports*. *Accountancy,* May 1991, p. 26.
6 G.I I. Sorter, MJ. lumberman and 1I.M. Maximon, *Finanaal Aicountmg; An Events and Cash Flow Approach,* McGraw-Hill. 1990.
7 J.W. Henderson and T.S. Maness, *The Financial Analyst's Desk-hook,* Van Nostnmd Rcinhold. 1989, p. 12.
S J. Crichton, 'Cash How statements - what are the choices?' *Accountancy,* October 1990, p. 30.
9 L.J. I leath and P. Rosenfield. 'Solvency: the forgotten half of financial reporting', in R. Hloom and P.T. Flgcrs (cds.), *Accounting Theory and Practice,* I larcourt Hraee Jovanovich, 19X7, p. 5X6.
10 I M (r.ililim and K.I.. Yigcland, "I..11I'. warning M^MS of bankruplo using cash Him analysis*. *Journal of Commercial landing,* December 19X8, pp. 4-15,
11 J.W. I lendcrson and T.S. Maness, *op. at.,* p. 72.
12 G. I lolmes and A. Sugdcn, *Interpreting Company Reports and Accounts* (5th editiun). Wood head Faulkner, 1995, p. 134.
13 I). Solomons, *Guidelines jor Financial Reporting Standards,* IC.AFVY, 1989.

Copyrighted material

- Six key ratios
- Pyramid of ratios
- Other important ratios
- Applieation of pyramid of ratios
- Segmental analysis
- Inter-firm comparisons and industry a\erases
- World Wide Web pages for company information
- Non-financial ratios
- Interpretation problems when using ratios and consolidated financial statements.

This chapter reviews the use of financial ratio analysis for the interpretation of a company's financial statements. The techniques that we discuss are fundamental to user appraisal of financial statements and should be used in conjunction with any alternative interpretative techniques available.

The key to understanding and interpreting financial statements is an extremely inquisitive and enquiring frame of mind. When examining a set of accounts, we should try to understand exactly what the figures mean.

Some issues will be evident from a cursor) look at the accounts. For example, an initial glance might reveal a company that has made losses in the past two years; that has a declining sales turnover, a large overdraft and a greatly increased accounts payable figure. This would clearly raise questions about, for example, the increase in accounts payable. The initial look is a prelude to a more systematic review and is helpful in quickly putting the accounts into context.

Following the overview, financial ratios become important. One of the main strengths of financial ratios is that they help to direct the user's focus of attention. They identify and highlight areas of good and bad performance, and areas of significant change. In each instance, the user should attempt to explain exactly why the accounts reveal this behaviour.

Before we embark on a full investigation of financial ratios, a word of warning. Ian Griffiths has written a book on creative accounting which questions the reliability of financial statements: 'Every company in the country is fiddling its profits. Every set of pub-

lished accounts is based on books which have been gently cooked or completely roasted ... it is the biggest con trick since the Trojan I lorse.

We should take heed of these reservations when we undertake any analytical interpretations. The) should make us e\en more open-minded and investigative when confronted by a set of financial statements. To quote Griffiths again,

> Whether the differences in accounting treatment and presentation are real or imagined, it is clear that there is scope for tremendous variation in reported figures ... perhaps the best safeguard is to look upon the annual accounts with a more cynical and jaundiced eye. The myth that the financial statements are an irrefutable and accurate reflection of the company's trading performance for the >ear must be exploded once and for all. The accounts are little more than an indication of the broad trend.[2]

27.2 Accounting ratios and ratio analysis

Accounting ratios identify irregularities, anomalies and surprises that require further investigation to ascertain the current and future financial standing of a company. This sounds Very useful, but what are ratios and how can we use them?

27.2.1 What are ratios?

Ratios describe the relationship between different items in the financial statements. Obviously, we could calculate hundreds of ratios from a set of financial statements; the expertise lies in knowing which ratios provide useful information. The relative usefulness of each ratio depends on what aspects of a company's business affairs are being investigated. Some of the most important and frequently used ratios are outlined in section 27.3.

27.2.2 How can we use ratios?

An important lesson about ratios is that, if they are applied incorrectly, they may be completely useless or, perhaps even worse, misleading. I low ever, if they are used correctly, thev are a powerful tool for understanding and interpreting company accounts. Some basic rules for financial ratio analysis are as follows.

Compare like with like

The relative performance of a company can be gauged in a number of different terms bv comparing that company's financial ratios with:

- financial ratios for a preceding period;
- budgeted financial ratios for the current period;
- financial ratios for other profit centres within the company;
- financial ratios for other companies within the same industrial sector.

In each case, comparison is possible only if an identical basis of compilation is employed. There must be conformity and Uniformity in the preparation of accounts to ensure a comparison of like with like. In addition, if one is comparing companies in different countries, one needs to be aware of an) differences in international accounting policies (see Chapter o).

Copyrighted material

Clear definition of the financial ratio

A full understanding of the precise implications of a given ratio is possible only if it is accompanied b\ a clear definition of its constituent parts. The user must be able to judge the accuracy and reliability of the undcrbing business operations before the reliability of the ralio can be assessed. In addition, the definitions of ratios ma\ van from source to source as concepts and terminology are not universally defined.[3]

Awareness of underlying trends

As a ratio compares two \alues, changes in either of these underlying values over time may be obscured in the linal ratio figure. Let us take the example of Radmand pic:

	Net profit **I**	*Capital employed* **i**	*Return on capital employed*
20X1	[00,000	1,000,000	10%
20X2	150,000	1,500,00(1	10%
20X3	225,000	2,250,000	10%

Although the return on capital employed (ROCK) remains a constant I0°o over the years 20X1-20X3, no assumptions can be made about the underlying figures. As we can see, the net profit increased by 50% in both 20X2 and 20X3, and this trend is not ascertainable in the ROCK ratio. The user should be aware that a ratio is not saying anything about the trends of its individual components - onl\ about the combined effect of both components.

27.3 Six key ratios

In our analysis we identity Six key ratios and a number of subsidiary ratios. The key ratios are presented as a pyramid in Figure 27.1. The pyramid illustrates how the constituent parts of each ratio relate to a set of financial statements.

The six kev[9] ratios are divided into three categories.[4] as follows:

Primary investment **level ratios**

1 Primary investment ratio (operating return on equity)

$$\frac{\text{Net profit before interest and tax}}{\text{Shareholders* funds}}$$

2 Primary financing ratio (financial leverage multiplier)

$$\frac{\text{Capital emplo> ed}}{\text{Shareholders* funds}}$$

Primary operative level ratios

3 Primary operating ratio (return on capital employed)

$$\frac{\text{Net profit before interest and tax}}{\text{Capital employed}}$$

Copyrighted material

- Interpretation

4 Primary utilisation ratio (asset turnover)

$$\frac{\text{Sales}}{\text{Capital employed}}$$

5 Primary efficiency ratio (net profit margin)

$$\frac{\text{Net profit before interest and tax}}{\text{Sales}}$$

Primary liquidity level ratios

6 Primary liquidity ratio (current ratio)

$$\frac{\text{Current assets}}{\text{Current liabilities}}$$

27.4 Description of the six key ratios

27.4.1 **Primary** investment **level** ratios

1 Primary investment ratio (operating return on equity)

The operating return on equity represents the net profit of a com pan) as a percentage of the shareholders* funds (i.e. the total investment by the owners). This ratio is at the apex of the ratio pyramid, and it is the product of the financial leverage multiplier and the ROCK. Note that our 'operating return on equity* is defined differently from more traditional 'returns on equity' (profit before tax/shareholders* funds and profit after tax/shareholders' funds).

2 Primary financing ratio (financial leverage multiplier)

The financial leverage multiplier expresses how many times bigger the capital employed is than the shareholders' funds. This multiplier implies that assets funded by sources other than the owners will increase the profit or loss of the company relative to shareholders' funds.

27.4.2 Primary operative level ratios

3 Primary operating ratio (return on capital employed)

The ROCE is a fundamental measure of the profitability of a company. It is a popular indicator of management efficiency because it contrasts the net profit generated by the company with the total value of fixed and current assets, which are presumed to be under management control. Therefore, the ROCE demonstrates how well the management has utilised total assets.

ROCK is the product of the remaining two primary operative level ratios;

ROCE = Asset turnover X Net profit margin

Many different factors impact on the ROCK figure, including asset valuation policies, depreciation policies, revaluation policies, pricing policies, the treatment of goodwill and the treatment of expenses. In particular, the accounting treatment of goodwill (prior to I'RS 10) resulted in the vast majority of companies writing off goodwill against their reserves. For some acquisitive companies, the goodwill write-off was so substantial that their

Copyrighted material

times series summaries, as shown in this extract from the 2004 Annual Report of Harloworld, a South African conglomerate:

	2<K)4	2003	2002	2001	2000	1999
Current ratio	1.5	1.4	1.3	1.3	1.6	1.7

This indicates that the company's current ratio for 2004 is within its own normal range.

The sector norms become relevant if a prospective acquirer is considering a takeover and subsequently revising the existing financial structure.

What if the current ratio increases beyond the normal range?

This may arise for a number of reasons, some beneficial, others unwelcome.

Beneficial reasons

- A build-up of inventory in order to support a recent advertising campaign or increasing popular demand as for, say, a PlayStation. Management action will be to establish from a cash budget that the company will not experience liquidity problems from holding such stock, e.g. a short-term loan, extended credit or bank overdraft may be appropriate.
- A permanent expansion of the business which will require continuing higher levels of inventor). Management action will be to arrange additional finance, e.g. equity or long-term borrowings to finance the increased working capital.

Unwelcome reasons

- Operating losses may have eroded the working capital base. Management action will vary according to the underlying problem, e.g. implementing a cost reduction programme, disposing of underperforming segments, arranging a sale of assets or inviting a takeover.
- Inefficient control over working capital, e.g. poor inventory or accounts receivable control.
- Adverse litigation, e.g. liability to employees for asbestosis.
- Adverse trading conditions, e.g. inxentorv becoming obsolete or introduction of new models by competitors.

Moreover, the current ratio should be analysed in terms of its constituent parts to test the quality of the value. We should ask: what part of current assets is cash, accounts receivable or inventory; what is the likelihood of debtors defaulting; what is the condition of the inventory; and what are the timings of all the current liabilities?

27.5 Description of subsidiary ratios

27.5.1 Gearing ratios

$$\text{Oeanng ratio} = \frac{\text{Total liability - Current liabilit\}}{\text{Capital employed}}$$

The gearing ratio represents the proportion of capital employed which is accounted for by long-term fixed-interest debt. The gearing structure of a company refers to the amount of borrowings compared with the amount of shareholders' funds. A company with high gearing is predominantly financed by debt, whereas a company with low gearing relies on equity finance. Different user groups prefer different gearing structures. Payables and

Copyrighted material

shareholders will be influenced by gearing as it affects factors such as annual inierest payments and earnings per share.

This particular definition of gearing concentrates on long-term debt financing. An alternative measure might be total liabilities/capital employed, which includes short-term financing as well as long-term financing. This might be more pertinent because some companies rely on high levels of overdraft. As a further relinement one might disaggregate current liabilities into interest-bearing finance (overdrafts; short-term loans) and more indirect finance (trade creditors; tax payable).

$$\text{Shareholders' ratio} = \frac{\text{Shareholders' funds}}{\text{Capital employed}}$$

This represents the proportion of capital employed that is financed by shareholders' funds.

$$\text{Interest cover} = \frac{\text{Net profit before interest and tax}}{\text{Interest}}$$

Most companies are committed to paying a certain amount of interest charges. This ratio describes how many limes greater the profit is than the interest charges. It gives creditors an indication ol how secure these payments are. An alternative measure is to compare the actual cash How (rather than profit) to interest payments to give an indication of the availability of cash to cover interest charges.

The earnings In-fore interest and tax (EBIT) might mine in the same way as the earnings before interest, tax, depreciation and amortisation (EBITDA). However, if they differ significantly, as in periods of unusual growth, it may he more useful to calculate the cash flow inierest cover. Even so, attention should also be given to free cash How, as suggested in the following extract from the 200(> Annual Report of Sauer-Danfoss Inc.:

> EBITDA - represents Net Income, plus Provision for Income Taxes and Net Interest expense, plus Depreciation and Amortization. EBITDA may not IK* comparable to similarly titled measures reported by other companies. \\ hile EBITDA should not be construed as a substitute for Operating Income or a better indicator of liquidity than Cash Mow from Operating Activities, which is determined in accordance with accounting principles generally accepted in the United States, it is included herein to provide additional information with respect to the ability of Sauer-Danfoss to meet its future debt service. Capital Expenditures and Working Capital requirements.

27.5.2 Liquidity ratios

$$\text{Acid test ratio} = \frac{\text{Current assets - Inventory}}{\text{Current liabilities}}$$

The acid lest or quick ratio indicates the company's ability to repay immediate commitments using cash or near-cash. It excludes the value of inventory in order to show the immediate solvency of the company.

The following is an extract from the 2004 Annual Report of Barloworld:

	2004	2003	2002	2001	2000	1999
Quick ratio	1.0	0.8	0.7	0.8	0.9	LI

This indicates that the company's quick (or acid test) ratio is within its own normal range.

Copyrighted material

The receivables ratio (usuall) trade receivables) is usually expressed in terms of the accounts receivable collection period (in days):

$$\frac{\text{Accounts receivable}}{\text{Sal}_{es}} \times 365$$

This ratio can be used to evaluate credit control and how quickly the company receives cash. Changes in the accounts receivable collection period might be misleading, so the root cause must be ascertained. A falling debt collection period might mean that the company is successfully reducing bad debts and eliminating poor risks; or the liquidity position might be so poor thai the company is extending discounts and incentives lo customers who pa) early (or on time); or the company might have entered into invoice factoring arrangements without recourse so that the trade receivable ligure is reduced and the cash balance increased. An increasing accounts receivable collection period might mean that the compart) has poor credit control and is besieged with bad debts; or that it has a strategy for attracting new customers.

The payables turnover ratio (usual!) trade payables) is calculated as:

$$\text{Pavables turnover} = \frac{\text{Sales}}{\text{Accounts pa)able}} \text{ or more usuallv } \frac{\text{Cost of sales}}{\text{Accounts pavablc}}$$

It is usually expressed in terms of the accounts payable payment period (in days):

$$\frac{\text{Accounts payable}}{\text{Sales}} \times 365 \text{ or more usually } \frac{\text{Accounts pa\able}}{\text{Cost ol sales}} \times 365$$

This ratio indicates the credit facilities extended to a company b\ its suppliers. Any changes in the payment period might be due to suppliers altering credit terms (either more or less generous), the compam trxing to gain maximum credit facilities, or the company utilising early payment incentives.

27.5.4 Investment ratios

Investment ratios such as earnings per share (EPS), price/earnings ratio (PK ratio) and dividend cover are of great interest to investors.

Earnings per share

KPS indicates the amount of profit after tax, interest and dividends lo preference shares has been earned for each ordinary share. Its importance is recognised by some management who use the KPS as part of their strategic planning; e.g. the 2005 Annual Report of Gamma I lolding NV states:

> Financial targets
>
> Gamma Holdings strives for an average annual growth of earnings per share of at least 10% over a number of years. This growth is related to the net result of the compam, excluding restructuring, in 2004.

The company also targets profit to sales °o, ROCK and balance sheet ratios:

In addition, the compam strives for an operating result of at least 8% of turnover for the Gamma Technologies sector and at least 9N> of turnover for the Gamma Comfort & Style sector. For each of these sectors Gamma strives for a return on capital employed of at least 15%. With a view to a healthy balance sheet, the company aims for a solvencv |K*rcentage of ft! least 30% and gearing (ratio of total interest-bearing liabilities to total equity) of at most 1. It is the company's policy thai net debi should not exceed 2.5 limes KBITDA.

Copyrighted material

27.5.5 Profitability ratios

Protitabilit) ratios allow a more specific analysis of profit margin, e.g. expressing individual expenses as a proportion of sales or cost of sales. These ratios will identify any irregularities or changes in specific expenses from year to year.

Figure 27.4 JD Wetherspoon consolidated profit and loss account for year ended 31 **July** 2003

Copyrighted image

Copyrighted material

A list of the subsidiary ratios is included in Figure 27.3.

27.6 Application of pyramid of ratios to JD Wetherspoon pic

To illustrate financial ratio analysis and trend analysis we are using the accounts of JD Wethcrspoon pic. The company's principal activities are the development and management of public houses.[4] JO Wcthcrspoon's profit and loss account and balance sheet for 2002 and 2003 are reproduced in Figure 27.4.

Calculation of the six key ratios

1 Operating return on equity

2003: 74,983 / 318,628 = 23.5%

2002: 70,085 / 310,133 = 22.6%

2 Financial leverage multiplier

2003: 816,250 / 318,628 = 2.56 times

2002: 783,366 / 510,133 = 2.53 times

3 Return on capital employed

2003: 74,983 / 816,350 = **9.19%**

2002: 70,085 / 785,566 = 8.95%

4 Asset turnover

2003: 730,913 / 816,350 = 0.90 times

2002: 601,295 / 785,566 = 0.77 times

5 Net profit margin

2003: 74,983 / 730,913 = 10.26%

2002: 70,085 / 601,295 = 11.66%

6 Current ratio

2003: 42,527 / 135,361 = 0.31:1

2002: 38,325 / 122,919 = 0.31:1

Five of these key ratios are shown in the pyramid structure of Figure 27.5 (allowing for rounding).

27.6.1 Interpretation of JD Wetherspoon pic's accounts

Using the pyramid structure to analyse JD Wetherspoon in 2003 and 2002 we can identify a number of areas of the business in which further investigations should be carried out. To begin with, the operating return on equity has improved from 22.6% to 23.5%. Disaggregating this ratio we can see that the improvement is due to both an increase in the financial leverage multiplier (2.53 to 2.56) and an increase in the ROCK (8.95% to 9.19%).

The increase in the financial leverage multiplier means that there has been an increased proportion of total liabilities within the capital employed figure. Looking at the balance sheet, it is evident that long-term loans have risen by nearly *£1* million (from £292,915,000 to £299,942,000).

Copyrighted material

quite low) and determine whether this drop in current ratio is a deliberate policy or needs .mention. The notes to the accounts (not reproduced here) show that trade creditors (accounts payable) have fallen from £54.4 million to *£5$* million.

27.7 Segmental analysis

In this section we review the reasons for and importance of segmental accounting in the analysis of financial statements.

Reasons for segmental accounting

Segmental information is pro\ ided on a consistent basis that allows it to be comparable over time so as to assist the users to:

- appreciate more thoroughly the results and financial position by permitting a better understanding of past performance and thus a better assessment of future prospects;
- be aware of the impact that changes in significant components of a business may have on the business as a w hole.

Importance of segmental accounting

Segmental information makes the user aware of the balance between the different operations and thus able to assess:

- the quality of the company's reported earnings;
- the specific risks to which the company is subject;
- the areas where long-term growth may IK expected.

Constraints on comparison between companies

Segmental analysis is intrinsically subjective. This means that there are likely to be major differences in the way segments are determined, and because costs, for instance, ma\ IK allocated differently by companies in the same industry it is difficult to make inter-company comparisons at the segment level and the user still has to take a great deal of responsibility for the interpretation of that information.[%]

Management reservations

Standard setters have not been total!) prescriptive in recognising that management's attitude to segmental reporting is coloured by their fear that they will suffer some competitive disadvantage, e.g. host countries or competitors becoming aware of profit margins. The) may also fear that they ma\ not have reciprocal access to sensitive information if their own reporting jurisdiction, e.g. in the LK, requires a higher level oi disclosure than that required of their international competitors, e.g. in Switzerland.

However, empirical evidence'' indicates that such disadvantage arising from disclosure is limited and restricted to geographic segmental disclosure, particularly for smaller companies where such a segment might relate to a single contract.

We also consider the rules applicable to segmental accounting, provide an extract from a set of accounts to illustrate what information miuht IK disclosed, and evaluate the information provided in Bass pic accounts (see section 27.7.2).

Copyrighted material

The segmental information to be disclosed

Companies are required to report segment revenue, expense, results, assets and liabilities. However, there can be problems, e.g. how to treat assets that arc jointly used by two or more segments. The important point is to ensure that there is appropriate matching, e.g. if an asset is allocated to a segment, then any related costs such as amortisation or depreciation should also be allocated to that segment. This is olten relerred to as symmetry and, just as related costs are included, so also is related income, e.g. if the segment results include interest income then the assets should include the asset producing thai interest.

Despite the existence of SSAP 25 and IFRS 8, there are many concerns about the extent of segmental disclosure and its limitations must be recognised." A great deal of discretion is imparted to the directors concerning the definition of each segment. However, 'the factors which provide guidance in determining an industry segment are often the factors which lead a company's management to organise its enterprise into divisions, branches or subsidiaries'.[2] There is discretion concerning the allocation of common costs to segments on a reasonable basis. There is flexibility in the definition of some of the items to be disclosed (particular!) net assets). Finally, in the UK there is a get-out clause. Where the directors consider the disclosure of information to be seriously prejudicial to the interests of their group, they do not have to disclose it (as long as the accounts report this non-disclosure). For example, the 2004 Annual Report of St Ives provides a segmental analysis of turnover but then states:

> The directors consider that an analysis of profit on a segmental basis would be seriously prejudicial to the interest of the Group and, as permitted by SSAP 25 *Segmental Reporting** no further disclosure is given.

IFRS 8 requires a much greater disclosure of information than both the original IAS 14 and SSAP 25. In particular, separate disclosure of both segment assets and segment liabilities are required (as opposed to net assets for SSAP 25) and the basis of inter-segment pricing. In the UK, FL) 45" proposed that the basis of inter-segment pricing (transfer pricing'[4]) should be disclosed, but this particular proposal was not implemented in SSAP 25.

Convergence tensions

The IASH and the USA ha\e been making steady progress towards the convergence of International and US standards. IFRS 8 is closely based on the USA's FAS 131 and this has led to much criticism, which has taken two forms. One is based on considerations of accounting principles, taking the \iew that it is inappropriate simply to adopt US standards without an economic impact study when the conceptual framework is different from that in Europe. The second criticism is a practical one, namely, that the IFRS allows directors too much freedom over disclosures. This latter concern has been raised in the UK Parliament where an Early Day Motion in April 2007 by Austin Mitchell stated:

> That this House finds International Financial Reporting Standard (IFRS) 8, concerning disclosure of operating segments by multinational corporations, totally unacceptable because it gives company directors *carte blanche* to decide what they disclose and how they disclose it and does not require consistency of disclosure either between periods or between companies and therefore fails to create a clear standard for disclosure to help investors, abolishes previous requirements for geographical disclosure and allows different accounting rules to IK applied to segment information from that used in the rest of a company's financial statements; and therefore urges the UK Government and the F-uropean Commission to earn- out their own urgent and in-depth impact

Copyrighted material

assessments on Il'RS 8 and require multinational companies to adopt, in addition to any segment data they disclose, full countr> -by-country disclosures of all activities in each geographical jurisdiction in which they operate, together with details of turnover, profits and taxes paid in each of those territories.

Gi\en the global nature of multinationals* activities, the pressure for country-ln-country disclosures seems well based and of interest to investors.

27.7.2 Segmental accounting - extract from a set of accounts

Where a segment can be distinguished, it is significant and the 'seriously prejudicial' clause is not invoked, one would expect to see disclosure of turnover, results and net assets for both business segments and geographical segments. However, a business may have only one business segment or operate in onl\ one geographical region. Also, not all groups disclose net asset information, e.g. I-eicestcr City pic state in the 1999 accounts: [4]In the opinion of the Directors, it is not possible to analyse the assets between the businesses due to the shared nature of many of the assets*.

The following extract shows a summarised segmental report from the Bass pic l°W accounts of their business segments and geographical segments (turnover by origin):

	External turnover **£m**	*Operating profit* /:m	*\ on-operating exceptional* x;n>	*Profit on ordinary activities before hit* **£m**
Bass Hotels & Resorts	IJ62	321	(107)	214
Bass Leisure Retail	1.428	298	^ ^	298
Bass Brewers	1,576	16(1	(7)	153
Brit vie Drinks	5(17	44		44
Other activities	13	1	2	3
	4,686	824	(112)	712
United Kingdom	3,564	556	3	559
Rest of Kuropc, Middle Kasi and Africa	4%	71	(6)	» f.5
United States	482	170	(11<>)	**60**
Rest of Americas	**86**	17	1	IS
Asia Pacific	*58*	10		10
	4,686	S24		712

Assets	**£m**
UK	5,328
Rest of Europe, Middle Kast and Africa	1,(176
United States	1,144
Rest of Americas	85
Asia Pacific	107
	,740

Copyrighted material

The segmental information provides a rough idea about how a group is performing in its main business segments and geographical regions. Bearing in mind the initial discussions on segmental accounting, a number of general observations can be made. Bass has significant interests in hotels, leisure retailing and branded drinks. Although most of Bass business is UK-based, there are high levels of sales in the USA and in the rest of Europe, the Middle East and Africa.

To get a feel for the profitability of the different business segments and markets, it is possible to calculate profit margins (based on operating profit/external sales as disclosed in the above note). For instance the profit margin for the hotel segment is 27.6% compared to 10.2% for Bass Brewers. In addition, the profit margin for the UK is 15.6% compared to 35.3% for the USA. This illustrates just how important it is to understand what different business segments are part of a group and which different markets the company is operating in. Furthermore, is the group changing its direction from one year to the next? The profit margin on the hotel segment might indicate that the company would make acquisitions to Strengthen this area. The 1998 accounts showed that this happened with the acquisition of Inter-Continental Hotels for £1,765 million. Is the group a conglomerate operating in numerous different business segments? What are the group's core competencies? Have there been any acquisitions during the year? Have there been any divestments? In relation to Bass, the 1998 operating and financial review stated that there had been a switch in its focus from one of maximising group benefits through operating tied beer outlets to one of being a leisure retailer.

The 1999 Review stated that the group made significant progress during 1999, capitalising on the strategic activity undertaken in 199S which saw the acquisition of the Inter-Continental Hotel (1CII) business, the disposal of the leased pub operation and the leisure businesses, and the return of over £800 million of capital to shareholders.

\\ ith regard to the Bass Hotels & Resorts segment of the business, the operating and financial review states: 'As an indicator of future expansion, at 30 September 1999, BHR had approved franchise applications for 571 hotels (1998, 575) with approximate!} 58,000 rooms, though the hotels had yet to enter the system*.

The refocusing was completed in December 2000 when Bass, the UK's third largest brewer, sold off its brewing division to Belgium's Interbrcw - this has resulted in more than 50% of UK brewing being owned by non-UK owners (refer to www.bass.com).

Implication of segment reporting for share valuation

There may be different risks attaching to the cash flows from the individual segments. This should be taken into account when assessing the overall value of the company, e.g. an extract from the Lex Column of the *Financial 'I'iwt's,* 17 November 20(H), reads:

> Bayer
>
> As other old-style chemical giants have broken themselves up to focus on pharmaceuticals, the inventor of aspirin has stuck to its unloved conglomerate formula. So when results on its healthcare business - on which it is increasing its focus - undershoot expectations, the market punishes its shares.
>
> In fact the slippage in healthcare margins came mainly from one-offs ... The pharmaceuticals business is in reasonable shape ... The 20% operating profit margin for healthcare by 2002 is not unrealistic ... So Bayer should be valued more highly. Pm healthcare on an earnings multiple of, say, 20% below the sector average, and it would be worth close to the group's €49.20 share price on its own. Adding on chemicals and polymers on an average sector multiple suggests a value closer to €75 .., Achieving its margin targets should provoke a rerating. Otherwise, counterparts such as Novartis or

Copyrighted material

even Roche - with hostile takeovers no longer taboo in Germany - might sniff a bargain.

27.7.3 Identifying segment trends and management strategy

Segmental reports are helpful in assessing current and future performance of companies w hich operate across a number of business or geographical segments. These may report year on year overall improvements in total operating revenues and operating profits whereas the underlying performance of individual segments may be deteriorating. In such cases, the directors' explanation of the reasons and their proposals for dealing with the situation are important. For example, the following are extracts from the 1999 Annual Report of Royal Ten Gate NV:

	1999	1998	1997
In millions of euros			
Revenues	655.9	627.7	629.7
Operating result	40.9	34.5	36.9
Return on capital employed	13.5%	11.5%	11.3%

The segmental information is:

	High grade textiles sector			Plasties sector			Rubber sector		
	1999	1998	1997	1999	1998	1997	1999	1998	1947
Revenues	329.1	303.1	278.0	237.7	221.0	222.4	97.4	107.0	117.2
Operating result	24.5	17.6	13.5	10.1	14.6	7.7	9.1	3.6	5.8
Return on capital employed (%)	15.0	12.2	10.3	9.5	16.8	><	*MM*	7.0	11.3

With regard to the rubber sector, management action was taken in 1998 to reverse the deterioration:

> The result improved sharply, thanks to fundamental cost reductions, the introduction of the production of cell structure and increased volume. As a result of the above-mentioned cost reductions, efficiency improvements and changes to product design. substantial sales price reductions were implemented. This restored the confidence of major customers and generated higher volumes. However, the volume growth was unable to offset the effects of the price reductions and sales fell in net terms by 9%.

Management also indicated medium-term and longer-term thinking:

> In the medium term part of the production will be transferred from F.uropc and the United States to eastern Europe and central America respectively … In the longer term it will be necessary to examine the strategic position of Ten Gate Enbi in the sector, partly in the light of the increasing importance of assembly plants.

With regard to the plastics sector, management action was implemented in the latter half of 1999:

> 1999 was an extremely difficult year, partly because customers experienced a decline in sales. A negative result was recorded in net terms. This led to a reorganisation, which was implemented in the second half of the year. .Management changes were made and led to the loss of over seventy jobs in three countries. The French operation was converted from a supplier of technical injection-moulded products CO a producer

Copyrighted material

accounts. As published accounts arc not usually available immediately after a financial year-end, there will be a time lag in the publication of inter-firm comparison information.

Although these drawbacks affect the reliability and completeness of survey results, such agencies have several advantages:

- The scope of an inter-firm comparison is extremely wide as it can include an analysis of any firm that produces published accounts.
- The quality of ratio analysis is improved because survey organisations attempt to standardise the bases of every ratio in the survey. This increases the uniformity and comparability of the ratio information.
- The survey information is easv to access and available at a relatively low cost.

What organisations provide inter-firm comparisons prepared from external published accounts?

Useful sources for inter-firm ratio comparisons include *Company REPS*$_t^K$ *Handbook of Market Leaders,,*[1"] Dun & Bradstreefs *Key Business Ratios: The Guide to British Business Performance*[^1] *The Company Guide*** and the online and (ID-ROM computer services, including Datastream, **OneSource,**[19] Fame and Kxtcl Financial Workstation. In addition, the World Wide Web provides an excellent source for corporate information.

27.8.2 Data collected direct from member companies of the private inter-firm comparison scheme

These inter-firm comparisons arc prepared on a confidential basis and the analysed information is usually available only to the participating companies.

The advantages of private schemes are that inter-firm comparisons consist of a comprehensive analysis of every firm in the scheme, and a higher degree of reliability can be attached to their findings than if external published accounts alone were used.

The drawbacks of private schemes are as follows:

- There are onerous requirements concerning the qualit} of information that companies contribute to private schemes. All information must comply with strict uniformity requirements.
- The cost of these schemes is relatively high.

The advantages of private schemes are that inter-firm comparisons consist of a comprehensive analysis of even firm in the scheme, and a higher degree of reliability can be attached to their findings than if external published accounts alone were used.

What organisations provide private schemes?

Numerous organisations co-ordinate pri\ ale inter-firm comparison schemes for the majority **of different** trade groups and industrial sectors. One of the best known is the Centre for Interfirm Comparison, which was founded by the British Institute of Management.

27.9 Ensuring true inter-firm comparisons

The necessity for comparing like with like has been stressed throughout this chapter. For true comparisons, we must ensure not onl\ that the bases of ratios are identical, but that a company is compared with companies in the same industrial sector and with similar prin-

Copyrighted material

cipal activities. If it is compared with a company in a different industrial sector, the results might be interesting, but they might not be suitable for any decision-useful anal}sis. Of course, when using any published inter-company eomparison data, it is essential to understand how the ratios are calculated. Each publication defines key terms, how ratios are computed and the methodologies used.

As stressed before, ratio definitions are not \set in stone'. Different publications and inter-company comparison schemes will use different definitions of seemingly identical ratios. For instance, when using FAME's profit margin, we would need to ascertain what measure of profit is used (e.g. is other income and/or interest received included?).

There arc a number of subscription databases available on CD-rom or online which provide annual reports and ratios with excellent search facilities e.g. FAME, Amadcus and OneSourcc.

FAME (Financial Analysis Made Easy) (www.bvdep.com)

FAME displays annual consolidated accounts, and performs company comparisons (Peer Analysis), as well as market sector reports (Statistical Analysis). The detailed information includes Companv profile including subsidiaries and directors. Accounting and financial information including company turnover. Ratios and trends. Complete lists of holding companies and shareholder details, and the latest company news.

Search can be on a single criterion or over 1(10 criteria with results displayed or printed in various formats, e.g. text, charts or graphs, and exported to other applications, e.g. word-processors, databases, Excel spreadsheets. The index supplies information on live and dissolved companies, which is particular!) helpful for tracing old, new and vcr\ small companies. It also includes share prices from mid-2000 for quoted companies.

Amadeus (www.bvdep.com)

Amadeus is a comprehensive, pan-European database containing financial information on public and private companies in thirty-four European countries. It provides standardised com pan \ accounts for up to ten years for European companies with twcntv-five standard ratios. As with FAME, it is modular, with data for the top 250,(MMI companies, the lop 1.5 million or all companies.

OneSource (www.onesource.com)

OneSourcc is a user-friendl\ database that can be accessed on line. It integrates business content from over 2,500 leading sources worldwide to provide world-class company anil industry profiles, executive biographies, financial data, analyst reports, and business press coverage. OneSource gathers in-depth data on more than 100 major industries, including detailed SIC code-level information. Users can search to find companies that match their criteria - search b) si/e, location or line of business or via a large selection of variables and get detailed financial information and analysts[1] reports. In addition to financial data it records key executive contacts and board members by name, location, line of business, job function or biographical details, news and articles.

The following extract from OneSource illustrates Key Indicators and a Peer Listing of ten closest companies by sales (it is also possible to extend the number of companies listed and list by assets):

Copyrighted material

JD Wethcrspoon pic
Financial Health Report - GBP ((MM))

	2(M)4	2003	2<M>2	1 Year Growth Rate	3 Year Growth Rate
Key Indicators					
Sales	787 J 26.0	730,9110	601,295.0	7.7%	17.6%
Net Income	29,274.0	34,044.0	35,416.0	-14.0%	-0.7%
Earnings Per Share	0.15	0.16	0.17	-7.89%	1.05%
Total Assets	828,078.0	820,838.0	783,366.0	0.9%	8.0%
Total Liabilities	539.124.0	502,511.0	473,233.0	7.3%	12.0%
Long-Term Debt	322,219.0	299,221.0	291,618.0	7.7%	8.6%
Margins	2004	2003	2002		
Gross Margin	14.6%	14.9%	16,2%	17.0%	17.7%
Operating Margin	9.9%	10.3%	11.7%	12.1%	12.5%
Pretax Margin	3.7%	4.7%	5.9%	6.2°..	NA
Profit Margin	3.7%	4.79b	5.9%	6.2%	6.59b
Ratios					
Long-Term Debt to Equity	1.1%	0.9%	0.9%	0.9%	0.9%
Return on Equity	9.6%	10.8%	12.1%	11.5%	NA
Asset Turnover	1.0%	0.99b	0.8%	0.8°..	0.79b
Inventory Turnover	59.1	64.3	62.6	65.9	71.4
Receivable Turnover	NA	NA	NA	NA	NA
Total Debt/Equity	1.2%	1.09b	1.0%	0.9%	0.9%
Current Ratio	0.3	0.3	0.3	0.4	0.9

JD Wctherspoon pic - Peer Listing Report

Peer Listing - 10 closest companies by sales anywhere in the United Kingdom in the same primary SIC

	Town	County	Sales (GBP 000)	Pre-Tax Profit (GBP 000)	Net Worth (GBP 000)	Number of Employees	Total Assets (GBP 000)
JD Wctherspoon pic	Wat lord	Hertfordshire	787,126.0	46.316.0	288,954.0	9,708	828,078.0
Punch Taverns pic	Burton On Trent	Staffordshire	637,600.0	133,300.(1	799,600.1	700	3,997,100.1
Spirit Group Ltd.	London	London	498,540.0	(8.912.0)	90,587.0	16,447	1,343,069.0
Unique Pubs Ltd.	Solihull	West Midlands	458,547.0	121.057.0	805.995.0	266	2,768,359.0
Dc Vere Group Pic	Warrington	Cheshire	321,778.0	41.029.0	597,781.0	7,014	944.131.0
Punch Taverns (Pm) Ltd.	Burton On Trent	Staffordshire	278,429.0	15,898.0	(65,585.0)	557	1,158,947.0

Copyrighted material

Punch Taverns (Ptl)Ltd.	Burton On Trent	Staffordshire	211,423.0	38,170.0	313,070.0	*K$*	1,223,760.0
Punch Taverns **(Vpr)Lld.**	Burton On 1 rent	Staffordshire	1.S3.0S5.0	9.812.0	146,652.0	NA	1,108,277.0
Spirit Group Retail Ltd.	Burton On Trent	Staffordshire	139.573.it	52.554.0	1.027.054.0	10,181	1J96.747.0
Punch Taverns **(Pml)Ltd.**	Warrington	Cheshire	135.506.0	2,151.0	(29,295.0)	267	1,186,015.0
SH Group l.ld.	Woking	Surre)	128.738.0	(26.392.0)	(11,081.0)	51.080	86.386.0

Nat?, The above information is derived from a OncSourcc Information Services, Ltd. (*OncSourcc') product, and is the copyrighted propert} of OncSourcc and/or its information providers. OncSource and its information providers disclaim the accuracy, adequacy, completeness, and timeliness of the information, and shall not be held liable for am loss, damage, or injur} thai results from am use of the information.

27.10 World Wide Web pages for company information

'Hie World Wide Web (WWW) offers enormous opportunities to access company information and selected accounting information. A number of sources include:

Financial report data	
Corporate reports	
Companies annual reports on line	www.carolworld.com
Hcmmington Scott	www.hcmscott.net
COMPANY RKI'S (demo)	www.companyrcfs.com
BIZ/ED	http://www.bi/ed.eo.uk
Accounting web	www.account ingweb.co.uk
Professional accounting bodies	
ACCA - Association of Chartered Certified Accountants	www .accagIobal.com
CIMA - Chartered Institute of Management Accountants	http://cimaglobaI.com
CIPFA - Chartered Institute of Public finance and Accountancv	www.cipfa.org.uk
Institute of Chartered Accounts in Ireland	www.ieni.ic
ICAS - Institute of Chartered Accountants of Scotland	www.icas.org.uk
ICSA - Institute of Chartered Secretaries and Administrators	www.icsa.org.uk
The Federation des Kvperts Comptables F.uropccns	www.fce.be
Hong Kong Institute of Certified Public Accountants	w\\w . 11Licpa.org.hk
Institute of Chartered Accountants of India	http://icai.org
Institute of Chartered Accountants of New Zealand	www.nzica.com
Institute of Certified Public Accountants of Singapore	www.accountants.org.sg
The Smith African Institute of Chartered Accountants	ww w .saica.co./a

Copyrighted material

27.12 Interpretation problems when using ratios and consolidated financial statements

Limitations of ratio analysis

Ratios are useful flairs but there are limitations that the reader needs to bear in mind - these include limitations:

- relating to the underlying financial statements:
  - the reliability of the financial statements themselves made suspect by, say, fraudulent misrepresentation as in Knron or window-dressing, e.g. despatching goods at the end of the period knowing them to be defective so that they appear in current year's sales and accepting that they will be returned later in the next period.
  - the possibility that the accounts are subject to fundamental uncertainty which could affect the going concern concept - there might IK- full disc!o*>ure in the notes but ratios might not be accurate predictors of earnings and solvency.
- arising because ratios make use of the balance sheet (igures:
  - the end of year figures are static and might not be a fair reflection of normal relationships such as when a business is seasonal, e.g. an arable farm might have no inventor) until the harvest and a toy manufacturer might have little inventory after supplying wholesalers in the lead up to Christmas. Any ratios based on the inventory figure such as inventory turnover could be misleading if calculated, at say, a ,>I December year-end.
- invalidating inter-company comparisons, such as:
  - use of different measurement bases, e.g.
    - non-current assets reported at historical cost or revaluation
    - revaluations carried out at different dates
  - use of off-balance sheet finance, e.g.
    - structuring the terms of a lease to ensure that it is treated as an operating lease and not a finance lease
    - special-purpose enterprises to keep debts off the balance sheet
  - use of different commercial practices, e.g.
    - factoring accounts receivable so that cash is increased - a perfectly normal transaction but one that could cause the comparative ratio of days* credit allowed to IK- significantly reduced
  - applying different accounting policies, e.g.
    - adopting different depreciation methods such as straight-line and reducing balance
    - adopting different inventory valuation methods such as FIR) and weighted average
  - assuming different degrees of optimism/pessimism when making judgement-based adjustments to non-current and current assets, e.g.
    - on the impairment review of intangible and tangible fixed assets
    - on writing down inventory and accounts receivable

    (An interesting research study[2]" looking at 243 Initial Public Offerings from 1">86 to 1991) found that there was a reduction In managers in R&D spending to increase current earnings and a manipulation of discretionary current accruals. One explanation might be that potential investors attach greater weight to current earnings and this could benefit insiders on the sale of their pre-offering shareholding.)
  - having different definitions for ratios, e.g.
    - the numerator for ROCK may be operating profit, profit before interest and tax, profit before interest, profit after tax etc.

Copyrighted material

- the denominator for ROCE may be total assets, total assets less intangibles, net assets etc.

- the use of norms can be misleading, e.g.
  - a current ratio of 2:1 ma\ be totalh inappropriate for a company like Tcsco which does not have long inventory turnover periods - as its sales are for cash it would also not produce trade receivable collection period ratios.
- making appropriate choice of comparator companies for benchmarking - this is a simple idea but more difficult in practice, e.g.
  - how to find companies with a similar trade
  - how to set criteria for selection - should it be
  - the industry average ratios - but these may be based on many companies operating under very different economics of scale; or companies with
  - similar amount of capital employed, or
  - similar amount of sales, or
  - some other criteria e.g. the most profitable.

The choice of benchmark is important in that it may affect the conclusions that are made.

Problems when using consolidated accounts

Certain limitations need to be recognised when analysing a consolidated balance sheet, making inter-company comparisons and forming a judgement on distributable profits based on the consolidated profit and loss account. These are as follows:

- The consolidated balance sheet aggregates the assets and liabilities of the parent company and its subsidiaries. The* current and liquidity ratios thai arc extracted to indicate to creditors the security of their credit and the likelihood of the debt being settled will be valid only if all creditors ha\c equal rights to claim against the aggregated assets. This may be the case if there are cross-guarantees from each company, but it is more likely that the creditors will need to seek payment from the individual group company to which it allowed the credit. One needs to be aware that the consolidated accounts are prepared for the shareholders of the parent company and that the> may be irrelevant to the needs of creditors. This is not a criticism of consolidation, merely a recognition of the purpose for which the accounts are relevant.

- The consolidated profit and loss account does not give a true picture of the profits immediately available for distribution by the holding company Co its shareholders. It shows the group profit that could become available for distribution if the holding company were to exercise its influence and control, and require all its subsidiary companies and associated companies to declare a dividend of I0()°o of their profits for the year. Legally, it is possible for the compam to exercise its voting power to achieve the passing up to it of the subsidiary companies' profits - although commercially this is highly unlikeh. The position of the associated companies is less clear: the holding company only has influence and does not have the voting power to guarantee that the profit disclosed in the consolidated profit and loss account is translated into dividends for the holding company shareholders.

Copyrighted material

4 (a) Explain the uses and limitations of ratio analysis when used to interpret the published financial accounts of a company.

(b) State and express two ratios that can be used to analyse each of the following:
(i) profitability;
(li) liquidity;
(iii) management control.

(c) Explain briefly points which are important when using ratios to interpret accounts under each of the headings in (b) above.

5 (a) Describe the current requirements for the disclosure of segmental information in the annual report.

(b) Discuss the advantages and disadvantages to the users and preparers of annual reports of disclosing segmental data classified by (i) industry groupings. (ii) legal entities within the group structure.

(c) Discuss the importance of the disclosure of exceptional items to the users of the annual report in addition to the operating profit

6 'Unregulated segmental reporting is commercially dangerous to companies making disclosures.'-[1] Discuss.

An outline solution is provided m the Appendix at the end of the text for exercises marked with an asterisk (*).

Question I

Saddam Ltd is considering the possibility of diversifying its operations and has identified three firms in the same industrial sector as potential takeover targets. The following information in respect of the companies has been extracted from their most recent financial statements.

	M Ud	Babo *Ltd*	Came/ *Ltd*
ROCE before tax %	211	237	25.0
Net profit %	12.0	125	3.75
Asset turnover ratio	1.45	1.16	3.73
Gross profit %	20.0	25.0	10.0
Sales/non-current assets	4.8	2.2	1 1.6
Sales/current assets	2.1	5.2	5.5
Current ratio	3.75	1.4	1.5
Acid test ratio	2.25	0.4	0.9
Average number of weeks' receivables outstanding	5.6	6.0	4.8
Average number of weeks' inventory held	12.0	19.2	4.0
Ordinary dividend %	10.0	15.0	30.0
Dividend cover	4.3	5.0	1.0

Required:

(a) Prepare a report for the directors of Saddam Ltd, assessing the performance of the three companies from the information provided and identifying areas which you consider require further investigation before a final decision is made.

(b) Discuss briefly why a firm's balance sheet is unlikely to show the true market value of the business.

Question 2

The major shareholder/director of Esrever Ltd has obtained average data for the industry as a whole. He wishes to see what the forecast results and position of Esrever Ltd would be if in the ensuing year its performance were to coincide with the industry averages.

At I July- 20X0. actual figures for Esrever Ltd included:

	i
Land and buildings (at wntten-down value)	132.000
Fixtures, fittings and equipment (at wntten-down value)	96,750
Stock inventory	22.040
12% loan (repayable in 20X5)	50.000
Ordinary share capital (50p shares)	100,000

For the year ended 30 June 20X1 the following forecast information is available:

1 Depreciation of non-current assets (on reducing balance)

Land and buildings	2%
Fixtures, fittings and equipment	20%

2 Net current assets will be financed by a bank overdraft to the extent necessary.

3 At 30 June 20X0 total assets minus current liabilities will be £231.808.

4 Profit after tax for the year will be 23.3296 of gross profit and 11.16% of total assets minus all externa) liabilities, both long-term and short-term.

5 Tax will be at an effective rate of 20% of profit before tax.

6 Cost of sales will be 68% of turnover (excluding VAT).

7 Closing inventory will represent 61.9 days' average cost of sales (excluding VAT).

8 Any difference between total expenses and the aggregate of expenses ascertained from this given information will represent credit purchases and other credit expenses, m each case excluding VAT input tax.

9 A dividend of 2.5p per share will be proposed.

10 The collection period for the VAT-exdusive amount of trade receivables will be an average of 42.6 days of the annual turnover. All the company's supplies are subject to VAT output tax at 15%.

11 The payment period for the VAT-exdusive amount of trade payables (purchases and other credit expenses) will be an average of 29.7 days. All these items are subject to (redaimable) VAT input tax at 15%. This VAT rate has been increased to 17.5% and may be subject to future changes, but for the purpose of this question the theory and workings remain the same irrespective of the rate.

Copyrighted material

12 Payables, other than trade payables, will comprise tax due. proposed dividends and VAT payable equal to one-quarter of the net amount due for the year.

13 Calculations *are* based on a year of 365 days.

Required:

Construct a forecast profit and loss account for Esrever Ltd for the year ended 30 June 20X1 and a forecast balance sheet at that date in as much detail as possible. (All calculations should be made to the nearest £I.)

* Question 3

Amalgamated Engineering pic makes specialised machinery for several industries. In recent years, the company has faced severe competition from overseas businesses, and its sales volume has hardly changed. The company has recently applied for an increase in its bank overdraft limit from £750.000 to £ 1.500.000. The bank manager has asked you. as the bank's credit analyst to look at the company's application.

You have the following information:

(i) Balance sheets as at 31 December 20X5 and 20X6:

	20X5		*20X6*	
	£000	£000	£000	£000
Tangible non<urrent assets				
Freehold land and buildings, at cost		1.800		1.800
Plant and equipment, at net value		3.150		3.300
		4.950		5.100
Current assets				
Inventory	1.125		1.500	
Trade receivables	825		1.125	
Short-term investments	300			
	2.250		2.625	
Current *liabilities*				
Bank overdraft	225		675	
Trade payables	300		375	
Taxation payable	375		300	
Dividends payable	225		225	
	1.125		1.575	
Net current assets		1.125		1.050
		6.075		6.150
Long-term *liability*				
Q% debentures. 20X9		1.500		1.500
		• '		4.650
Capital and reserves				
Ordinary shares of £ I each		2.250		2.250
Share premium account		750		750
Retained earnings		1375		1.650
		4,575		4.650

Copyrighted material

The director has asked you to explain why the bank manager has requested this additional information given that he has already been supplied with profit-based ratios.

Question 4

Sally Gorden seeks your assistance to decide whether she should invest in Ruby pic or Sapphire pic. Both companies are quoted on the London Stock Exchange. Their shares were listed on 20 June 20X4 as Ruby 475p and Sapphire 480p.

The performance of these two companies during the year ended 30 June 20X4 is summarised as follows:

	Ruby *pic*	*Sapphire pic*
	£000	£000
Operating profit	588	445
Interest and similar charges	(144)	J60)
	444	385
Taxation	(164)	(H5)
Profit after taxation	280	240
Interim dividend paid	(30)	(40)
Preference dividend proposed	(90)	—
Ordinary dividend proposed	J60)	(120)
Retained profit for the year	100	80

The companies have been financed on 30 June 20X4 as follows:

	Rubypk	Sapphire *pic*
	£000	£000
Ordinary shares of 50p each	1.000	1.500
15% preference shares of £ 1 each	600	
Share premium account	60	
Profit and loss account balance	250	450
17% debentures	800	
12% debentures	^—	500
	2710	2.450

On I October 20X3 Ruby pic issued 500.000 ordinary shares of 50p each at a premium of 20%. On I April 20X4 Sapphire pic made a I for 2 bonus issue. Apart from these, there has been no change in the issued capital of either company during the year.

Required:

(a) Calculate the earnings per share (EPS) of each company.
(b) Determine the price/earnings ratio (PE) of each company.
(c) Based on the PE ratio alone, which company's shares would you recommend to Sally?
(d) On the basis of appropriate accounting ratios (which should be calculated), identify three other matters Sally should take account of before she makes her choice.
(e) Describe the advantages and disadvantages of gearing.

Copyrighted material

Question 5

Briefly state:

(i) the case for segmental reporting;

(ii) the case against segmental reporting.

Question 6

Filios Products pic brews beers, owns and manages pubs and hotels, manufactures and supplies alcoholic and soft drinks, and is a supplier and operator of amusement machines and other leisure facilities.

The accounts for 1997 contain the following information:

Balance Sheet of Filios Products

	£m
Non-current assets at book value	1.663
Current ossets	
Inventories and receivables	381
Bank balance	128
	509
Less. Creditors *failing due within one year*	193
Net current assets	316
Total assets less current liabilities	1.979
Less: 10% debentures	140
	1.539
Capita! and reserves	
Share capital	80C
Retained earnings	1,039
	1.839

Profit and Loss Account of Filios Products

	Cm	£m
Turnover		1.028
Less: Cost of sales	684	
Administration expenses	110	
Distribution costs	101	
Interest charged	14	909
Net profit		119

The following breakdown is provided of the company's results into three divisions and head office;

	Beer *and pub operations*	*Hotel* business	*Other drinks & leisure*	*Head office*
	£m	*Cm*	*Cm*	*Cm*
Turnover	508	152	368	
Cost of sales	316	81	287	
Administration expenses	43	14	38	15

Copyrighted material

cerpretation

Distribution costs	64	12	25	—
Interest charged	10		—	4
Non-current assets at book value	890	332	364	77
Inventories and receivables	230	**84**	67	—
Bank balance	73	15	28	12
Payables	66	40	56	31
10% debentures	100	–	—	40

The following information is obtained for competitor companies: Dean, which brews beer and manages pubs: and Oarke. which is in the hotel business:

	Dean	*Clarke*
	£m	£m
Turnover	600	150
Operating profit	80	60
Net assets	1,300	300

Required:

(a) Outline the nature of segmental reports and explain the reason for presenting such information in the published accounts.

(b) Prepare a segmental statement for Filios Products pic for 1997 complying, so far as the information permits, with the provisions of SSAP 25 *Segmental Reporting,* so as to show for each segment and the business as a whole:
- turnover;
- profit:
- net assets.

(c) (i) Examine the relative performance of the operating divisions of Filios Products; and
(ii) Compare the performance of the operating divisions of Filios Products, where appropriate. with that of the competitor companies.

The examination and comparison should be based on the following accounting ratios;
- operating profit percentage;
- net asset turnover
- return on net assets.

(The *Chartered Institute of Bankers)*

Question 7

The Housing Department of Chaldon District Council has invited tenders for re-roofing 80 houses on an estate. Chaldon Direct Services (CDS) is one of the Council's direct services organisations and it has submitted a tender for this contract as have several contractors from the private sector.

The Council has been able to narrow the choice of contractor to the four tenderers who have submitted the lowest bids, as follows:

	r
Nutfield & Sons	398.600
Chaldon Direct Services	401.850
Tandndge Tilers Ltd	402.300
Redhill Roofing Contractors pic	406.500

The tender evaluation process requires that the three private tenderers be appraised on the basis of

Copyrighted material

terpretation

A further analysis of the tender bids is provided below:

	Nutfield &$ons L	*Chakion Direct* Services £	*Tandndge Tilers Ud L*	*Redbill Roofing Contractors pic* £
Labour	234.000	251.400	303.600	230.400
Materials	140.000	100.000	80.000	140.000
Overheads (including profit)	24.600	50.450	18.700	36.100

The Council's Client Services Committee can reject tenders on financial and/or quality grounds. However, each tender has to be appraised on these criteria and reasons for acceptance or rejection must be justified in the appraisal process.

Required:
In your capacity as accountant responsible for reporting to the Client Services Committee, draft a report to the Committee evaluating the tender bids and recommending to whom the contract should be awarded.

(OPFA)

Question 8

Chelsea pic has embarked on a programme of growth through acquisitions and has identified Kensington Ltd and Wimbledon Ltd as companies in the same industrial sector, as potential targets. Using recent financial statements of both Kensington and Wimbledon and further information obtained from a trade association. Chelsea pic has managed to build up the following comparability table;

	Kensington	*Wimbledon*	*Industrial average*
Profitability ratios			
ROCE before tax %	22	28	20
Return on equity %	18	22	15
Net profit margin %	II	5	7
Gross profit ratio %	25	12	20
Activity ratios			
Total assets turnover = times	L5	4.0	2.5
Non-current asset turnover = times	Z3	12.0	5.1
Receivables collection period in weeks	8.0	5.1	6.5
Inventoryholding period in weeks	21.0	4.0	13.0
Liquidity ratios			
Current ratio	1.8	1.7	2.8
Acid test	0.5	0.9	1.3
Debt-equity ratio %	80.0	20.0	65.0

Required:

(a) Prepare a performance report for the two companies for consideration by the directors of Chelsea pic indicating which of the two companies you consider to be a better acquisition.

(b) Indicate what further information is needed before a final decision can be made.

Copyrighted material

28.1 Introduction

In the preceding chapter \vc introduced ratio analysis as a means for interpreting Hnancial statements. In this chapter we present further techniques that can be used in conjunction with ratio analysis. The main similarity between these techniques is their purpose: each technique acts as a focus for more detailed investigation. B\ various means, they can be applied to a set of financial statements to identify areas of interest and concern. If the initial investigation throws up unexpected and unexplained results, the root cause should then be ascertained b\ more rigorous investigation.

In this chapter we consider the following:

- I lori/ontal analysis between two periods
- Trend analysis over a series of periods
- 1 listorical summaries
- Vertical analysis - common size statements
- Multivariate analysis - Z-scores
- H -scores
- A-scorcs
- Balanced scorecards
- Valuing shares of an unquoted company quantitative process
- Valuing shares of an unquoted company - qualitative process
- Shareholder value analysis
- Financial reporting and risk.

\\ e will illustrate the techniques using the accounts of JD \\ cthcrspoon pic, which were used in the preceding chapter to demonstrate ratio analysis.

28.2 Horizontal analysis between two periods

The mechanics of horizontal analysis between two periods are very simple. The percentage change (positive or negative) for each item in the financial statements between two periods needs to be calculated. Lsuallx, the percentage changes are calculated for all balance sheet items and profit and loss items over two successive years.

Although the calculations are straightforward, the skill rests with their interpretation. \\ hat do the percentages mean? Which changes are significant and warrant detailed analysis?

Which changes require an explanation so that we can determine whether or not we need to implement rectifying measures:

28.2.1 Percentage changes in profit and loss account items

The percentage changes between J1) Wetherspoon pic's 2002 and 2003 consolidated profit and loss accounts are calculated below.

"« *change*	*2003*	*2002*
	£000	£000
Turnover from continuing operations 21.6%	730,913	601,295
(lost of s;des 23.5%	(621,894)	(503,699)
Gross profit 11.7%	109,019	97.596
Administrative expenses 23.7%	(34,036)	(27,511)
Operating profit 7.0%	74,983	70,085
Loss on disposal ot tangible non-current assets	(3,688)	
Net interest payable 14.1%	(18,844)	(16,517)
Profit on ordinary activities before lax 2.1%	52,451	53.568
Tax on profit on ordinary activities 1.4%	(18,407)	**(18,152)**
Profit on ordinary activities after tax (3.9%)	34,044	**35,416**
Dividends 7.7%	(7,434)	**(6,902)**
Retained profit for the year 6.7%	26.610	**28,514**

The company has been following an active policy of opening pubs, with forty-five new pubs opened in 2003, bringing the total to 638, This has been a large element in the turnover increase. To quote the chairman's statement:

> The new pubs are in a variety of locations throughout Britain and Northern Ireland and have opened at initial sales levels which are encouraging for the future. I.ikc-for-likc sales increased bv 4% although like-for-like profits declined by 1%, principally as a result of higher costs for labour, repairs and insurance.

Although higher labour and other pub costs exceeded the rate of increase in the turnover, operating profit increased In 7'N». Dividends appear to have increased at a little over this rate and retained earnings have been depleted.

28.2.2 Percentage changes in profit and loss account items affected by exceptional items and balance sheet movements

Our interpretation can IK* affected by (a) balance sheet movements and (b) exceptional items.

Balance sheet movements

For example, the apparent increase of 7.7% in the dividend payout is misleading as wc arc- more interested in the rate of increase in the di\ idend per share which can be affected by the number of shares in issue - the balance sheet note tells us that the company lias purchased shares during the year and the chairman's statement includes the following:

> The board proposes, subject to shareholders* consent, to pay a final dividend of 2.33p per share on 28 November 2003 to those shareholders on the register on 31 October 2003, bringing the total dividend for the year to 3.54p per share, a 10% increase on the previous year. At this level, dividends will be covered 4.S times bv earnings (before

Copyrighted material

28.4 Historical summaries

There is no statutory requirement for a company to include a historical summary in its annual report. However, following a comment by the chairman of the Stock Exchange, the practice has arisen for companies to include a five-year historical summary.

There is no accounting standard relating to such summaries, but there may well be circumstances where the reported figures need to be adjusted to make the series comparable: e.g. a change in accounting policy such as the adoption of IFRSs; a change in the composition of the group; bonus issues, rights issues and share splits. In the ASC handbook *Accounting for the Effects of Changing Prices*^ it was recommended that companies which publish historical summaries should restate certain figures such as turnover, earnings and dividends in units of current purchasing power.'

The following extract from the 2000 Annual Report of a South African company, Barloworld, considers inflation in relation to earnings and dividends per share:

Inflation-adjusted information

South African consumer price index	2000	\W)
(base 1994= 100)	145.6	138.2
Deflation factor	*68J*	*72A*
Earnings per share (cents)	380.4	285.8
EPS deflated	*261.3*	*206.S*
I)ividends per share (cents)	180.0	141.0
Dividend deflated	*123.7*	*102.0*
Total assets	16,550	14,951
Total assets deflated	*11,309*	*HKH20*

Historical summaries should assist shareholders to answer such questions as: Is growth being achieved in excess of the rate of inflation? Is the growth in all segments of the business? What is the di\idend cover over the past five years? Is the change in turnover and profitabilit) constant or fluctuating?

Given the usefulness of the historical summaries, this is an area that requires a standard approach of the kind provided for segmental reporting. Without such a standard, the information may be unavailable or partially presented, e.g. it may disclose profit and loss data, but no balance sheet data to assess the rate of change in assets and rates of return.

28.5 Vertical analysis - common size statements

Vertical analysis concentrates soleh on one year's financial statements, rather than comparing a number of years. Common size statements express all items in each financial statement as a percentage of a selected figure. For instance, all items in the profit and loss account can be expressed in terms of turnover; and all items in the balance sheet can be expressed in terms of capital employed or total shareholders' funds.

The advantages of vertical analysis are as follows:

- Common size statements allow comparisons between companies of different sizes. I lowcvcr, like ratio analysis, particular care should be taken to ensure the comparison of like companies with like.
- The balance sheet will identify changes in financial structure relative to the total capital

Copyrighted material

emplo\ed or total shareholders' funds. The profit and loss account will identify changes in expenses relative to turnover.

As all figures are expressed as annual percentages, this will redress man> of the distortions of inflation. However, different financial statement items might be affected by dilTcrcnt specific rates of inflation.

The disadvantages are as follows:

Accounting policies might distort changes in financial structure and expenditure.

Common size statements eliminate the concept of different-sized companies so that comparison is possible. I low ever, the actual size of a compam determines the specific risks to which the company is subject.

To illustrate common size statements, the 2003 balance sheet and profit and loss accounts for Jl) Wetherspoon pic are analysed below. The balance sheet expresses all items in terms of shareholders' funds, while the profit and loss account expresses all items in terms of turnover.

JD Wether spoon

Consolidated profit ami loss account for theyear ended 31 July 2003

	2003	*Calculations*	*"n*
Turnover from continuing operations	730,913	730,913/730,913	100
(lost of sales	(621,894)	(621,894)7730,913	(85.1)
Gross profit	109,019	109,019/730,913	**14.9**
Administrative expenses	(34,036)	(34,036)/730,913	(4.7)
Operating profit	74,9X3	74,983/730,913	10.2
Loss on disposal of tangible assets	(3,688)	(3,688)/730,913	(0-5)
Net interest payable	(18,844)	(18,844)/730,913	(2.6)
Profit on ordinary activities before tax	52,451	52,451/730,913	7.1
'lax on profit on ordinary activities	(18.407)	(18,407)/730,9I3	*(2.5)*
Profit on ordinan activities after tax	34,044	34,044/730,913	4.6
Dividends	(7,434)	(7,434)/730,913	(1.0)
Retained profit lor the year	26,610	26,610/730,913	3.6

Balance sheet at 31 July 2003

	2003 £000	*Cumulations*	*"«*
Fixed assets			
Tangible assets	773,823	773,823/318,628	242.9
	773,823	773,823/318,628	242.9
Current assets			
Stocks	9,64)1	9,601/318,628	3.0
Debtors due after more than one vear	8.44S	8,448/318,628	2.7
Debtors due within one year	9,017	9,017/318,628	2.8
Imcstmcnis	301		

Copyrighted material

PAS-score: performance analysis score

Ta filer adapted the Z-scorc technique to develop the PAS-score. The PAS-scorc evaluates company performance relative to other companies in the industry and incorporates changes in the economy.

The PAS-score ranks all company Z-scores in percentile terms, measuring relative performance on a scale of 0 to 100. A PAS-score of A* means that 100 - A*"o of the companies have scored higher Z-scores. So, a PAS-score of 80 means that only 20% of the companies in the comparison have achieved higher Z-scores.

The PAS-score details the relative performance trend of a company over time. Any downward trends should be investigated immediately and the management should take appropriate action. For other danger signals see I lolmes and Dunham.[4]

SMEs and failure prediction

The effectiveness of applying a failure prediction model is not restricted to large companies. This is illustrated by research [10] conducted in New Zealand where such a model was applied to 185 SMKs and found to be useful. As with all models, it is also helpful to refer to other supplementary information that may be available, e.g. other credit reports, credit managers' assessments, trade magazines.

28.7 H-scores

An {{-score is produced by Company Watch to determine overall financial health. The H-score is an enhancement of the Z-score technique in giving more emphasis to the strength of the balance sheet. The Company Watch system calculates a score ranging from 0 to 100 with below 25 being in the danger zone. It takes into account profit management, asset management and funding management using seven factors - these are profit from the profit and loss account, three factors from the asset side of the balance sheet, namely, current asset cover, stock and debtor management and liquidity; and three factors from the liability side of the balance sheet, namely, equity base, debt dependence and current funding.

The factors are taken from published financial statements which makes the approach taken by the ASB to bring off balance sheet transactions on to the balance sheet particular!) important.

A strength of the H-score is that it can be applied to all sectors (other than the financial sector) and there is clear evidence that it can predict possible failures, e.g. the model indicated that Kuropean Home Retail (the parent company of Farcpack, the Christmas hamper company) was at risk as far back as 2001 when its H-score was nine.

The ability to chart each factor against the sector avenge and to twenty-five level criteria over a five-year period means that it is valuable for a range of user needs from trade creditors considering extending or continuing to allow credit to potential lenders and equity investors and the big four accounting firms in reviewing audit risk. The model also has the ability to process *what-ifs\ This is referred to in an article by Maggie L'rry, who gives as an example the fact that the impact on the H-score can IK measured for a potential rights issue which is used to repay debt. She states:

> That is a feature which Paul \Yoodlc\, a director of Postern, the group that provides company doctors for distressed companies, also finds useful. If a company is in trouble, the H score call be used to show exactly what needs to be done to sort it out."

Copyrighted material

- How do customers sec us? (customer perspective)
- What must we excel at: (internal perspective)
- Can we continue to improve and create value? (innovation and learning perspective)
- How do we look to shareholders? (financial perspective).

There is nothing particular!) new in the perspectives. Customers and staff are invariably referred to by the chairman in the annual report as important contributors to the company's success. The difference that the balanced storecard approach makes is to raise awareness that the perspectives are interdependent and that management performance can be appraised on more than just the bottom line. Of course, the bottom line needs to be healthy for a company to be successful, but it does not exist in isolation; other important factors affect long-term health.

28.12 Valuing shares of an unquoted company- quantitative process

The valuation of shares brings together a number of different financial accounting procedures that we have covered in previous chapters. The assumptions may be highly subjective, but there is a standard approach. This involves the following:

- Estimate the maintainable income flow based on earnings defined in accordance with the IIMR guidelines, as described in Chapter 25. Normally the profits of the past fi\e years are used, adjusted for any known or expected future changes.
- Estimate an appropriate dividend yield, as described in Chapter 27, if valuing a minority holding; or an appropriate earnings yield if valuing a majority holding.
- Make a decision on any adjustment to the required yields. For example, the shares in the unquoted company might not be as marketable as those in the comparative quoted companies and the required yield would therefore be increased to reflect this lack of marketability; or the balance sheet might not be as strong with lower current/acid test ratios or higher gearing, which would also lead to an increase in the required yield.
- Calculate the economic capital value, as described in Chapter .*, by applying the required vield to the income flow.
- Compare the resulting value with the net realisable value (NRV), as described in Chapter 4, when deciding what action to take based on the economic \alue.

EXAMPLE • The Doughnut Lid is an unlisted company engaged in the baking of doughnuts. The balance sheet of the Doughnut Ltd as at 31 December 20X4 showed:

	£000	£000
Freehold land		KM)
Non-current assets at cost	240	
Accumulated depreciation	40	
		200
Current assets	SO	
Current liabilities	(60)	
		20
		320

Copyrighted material

Share capital in £\ shares	300
Profit and loss account	20
	320
Estimated net realisable values:	
Freehold land	310
Fixed assets	160
Current assets	70

It achieved the following profit after tax (adjusted to reflect maintainable earnings) for the past five years ended 31 December:

	20X0	*20X1*	*20X2*	*20X3*	*20X4*
Maintainable earnings (£000)	36	40	44	38	42
Dividend payout history: Dividends	10%	10%	12%	12%	12%

Current yields for comparative quoted companies as at 31 December 20X4:

	Earnings yield	*Dividend yield*
	%	%
Ace Bakers pic	14	8
Busi-Bakc pic	10	**S**
Hard-to-beat pic	13	**S**

You arc required to value a holding of 250,000 shares for a shareholder, Mr Quick, who makes a practice of buying shares for sale within three years.

Now, the 250,000 shares represent an 83% holding. This is a majority holding and the steps to value it are as follows:

1 Calculate average maintainable earnings (in £000):

$$\frac{36{,}000 + 40{,}000 + 44{,}000 + 38{,}000 + 42{,}000}{\quad} \quad _$$

2 F.stimate an appropriate earnings yield:

$$\frac{14\% + 10\% + 13\%}{:} \quad _\text{I 1 M «} \;\; — \text{ 1Z..J /o}$$

3 Adjust the rate for lack of marketability by, say, 3% and for the lower current ratio by, say, 2%. Both these adjustments arc subjective and would be a matter of negotiation between the parties.

		%
Require yield	=	12.3
Lack of marketability weighting	=	3
Balance sheet weakness	=	_2_
Required earnings yield		17.3

The adjustments depend on the actual circumstances. For instance, if Mr Quick were intending to hold the shares as a long-term investment, there might be no need to increase the required return for lack of marketability.

Copyrighted material

4 Calculate share value:

(£40,000 x 100/I7.3)/300,000 = 77p

5 Compare with the net realisable \alues on the basis that the company were to IK liquidated:

Net realisable values = 70,000 + 160,000 + 310,000	=	540.0(H)
l<ess; Current liabilities		60,000
		4X0,000
Net asset value per share = £480,000/300,000	=	£1.60

The comparison indicates that, on the information we have been given, Mr Quick should acquire the shares and dispose of the assets and liquidate the company to make an immediate capital gain of 83p per share,

Let us extend our illustration b\ assuming that it is intended to replace the non-current assets at a cost of £20,000 per year out of retained earnings, if Mr Quick acquires the shares. Advise Mr Small, who has £10,000 to invest, how many shares he would be able to acquire-in the Doughnut Ltd.

There are two significant changes: the cash available for distribution as dividends will be reduced by £20,000 per year, which is used to replace fixed assets; and Mr Small is acquiring only a minority holding, which means that the appropriate valuation method is the dividend yield rather than the earnings yield.

The share value will be calculated as follows:

1 Kstimate income flow:

	i
Maintainable earnings	40,000
Less: Fixed asset investment	20,000
Cash available for distribution	20,000

Note that we are here calculating not distributable profits, but the available cash How.

2 Required dividend yield:

	%
Average dividend yield	8
Lack of negotiability say	2
Financial risk, say	1.5
	11.5

3 Share value:

£20,000 / 300,000 * [00 / 11.5 = P

At this price it would be possible for Mr Small to acquire (£10,000/5Sp) = 17,241 shares.

Copyrighted material

There is an increasing wealth of financial and narrative disclosures to assist investors in making their investment decisions. There are external data such as the various multivariate Z-scorcs and I I-scores and professional credit agency ratings; there is greater internal disclosure of financial data such as TSR and K\'-\ data indicating how well companies have managed value in comparison with a peer group and of narrative information such as the OFR, statements of business risk and the Value Platform approach to explaining the key drivers to increased shareholder value; and there will increasingly be easier access to companies[1] financial data through the web.

Literature search of qualitative factors which can lead to improved or reduced valuations

There is an interesting research report[1,] investigating the nature of SMIL intangible assets in which the researchers have reported the following:

- Factors identified in the literature as enhancing achieved price: transportable business with a transferable customer base; provides attractive lifestyle for new owner; non-cancellable service agreements and beneficial contractual arrangements; unexploited property situations; synergistic and cost-saving benefits; under-exploited brands and products; customer base providing cross-selling opportunities; competitor elimination, increased market share; complementary product or service range; market entry - quick wa> of overcoming entry barriers; buy into new technology; access to distribution channels; and non-competition agreements.
- Factors identified in the literature as diminishing achieved price: confused accounts; poor housekeeping, doubtful debts, under-utilised equipment, outstanding litigation, etc.; over-dependence upon owner and kev individuals; over-dependence on small number of customers; unrelated side activities; poor or out-of-date company image; long-term contracts about to finish; poor liquidity; poor performance; minority and *mess* ownership structures; inability to substantiate ownership of assets and uncertainties surrounding liabilities.

Not all of these satisfy the criteria for recognition in annual financial statements.

28.14 Shareholder value analysis (SVA)

Rappaport[ls] identified a number of reasons whv there has been a growing interest in shareholder value analysis:

- a belief that takeovers are based on undervalued assets;
- a belief that accounting measures (e.g. KI'.S) are unrelated lo share value;
- wider reporting of returns to shareholders;
- wider adoption and endorsement;
- the linkage of executive rewards to shareholders' returns.

Copeland *el al.*[v>] argued that 'managers at both business-unit and corporate levels need to broaden their conceptions of strategy; they need to manage value*. Mills explained that 'tin-pursuit of such an approach involves moving the focus of attention away from simply looking at short-term profits to a longer-term view of value creation'.[2"]

Essentially, SVA discounts forecasted cash flows, factors in a terminal value for the period beyond the forecast period, and adjusts for the value of debt. Rappaport proposed a seven value-driver approach (which was adopted by Mills *el ul.*[!l]) based on:

Copyrighted material

- sales growth,
- operating margin,
- fixed capital investment,
- working capital investment,
- cash taxes,
- planning period,
- cost of capital.

There are several other variations for determining wealth. Two of these measures[22] are:

Market Value Ail Jed (WW) - the difference between total market value and invested capital (i.e. the difference between what investors can take out of a business and what they put in).

Economic Value Added (EVA) - this is the wealth a company creates each year as measured by net income from operations less the cost of capital needed to generate thai income. Essentially, MVA is the valuation of all future annual F.VAs.

The strength of the MYA/KVA framework is that it "improves a company's focus on the maximisation of shareholder value ... [and| discourages new investments that are likely to earn inadequate rates of return while encouraging periodic culling of existing assets*.[23]

28.15 Measuring and reporting values in the annual report

28.15.1 Shareholder value (SV)

It has been a longstanding practice for analysts to arrive at shareholder value of a share by calculating the internal rate of return <IRR"o) on an investmeni from the dividend stream anil realisable value of the investment at date of disposal, i.e. taking account of dividends received and capital gains. However, it is not a generic measure in that the calculation is specific to each shareholder. The reason for this is that the dividends received will depend on the length of period the shares are held and the capital gain achieved will depend on the share price at the date of disposal and, as we know, the share price can move significantly even over a week.

For example, consider the SV for each of the following three shareholders, Miss Rapid, Mr Medium and Miss Undecided, who each invested £10,000 on 1 January 20X1 in Spacemobile Ltd which pays a dividend of £500 on these shares on 31 December each year. Miss Rapid sold her shares on 31 December 20X2. Mr Medium sold his on 31 December 20X4, whereas Miss Undecided could not decide what to do with her shares. The SY for each shareholder is as follows:

Shareholder	Date-acquired	Investment at cost	Dividends amount (total)	Dale of disposal	Sale procee	IRR%
Miss Rapid	1.1.20X1	10,000	1,000	31.12.20X2	11,000	10%*
Mr Medium	LI.20X1	10,000	2,000	31.12.20X4	15,000	15%
Miss Undecided	1.1.20X1	10,000	2,000	undecided		

*((500 x .9091) + (11,500 x .8265)) - 10,000 = 0

We can see that Miss Rapid achieved a shareholder value of 10% on her shares and Mr Medium, by holding until 31.12.20X4, achieved an increased capital gain raising the SY to 15%. We do not have the information as to how Miss Rapid invested from 1.1.20X3 and so

Copyrighted material

Why increase risk reporting in annual reports?

Knhanccd information about what companies do to assess and manage key business risks of all types will:

- provide practical forward-looking information;
- reduce the cost of capital;
- encourage better risk management;
- help ensure the equal treatment of all investors; and
- improve accountability for stewardship, investor protection and the usefulness of financial reporting.

What should a statement of business risk include?

- Identification: a company should identify and prioritise its key risks.
- Risk management: a company should describe the actions it has taken to manage each of the identified risks.
- Measurement: the company should identify how each risk is measured.

What should preparers consider when preparing the statement of business risk?

Preparers need to ensure that the information satisfies a range of qualitative characteristics (e.g. relevant, reliable); is forward-htoking; is suitable for users; is clear with respect to time-scales; and is not too commercially sensitive.

28.16.2 *Inside Out: Reporting on Shareholder Value*

In 1W) the ICAKW produced a report, *Xo Surprises: The ('use for Better Risk Reporting* which recognised the need for management to disclose their strategies and how the) managed risk - the intention was not to encourage profit smoothing but rather a better management of risk and a better understanding by investors of volatility.

In the same year it produced a discussion paper, *Financial Performance: Alternative Views of the Bottom Lim* which, whilst appreciating that the financial performance of a business was best represented by the change in the net present value of its expected future cash (lows, recognised that such changes were uncertain. This led to the recognition that there was a need for more narrative disclosures and performance indicators.

In the same year the ICAKW produced a discussion paper. *Inside (hit: Reporting on Shareholder I 'a/ue,* which focused on improved transparency with a more open disclosure by management of their strategies, and more forward looking disclosures, particularly identifying the information which they considered important in making their decisions and the indicators that would IK most useful in assessing their effective implementation.

28.16.3 Value platform

There is an increasing recognition that investors need to know the drivers which create and maintain corporate wealth in the form of net present value of future cash flows. PwC have carried out research which indicates that there is broad agreement on the constituents of a company's value platform. The constituents are six intangible assets, or key drivers, namely: innovation, brand, customers, supply chain efficiency, human capital and reputation. Traditional financial reporting has not generally included any of these in the balance sheet

Copyrighted material

28.17.1 How are ratings set?

The credit agencies tale a broad range of internal company and external factors into account.

Internal company factors may include:

- an appraisal of the financial reports to determine:
  - trading performance, e.g. specific financial targets such as return on equity and return on assets; earnings volatility; past and projected performance; how well a company has coped with business cycles and severe competition
  - cash flow adequacy, e.g. KDITDA interest cover; KHIT interest cover; free operating cash flow
  - capital structure, e.g. gearing ratio; debt structure; implications of oil balance sheet financing
  - a consideration of the notes to the accounts to determine possible adverse implications, e.g. contingent liabilities, heavy capital investment commitments which may impact on future profitability, liquidity and funding requirements;
- meetings and discussions with management;
- monitoring expectation, e.g. against quarterly reports, company press releases, profit warnings;
- monitoring changes in company strategy, e.g. changes to funding structure with company buyback of shares, new divestment or acquisition plans and implications for any debt covenants.

However, experience with companies such as Knron makes it clear that off balance sheet transactions can make appraisal difficult even for professional agencies if companies continue to avoid transparency in their reporting.

Kxternal factors may include:

- growth prospects, e.g. trends in industry sector; technology possible changes; peer comparison;
- capital requirements, e.g. whether company is fixed capital or working capital intensive; future tangible fixed asset requirements; R&I) spending requirements;
- competitors, e.g. the major domestic and foreign competitors; product differentiation; what barriers there are to entry;
- keeping a watching brief on macrocconomtc factors, e.g. environmental statutory levies, tax changes, political changes such as restrictions on the supply of oil, foreign currency risks;
- monitoring changes in company strategy, e.g. implication of a company embarking on a heavy overseas acquisition programme which changes the risk profile, e.g. difficulty in management control and in achieving synergies, increased foreign exchange exposure.

28.17.2 What impact does a rating have on a company?

The rating is a risk measure and influences decisions as to whether to grant credit and also as to the terms of such credit, e.g. if a company's rating is downgraded then lenders may refuse credit or impose a higher interest rate or set additional debt covenants.

The ratings are taken seriously by even the largest multinational because they are perceived by investors as possibly adversely affecting access to capital markets. Sony, for example, addressed this concern when it commented in its 2004 Annual Report:

Copyrighted material

optimistic in setting inventory obsolescence and accounts receivable pro\isions and have a lower expectation of the likelihood of contingent liabilities crystallising.

28.17.6 Impact on share price

If there is a risk of bank covenants being breached there can be a significant adverse effect on the share price, e.g. the Jarvis share price tumbled 24"o, wiping *£M* million off the engineering services group's stock market value as a result of fears that bank covenants would be breached.*'[6]

28.18 Aggressive earnings management

In 2001, before the collapse of Enron, there was a consensus amongst respondents to the UK Auditing Practices Hoard Consultation Paper *Aggressive Earnings Management* that aggressive earnings management was a significant threat and actions should be taken to diminish it. It was considered that aggressive earnings management could occur when there was a need to meet or exceed market expectations and w hen directors* and managements* remuneration were linked to earnings - also, but to a lesser extent, to understate profits to reduce tax liabilities or to increase profits to ensure compliance with loan covenants.

In 2004, as a part of the *Informal ion for Belief Markets* initiative, the Audit and Assurance Faculty commissioned a survey[2'] to check whether views had changed since 2001. This showed that the vulnerability of corporate reporting to manipulation is perceived as being always with us but at a lower level following the greater awareness and scrutiny by non-executive directors and audit committees.

The *analysts* interviewed in the survey believed the potential for aggressive earnings management varied from sector to sector, e.g. in the older, more established sectors followed by the same analysts for a number of years, they believed that company management would find it hard to disguise anything aggressive even if they wanted to - however, this was not true of newer sectors (e.g. IT) where the business models may IK imperfectly understood.

Whilst analysts and journalists tend to have low confidence in the reported earnings where there are pressures to manipulate, there is a research report[2]* which paints a rather more optimistic picture. This report aimed to assess the level of confidence investors had in different sources of company information, including audited financial information, when making investment decisions. As far as audited financial information was concerned, the levels of confidence in UK audited financial information amongst UK and US investors remained very high, with 87"t» of UK respondents having either a 'great deal' or a 'fair amount[1] of confidence in UK audited financial information.

The audit profession continues to respond to the need to contain aggressive earnings management. This is not easy because it requires a detailed understanding not only of the business but also of the process management follow when making their estimates. The proposed ISA 540 Revised, *Auditing Accounting Estimates, including Fair I'alue Accounting Estimates, and Related Disclosures** requires auditors to exercise greater rigour and scepticism and to be particularly aware of the cumulative effect of estimates which in themselves fall within a normal range but which, taken together, are misleading.

Copyrighted material

score falls by 40% or more m any one year, immediate investigations must be made to identify and rectify the cause of the decrease in Z-score. If the score falls by 40% or more for two years running, the company is unlikely to survive.

Compare and contrast Robertson's Z-score with:

(i) Altman's Z-score;

(ii) Tafflers Z-score and PAS-score.

4 (a) Explain how ROI. ROCE and EVA are calculated.

(b) Compare ROI. ROCE and EVA as a means of improving company performance.

5 Explain what you would look for when examining a company's common-sized balance sheet.

6 Discuss the difficulties when attempting to identify comparator companies for benchmarking as. for example, when selecting a TSR peer group.

7 The details given below are a summary of the balance sheets of six public companies engaged in different industries;

	A	'<	C	D	E	F
	%	%	%	%	%	%
Land and buildings	10	2	26	24	57	5
Other non-current assets	17	I	34		13	73
Inventories and work-in-progress	44		22	55	16	I
Trade receivables	6	77	15	4	1	13
Other receivables	II			-	2	5
Cash and investments	12	20	3	9	1 i	3
	100	100	100	100	100	100
		8	C	D		
Capital and reserves	37	5	62	58	55	50
Creditors: over one year	12	::	4	13	6	25
Creditors: under one year						
Trade	32	85	34	14	24	6
Other	16	5		14	15	II
Bank overdraft	3			1		8
Total capital employed	100	100	100	100	100	ICO

The activities of each company are as follows:

1 Operator of a chain of retail supermarkets.

2 Sea ferry operator.

3 Property investor and house builder. Apart from supplying managers, including site management, for the house building side of its operations, this company completely subcontracts all building work.

4 A vertically integrated company m the food industry which owns farms, flour mills, bakeries and retail outlets.

5 Commercial bank with a network of branches.

6 Contractor in the civil engineering industry.

Copyrighted material

Question 3

Liz Collier runs a small delicatessen. Her profits m recent years have remained steady at around £21.000 per annum. This type of business generally earns a uniform rate of net proftt on sales of 20%.

Recently, Liz has found that this level of profitability is insufficient to enable her to maintain her desired lifestyle. She is considering three options to improve her profitability.

Option I Liz will borrow £10.000 from her bank at an interest rate of 10% per annum, payable at the end of each financial year. The whole capital sum will be repaid to the bank at the end of the second year. The money will be used to hire the services of a marketing agency for two years. It is anticipated that turnover will increase by 40% as a result of the additional advertising.

Option *1* Liz will form a partnership with Joan Mercer, who also runs a local delicatessen. Joan's net profits have remained at £12.000 per annum since she started in business five years ago. The sales of each shop in the combined business are expected to increase by 20% in the first year and then remain steady. The costs of the amalgamation will amount to £6.870, which will be written off in the first year. The partnership agreement will allow each partner a partnership salary of 2% of the revised turnover of their own shop. Remaining profits will be shared in the ratio of Liz 3/5, Joan 275.

Option 3 Liz will reduce her present sales by 80% and take up a franchise to sell Nickson's Munchy Sausage. The franchise will cost £80,000. This amount will be borrowed from her bank. The annual interest rate will be 10% flat rate based on the amount borrowed. Sales of Munchy Sausage yield a net profrt to sales percentage of 30% Sales are expected to be £50.000 in the first year, but should increase annually at a rate of 15% for the following three years then remain constant

Required:

(a) Prepare a financial statement for Liz comparing the results of each option for each of the next two years.
(b) Advise Liz which option may be the best to choose.
(c) Discuss any other factors that Liz should consider under each of the options.

Question 4

The directors of Chekam pic. a large listeO company, are engaged in a policy of expansion. Accordingly, they have approached the directors of Meela Ltd. an unlisted company of substantial size, in connection with a proposed purchase of Meela Ltd.

The directors of Meela Ltd have indicated that the shareholders of Meela Ltd would prefer the form of consideration for the purchase of their shares to be in cash and you are informed that this is acceptable to the prospective purchasing company. Chekani pic.

The directors of Meela Ltd have now been asked to state the price at which the shareholders of Meela Ltd would be prepared to sell their shares to Chekani pic. As a member of a firm of independent accountants, you have been engaged as a consultant to advise the directors of Meela Ltd in this regard.

In order that you may be able to do so. the following details, extracted from the most recent financial statements of Meela. have been made available to you.

Copyrighted material

Meela Ltd accounts for year ended 30 June 20X4

Balance sheet *extracts as at 30 June 20X4.*

	£000
Purchased goodwill unamortised	15.000
Freehold property	30.000
Plant and machinery	60.000
Investments	15.000
Net current assets	12,000
10% debentures 20X9	(30.000)
Ordinary shares of £1 each (cumulative)	(40.000)
756 preference shares of £1 each (cumulative)	(12.000)
Share premium account	(20,000)
Retained earnings	(30,000)

Meela Ltd disclosed a contingent liability of £3.0m in the notes to the balance sheet

(Amounts in brackets indicate credit balances.)

Income statement extracts for rhe *year ended 30 June 20X4:*

	£000
Profit before interest payments and taxation and exceptional items	21.000
Exceptional items	1,500
Interest	(3.000)
Taxation	(6.000)
Dividends paid - Preference	(840)
- Ordinary	(3,000)
Retained profit for the year	9,660

(Amounts in brackets indicate a charge or appropriation to profits.)

The following information is also supplied:

(i) Profrt before interest and tax for the year ended 30 June 20X3 was £24.2 million and for the year ended 30)une 20X2 it was £30.3 million.

(ii) Assume tax at 30%.

(iii) Exceptional items in 20X4 relate to the profit on disposal of an investment in a related company. The related company contributed to profit before interest as follows:

To 30 June 20X4	£0
To 30 June 20X3	£200.000
To 30 June 20X2	£300.000

(iv) The preference share capital can be sold independently, and a buyer has already been found. The agreed purchase price is 90p per share.

(v) Chekani pic has agreed to purchase the debentures of Meela Ltd at a price of £ 110 for each £100 debenture.

(vi) The current rental value of the freehold property is £4.5 million per annum and a buyer is available on the basis of achieving an 8% return on their investment.

(vii) The investments of Meela Ltd have a current market value of £22.5 million.

(viii) Meela Ltd is engaged in operations substantially different from those of Chekani pic The most recent financial data relating to two listed companies that are engaged in operations similar to those of Meela Ltd are:

Copyrighted material

	NV per share	*Market price per share*	*PIE*	*Net dividend per share*	*Cover*	y.ew
Ranpar pic	C\	£3.06	11.3	12 pence	2.6	4.9
Menner pic	50p	£1.22	8.2	4 pence	3.8	4.1

Required:

Write a report, of approximately 2,000 words, to the directors of Meela Ltd, covering the following:

(a) Advise them of the alternative methods used for valuing unquoted shares and explain some of the issues involved in the choice of method.
(b) Explain the alternative valuations that could be placed on the ordinary shares of Meela Ltd.
(c) Recommend an appropriate strategy for the Board of Meela Ltd to adopt in their negotiations with Chekani pic.

Include, as appendices to your report, supporting schedules showing how the valuations were calculated.

Question 5

R. Johnson inherited 810.000 £ I ordinary shares in Johnson Products Ltd on the death of his uncle in 20X5. His uncle had been the founder of the company and managing director until his death. The remainder of the issued shares were held in small lots by employees and friends, with no one holding more than *4%.*

R. Johnson is planning to emigrate and is considering disposing of his shareholding. He has had approaches from three parties, who are:

1 A competitor Sonar Products Ltd. Sonar Products Ltd considers that Johnson Products Ltd would complement their own business and they *are* interested in acquiring all of the 810.000 shares. Sonar Products Ltd currently achieve a post-tax return of 12.5% on capital employed.

2 Senior employees. Twenty employees are interested in making a management buyout with each acquiring 40.500 shares from R. Johnson. They have obtained financial backing, in principle, from the company's bankers.

3 A financial conglomerate - Divest pic. Divest pic is a company that has extensive experience of acquiring control of a company and breaking it up to show a profit on the transaction. It is their policy to seek a pre-tax return of 20% from such an exercise.

The company has prepared draft accounts for the year ended 30 April 20X9. The following information is available.

(a) Past earnings and distributions:

Year ended 30 April	*ProliU(Loss) after tax*	Gross *diwjenck declared*
.	%	
20X5	79.400	n
20X6	(27.600)	
20X7	56.500	4
20X8	88.300	r;
20X9	97,200	6

Copyrighted material

The non-current assets of NX comprise:

	Cost	*Depredation*	*Net*
	$	*$*	**S**
Property	2.137.500	262.500	1.875.000
Equipment	1,611,855	515.355	1.096.500
Motor vehicles	696.535	298.515	398.020
	4,445.890	1,076.370	3.369.520

NX has grown rapidly since its formation in 2000 by Albert Bell and Candy Dale who are currently directors of the company and who each own half of the company's issued share capital. The company was formed to exploit knowledge developed by Albert Bell. This knowledge is protected by a number of patents and trademarks owned by the company. Candy Dale's expertise was in marketing and she was largely responsible for developing the company's customer base. Figures for turnover and profit after tax taken from the income statements of the company for the past three years are:

	Turnover	*Profit after tax*
	$	*$*
Profit for 2004	8.218.500	1.031.000
Profit for 2005	10.273,100	1.288,720
Profit for 2006	11.414.600	991.320

NX's property has recently been valued at $3,000,000 and rt is estimated that the equipment and motor vehicles could be sold for a total of $1,568,426. The net realisable values of inventory and receivables *are* estimated at $400,000 and $580,000 respectively. It is estimated that the costs of selling off the company's assets would be $101,000.

The 8% loan note is repayable at a premium of 30% on 31 December 2006 and is secured on the company's property. It is anticipated that it will be possible to repay the loan note by issuing a new loan note bearing interest at I \% repayable in 2012.

As directors of the company Albert Bell and Candy Dale receive annual remuneration of $99,000 and £74.000 respectively. Both would cease their relationship with NX because they wish to set up another company together. Harry would appoint a General Manager at an annual salary of $ 120.000 to replace Albert Bell and Candy Dale.

Investors in quoted companies similar to NX are currently earning a dividend yield of *6%* and the average PE ratio for the sector is currently 11. NX has been paying a dividend of *7%* on its common stock for the past two years.

Ownership of the issued common stock and preferred shares is shared equally between Albert Bell and Candy Dale.

Harry wishes to purchase a controlling interest in NX.

Required

(a) On the basis of the information given, prepare calculations of the values of a preferred share and an ordinary share in NX on each of the following bases:
    (i) net realisable values;
    (ii) future maintainable earnings.
(b) Advise Harry on other factors which he should be considering in calculating the total amount he may have to pay to acquire a controlling interest in NX.

(The Association of International Accounronts)

Copyrighted material

Wc saw in the previous chapter that various online subscription databases such as Datastrcam, FAME and OncSource are available, where selected financial reports have been formatted by each of the databases into a standardized format. This allows subscribers to select peer groups and search across a variety of variables. Students having access to such databases at their own institution may carry out a range of assignments and projects such as selecting companies suitable for takeover based on stated criteria such as ROCK, °o Sales and Earnings growth.

At an individual compam level we find that most companies ha\e a website to communicate all types of information to interested parties including financial information. Stakeholders or other interested parties can then download this information for their own particular use. Most of the financial information is in the format of PDF files created by a software program called Adobe" Acrobat". This program is used for the conversion of all their documents, which make up the financial information contained within the Annual General Reports, into one document, a PDF file, for publication on the Internet. This PDF file can be formatted to include encryption and digital signatures to ensure that the document cannot be changed. In order for the user to be able to read the PDF files a special software program called Adobe Reader* needs to be downloaded from the Adobe website www.adobe.com

Other formats used to display company information are often in Hyper Text Mark-up Language (HTML). HTML mainly defines the appearance of the information on the computer screen such as placement, colour, font etc. Hut even (hough it is helpful to be able to download the file and read or print the financial information on screen or on paper, when calculations need to be performed all the needed information needs to be re-typed unless, as with a few companies, the data is also in Excel format. The previous chapters on interpretations of company financial information would give some indication of the time it takes to do this. When we need to consider and evaluate multiple years of the company's financial results or when we wish to evaluate a whole category of companies then this re-keying becomes a time consuming task. Any of the re-keyed information can contain errors, which makes the information produced less reliable.

Other interested parties or stakeholders such as investment analyst, merchant bankers, banks, regulator) bodies and government taxation departments also need to re-key all the information or request information in specific electronic formats so that the re-keying is kept to a minimum. This is a very costly process which has led to the development of a special business reporting language called cXtcnsiblc Business Reporting Language or XBRL.

Accountants will become increasingly involved with its development and this chapter provides a brief oversight of a development that is going to make a major impact on the avail-

ability of financial data for comparative analysis. Just as the IASB is making an impact on the uniformity of accounting policies, XBRL will make an impact on the uniformity in the presentation of data on the Internet.

In this Chapter we will consider:

- What is XBRL
- What it is not
- How can it be used
- What is needed to use XBRI.
- Progress of development
- Companies currently using XBRI.

29.2 What is XBRL?

XBRL is based upon the extensible Mark-up Language or XML. XML itself is an extension of the Hyper Text Mark-up Language (HTML) which controls the format and display of web pages. HTML is extensively used in website creation for the purposes of display.

XML goes one step further, it allows for 'tags' to be created which convey identification and meaning of the data within the tags. Thus instead of looking at format and presentation, the XML code looks for the text displayed within the code. This XML language is a developed by The World Wide Web Consortium (W3C). (www/w3/org/Consortium/)

The following text using HTML would have tags that describe the format and placement of the text.

Assets 850,000
Liabilities S25,000

Assets S5(),000
Liabilities S25,OO0

where instructs the item to be printed on the screen (and also where on the screen or in what format) and instructs the item to be displayed in bold print. The and the denotes the end of the commands.

The user can design the tags used in XML. For example:

Assets S50,U00 in this example of XML would be written as
<Assets>S50,000</Asscts> and similarly for Liabilities S25,000 the XML code would be <Liabilities>$50,000</Liabilities>

The computer program reading the XML code would thus know that the value found within the tags relates to Assets.

How the layout of a report is specified

The bold in the print and the way in which the financial report is set out would be formatted through the use of a 'Stylesheet[1] where the display is pre-designed. Stylesheets can be used again and again or a variety of different stylesheets can be used for different purposes. For example, the information presented in a full annual report would be based on a company's same stylesheet year after year whilst that for a half-yearly concise report to the Shareholders might well be different each year.

Copyrighted material

How tags can be defined for each regulatory jurisdiction

XBRL has taken XML one step further and designed 'tags' based upon the common financial language used. For example, the term ASSETS or LIABILITIES is a common term used in financial reports even though the calculations or valuations and the definitions used in different accounting standards may be dependent on those accounting standards applicable to the company.

Tags can thus be developed for a particular set of Accounting Standards, e.g. International Accounting Standards, or specific to a country such as US GAAP

The location of XBRL tags

The XBRL tags are contained within a set of files. Other technical specifications are also required and those are found in set of files referred to as 'Schema', 'Label Linkbasc\ 'Presentation Linkbase\ and 'Calculation Linkbasc'. Within those riles are references, or variables, to other files and specifications as defined by XML protocols. The files are necessary to allow the computer to be able to combine all the language contained within the taxonomy with those files and then together to enable the operation of XBRL. Schemas for calculation and definitions of fields etc. are often used in programming. Schemas with these abstract meanings are kept separate as it is easier, and more efficient, for the main program to call upon schema files than to incorporate all variables in the main program. The table below provides a simplified listing of the elements.

The elements of the XBRL Specification

XBRL Specification and schema	Describes the architecture and structure of the XML references used in XBRL. A special XL schema has been constructed for XBRL to over-come connectivity problems in using the w3c xlink technology.
Taxonomies	Contains the meaning and presentation of the financial data elements; acts like a dictionary
Instance documents	The physical document in which the financial data is presented e.g. the Balance Sheet or Income Statement
Stylesheet	Different types of templates for the presentation of the financial data

{Source: Based on Ernst & Young, 2004 pp 21-22)

The latest version for the UK GAAP taxonomy was released in January 2007. The file can be downloaded from http://www.xbro.org/uk/Taxononiies/.

The taxonomies used around the world are all designed using the basic design principles set out by XNRL International. The design guide can be found at http://www.xbrl.org/ TaxononnGuidance/. The International Accounting Standards Board (1ASB) would thus have designed their taxonomy according to this guidance.

Each jurisdiction, or country, then links their taxonomy to the international taxonomy.

Also used is 'Global Common Data' (GCD) taxonomx, formulated in 2005. This tax-onomy was designed to incorporate commonly used terminology in the business community and from this the 'National Common Data* taxonomy (NCD) would then evolve. Some countries have specific terminology only used in their country/language which needs to be accommodated within the taxonomies. The advantage of using the GCD and the NCD is

Copyrighted material

that design principles arc adhered lo and the design and application of XBRI. then becomes internationally understandable even though there may be language differences.

The taxonomy developed by the IASB can be obtained from http://xbrl.isab.org. The current UK taxonotm was developed based on this and would have been extended to include items specifically used in the UK - refer to http://xbrl.org.

To illustrate how the UK GAAP may differ from the IASB's IFRS taxonomy compare the codes for the two examples listed below:

1. The XBRI. code for the IFRS Balance sheet item 'Inventories*

<loc xlink:href="ifrs-gp-2006-08-15.xsd#ifrs-gp_Invcntorics[M] xlink:labcl="ifrs-gp_Inventorics" xlink:type[=i]iocator" />

<presentationArc order = "2.0" use="optional** xlink:arcrole="http://\vww.xbrl.org/200.Varcrole/parent-child" xIink:from="ifrs-gp_AssctsCuirentPresentation" xlink:to="ifrs-gp_Inventorics" xlink:type = "arc" />

(Source: http://sbrl.iasb.(>rg/int/fr/ifrs/gp/2(M)6-08-15/ifrs-gp-2(MK)-«8-l5-prc-bs-classificd.xml accessed on 10 March 2007)

2. The XBRI. code for the UK GAAP Balance sheet item 'Stocks and Inventory'

<locxlink:type="locator"xlink:hrc^ 15.xsd#uk-gaap-pt_StocksInvcntory" x1ink:label="uk-gaap-pt_StocksInvcntory" xlink:titIc="Go down to: stockslnv" />

<prescntationArc xltnk:typc="arc" xlink:arcrole-"http://www-xbrl.org/2003/arcrole/parent-ehtld" xltnk:from = "uk-gaap-pt_CurrcntAssets" xlink:to = "uk-gaap-pt_StocksInvcntory" xlink:titIe=[u]Go down to: stockslnv" ordcr=[tt]l" use="optional" />

(Source: http://www.xbrl.org/uk/taxonomiesaccesscd on 10 March 2007)

This demonstrates the use of the different terminology in the UK but still referring to the xbrl.org 2003 taxonomy.

For a more extensive example to see how the code actually looks when read by humans, access the following link www.xbrl.org/FxampleI/

The XBRI. specifications and schemas and taxonomies go through a process of validations and approval by XBRL International. The taxonomies are specifically developed according to a specific accounting standard. E[;]or example the US GAAP taxononn is different from the Australian taxonomv or the UK GAAP taxonomy.

With the requirement to follow the International Financial Reporting Standards in most ihe individual country. Australian listed companies must use the Australian Accounting Standards that have been harmonised with IFRS from June 2005.

Copyrighted material

Figure 29.4

financial statement naming conventions is used to accomplish the mapping process and produce the instance document. For some of the software available see the listing at the end of this chapter.

See Figurc29.4 below for a summary of the four processes

29.6 Progress of XBRL development

Since the formation of XBRL as an independent organisation in 1999 in the USA, it only had only a dozen or so members then, membership and development of taxonomies has progressed. In December 20(H) membership had grown to around seventy organisations. In **February** 2001 the first IASB draft taxonom\ was released and UK XBRL was launched. In June 2001 XBRL was harmonised with new W3C recommendations and work on XBRL for the General Ledger was announced.

Also in 2001 countries such as Australia and Japan launched their jurisdictions and started working on taxonomies and other adoption work. Work did not only commence on the countries* own XBRL taxonomies but projects were also initiated by Regulators and Industry.

For example, the Australian Prudential Regulatory Authority (APRA), the government body that controls and regulates banking and superannuation funds in Australia, announced the adoption of XBRL for their data collections. APRA needs to collect regular data from more than 10,000 institutions. APRA has since developed a collection tool called D2A (direct to APRA) which reporting entities must use to submit their statutory returns.

Development of taxonomies is a time consuming task. Most of the early development was undertaken by volunteers and it takes time to develop and meet with other volunteers with a view to discus design issues and complete tasks. Considerable amount of the volunteer work was contributed by accounting professionals employed by the big accounting consultancy firms and by academics interested in developing the educational site of the XBRL project. Professional Accounting Associations also contributed by making meeting space available and having an 'in-house' contact and supporting XBRL projects in general communication with their members.

The adoption of International Accounting standards will make it easier for individual Jurisdictions to develop their 'harmonised' taxonomies. Jurisdictions are established by accounting professional in a particular country or organisation and the resulting taxonomy is then submitted to XBRL International for testing of correct usage of all the protocols applicable and for open comment to the community.

At the same time when the taxonomies were being developed, Software companies were also trying to keep pace with development of taxonomy builders and with software delivering all the needed mapping and production of instance documents. Software development is always subject to extensive testing and there is no difference in the case of XBRL. Validation requires a lot of testing for data integrity and for the software routines. There are now however a few commercial products available.

Development in the general ledger area is continuing and will probably be one of the most important developments for companies with consolidation requirements when multiple general ledgers arc involved. The general ledger specification has the advantage that organisational data is classified at the source as to which particular 'identity label' the transaction belongs. This means that classification decision with respect to XBRL names will have to be made at the Chart of Accounts level. This is very large task as the financial statements usually are concerned with aggregated data. For example the total for administration expenses in the Income Statement is usually made up b\ the aggregation of quite a number of different account classifications in the General Ledger. In order to develop the XBRL code for the General Ledger, decisions as to what constitutes the aggregate accounts needs to 1K based upon the relevant accounting standard. For example the Chart of Account structure for the disclosure of segmentation by product class or geographical areas, is distinctly different. The XBRL code also needs to reflect this. There is also the probability of an organisation changing its focus due to strategic decisions. The information systems must then also be adapted to reflect the change. This can be very costly.

The XBRL for the General Ledger may also bring great cost savings as data collection at source is automated and the extraction and processing of data into information can be achieved in a much shorter time. A compam such as General Electric has more than 150 general ledgers which are not compatible in use. XBRL has the potential to considerably streamline consolidation processes considerably.

This is not just restricted to the General Ledger for an organisation in one country; organisations with overseas subsidiaries or other global organisations can use the GL project even if the accounting standards (GAAPs) are different in the countries they operate in. For more information on the General Ledger taxonomy see http://www.xbrl.org/GLKevFeatures/ accessed 12/03/07.

29.7 Companies currently using XBRL

There are quite a number of organisations currently using XBRL for reporting purposes. For Example EDGAR* Online*, Inc. (NASDAQ; EDGR - News), a financial information

Copyrighted material

company specialising in making complex regulatory reporting by public companies actionable and easy to use, now offers US public company financial statements in XBRL. However, not all are commercial organisations either; some of the Professional Accounting Organisations also have applied XBRL to their annual reports.

The XBRL International website www .xbrl.org has an extensive listing of companies and authorities currently using XBRL; the reader is encouraged to investigate any of these further. A number of the links provided will lead to good discussions of the projects and demonstrate how XBRL is applied. Some of the links will also bring the reader to websites in languages other than Knglish and may be of particular interest to readers of this text living in these countries.

Individual country's jurisdictions can also be reached from the XBRL international website.

1 Discuss how an investor might benefit from Annual Reports being made available in XBRL

2 Explain how a body such as a tax authority might benefit from XBRL

3 Explain what you understand by taxonomy and mapping.

4 Explain the sue of stylesheets.

5 List the steps m the approval process for a taxonomy to be considered to have 'final' status. (Hint look at www.xbrl.org.)

Question I

In this chapter you were given an example of what Current Assets may look like in XBRL coding. Current Assets refers to a heading in the Financial Statements and is thus used as a TOTAL account (sometimes also referred to as a 'roll up to' account).

Required:
Construct your own XBRL coding to an item belonging to the current assets such as Inventory. (Hint: look at the taxonomy applicable in your jurisdiction on the xbrl.org website)

Question 2

List the steps in the approval process for a taxonomy to be considered to have 'final' status. (Hint look at wwwxbrl.org.)

Question 3

How does a country establish a 'jurisdiction'? Is your country listed as such? If not do you know of any activity in the XBRL area in your country?

Question 4

Visit the website www.us.kpmg.com/microsite

What other type of training courses in XBRL are listed? Attempt one of them and write a short summary of what you have learned.

Question 5

Find a company listed on the wvw.xbrl.org website as having accounts prepared with XBRL and write a brief summary about the company. See if you can also find information on the **company's own** website about the use of XBRL

Question 6

Visit www.microsoft.com and write a summary of Microsoft's involvement in XBRL.

Question 7 - For the adventurous!

Follow the link from www.microsoft.com/ofnce/solutions/xbrl/defaultmspx information page on 'Solutions for Financial Reporting' here you can follow the link www.microsoft.com/ office/solutions/xbrl/nextsteps.mspx and download the Office Tool for XBRL *Prototype.* There is also further information and a help-file for the demo.

The following websites were accessed.

wwu.adobe.com

www.w3.org/Q>nsortium/

http://w\\ w.xbrl.org/Kxamplel /

http://www.xbrl.org/FRTaxonomies/

http://www.xbrl.org/WhatIsXBRL/

hltp://www.us.jkpmg.com/microsite/xbrl/train/86/start.htm

http://www.xbrl.org

http://www.oracle.com/applications/financials/OracleGeneralI-edgerOS-1.pdr

http://www.xbrl.org.au/training.\S\Y\Vorkshop.pdf

http://www.microsoft.com/ot1ice/solutions.xbrl/default.mspx

http://www.ubmatrix.com/home/

http://www.semansys.com

http://\\ww.ptcchnolog\\eom/

Please note: All material accessed from XIJRI-.org is subject to Copyright^ 2002 XBRL International. All Rights Reserved.

Copyrighted material

PART 6

Accountability

In this chapter we consider:

Corporate governance - directors

- The need for corporate governance guidelines
- Corporate governance in different countries
- Corporate governance requirements
- UK Voluntary Code
- Directors* remuneration
- Influence of institutional investors.

Corporate governance - auditors

- Auditors report to shareholders
- Competence of the auditor - educational requirements
- Independence of the auditor
- Assessing quality of management performance.

30.2 The need for corporate governance guidelines

Where shares are widely held, and management of the company is delegated to directors who are not major shareholders of the company, there is a need lor corporate governance guidelines.

The 'theory[1] of listed companies is thai the shareholders own the company. However, there are too many shareholders to run the company, and they may not have the expertise or desire to run the company. So, the task of running the company is delegated to the directors. The 'duty' of the directors is to run the company in a way that maximises the long-term return to the shareholders (i.e. maximises the company's profit and cash How).

Corporate governance guidelines arc developed so that it can be seen whether the directors are maximising returns to shareholders, that business risk is set at a reasonable level, that a director or the board of directors do not become dominant to the detriment of the shareholders, and that the remuneration of the directors is reasonable.

Disclosure of this information is made in the company's annual financial statements. To ensure the reliability of this information, it must IK checked by an independent auditor. The national accounting bodies and the International Federation of Accountants provide ethical

rules and auditing standards which aim to ensure that auditors are competent to perform their work and have the appropriate independence from the audit client.

30.3 Corporate governance in different countries

There are four interesting correlations when considering the development of corporate governance requirements in different countries. These arc:

(a) the ratio of the value of listed companies to the country's gross domestic product (GDI*). The higher this ratio, the more developed are the corporate governance requirements;

(b) how widely the shares of listed companies are held. If a large number of financial institutions and individuals hold shares in listed companies, there is a greater need for corporate governance requirements;

(c) cultural considerations. The USA and the UK and its former colonics tend to have much more developed corporate governance requirements than other countries;

(d) the different levels of management in the organisation structures of companies.

We will consider each of these correlations below.

30.3.1 The ratio of the value of listed companies to the country's GDP (gross domestic product)

As we can see from Figure 30.1, the value of listed companies as a percentage of GDP varies between countries. The high percentages in the UK and US have been one of the reasons why there has been an early interest in corporate governance and transparency in those countries. In all countries, however, the growth of equity investment has meant the percentage has tended to increase over time, with a corresponding interest in greater transparency, corporate governance and investor education.

Figure 30.1 Domestic Market Capitalisation as a percentage of GDP

Note I: GDP is total for France, the Netherlands. Belgium and Portugal
Note 2: Ratio of combined Market Capitalisation of Nasdaq and NYSE to US GDP.
Source: London Stock Exchange.

30.3.2 How widely the shares in listed companies are held

The second factor influencing corporate governance requirements is how widely the shares in listed companies are held. In the USA and the UK, a large number of financial institutions and individuals hold shares in listed companies, so there is a greater need for corporate

governance requirements. In Japan and most European countries (except the UK) shares in listed companies tend to be held by a small number of banks, financial institutions and individuals. Where there are few shareholders in a company, they can question the directors directly, so there is less need for corporate governance requirements.

A further related factor is that US and UK companies tend to have a low gearing, so most of the finance is provided by shareholders. However, in other countries the gearing of companies is much higher, which indicates that most finance for companies comes from banks. If the majority of the finance is provided by shareholders, then there is a greater need for corporate governance requirements than if finance is in the form of loans where the lenders are able to stipulate conditions and loan covenants, e.g. the maximum level of gearing and action available to them if interest payments or capital repayments are missed.

30.3.3 Cultural

The third factor is cultural. It is apparent that the most detailed corporate governance requirements come from the USA, the UK and former UK colonies (Australia, Canada, Singapore, Malaysia, Hong Kong and South Africa).

30.3.4 Organisational structures

In the UK system there is just one level of management represented by a board of directors who may delegate to members of the board such functions as remuneration committee and audit committee membership. Corporate governance is achieved by the financial regulatory authorities requiring compliance with a voluntary code of conduct from the directors of listed companies.

Other countries have a two-tier system of management with a management (or executive) hoard responsible for the operational management of the company, and a supervisor) board which acts on an *ad hoc* basis, e.g. approving an important business transaction, and at the year-end when it receives the audit report, and the management report on the activities and dividend proposed b\ the management board and approves the financial statements and dividend distribution. This two-tier structure might be seen as providing a greater degree of control than the single-tier system and so there is less need for an imposed code of conduct.

30.3.5 Future developments

Corporate governance requirements are less developed in the European Union (KU) countries (except the UK) and Japan. What about the future? Developments in the EU Japan, China. Russia and other Kastern Bloc (former communist) countries are leading to a model of much wider ownership of shares (i.e. like the USA and the UK). For example, in 2006 the market capitalisation as a percentage of GDP in China was 50%, Italy 52°<> and Spain 95%.

In the EL\ restrictions on who may hold shares in major companies are inconsistent with the Union's desire for 'free movement of goods and capital[1], so there will be a trend tor a greater proportion of companies' shares being listed on a slock exchange.

In Japan, major losses by some large companies have led to 'negative equity' and those companies being purchased in part or whole by companies in the USA and other countries. In China, Russia and the former communist countries in Eastern Europe, the economies are being changed from state-controlled businesses to privately owned companies. The 'model[1] of these companies is similar to those in the USA and UK. So, the trend is towards the US

Copyrighted material

and UK model of companies' shares being listed on their national stock exchange. This trend to wider share ownership will doubtless encourage the developmeni of corporate governance criteria similar to those in the USA and the UK.

30.4 Corporate governance requirements

Figure 30.2 summarises the main corporate governance requirements for listed companies in OECD recommendations,[1] the Commonwealth,[2] the USA, and the UK.

Figure 30.2 Corporate governance guidelines in different countries

30.4.1 Status of corporate governance requirements

The above list of points are recommendations and not requirements. Thus, they are not as strong as statutory requirements or even accounting standards. However, stock exchanges will expect listed companies to comply with the recommendations, and failure to comply with some of them may have an adverse effect on the company's share price.

Generally, the recommendations have been drawn up by committees comprising directors and representatives of listed companies, their auditors, and financial institutions which invest in the shares. There is little, if any, representation of 'ordinary' shareholders on these committees. So, the recommendations may IK biased. Many companies and their directors would prefer not to have to comply with corporate governance requirements, compliance limits their independence, and there are additional costs involved in setting up and monitoring corporate governance systems within the company. However, pressures from governments, the general public, shareholders and financial institutions will mean thai directors have to accept some corporate governance requirements. The agreed corporate governance requirements will be a compromise between the pressures of the directors of the listed companies (who would have few, if any, requirements) and those of ihe government, shareholders and financial institutions (who would prefer to have detailed corporate governance requirements).

30.4.2 Setting directors* remuneration

Consideration ol requirements to disclose directors* remuneration illustrates these pressures and the final compromise which is reached. In the UK there has been considerable concern at

(a) the high salaries paid to listed company directors;

(b) the high annual increase in these salaries, often at least twice the annual increase of other employees;

(c) the salaries continuing to remain high, even when the company is performing badlv.

Although the general public may believe that directors' salaries are set by the shareholders, this does not happen, as it is not a requirement of the Companies Act. With no statutory control over directors' setting their salaries, there has been a rapid increase in their salaries. So, one would expect corporate governance requirements to require some controls over the levels of directors' salaries, probably by their salaries being approved by the shareholders at the annual general meeting. However, there is no requirement for approval «f directors* salaries by the shareholders. Recently, in the UK, listed companies are now required to propose a resolution at the Annual General Meeting for shareholders to approve the Directors' Remuneration Report. In this way, UK shareholders have some control over the remuneration of the directors. In a few companies, there has been the threat that shareholders may vote against this report when the directors' remuneration appears to be over-generous. Occasionally, cither the generous remuneration package has been withdrawn or a majority of shareholders have voted against the resolution.

Copyrighted material

Reporting and controls

4.1 It is the board's dut\ to present a balanced and understandable assessment of the company.

4.2 The board should ensure that an objective and professional relationship is maintained with the auditors.

4.3 The board should establish an audit committee of at least three non-executive directors with written terms of reference which deal clearh with its authority and duties.

4.4 The directors should explain iheir responsibility for preparing the accounts next to a statement b\ the auditors about their reporting responsibilities.

4.5 The directors should report on the effectiveness of the company's system of internal control.

30.6 The Greenbury Report[5]

In July IW5 the Greenbury Committee issued a four-part code on directors' remuneration and covering good practice in relation to the following:

- The remuneration committee. The board should set up remuneration committees of non-executive directors to determine the company's policy on executive remuneration and specific remuneration packages for each of the executive directors, including pension rights and compensation payments.
- Disclosure. The remuneration committee should report to the shareholders each year the company's policy on executive directors' remuneration, including levels, comparative groups of companies, individual components (e.g. basic salary, benefits in kind, annual bonuses and long-term incentive schemes including share options), performance criteria and measurement, pension provision, contracts of service and compensation commitments on early termination.
- Remuneration policy. Remuneration committees must provide the packages needed to attract, retain and motivate directors of the quality required, but avoiding paying more than is necessary.
- Service contracts. Remuneration committees should consider what compensation commitments their directors* contracts of service would entail in the event of carlv termination, particularly for unsatisfactory performance, with a strong case for setting contract periods at one >ear or less.

Two of the most controversial recommendations - issuing options at discounts and pension entitlements - were initially resisted by a number of companies maintaining that thcv were unable to value these benefits. However, the existence of the code was vet another step exerting pressure on companies to give more information to the shareholders. The Greenbury Report was followed by the Hampel Report.

30.7 The Hampel Report[6]

In January 1998 the Hampel Report was produced. It was defined by the chairman as a 'fine tuning exercise' of the Cadbury and Greenbun Reports. The main provisions are:

Copyrighted material

- Chairman and chief executive should be separate roles. This was stronger than the Cadbury recommendation that where the chairman is also the chief executive, it is essential that there should be a strong and independent element on the board, with a recognised senior member.
- Directors should l>e on contracts lasting one year or less. This was more restrictive than the Cadburv recommendation that directors' service contracts should not exceed three years without shareholders' approval.
- Remuneration committees should be made up of independent non-executive directors. This was more restrictive than the Cadbury recommendation that executive directors' pay should be subject to the recommendations of a remuneration committee made up wholly or mainly of non-executive directors.
- Non-executive directors may be paid in company shares although this is not recommended. This view is more restrictive than the existing Cadbury recommendation that accepts non-executive directors holding shares but is against them holding share options that means they are tied to the company performance. The Hampel view appeared more logical. It was difficult to see why independence was not compromised b\ holding shares whilst it was by holding share options - if am thing the pressure on the non-executive director was c\en greater if he or she actually had an existing shareholding to protect rather than a speculative gain.
- A senior non-executi\ e director should be nominated to deal with shareholders' concerns. Mampcl has expressed the view that, if directors pay themselves too much or do not invest enough in the company, it was the power wielded by the shareholders rather than books of corporate governance rules that really counted. However, it is difficult to see how a busy non-executive director, often with extensive commitments elsewhere, will be in a position to respond to other than limited requests for information or action.
- Directors should be trained.

The Hampel Report was followed by the *Combined Code* (see section 30.10).

30.8 The Higgs Report[7]

The Higgs Report on the role and effectiveness of non-executive directors' (NKDs) was published in January 2003. The main recommendations are summarised below:

Board operation

- The company's annual report should state the number of meetings of the board and its main committees, and the attendance of each director. There should he a description of how the board operates.
- At least half the members of the hoard, excluding the chairman, should be independent NEDs.
- The performance of the Hoard, its committees and its members should be evaluated at least once a vear.
- A nomination committee of the board should conduct the process of board appointments and make recommendations. It should consist of a majority of independent NEDs.

Comment on possible success of the proposal that at least 50% of the directors of listed companies should be SEDs:

Copyrighted material

What will the impact be in practice?

There are two aspects that nm affect the impact:

- the degree to which the NEDs achieve constructive informal relationships beyond the formal meetings;
- the extent to which boards exercise discretion with disclosure.[s]

30.10 The *Combined Code*

The *Combined (lode*[1] is described in the Preamble to the (lode as *a consolidation of the work of the three committees, not a new departure*.

It made clear that companies should be ready to explain their governance policies, including any circumstances justifying departure from best practice, and that those concerned with the evaluation of governance should do so with common sense and with due regard to companies' individual circumstances.

The Code proposes principles and code provisions under five headings:

(a) directors

(b) directors' remuneration

(c) relations with shareholders

(d) accountability and audit

(e) institutional shareholders.

We considered directors in Chapter 5. We will now consider headings (b), (c) and (e).

30.1 I Directors' remuneration

The proposals are as in previous reports, i.e.:

- companies should establish a formal and transparent procedure for developing policy;
- companies should pay enough to attract suitable directors;
- companies should pay no more than enough;
- part of the remuneration should be linked to individual and corporate performance;
- polio and remuneration of each director should be disclosed in the annual report.

30.1 l.l Where do accountants feature in setting directors' remuneration?

The equity of the remuneration is not normally seen as an accounting matter, hut accountants should ensure transparent disclosure of the performance criteria and of the payments.

30.11.2 Performance criteria

Directors are expected to produce increases in the share price and dividends, 'traditional measures have been largely based on growth in earnings per share (EPS), which has encouraged companies to seek to increase short-term earnings at the expense of long-term earnings, e.g. by cutting back capital programmes. Even worse, concentrating on growth in earnings per share can result in a reduction in shareholder value, e.g. by companies borrowing and

Copyrighted material

investing in projects that produce a return in excess of the interest charge, hut less than the return expected by equity investors.

30,11.3 What alternatives are there?

It is interesting to identify the suggested criteria because they could have an impact on the financial information that has to be disclosed in the annual accounts. Suggested criteria include the following:

- Relative share price increase, i.e. using market comparisons. Grand Met has revised its scheme so that, before executives gain any benefit from their share options. Grand Met's share price must outperform the FT All-Share Index over a three-year period, i.e. the scheme focuses management on value creation."' If this policy is adopted, it would be helpful for the annual accounts to contain details of share price and index movements. G>mparative share price schemes should also, in the opinion of the Association of British Insurers, be conditional on a secondary performance criterion, validating sustained and significant improvement in underlying financial performance over the same period.
- Indicators related to business drivers, i.e. using internal data. Schemes would need to identify business drivers appropriate to each company, such as customer satisfaction or process times, growth in sales, gross profit, profit before interest and tax, cash How and return on shareholders* hinds.
- Indicators based on factors such as size and **complexity.** Schemes would need to take account of factors such as market capitalisation, turnover, number of employees, breadth of product and markets, risk, regulator) anil competitive environment, and rates of change experienced by the organisation. This information could again be disclosed in the business review section of the annual report.

The indications arc that there will IK* a growth in the number of firms offering schemes. However, regulators will need to keep a close eye on the position to avoid schemes creeping in that avoid the existing disclosure requirements. Fur example, there has been a growth in long-term incentive plans, under which free shares are offered in the future if the executive remains with the company and achieves a certain performance level. This is a perfectly healthy development that retains staff, but such schemes fall outside the definition of a share option plan and allow companies to avoid disclosure.

One of the problems is the innovative nature of the remuneration packages that companies might adopt and the fact that there is no uniquely correct scheme. The Association of British Insurers, in its publication *Share Option and Profit Sharing Incentive Schemes* (February 1995), commented on this very point:

> There is growing acceptance that the benefit arising from the exercise of options should be linked to the underlying financial performance of the company.
>
> Initial!), attention focused on performance criteria showing real growth in normalised earnings; however, a number of other criteria have subsequently emerged. The circumstances of each individual company will vary and there is a reluctance, therefore, on the part of institutional investors to indicate a general preference for any particular measurement. On the other hand, a considerable number of companies have slated that they welcome indications of the son of formulae that are considered to be acceptable ... It is felt that remuneration committees should have discretion to select the formula which is felt to be most appropriate to the circumstances of the company in question. Nevertheless ... it is important that whatever criterion is chosen ... the formula should

Copyrighted material

This would seem to indicate that all is well. I lowcver, this is certainly not the view presented in an article in *Management Today?*[1] This makes positi\c reference to ilic effect of Cadbury, Grccnbury and I lampcl in forcing companies to adopt long-term incentive plans linked to future performance over a three- to five-year period which, on the surface, appears to be a far more effective way of aligning the interests of executives with those of their investors and their workers; it also recognises thai some companies are introducing more stringent performance criteria, e.g. the Whit bread requirement that, unless o\er a three-year period it improves its minimum total shareholder ranking from 75th to With out of the FTSF, 100, executives participating in the scheme will not be entitled to any shares. There is a note of caution, however, in that 40°o of ITS*V*. 100 companies are still paying above average rewards for poorly performing executives, and more challenging objectives should IK* found that support shareholder \alue creation.

The search to tailor remuneration packages will continue and may see a move away from measures such as share price movements which are often a reflection of market movements rather than executive performance. An interesting suggestion was made by Robert I idler in *Management Today* in July I997,[1'] that, if the true top task is to provide successful medium- and long-term strategic direction, and to ensure its implementation, then this should loom largest in determining rewards, and never mind the short-term price of shares. This could be implemented by the use of techniques such as the balanced scorecard with its combination of financial and non-fmancial measures.

The Code itself sets out provisions to act as warnings to the remuneration committee, e.g. 'comparisons with other companies should be used with caution, in view of the risk that they can result in an upward ratchet of remuneration le\els with no corresponding improvement in performance[1] and 'avoid paving more than is necessary* and 'options should not be exercisable in under three years' and 'total rewards potentially available should not be excessive* and 'incentive schemes should be subject to challenging performance criteria'.

However, in the *Combined (lode* there is recognition that the achievement of a fair remuneration policv has not been completed and it states in its preamble: 'We ... make it clear in our report that it is still too soon to assess definitively the results of the C^adbury and, more especially, the Grcenbury codes.'

30.1 1.9 How well do executives' rewards correlate with performance?

A comparison'* of the top FTSE 100 performers with those at the bottom showed that the presence or otherwise of long-term incentive plans (I-TIPs) made very little difference loan executive's performance. The comparison showed the following information for the chief executive officers (CEOs):

Company	*Salary(l)*	*Bomts(l)*	*LTIP(l)*	*Total(C)*
Footsie leaders				
Misvs	285,717	329,287	193,228	808,232
Legȧl &; General	440,000	400,000	361,215	1,201,215
Vodafone	587,000	0	3,246,985	3,833,985
LlovdsTSB	475,000	199,000	940,797	1,614,797
Footsie laggards				
Hanson	310,000	155,000	544,223	1,009,223
Rio Tinto	669,000	144,000	1.179,548	1,992,548
KMI Ciroup	543,300	105,500	361,600	1,010,400
Allied Domecq	460,000	165,000	732,065	1,357,065
Reuters	522,000	255,000	815,938	1,592,938

Copyrighted material

Developing new products is expensive, and will adversely affect the current year's profit. Some of the costs of developing new products will have to be charged against the current year's profits, as not all these costs can be included in capitalised development expenditure. Also, feu companies capitalise development expenditure, and it may not be possible to capitalise development expenditure (particularly in the early stages) as it may not be possible to guarantee there will be sufficient profits from the new product to cover the development costs. So, basing directors' bonuses on the current year's profits could encourage directors to delay (or cancel) development of new products.

If no new products are developed, the company will probably fail in the long term. Thus, providing a bonus based on the current year's profit tends to encourage *short-tcrmism\ which is not in the best interests of the shareholders. The allocation of share options to directors will tend to encourage directors to consider longer-term profitability, which is in the interests of the shareholders. 'Share options' are considered below.

A further problem with paying directors on the basis of the company's profits is that no one would want to be a director in a loss-making company. In many ways, it can be much more difficult to be a director of a company which is in trouble and making losses (in terms of skills required, hours worked and stress) than of a successful and profitable company. Normally, a company makes losses because there have been changes in market conditions and the company has not been able to keep up with the changes. Implementing changes in the company is very difficult and time-consuming. The directors have to decide the new direction of the company. This is very risky, and taking the wrong direction may result in failure of the company. This requires very skilled directors, working very long hours and making difficult decisions. Some decisions, such as making employees redundant, will increase losses (or reduce profits). So, a directors' bonus scheme based on the profitability of the company would be inappropriate. In this situation a remuneration committee would be very valuable. The members of the remuneration committee will be able to see the contributions of each director towards 'turning around' the company. So, they will be good at deciding the appropriate remuneration of each of the directors. The shareholders would be less effective at this task, as they would not have the necessary detailed understanding of the contribution of each director.

From the above discussion, it can be seen that the remuneration committee can be an effective way of determining the remuneration of the individual directors.

30.12.5 Pension entitlements

Diagto's financial statements sav:

> The executive directors accrue pension rights at the rate of one-thirtieth of basic salary per annum, subject only to current Inland Revenue limits. Bonus payments and other benefits are not included in pensionable pay. No actuarial reduction is applied to pensions payable from the age of 57, subject to company consent. Their pensions are guaranteed to increase in line \\ ith inllation up to a level of 5% per annum, and such increases will not be lower than 3% per annum, and their pensions at normal pension age of 62 will not be less than two-thirds of basic salary in the twelve months prior to retirement. On death in service, a lump sum of four times pensionable salary is paid, along with a spouse's pension ot two-thirds ol the member's prospective pension. When an executive director dies after retirement, a spouse's penion of two-thirds of the member's pension would be paid. The executive directors are not currently required to make pension contributions.

Copyrighted material

Other financial information is provided on the directors* pension benefits as follows, with the figures given for one director:

As at 30.6.05 (years)	50
Pensionable sen ice at 30.6.05 (years)	23
Accrued pension at 30.6.05 (£(MM)pa)	556
Additional pension accrued in the year (j£000pa)	86
Accrued pension at 30.6.05 (/'O(H)pa)	642
Transfer \alue at 30.6.04 (£m)	6.531
Increase in transfer value (£ra)	1.783
*tTransfer value at 30.6.05 (/m)	8.314

These pension payments are extremely generous compared with pensions paid to company employees. An excellent final salary pension scheme for employees would pay 1\60 of the employee's salary, compared with I\30 for Diageo's directors and, at best, the pension would be increased by inflation, which currently is less than 3°«<>. Note also, that the directors' pension is not less than two-thirds of the basic salary which will take the period of service (in the calculation) to be at least twenty years (even if the director has served less than twenty years). Most companies are terminating final salary pension schemes for their employees and making them transfer to less generous and less secure 'money purchase[1] schemes. From the figures abo\e, it can IK- seen that the cost of providing the director's pension in 2005 is £1.7X3 million - a very substantial figure and an additional 76"<> over the director's basic salarv and bonus.

30.12.6 Share options

As indicated earlier, share options are believed to be an effective way of paying directors and of avoiding 'short-termism', as the \alue of a share should be a reflection of the long-term profitability of the company. Until recently, there had been no charge to the income statement for share options, so the shareholders were not aware of the value of the options granted to the directors. However, share options can be very valuable to directors. Kxcluding the cost of share options from the financial statements understates the directors' remuneration.

With the introduction of II'RS 2 *Share-based payments,* these have to be accounted for in annual periods beginning on or after 1 January 2005.

An illustration of how share options work

A company granted a share option on 1 January 20X3 (the grant date) to its chief executive officer (CEO) for 100.000 shares at the current market price of 3S0p. The option required the director to meet profit targets for the three years to 31 December 20X5 (the vesting date). If these profit targets are met, the director will be able to purchase the shares at the exercise date of 30 June 20X6 at the option price of 350p a share.

Normally, the option is granted at the market price of the shares at the grant date (i.e. 350p a share). If the value of the shares is less than 350p on 30 June 20X6, the director will not purchase the shares (as they would make a loss), so the director's gain on the option will be zero. If the value of the shares is 4I0p on 30 June 20X6, the director will buy the shares for £350,000 and immediately sell them in the market for £410,000, making a gain of £60,000.

Interestingly, most directors of listed companies in the UK buy and sell the shares at the exercise date (30 June 20X6 in this case). Only a small minority of directors buy the shares at the option price and continue to hold them.

Copyrighted material

zero, as the director will make either a nil profit or a pain on exercising the share option on 30 June 20X6. So, the value of the option is the market price of an opiion to purchase the company's shares at 350p on 30 June 20X6 - we will take the value of this option at 1 January 20X3 as 30p a share. But the director may not be eligible to take the option as the profitability target may not be met. The probability of the CF.O meeting the target is 60%.

L'sing the tigure in our example, we will show how these affect the charge to the income statement for three methods:

(a) Using IFRS 2 *Share-Bused Payment,* the Standard issued by the IASB in 2004, This Standard uses the grant date as when the charge should be made to the income statement. IFRS 2 is similar to the US Standard FAS 123 *Accounting for Stock-Based Compensation* and the UK Standard FRS 20 *Share-based Payment.*

(b) Using an earlier UK Accounting Standards Board proposal, which used the vesting date to measure and date the charge for the option in the financial statements.

(c) A proposal based on IAS 37 *Provisions, Contingent Liabilities and Contingent Assets.*[lb]

US and IAS treatment

At the grant date, the value of the option is

100,000 x 0.30 x 60% = £18,000

As the vesting period is three years, a charge of £6,IHH) a year would be made in the financial statements, reaching a total balance sheet provision at 31 December 2(1X5 of £18,000. This is the amount charged using the US FAS 123 and IFRS 2 methods.

UK *treatment*

There would IK- no charge at this stage under the UK ASB proposals, as the charge does not arise until the vesting date.

IAS 37 treatment

Under IAS 37, the value of the option would be calculated at each year-end, and the charge to the income statement would be the difference between this year's provision and last year's. At 31 December 20X3 the value of the option is 35p a share, and the probability of the option being granted is 70"n. At this date, a third of the sen ice will have been performed, so the contingent liability and charge to the income statement for the year is:

100,000 x 0.35 x Wo x 1/3 = £8,167

At 31 December 20X4 the option value is 45pa share, the probability is 85% and two-thirds of the service has been performed, so the contingent liability is

100,000 X 0.45 X 85% X 2/3 = £25,500

The charge to the income statement is £17,333 (i.e. £25,5(H) — 8,167).

At 31 December 20X5 the option value is 55p a share, the probability is 100% and all of the service has been performed, so the contingent liability is

100,000 x 0.55 x 100% x 1 - £55,000

The charge to the income statement is £29,500 (i.e. £55,000 - 25.5(H)).

At the \esting date of 30 June 20X6 the price of the shares is £4.10 (gi\ingan option value of 60p), the probability is 100% and all of the service has been performed, so the contingent liability is

Copyrighted material

The treatment of payment of employees in shares ((a) above) is the same as for directors.

Where employees or directors are paid in cash, based on the increase in the share price ((b) above), the cost is taken as the final amount paid (i.e. the IAS 37 method) with a progressive increase as the 'bonus' is earned.

In (c), where shares are issued, the value is taken as the fair value of the goods or services received.

Where the eventual payment is in cash, the accounting entry is:

Dr	expense
Cr	liahilit)

This is consistent with the IASB Framework. However, where the eventual payment is in shares, the accounting entry is:

Dr	expense
Cr	equity

The credit entry is 'very surprising* and inconsistent with the IASB *Framework'.* The company 'owes* the shares or share options to the employee, so surely the credit entry should be a liability. According to the *Framework,* the entry is consistent with the definition of a liability, as: 'recognised in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably'.

The 'outflow of resources' is issuing the shares at a discount (rather than the current market price) and the 'obligation' is to the employee.

When one asks "where will I make the credit entry to equity', IFRS 2 gives no guidance. If the credit entry is to the income statement, then there is no net charge, so the credit entry is probabh IO a directors' share options reserve (efTccti\cl\ from the income statement). However, the directors' share options reserve is not an amount which belongs to the company (i.e. capital) - it belongs to the directors and thus is a liability.

IFRS 2 becomes even more complex (and inconsistent with the *Framework)* in situations where some or all of the share options are not exercised. The cost of the share option is charged to the income statement when granted. However, the share option may not be granted if the employee leaves, or does not satisfy the vesting conditions, or the share price at the exercise date is below the option price. If the option is not granted, IFRS 2 does not allow the earlier charge to be reversed and credited to the income statement. This is inconsistent with normal accounting. If, for instance, an electricity accrual is overstated in one year, then this is corrected by an understatement of the electricity charge in the following year. Why shouldn't this be allowed to happen with directors* share options?

From this discussion, it can be seen that, in many ways, IFRS 2 is inconsistent with the *Frameworky* particularly in valuing the option at the grant date and crediting the cost to equity. This has produced a standard which is very complex, so that it can 'get round* the inconsistencies it has created in its basic principles. For example, if the settlement is in cash, the cost is taken at the exercise date, whereas if it is in shares the cost is taken at the grant date. It could be argued that the correct treatment would be to take the exercise date in both cases.

If IFRS 2 had taken the exercise date as the final cost of the option, it would have been consistent with the *Framework* and IAS 37. Also, the credit entry should be to a liability (and not to equity).

By using these principles, which are consistent with the *Framework* and IAS 37, the 1ASB would have produced a standard which would ha\e been much shorter and simpler than the current IFRS 2.

Copyrighted material

However, the principal aims of the IASB in producing IFRS 2 seem to have been to produce a standard which is consistent with the US FAS 123 and acceptable to directors of listed companies.

30.13 Directors[9] remuneration - conclusion

From the above discussion on directors[1] remuneration, it can be seen that current disclosure of the costs to the company of employing directors is incomplete, and the disclosed cost is understated. In particular:

(a) The cost of providing directors* share options is probablv understated (under US FAS 123, IFRS 2 or UK ASH proposals). A method which is consistent with IAS 37 *Provisions, Contingent Liabilities ami Contingent Assets* should be used to determine the annual cost of these opiions to (he company.

(b) There was no single statement of the total remuneration of the directors, comprising basic salary, bonus, benefits in kind, share options and pension cost.

In the example of Diagco pic shown in this chapter, the disclosure of directors* remuneration and benefits is probably close to the best a\ailab!e for listed companies. For most other listed companies in the UK and other countries, the disclosure of directors* remuneration is probably less detailed and less helpful than for Diageo. This shows how much further listed companies need to go to provide a complete disclosure of directors* remuneration in the annual financial statements.

30.14 Relations with shareholders

There is simply a proposal that companies enter into dialogue with institutional shareholders and for chairmen of the remuneration, audit and nomination committees to be available to answer questions at the AGM.

30.15 Institutional investors

There are three principles, namely that institutional shareholders:

- have a responsibility to make considered use of their votes,
- should be ready to enter into dialogue with companies, and
- should give due weight to all factors drawn to their attention when evaluating companies* governance arrangements.

For greater detail, we need to refer to the governance documents produced by the various institutional investor organisations, e.g. the Association of British Insurers and National Association of Pension Funds.

30.15.1 Association of British Insurers (ABI)

The ABI lias published a *Statement of I 'nting Policy and Corporate Governance Good*'* which sets out that ABI members' overall objective is, and must be, to achieve on behalf of those for whom they act a competitive return on the funds invested and that the exercise of their

Copyrighted material

correspondence courses. Being a lecturer or leader in a conference also comprises 'structured learning'. Unstructured learning will usuall) comprise reading technical, professional, financial or business literature. Many accountancy bodies provide or approve courses with 'approved CPE hours'. If the accountancy body requires CPE to be mandatory, they will have to pro\ ide and monitor a system for members to record their CPE activities and hours.

It is apparent that accountancy bodies must have a system of compulsory CPE to ensure that their members keep up to date with changes in legislation and with accounting and auditing standards. Also, there will be a need for members to increase the depth of their knowledge in the specialised areas they work in, oxer and abo\e the basic knowledge they learnt when taking the exams of their professional body.

Practical experience

The 1FAC says (IKS 5) that this should IK* at least three years* duration. Also, they suggest professional bodies should have a system for approving employers who are suitable for providing the appropriate experience to students. These 'approved employers' should be checked periodically by the professional body. The employer is responsible for designing and implementing a programme which meets the practical experience requirements of the student and the needs of the employer. The employer is responsible for recording the actual experience provided for each student.

30.18.3 Independence of the auditor

The 1FAC Code of Ethics for Professional Accountants (para. 1(10.4) sets out five fundamental principles with which an accountant should comply. These are:

(a) *Integrity.* A professional accountant should be straightforward and honest in all professional and business relationships.

(h) *Objectivity.* A professional accountant should nol allow bias, conflict of interest or undue influence of others to override professional or business judgements.

(c) *Professional competence and due aire.* A professional accountant has a continuing duty to maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional service based on current developments in practice, legislation and techniques. A professional accountant should act diligently and in accordance with applicable technical and professional standards when providing professional services.

(d) *Confidentiality.* A professional accountant should respect the confidentiality of information acquired as a result of professional and business relationships and should not disclose any such information to third parties without proper and specific authority unless there is a legal or professional right or duty to disclose.

(e) *Professional behavior,* A professional accountant should comply with relevant laws and regulations and should avoid any action that discredits the profession.

Conceptual framework approach

The IFAC Code does not take a rules-based approach, with accountants required to comph with a set of specific rules. Instead, it provides a conceptual framework that requires a professional accountant to identify threats to compliance with the fundamental principles and appl\ appropriate safeguards.

The Code does not set out rules but it does give examples of threats such as potential conflicts, inducements and financial interests and appropriate safeguards that should be

Copyrighted material

considered. For example, the Code sets out the following threats and safeguards relating to financial interests.

Financial interests

Professional accountants in business mav have financial interests, or mav know of financial interests of immediate or close family members, that could, in certain circumstances, give rise to threats to compliance with the fundamental principles. For example, self-interest threats to objectivity or confidentiality may be created through the existence of the motive and opportunity to manipulate price sensiti\e information in order to gain financially.

Examples of circumstances that ma_\ create self-interest threats include where an immediate or close family member:

- Holds a direct or indirect financial interest in the employing organisation and the value of that financial interest could be directly affected by decisions made by the professional accountant in business;
- Is eligible for a profit related bonus and the value of that bonus could be directly affected by decisions made by the professional accountant in business;
- Holds, directly or indirectly, share options in the employing organisation, the value of u hieh could be direct!} affected bv decisions made bv the professional accountant in business;
- Holds, direct!) or indirect!}, share options in the employing organisation which arc, or will soon be, eligible for conversion; or
- May qualify for share Options in the employing organisation or performance related bonuses if certain targets are achieved.

If threats are other than clear!} insignificant, safeguards should be considered and applied as necessary to eliminate or reduce them to an acceptable level. Such safeguards may include:

- Policies and procedures for a committee independent of management to determine the level of form of remuneration of senior management.
- Disclosure of all relevant interests, and of any plans to trade in relevant shares to those charged with the governance of the employing organisation, in accordance with am internal policies.
- Consultation, where appropriate, with superiors within the employing organisation.
- Consultation, where appropriate, with those charged with the governance of the employing organisation or relevant professional bodies.
- Internal and externa! audit procedures.
- Up-to-date education on ethical issues and the legal restrictions and other regulations around potential insider trading.

30.18.4 Current position on auditor providing consultancy services

Pre Enron

In 20(H), the chairman of the US Securities and F.xchangc Commission (SEC), Arthur Levitt, proposed thai other services provided bv audit lirnis to their audit clients should be severely restricted, probably solely to audit and tax work.[:i] The provision of am other service to audit clients would he prohibited.

Copyrighted material

Whilst ihc profession was opposed to the blanket approach appearing to IK* taken by the SEC there was also support for a selective approach to restricting particular types of work, e.g. that external auditors should not provide internal audit services for client companies.

Post Enron

Enron filed for bankruptcy in early December 2001 by which time the share price had fallen from a 2MM) figure of about SX3 a share to less than SI a share. The bankruptcy was unexpected by those investors who might have based their investment decisions on the historical financial statements on the mistaken assumption that these were accurate.

Equity shareholders are rewarded for taking risks and understand that no company in which they invest is immune to the risk of failure. However, in the case of Enron there appear to have been three major problems.

The first problem was that the US financial reporting standards were not as robust in dealing with off balance sheet transactions such as special purpose entities (SPEs) as FRS 5 *Reporting the Substance of Transactions* which has been effective in the UK since 1995.

What is an SPE?

An SPE might be set up for a variety of purposes ranging from those that are commercially acceptable (e.g. to finance fixed assets) to those that are unacceptable (e.g. to conceal from investors who rely on the company's financial statements presenting an accurate or true and fair view of material items such as the existence of liabilities or losses or the payment of fees to directors of the sponsor company). In the case of Enron it is reported that there was concealment of all three such material items.

How does an SPE operate?

Typically there are four parties involved, namely.

- the sponsor (a company such as Knron that wishes to acquire a fixed asset but wants to keep the asset and liability off the balance sheet);
- the SPE (this is the entity that will borrow the funds to acquire the fixed asset);
- the lender (a bank or institution prepared to advance funds to the SPE to acquire the fixed asset); and
- the independent investor (who puts in at least 3% of the cost of the fixed asset and who technically controls the SPE).

As far as the sponsor is concerned, both the asset and the liability are off the balance sheet and the sponsor enters into a lease arrangement with the SPE to make lease payments to cover the loan repayments, if required by the lender, the sponsor might also arrange for a guarantee to be provided using its own share price strength or through another party. As we recognised in the UK. prior to the introduction of FRS 5, by keeping debt oft the balance sheet a company's creditworthiness is improved.

The second problem was that investors were unable to rely on advice from analysts. It is reported that analysts failed to follow sound financial analysis principles, being under pressure to hype the shares, e.g. to keep the share price up particularly where their employers, such as investment banks, were making significant advisory fees.'[3]

The third problem was that investors were not alerted by the auditors to the fact that such liabilities, losses and the payment of fees existed. It could be that the auditors were convinced that the financial statements complied with the requirements of US GAAP and that

Copyrighted material

UK government initiatives

Following the collapse of Enron the Secretary of Stale for Trade and Industry, Patricia Hewitt, announced in early 2(M)2 the creation of a Co-ordinating Group on Audit and Accounting Issues with a remit to ensure that the effectiveness of the UK systems of financial reporting and audit regulation is carefully reviewed. Issues that have been raised include:

- the adequacy of existing ethical standards of the professional audit bodies in ensuring the independence of auditors particularly as to whether they provide sufficient protection where auditors also provide non-audit services to clients;
- the possible requirement for the mandatory rotation of auditors or re-tendering for company audits;
- the need for more detailed disclosure in company accounts of the fees paid to the auditors for audit and non- audit seniccs.[2]*

The above references are a sample of the steps now being taken following the collapse of Enron. It will be interesting to see the extent to which confidence in financial reporting and auditing is restored during the next few years.

30.18.6 The Sarbanes-Oxley Act 2002

The US Sarbancs-Oxley Act was enacted in 2(K)2 following the Enron 'scandal*. This is an important and detailed Act (it covers sixty-six pages), as it applies not only to listed US companies but also to companies in other countries which are listed on a US stock exchange (e.g. BP pic). It is probable that many of the provisions of the Act will be enacted in legislation in other countries and in the auditing and ethical rules of professional bodies and the IF AC.

Principally the Act covers:

- registered public accounting firms
- publicly traded companies.

It establishes a Public Company Accounting Oversight Hoard (PCAOB) and provides the SEC with the authority to issue rules, set standards, and provide oversight and enforcement over the PCAOB.

Auditors

All auditors of publicly traded companies (auditors) must register with the PCAOB. The Act defines the scope of audit practice and reports, details investigations and disciplinary procedures, and defines conflict of interest. Auditors must keep their audit working papers for at least seven \ears.

On auditor independence, the Act specificalI\ prohibits auditors from providing:

- book-keeping or other sen ices related to the accounting records or financial statements of the audit client;
- financial information systems design and implementation;
- appraisal or valuation services, fairness opinions, or contribution-in-kind reports;
- actuarial services;
- internal audit outsourcing services;
- management functions or human resources;

Copyrighted material

- broker or dealer, investment adviser, or investment hanking services;
- legal services and expert services unrelated to the audit; and
- any other service that the PCAOB determines, by regulation, is impermissible.

I lowever, there is a 'get out clause' in that the PCAOB may, on a case-by-case basis, exempt from these prohibitions any person, issuer, public accounting firm or transaction, subject to review bv the Commission.

On 'partner rotation*, it requires the lead audit or coordinating partner and the reviewing partner to rotate ofTthe audit every five years.

Listed companies

For publicly traded companies, the Act prohibits insider trading (purchase or sale of shares during 'blackout periods), loans to officers and directors, and improper influence on audits. Companies must have at least one financial expert on their audit committee. The CEO and CI'O must certify the fair presentation of the results of operations and financial condition. There arc further provisions relating to internal control and they must report to the audit committee and the auditors any fraud committed by management or other employees who have a significant role in the compam's internal control.

The full text of the Sarbancs-Oxlcy Act can be found on www.aicpa.org/sarbanes/ index.asp

Corporate governance and investor reaction

Good governance has not been fully defined and consists of a range of reforms such as pro- posing that the roles of chairman and chief executive IK split and other provisions of which those set out in the Combined Code and Sarbanes-Oxley are typical. It appears that investors are prepared to pay a premium to invest in companies perceived to enjoy good gov- ernance.

Corporate governance and investment return

Whilst there is evidence that investors prefer good governance and financial reporting is more reliable, there is little substantive e\ idcncc that this has am positive effect on perform- ance. Among the reasons for questioning whether there is a positive effect for the shareholders is that the additional work invoked in compliance incurs a cost that exceeds the benefit - the cost including direct costs such as additional audit fees, and indirect costs, such as managers being diverted from income generation to compliance checking. Whilst companies can identify the direct costs and estimate the indirect costs, the regulators have taken a view that eventual benefits will outweigh the initial compliance costs.

Continuing research required

There is a temptation to gold plate corporate governance requirements and there is a need for continuing research to attempt to identify which of the array of corporate governance requirements actually does have a positive impact on (a) investor confidence by reducing the risk of Enron-style fraud and excessive remuneration being taken by directors, and (b) company performance b) demonstrating that the cost of compliance does not exceed the benefit.

Supporting the case of those who doubt that there is a positive impact on performance is an Australian research project-'" looking at companies in the S&P/ASX 200 index which found that companies which the researcher classified as having poor corporate governance

Copyrighted material

5 There has been much criticism of the effectiveness of non-executive directors following failures such as Enron. Some consider that their interests are too close to those of the executive directors and they have neither the time nor professional support to allow them to be effective monitors of the executive directors. Draft a job specification and personal criteria that you think would allay these criticisms.

6 The Chartered Institute of Management Accountants (CIMA) has warned that linking directors* pay to EPS or return on assets is open to abuse, since these *are* not the objective measures they might appear.

(a) Can shareholders rely on the ASB to prevent abuse? Discuss.

(b) Identify five ways in which the directors might manipulate the EPS and return on assets without breaching existing standards.

7 It has been suggested that 'changes in market capitalisation from period to period should be the subject of comment [and] it would be sensible for investors to be guided on the nature of the market capitalisation figure and to be grven an indication of share price trends'." Discuss the advantages and disadvantages of such disclosure m relation to corporate governance.

8 ([a]) The Companies Act 1985 (Disclosure of Remuneration for Non-audit Work) Regulations SI No 1991/2181 requires companies to disclose all payments made to their auditors. Discuss the additional information that would be required in order to make the disclosure of the non-audit fees meaningful.

(b) The Combined *Code* provides that the audit committee should keep the nature and extent of non-audit services provided by the auditor under review, seeking to balance the maintenance of objectivity and value for money. Discuss criteria that could be applied m seeking to establish this balance.

9 In the modern commercial world, auditors provide numerous other services to complement their audit work. These services include the following:

(a) Accountancy and book-keeping assistance, e.g. tn the maintenance of ledgers and in the preparation of monthly and annual accounts.

(b) Secretarial help, e.g. ensuring that the company has complied with the Companies Act m the maintenance of shareholder registers and in the completion of annual returns to Companies House.

(c) Consultancy services, e.g. advice on the design of information systems and organisational structures, advice on the choice of computer equipment and software packages, and advice on the recruitment of new executives.

(d) Investigation work, e.g. appraisals of companies that might be taken over.

(e) Receivership work. e.g. when the firm assumes the role of receiver or liquidator on behalf of an audit client.

(0 Taxation work. e.g. tax planning advice and preparation of tax returns to the Inland Revenue for both the company and the company's senior management.

Discuss;

(i) Whether any of these aaivrties is unacceptable as a separate activity because it might weaken an auditor's independence.

(ii) The advantages and disadvantages to the shareholders of the audit firm providing this range of service.

10 The audit fee disclosed for Severn Trent pic (a UK company providing water to homes and businesses) was *L*\ .0 million in its 2005 accounts.

(a) Discuss how many man-days of audit time you think would be reasonable to audit this company where:

Copyrighted material

31.1 Introduction

In this chapter \vc consider the following:

- Accountants' role in a capitalist society
- Sustainabilitv
- Environmental reporting
- European Commisson recommendations
- Stand-alone environmental reports and award schemes
- International charters, guidelines and self-regulation schemes
- Economic consequences of environmental reporting
- Environmental auditing
- Social accounting
- Corporate social responsibility
- Need for comparative data
- International initiatives towards triple bottom line reporting.

31.2 Accountants* role in a capitalist industrial society

In a capitalist, industrial society, production requires the raising and efficient use of capital largely through joint stock companies. These Operate within a legal framework which grants them limited liability subject to certain obligations. The obligations include capital maintenance provisions to protect creditors, e.g. restriction on distributable profits, and disclosure provisions to protect shareholders, e.g. the publication of annual reports.

The state issues statutes to ensure there is effective control of the capital market; the degree of intervention depends on the party in power. Accountants issue standards to ensure there is reliable information to the owners to support an order!) capital market. Both the state and the accountancy profession have directed their major efforts towards servicing the needs of capital. This has influenced the nature of the legislation, e.g. removing obligations that are perceived to make a company uncompetitive, and the nature of the accounting standards, e.g. concentrating on earnings and monetary values.

However, production and distribution involve complex social relationships between private ownership of property and wage labour' and other stakeholders. This raises the question of the role of accountants. Should their primary concern be to serve the interests

of the shareholders, or the interests of management, or to focus on equity issues and social welfare?[2]

Prior to the formation of the ASB, the profession identified with management and, willingly or unw illingly, it appeared to allow information to be reported to suit management. If management were unhappy with a standard, as with SSAP 11 and SSAP 16, they were able to frustrate its implementation. Often, reported results bore little resemblance to the commercial substance of the underlying transactions.

The ASB has concentrated on making reports congruent with commercial reality; it sees financial information as being an economic commodity in its own right. It has developed a conceptual framework for nnancial reporting to underpin its reporting standards; assets, liabilities, income and expense have been defined with criteria for their recognition which include the ability to state them in monctan terms.

The ASB has not produced mandatory requirements for narrative or qualitative disclosures - the operating and financial review (Ol R) remains voluntary. I lowever, the proposal for the publication of an OFR was an important shift: it was recognition that there was a need for narrative disclosure, even where this was not capable of audit verification.

Why is the qualitative information voluntary?

It is voluntary in recognition of the fact that market and political pressures exist; that each company balances the perceived costs, e.g. competitive disadvantage, and the perceived benefits of voluntary disclosure, e.g. improved investor appeal, in determining the extent of its voluntarv disclosures.[1]

Companies have traditionally been ranked according to various criteria, e.g. their ability to maximise their shareholders' wealth or return on capital employed or ITS growth rates. I lowever, there is a philosophical view that holds that a company

> possesses a role in society because society finds it useful that it should do so ... [It] cannot expect to find itself fully acceptable to society if it singlc-mindedU pursues its major objective without regard for the range of consequences of its actions.[4]

This means that a company is permitted to seek its private objectives subject to legal, social and ethical boundaries, This takes accounting beyond the traditional framework of reporting monetan transactions that are of interest primarily to the shareholders. It takes it into a realm where there is, at present, no obvious paymaster.

31.3 Sustailiability

There has been a growing concern since the early 1990s that insufficient attention has l>cen given to the impact of current commercial activities on future generations. This has led to the need for sustainable development w hich meets the needs of the present without compromising the ability of future generations to meet their own needs.

Why have companies become sensitive to the environmental concerns of stakeholders other than their shareholders? This has been a reaction to pressure from a variety of stakeholders ranging from the government to local communities and from environmental groups to individual consumers and individual investors.

31.3.1 Environmental information in the annual accounts

Much of the environmental information falls outside the expertise of the accountant, so why was it included in the annual report? The annual report had alrcad\ become the accepted

Copyrighted material

the ever-increasing public awareness of the en\ironmental, social and economic impacts of business. The ACCA Award scheme was restructured in 2001 under the title 'The ACCA Awards for Sustainability Reporting*. There are three different award categories: the ACCA UK Environmental Reporting Awards, the ACCA Social Reporting Awards and a new category, the ACCA Sustainability Reporting Awards. Details of Award winners can be found on the ACCA website.

These schemes have given environmental reporting a high profile and contributed greatlv to the present quality of reports.

31.7 International charters and guidelines

There have been a number of international and national summits, charters and recommendations issued. In some jurisdictions such as Denmark, the Netherlands, Norway and Sweden, there is now legislation requiring environmental statements from environmentally sensitive industries either in their financial statements or in a stand-alone report; in other countries, voluntary disclosures are proposed. Below are brief descriptions of just some of the voluntary disclosures proposed b\ the United Nations, Kurope and the USA, and of some self-regulation schemes in which companies can elect to participate.

31.7.1 United Nations

At the United Nations we can see that the United Nations Environmental Programme (UNEP)[10] has made major impacts, e.g. it was the driving force behind the 19S7 Montreal Protocol on Substances that Deplete the O/one Layer wherein industrialised countries ceased production and consumption of a significant proportion of all ozone-depleting substances in 1996. It is estimated that 1.5 million cases of melanoma skin cancer due lo the sun's UY-B radiation will be averted bv the vear 206(1 as a result of the Protocol. It has had similar success as the leading force for the sound global management of hazardous chemicals and the protection of the world's biological diversity b\ forging the Convention on Biological Diversity. It is innovative in its approach, e.g. entering into a partnership agreement with the International Olympic Committee (IOC) in 1995 as a result of which the environment now figures as the third pillar of Olympism, along with sport and culture, in the IOC's Charter. UNEP has initiated the development of environmental guidelines for sports federations and countries bidding for the Olympic Games.

31.7.2 Europe

In Europe the F.co-Management and Audit Scheme (K.MAS)[11] was adopted bv the European Council on 29 June 1993, allowing voluntary participation in an environmental management scheme. Its aim is to promote continuous environmental performance improvements of activities by committing organisations to evaluating and improving their own environmental performance.

The main elements of the current E.MAS regulations include:

- making environmental statements more transparent;
- the involvement of employees in the implementation of EMAS; and
- a more thorough consideration of indirect effects including capital investments, administrative and planning decisions and procurement procedures.

Copyrighted material

31.7.4 Self-regulation schemes

There are a number of examples of sclf-rcgulator\ codes of conduct from institutions, e.g. The International Chamber of Commerce (ICC),[12] The International Organization for Standardization (ISO), and bodies representing particular industries, e.g, the European Chemical Industry Council (CEFIC).[1'] We will describe briefly the ICC Charter and ISO standards.

The International Chamber of Commerce (ICC)

The ICC launched The Business Charter for Sustainable Development in 1W1 to help business around the world improve its environmental performance relating to health, safety and product stewardship. The Charter set out sixteen Principles which include:

- *Polity statements* - such as giving emironmental management high corporate priority; aiming to integrate en\ ironmental policies and practices as an essential element of management; continuing to improve corporate policies performance; advising customers, distributors and the public in the safe use, transportation, storage and disposal of products provided; promoting the adoption of these principles b\ contractors acting on behalf of the enterprise; de\ eloping products thai ha\ e no undue environmental impact and are efficient in their consumption ofencrgv and natural resources, and that can be recycled, reused, or disposed of safely; fostering openness and dialogue with employees and the public, anticipating and responding to their concerns about the potential hazards and impacts of operations, products, wastes or services; and measuring environmental performance.
- *Financially quantifiable practices* - such as employee education; assessment of cm ironmental impacts before starting a new activity or decommissioning; conduct or support of research on the environmental impacts of raw materials, products, processes, emissions and wastes associated with the enterprise and on the means of minimising such adverse impacts; modification of the manufacture, marketing or use of products or services to prevent serious or irreversible environmental degradation.

The following extract from the Nestle 2(MH) Knvironment Progress Report is a good example of a company that has applied the ICC approach and is proactive in seeking improvements:

> Message from CEO
>
> I am pleased about the clear progress in a number of ke> areas, including a significant decline in the amounts of water and energy used to bring each kilo of Nestle product into vour home, and a similar reduction in factors which potentially affect global warming. However, we are never completely satisfied with our current performance, and are committed to further emironmental improvements.
>
> We trv to remain sensitive to the environmental concerns of our consumers and the public as a whole. ... we have pledged our allegiance to *The Business Charter fur Sustainable Development* of the International Chamber of Commerce, and we are committed to being a leader in environmental performance.

The Report then proceeded to deal in detail with three key areas on which the companv focus, namely,

- An integrated approach throughout the supply chain, quantifying:
  - The average annual investment reporting, for example, that 'From *Wfi* to 1999, Nestle invested an average of CHI* 1(H) million per vear for the protection of the environment. This included readily-identifiable environmental investments, and amounted to more than 3"o of total capital expenditure'.

Copyrighted material

  - Environmental performance indicators for greenhouse gases, air acidification potential, o/one-depleting substances and energy consumption. As an example of the level of detail, it reported for energy: 'Energy consumption is the sum of all energy purchased or obtained - less any energy which, in rare cases, is sold. This includes electricity, steam, fuels such as oil and natural gas, and by-products such as spent coffee grounds. Through different approaches, global energy consumption per tonne of product was reduced and, thus, energy use efficiency was improved by 20%. Even with the significant increase in manufacturing production, the total energy use company-wide has remained stable'.

- Water as a key priority, quantifying:
  - environmental performance indicators for water consumption, water waste management and by-products/water generation.
- Systematic management of environmental performance, committing itself to:
  - comparability with international standards, e.g. ISO 14001 and F.MAS of the European Union;
  - focus on performance and improvements in all aspects of sutainability.

The International Organization for Standardization (ISO)

ISO is a non-governmental organisation established in 1947, and comprises a worldwide federation of national standards with the aim of establishing international standards to reduce barriers to international trade. Its standards, including environmental standards, are voluntary and companies may elect to join in order to obtain ISO certification.

One group of standards, the ISO 14000 series, is intended to encourage organisations to systematically assess the environmental impacts of their activities through a common approach to environmental management systems. Within the group, the ISO 14001 standard states the requirements for establishing an F.MS and companies must satisfy its requirements in order to qualify for ISO certification.

What benefits arise from implementation of ISO 14001?

Those who support the ISO approach consider that there are a number of positive advantages, such as:

- Top-level management become involved - they are required to define an overall policy and, in addition, they recognise significant financial considerations from certification, e.g. customers might in the future prefer to deal with ISO compliant companies, insurance premiums might be lower and there is the potential to reduce costs by greater production efficiency.
- Environmental management - ISO 14001 establishes a framework for a systematic approach to environmental management which can identif) inefficiencies that were not apparent beforehand resulting in operational cost savings and reduced environmental liabilities. We have seen above, for example, that Nestle reduced its energy consumption by 20%.
- A framework for continual improvements is established - there is a requirement for continual improvement of the management system.

What criticisms are there of a compliance approach?

Compliance approaches which set out criteria such as a commitment to minimise environmental impact can allow companies to set low objectives for improvement and report these as achievements with little confidence that there has been significant environmental benefit.

Copyrighted material

En\ironmcntal investment is no longer seen as an additional cost hut as an essential part of being a good corporate citizen and environmental reports are seen as necessary in communicating with stakeholders to address their environmental concerns.

Companies are realising that it is their corporate responsibility to achieve sustainable development whereby they meet the needs of the present without compromising the ability of future generations to meet their own needs. Economic growth is important for shareholders and other stakeholders alike in that it provides the conditions in which protection of the environment can best be achieved, and environmental protection, in balance with other human goals, is necessary to achieve growth that is sustainable.

I lowever, there is still a long way to go and the EU's Sixth Action Programme 'Environment 2010: Our Future, Our Choice'[14] recognises that effective steps have not been taken bv all member states to implement EC environmental directives and there is weak ownership of environmental objectives by stakeholders. The programme focuses on four major areas for action - climate change, health and the environment, nature and biodiversity, and natural resource management - and emphasises how important it is that all stakeholders should be involved to achieve more environmentally friendly forms of production and consumption as well as integration into all aspects of our life such as transport, encrgv and agriculture.

As with the other environmental reporting initiatives discussed above and the corporate governance approach we have seen with the I lampel Report and the OFR, the programme concentrates on setting general objectives rather than quantified targets apart from the targets relating to climate change where there is the EC's 8°<» emission reduction target for 2008-12 under the Kyoto Protocol. This is a sensible way to progress with an opportunity for best practice to evolve.

However, significant improvements are still required, with research indicating that although the majoritv of FTSE All Share companies discuss their interaction with the environment in their Annual Report and Accounts, the vast majority lack depth, rigouror quantification.

31.10 Environmental auditing: international initiatives

The need for environmental auditors has grown side by side with the growth of environmental reporting. This is prompted bv the need for investors to be confident that the information is reliable and relevant. There have been various initiatives around the world and we will briefly refer to examples from Canada, [he USA and Europe.

Canada

The Canadian Environmental Auditing Association (CEAA) was founded in 1991 lo encourage the development of environmental auditing and the improvement of environmental management through environmental auditor certification and the application of environmental auditing ethics, principles and standards. It is a mullidisciplinarv organisation whose international membership base now includes environmental managers, ISO 14001 registration auditors, EMS consultants, corporate environmental auditors, engineers, chemists, government employees, accountants and lawyers. The CEAA is now accredited by the Standards Council of Canada as a certifying body for EMS Auditors.[15]

USA

The Registrar Accreditation Hoard (RAH)[1"] was established in 1989 by the American

Copyrighted material

Figure 31.1 Barloworld Limited value added statement for year ended 30 September 2004

Copyrighted image

Copyrighted material

There was also criticism that there was no standard so that expenditures could be aggregated or calculated to disclose a misleading picture, e.g. the inclusion of PAVE tax and welfare payments made to the government in the employee classification so that wages were show n gross \\ hereas distributions to shareholders were show n net of tax. The effect of both was to overstate the apparent employee share and understate the government and shareholders* share."

In the years immediately following the publication of *The Corporate Report.,* companies published value added statements on a voluntary basis but their importance has declined. There was a move away from industrial democracy and the standard-setting regulators did not make the publication of value added statements mandator).

31.13.1 Why *The Corporate Report* was not implemented

The Corporate Report's proposals for additional reports have not been implemented. There are a number of views as to why this was so. There is a view that the business community, despite the results of the chairmen survey, were concerned about the possibility of their reporting responsibility being extended through the report's concept of public accountability and welcomed the release of the Sandilands Report on inflation accounting which Overshadowed *The Corporate Report.* There is a view that *The Corporate Report* fell short of making a significant contribution 'by virtue of its failure to select the accounting models appropriate to the informational needs of the individual user groups which it had identified'.*[4]

I lowever, the most likely reason for it not being full) implemented was the change of government. The Labour government produced a Green Paper in 1976, *Aims and Scope of Company Reports,* w hich endorsed much of *The Corporate Report* concept. The reaction from the business communit) and the Stock Exchange was hostile to any nunc away from the traditional stewardship concept with its obligations only to shareholders. The CHI \iew was that other users could ask for information, but that was no reason for companies to be required to pro\ide it. In the event, there was a change of government and the Cireen Paper sank without trace.

The new government supported the view of Milton Friedman, who wrote in 1962 that Mew trends could so ... undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money ... as possible'.

Man) responsible members of the business community pressed for change,*[6] but the mid 1980s saw a decline in the commercial support for social accounting, as profit, dividends and growth superseded all other social goals in business. The movement continued but advocates were regarded at best as well-meaning radicals and at worst as dangerous politicised activists devoted to the destruction of the capitalist system.

IK the earl\ 1990s, interest was appearing in the commercial sector but from a free market rather than regulator) viewpoint. The thought was that socially responsible policies need not mean lower profits in tact, quite the opposite. Given this change in perception, companies began to embrace social accounting concepts suddenly accountants were able to make a contribution, e.g. evaluating the profit implication of creche facilities for working mothers being provided by the employer rather than the state. There was also a growth within society in general of a socially responsible point of view which even extended to share investment decisions with the marketing of ethically sound investments.

Copyrighted material

31.14 Corporate social responsibility

Companies are increasingly recognising the importance of adopting a social, ethical and environmentally responsible approach to business activity and entering into dialogue with all groups of stakeholders. We have discussed the environmentally responsible approach above - the socially responsible approach includes a wide range of activities including the companies' dealings in the marketplace, the workplace, and the community, and in the field of human rights.

Reporting is slowly evolving from simply reporting the amount of charitable donations in the annual report to including additional activities which the company considers to be of key interest. The reporting might be brief hut ii gives an attractive picture of a company's social responsibility. For example, the 2001 Kingfisher Annual Report has a brief two-page section for social responsibility in which it gives information on:

- environmental issues, e.g. a commitment to sustainable forestry, winning the business in the Environment award for energy saving; and
- social issues, e.g. from training young unemployed people to recycling electrical goods; making charitable donations that supported the Woolwnrth Kids First, You Can Do It and Green Grants schemes; and winning a Business in the Community award for Innovation relating to its work forming partnerships with local disability organisations.

We can see from this that community involvement can take many forms, e.g. charitable donations, gifts in kind, employee volunteering initiatives, staff secondments, and sustainable and mutually beneficial partnerships with community and voluntary organisations active in a variety of fields including education, training, regeneration, employment and homelessness.

The approach to CSR is becoming increasingly formalised with the setting up of committees reporting to the Board and more comprehensive CSR Reports.

Committees reporting to the Board

The 2004 Kingfisher Annual Report described the role of the Social Responsibility Committee whose purpose is to review progress in fulfilling the Social Responsibility Plan, including monitoring the resources required to support the Plan and ensuring that actions taken maximise the opportunity to meet the expectations of ke\ Group stakeholders and emerging corporate governance standards (e.g. investor surveys, Turnbull, Business in the Community Survey). The seniority of the Committee members is an indication that it has significant influence in advising the board and ensuring the Plan is delivered.

CSR Reports

The following is an extract from the CSR Report accompanying the Marks & Spencer 2004 Annual Report:

> What Corporate Social Responsibility means to us
> Marks & Spencer has a strong tradition of CSR ... Our founders believed that building good relationships with employees, suppliers and wider society was the best guarantee of long-term success ... Managing CSR well \\ ill allow us to identify potential risks to the Company and respond to areas of performance where we fall behind ... it also means we can identify opportunities to differentiate ourselves from our competitors. CSR can help us to draw shoppers to our stores, attract and retain the best staff, make us a partner of choice with suppliers and create value for our shareholders.

Copyrighted material

Their approach is built around three Principles, namclx Products, People and Places, and a framework de\eloped by their Hoard-level CSR Committee during 2IMI2 with a detailed statement for each Principle. For example, the Principle for Places reads as follows:

> Help make our communities good places in which to live and work
> We recognise our obligations to the communities in which we trade. We were founding members of Business in the (lommunit) .,. Our relationship with communities is interdependent. Successful retailing requires economically healthy and sustainable communities ... we provide employment and products and services and often become an important part of the fabric of the high street. We place much emphasis on our stores, their location, design, construction and activities. A 'Store of the Future* project has helped to impro\c the environmental standards we use to locate, build and refurbish them. Day-to-day operations are managed within an overall compliance system that includes emergency planning, energy and water usage, health and safety, waste disposal, recycling, recovery of shopping trolleys and donations of unsold food to charities ... We are also active in a wider sense ... A recent development is our growing co-operation with suppliers and business partners in community programmes.

31.15 Need for comparative data

There is evidence" that environmental performance could be given a higher priority when analysts assess a company if there were comparable data by sector on a company's lex el of corporate responsibility.

We will consider two approaches that have taken place to satisfy this need lor comparable data: benchmarking and comprehensive guidelines.

31.15.1 Benchmarking

There are a number of benchmarking schemes and we will consider two bv wax of illustration these are the London Benchmarking Group, established in 1994, and the Impact on Societx, established in December 2001.

The London Benchmarking Group[30]

The Group started in 1994 and consists of companies which join in order to measure and report their involvement in the community, which is a key part of any corporate social responsibility programme, and which have a tool to assist them effectively to assess and target their community programmes. Organisations such as Deloitte & Touchc, British Airways and I.loxds TSH are members.

The scheme is concerned with corporate community involvement. It identifies three categories into which different forms of community inxolvement can be classified, namely, charity donations, social orcommunit) investment and commercial initiatives, and includes only contributions made over and above those that result from the basic business operations.

It uses an input/output model, putting a monetary value on the 'input' costs which include contributions made in cash, in time or in kind, together with full cost of staff involved; and collecting 'output* data on the community benefit, e.g. number who benefited, leveraged resources and benefit accruing to the business.

Copyrighted material

7 Discuss the value added concept giving examples, and ways to improve the statement.

8 Outline the arguments for and against a greater role for the audit function in corporate social reporting.

9 (a) 'Human assets are incapable of being valued.' Discuss.

(b) Football clubs have followed various policies in the way in which they include players within the«r accounts. For example, some clubs capitalise players, as shown by a 1992 Touche Ross survey:-*3

Cub	*Value* £m	Basis	*Whtch players*
Tottenham Hotspur	9.8	Cost	Those purchased
Sheffield United	8.7	Managers valuation	Whole squad
Portsmouth	7.0	Directors' valuation	Whole squad
Derby County	6.5	Cost	Those purchased

lubs disclose squad value in notes to the accounts or in the directors' report

Manchester United	24.0	Independent valuation
Charlton Athletic	4.1	Directors' valuation
Millwall	11.0	Manager's valuation

Discuss arguments for and against capitalising players as assets. Explain the effect on the profit and loss account if players are not capitalised.

10 (a) Examine the recent financial press to identify examples of a failure to meet information needs in respect of an area of public interest

<b) Obtain a set of accounts from a public listed company and assess the success in meeting the needs of the traditional users. Repeat the process for non-traditional users and discuss how you could improve the situation (i) marginally. (ii) significantly.

11 Discuss the impact of the following groups on the accounting profession:

(a) Environmental groups;

(b) Customers:

(c) Workforce;

(d) Ethical investors.

12 Nissan, the Japanese car company, decided that 'any environmentalism should pay for itself and for every penny you spend you must save a penny. You can spend as many pennies as you like as long as other environmental actions save an equal number."[41] Discuss the significance of this for each of the stakeholders.

13 (a) 'Accounting should contribute to the protection of the environment.' Discuss whether this is a proper rote for accounting and outline ways in which it could

(b) Outline, with reasons, your ideas for an environmental report for a company of your choice.

(c) Discuss the arguments against the adoption of environmental accounting.

14 (a) Obtain the annual reports of companies that claim to be environmentally aware and assess whether these reports and accounts reflect the claim. The various oil. chemical and pharmaceutical companies are useful for this.

(b) Look at your own organisation/instrtution. outline the possible environmental issues and discuss how these could or should be disclosed in the annual report.

Copyriqhfod material

4 *To pay* providers *of capital*	
Debenture interest	
11% of £600.000	66.0
Dividends	
Preference 20X8 *7%* of £200,000	14.0
Ordinary 20X8 8 million shares at 4.28p	342.4
Minority interest	144.1
	366.5
5 To *provide (or maintenance and expansion of assets*	
Profit before tax	1.156.4
Less: tax	(527.9)
: minority interest	(144.1)
: dividends	(356-4)
Retained profits	128.0
Depreciation	98 4
	226.4

Required:

(a) Prepare a statement of value added for the year to 30 September 20X9. Include a percentage breakdown of the distribution of value added.

(b) Produce ratios related to employees' interests based on the statement in (a) and explain how they might be of use.

(c) Explain briefly what the difficulties are of measuring and reporting financial information in the form of a statement of value added.

Question 2

David Mark is a sole trader who owns and operates supermarkets in each of three villages near Ousby. He has drafted his own accounts for the *year* ended 31 May 20X4 for each of the branches. They are as follows:

	Arton		*Rlendale*		*Otfearn*	
	£	£	*L*	£	£	£
Sales		910.800		673.200		382.800
Cost of sales	»	633,100		504,900		287.100
Gross profit		277,700		168.300		95.700
Less: Expenses:						
David Mark's salary	10.560		10.560		10.560	
Other salaries and wages	143,220		97.020		78.540	
Rent			19.800			
Rates	8.920		5,780		2.865	
Advertising	2.640		2.640		2.640	
Delivery van expenses	5.280		5.280		5.280	
General expenses	11.220		3.300		1.188	
Telephone	2.640		1.980		1.584	
Wrapping materials	7.920		3.960		2.640	
Depreciation:						
Fixtures	8.220		4.260		2.940	
Vehicle	3.000	203.620	3.000	157.580	3.000	111.237
Net profit/floss)		74,080		10.720		(15,537)

uopyrighted material

The figures for the year ended 31 May 20X4 follow the pattern of recent years. Because of this, David Mark is proposing to close the Clifearn supermarket immediately.

David Mark employs 12 full-time and 20 part-time staff. His recruitment policy is based on employing one extra part-time assistant for every £30,000 increase in branch sales. His staff deployment at the moment is as follows:

	Arton	*Blendale*	*Qtfearn*
Full-time staff (including managers)	6	4	2
Part-time staff	8	6	6

Peter Gaskin. the manager of the Clifearn supermarket asks David to give him another year to make the supermarket profitable. Peter has calculated that he must cover £125.500 expenses out of his gross profit in the year ended 31 May 20X5 in order to move into profitability. His calculations include extra staff costs and all other extra costs.

Additional information:

1 General advertising for the business as a whole is controlled by David Mark This costs £3.960 per annum. Each manager spends a further £1,320 advertising his own supermarket locally.

2 The delivery vehicle is used for deliveries from the Arton supermarket only.

3 David Mark has a centra! telephone switchboard which costs £ 1584 rental per annum. Each supermarket is charged for all calls actually made. For the year ended 31 May 20X4 these amounted to:

Arton	**£2.112**
Blendale	£1,452
Clifearn	£1.056

Required:

(a) A report addressed to David Mark advising him whether to close Clifearn supermarket. Your report should include a detailed financial statement based on the results for the year ended 31 May 20X4 relating to the Clifearn branch.

(b) Calculate the increased turnover and extra staff needed if Peter's suggestion is implemented.

(c) Comment on the social implications for the residents of Clifearn if (i) David **Mark** closes the supermarket, (ii) Peter Gaskin's recommendation is undertaken.

* Question 3

(a) You are required to prepare a value added statement to be included m the corporate report of Hythe pic for the year ended 31 December 20X6. including the comparatives for 20X5. using the information given below:

Copyrighted material

32.1 Introduction

In this chapter we consider the following:

- The nature of business ethics
- Ethical codes for businesses
- The background to business ethics
- The role of ethics in modern business
- The role of professional accounting ethics
- The role of the accountant as a guardian of business ethics
- Growth of voluntary standards.

The issue of ethics is at the very centre of all societies. Every society, such as a nation, must operate according to some ethical guidelines, however idiosyncratic or singular they may seem to outsiders - without such guidelines the society would lapse into anarchy and eventual collapse. This also applies to sub-societies, e.g. a family, a group of friends or even a business organisation, and in this chapter wc introduce the student of accounting to the basics of ethics as they could be applied to business.

What do we mean by 'ethics'?

In any study a good starting point is the production of a working definition of the issue-under consideration. The *Oxford English Dictionary* has one of the more accessible definitions of ethics. It states four possible views of ethics:

> Ethics can be defined as (i) the science of morals; (ii) moral principles; (iii) a philosophy or (iv) a code.

In this chapter we will adopt the fourth definition of ethics as an ethical code, i.e. wc will concentrate on the bureaucratic view of how to operate ethics in practice. The other three views are more properly the domain of philosophers as they are really concerned with what ethics should be.

32.2 The nature of business ethics

Business ethics refers to the relationship of a business to three significant 'environments* or 'levels'. Each business seeks for a harmnnisation (or even a compromise) between the three levels of ethics which are traditional 1\ viewed as follows:

1 The macro level

The macro ethical guidelines applied to a business in the national and international context arc usually the result of political, cultural, legal and religious pressures.

2 The organisational level

The organisational ethical guidelines are the ethics specific to an organisation. In many texts they are referred to as 'corporate social responsibility*. The guidelines may be of long duration, e.g. the ethics of the original founders of the organisation (such as the Co-operative Wholesale Movement or the John Lewis Partnership) or short duration, e.g. the ethical beliefs of the current senior managers of the business and of the current trading partners in the industrial sector within which the organisation operates.

3 The individual level

Individual ethical guidelines or personal ethics refers to the ethics of each individual in the organisation. These are naturallv the result of a much metre varied set of influences or pressures. As an individual each of us 'enjoys' a series of ethical pressures or influences including the following:

- parents - the lirsl and, according lo many authors, the most crucial influence on our ethical guidelines;
- family - the *extended* family which is common in Eastern societies (aunts, uncles, grandparents and so on) can have a significant impact on personal ethics; the *nuclear* family which is more common in Western societies (just parent(s) and siblings) can be equally as important but more narrowly focused;
- social group - the ethics of our 'class* (cither actual or aspirational) can be a major influence;
- peer group - the ethics of our 'equals' (again either actual or aspirational) can be another major influence;
- religion - ethics based in religion are more important in some cultures, e.g. Islamic societies have some detailed ethics demanded of believers as well as major guidelines for business ethics. I Iowever, even in supposedly secular cultures, individuals are influenced by religious ethics;
- culture - this is also a very effective formulator of an individual's ethics;
- professional - when an individual becomes part of a professional body then they are subject to the ethics of the professional body.

How do professional ethics differ from those arising from parents and peers?

The essential difference is that the ethics handbook which governs the behaviour of all staff in an organisation are more likely to be formally codified. A code of behaviour may be written as a fonnal Statement of Professional Ethics or subsumed within the staff. The fact that the (!ode is formally specified means that it is capable of being policed with information systems in place to assist monitoring and enforcement.

Harmonisation

We have seen above that 'business* has a complex 'web* of relationships with various parties each operating with their own ethics guidelines. The task of the business is therefore to ensure effective operations whilst meeting the various ethical demands of all interested parties.

Copyrighted material

Promotion of business ethics

At an institute level, the Chair of the Institute of Business Kthics, Neville Cooper put the issue with remarkable clarity in 1987 when he said:

> Our conviction is thai, essentially, industry and commerce are highly ethical undertakings. The ethical demands on us ... are to run them supremely efficiently, responsibly and with clear moral standards.'

At a corporate level, the chairman of a major UK food company in referring to his company's code of ethics said:

> ... business ethics arc not negotiable - a well founded reputation for scrupulous dealing is itself a priceless company asset and the most important single factor in our success is faithful adherence to our beliefs.

Management commitment to business ethics

This view of business ethics has its spiritual home in the development of codes ofbehaviour formulated in the USA since the 1960s and imported into Britain in the 1980s. Research carried out b\ the Institute of Business Kthics in 1987 in respect of the 300 largest UK companies did support this view, where the replies received did show ethics being taken seriously by senior management. Many ethical statements were shown to be published in the annual accounts and report documents produced by these companies. This research supported other surveys, especially that carried out by the journal *International Management* in 1982.

Well-known failures to follow acceptable ethical practices

The importance of business ethics is also, sadh, reinforced by a series of high-profile scandals caused by an obvious lack of business ethics. There are many examples including BCCI and the activities of the late Robert Maxwell with the Mirror Group of companies.

The issue of public confidence in business integrity is at the key of the continued acceptance of the freedom to operate within a market economy. It was as a result of such scandals that the Institute of Business Kthics was formed in 1987 to

> ... clarify ethical issues in business, to propose positive solutions to problems and to establish common ground with people of goodwill of all faiths.

This, voluntary, organisation has been attempting to spread the issue of ethics and ethical behaviour across all business enterprises both nationally and internationally.

Concerns about ethical standards still exist

In 2003 a new guide *Developing a Code ofBusiness Ethits* was published In the Institute of Business Kthics (IBK) accompanied by a comment by the guide's author (www.ibc.org.uk) that business should be shocked to find how low thev score in the trustworthiness stakes with 60% of people not trusting business leaders to tell the truth. The IBK view is that the existence of a Code provides the criteria against which business decisions can be measured and that, without it, ethical dilemmas may be hard to identify - making the point as an example that it is too easy, when trying to win contracts, or simply dealing with suppliers or customers, to take decisions that may not stand critical assessment when the heat of the immediate pressure is off.

Copyrighted material

UK commitment to self-regulation

The self-regulation approach is a feature of the business culture of the UK. The work of the Cadbun Committee (1991, Updated in 1992) helped the issue of corporate governance and managerial behaviour and the Greenbury Report (1995), which looked in detail at the issue of directors* remuneration packages, included an ethical view of such, again reflecting the usual UK approach. The Hampel Report (1998) reinforced the voluntary, sclf-rcgulatory nature of such views of business ethics.

Thus the issue of business ethics is seen to be a ke\ feature of business success but ethics are (in the view of business) best 'enforced' on a voluntary basis.

32.5 The role of ethics in modern business

When considering the issues raised under business ethics a useful starting point is to examine the areas covered by the Ethical Codes published by the various organisations which indicate the kev areas of concern.

1 Conflicts of interest

These are always issues of concern as management must be concerned with the benefit of the organisation and they must not put personal gain ahead of the gain for the organisation. Where there is a possibility of conflict, the usual practice is for the manager (including directors) to declare an interest to their fellow managers who can then assess the actions of the manager in such a light. Ideally the manager should withdraw from taking decisions where they may gain personally, but this may not always be practical. The awarding of contracts, employment of relatives and share dealings are all areas of concern here.

Public perceptions

The manager needs to not only be behav ing ethically but also to be seen to be behaving ethically. Recent issues in Parliament have highlighted the dangers of conflicts of interest and how even innocent conflicts can be seen to have a more sinister, ulterior motive. The whole issue of insider dealing has recently caused problems in respect of share options for directors and their actions in taking up the options at advantageous times.

2 Gifts

The practice of giving and receiving gifts in business has always been a very fine ethical question. Ideally gifts should not be seen as an inducement to promote business in a manner which is less than open and honest. However, gifts are often intended as a sign of goodwill and respect and have no other motive than this. The issue becomes even more cloudy when we consider corporate hospitality, e.g. are tickets for the Football World Cup given to potential customers a legitimate gift? An apparently innocent social event could be seen to have sinister overtones in the 'cold light of day[9].

There is a normal, human need to show respect and the giving and receiving of gifts is a key part of this. Japan for example is an illustration of cultural ethical differences where gifts are commonplace in business. In most businesses the key factor is scale. Small, low-value gifts (diaries, low cost pens, etc.) are not perceived as a threat to ethical behaviour but high-value gifts arc not acceptable.

This is the policy set out in the PSA Peugeot Citroen 2003 Code of Ethics:

> Employees act with integrity and honesty in their dealings with customers and suppliers, refraining from directly or indirectly soliciting gifts and refusing to accept gifts of any significant value.

Copyrighted material

In 19%, SAI convened an international multi-stakeholder Advisory Hoard which developed Social Accountability 8000 (SA 8000), a voluntary standard for workplaces based on II.() (International labour Organization) and other human rights conventions with independent verification,

SA 8000 is a way for retailers, brand companies, suppliers and other organisations to maintain just and decent working conditions throughout the supply chain. It is based on international workplace norms in the II.O conventions and the UN's Universal Declaration of I luman Rights and the Convention on Rights of the Child. It includes, e.g. a standard for compensation which reads as follows:

> Compensation: Wages paid for a standard work week must meet the legal and industrv standards and be sufficient to meet the basic need of workers and their families; no disciplinary deductions.

There are also standards relating to child labour, forced labour; health and safety; freedom of association and right to collective bargaining; discrimination; discipline; working hours and management systems. For lurther information refer to www.sa-tntl.org.

32.6 The role of professional accounting ethics

\\ ithin the UK the various professional accounting bodies do provide their members with very detailed ethical guidelines. Accountants both in practice and in businesses are required to follow these guidelines in their normal patterns of work and can be punished individually for breaches of these professional codes of ethics. There are, however, two distinct approaches to ethics, one for the accountant in practice and another for those within business.

Accountants in practice

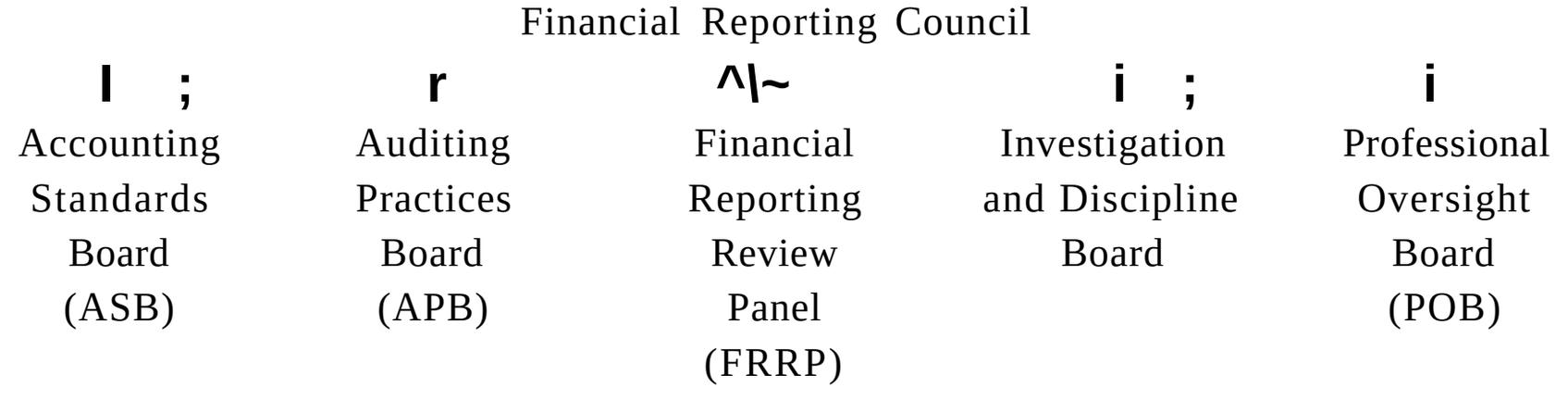
The accountant in practice has a considerable body of ethical support to work from, particular! v if he/she is a member of one ol the various Chartered Accountancy bodies.

These bodies (for Hngland and Wales, Scotland and Ireland) publish guidelines covering key areas of accounting work and behaviour such as

- their relationship with the client;
- the t\pe of work they can do for the client;
- the way to safeguard independence;
- the standards of behaviour expected of accountants;
- the manner of dealing with conflicts of interest;
- the way in which they will heha\e in gi\en situations such as takeovers, insolvencies and so on;
- the nature and type of advice they can give clients.

In 2002 following the recommendations of the Coordinating Group on Audit and Accounting Issues, the Accountancy Foundation, which had been set up in I°9° as a self-regulatory body, was replaced by extending the powers of the Financial Reporting Council. The new structure is as follows:

Copyrighted material



The ASB will continue to be responsible for accounting standards; the APB will be responsible for standards for audit integrity, independence and objectivity previously set by the professional bodies; the FRRP will become more proactive in investigating possible departures from standards; the Investigation and Discipline Board provides an independent hearing for those disciplinary cases where there is a public interest; the Professional Oversight Board (POB) will oversee ethical standards.

The intention has been to put in place a regime (supplemented by the Higgs and Smith Reports) that will maintain public confidence that there is sound corporate governance, that the financial reports give a fair view and the audit process is effective to avoid the prospect of the large-scale accounting frauds that have occurred in the USA.

The POB has recommended that the profession should share experience of dealing with ethical issues or fraud through greater use of'real-life* case studies as part of training. The professional bodies have responded and included ethics within their examination syllabi. For example, the ICAKW has an Ethics Module as one of the twelve modules examined at the Professional stage and the ACCA in its Paper PI, *Professional Accountant,* covers personal and professional ethics, ethical frameworks and professional values, as applied in the context of the accountant's duties and as a guide to appropriate professional behaviour and conduct in a variety of situations. In addition, as part of their ethical development, students will be required to complete a two-hour online training module, developed by ACCA. This will give students exposure to a range of real-life ethical case studies and will require them to reflect on their own ethical behaviour and values. Students will be expected to complete the ethics module before commencing their Professional level studies.

Alongside the developments in the professional examination system, there has been a growing increase in the coverage of corporate social responsibility and sustainability reporting in academic teaching programmes. There have been various approaches, such as designing separate modules within an undergraduate programme, as at Nottingham University Business School, to embedding CSR within syllabi, as at Waikato, where the Dean states: "In contrast with the traditional university approach of creating a centre to study sustainability, the Waikato Management School embraces sustainability at the heart of our activities. We see sustainability as central to the future of business' (www.mngt.waikato.ac.nz).

As well as coverage in the teaching programmes there has also been a growing pressure from academics for more academic research challenging the managerialist perspective in the post-Enron era.

Accountants in business

The accountant working within business has a different set of problems due to the dual position as an employee and a professional accountant. There is a potential clash of issues where the interests of the business could be at odds with professional standards.

The various professional bodies approach things in different ways. For example, the ICAEW established the Industrial Members Advisory Committee on Ethics (IMACE) in

Copyrighted material

Ihe late 1970s to give specific advice to members with ethical problems in business. This is supported by a strong local support network as well as a national helpline for the guidance of accountants. At the moment [MACE is dealing with 200 to .>00 problems per year but this is more a reflection of the numbers of chartered accountants in business than a reflection on the lack of ethical problems. A survey[2] carried out by the Board of Chartered Accountants in Business indicated that 11% of members had put their jobs on the line over ethical issues.

The type of problem raised is a good indication of the ethical issues raised for accountants in business. Thcv include:

- requests by employers to manipulate tax returns;
- requests to produce figures to mislead shareholders;
- requests to conceal information;
- requests to manipulate overhead absorption rales to extort more income from customers (an occurrence in the defence industries);
- requests to authorise and conceal bribes to buyers and agents, a common request in some-exporting businesses;
- requests to produce misleading projected figures to obtain additional finance;
- requests to conceal improper expense claims put in by senior managers;
- requests to over- or undervalue assets;
- requests to misreport figures in respect of government grants;
- requests for information which could lead to charges of'insider dealing";
- requests to redefine bad debts as 'good' or vice versa.

These issues are also reflected by the other professional bodies, the Chartered Association of Certified Accountants (ACCA), the Chartered Institute of Management Accountants (CIMA) and the Chartered Institute of Public Finance and Accountancy (CIPFA). The last of these organisations has added problems in that there is an men political dimension to many decisions taken as its members are working in local government and the concept of 'value for money* is becoming a key feature of their work. Cases in respect of local councils in Westminster and Doncaster have demonstrated the ethical difficulties encountered In CIPFA members in carrying out their duties within their very singular environment.

The accountant in business has this problem of dual ethical structures; they are professionals but they are also employees and on a surprising number of occasions there is a conflict between the two roles on ethical issues. The solution of this conflict causes main problems for the accountant who is left with only three possible solutions, namely:

1 Take some action either by informing a superior (letting them take some action) or by whistle-blowing to an outside agency such as the professional body, the police, the media or whatever. This may well cause the accountant some personal problems and is difficult if the superior is the 'guilty party'.

2 Resign on principle and leave the organisation with personal and professional ethics intact but with a possibly damaged career.

3 Ignore the action and hope someone else notices the unethical behaviour and takes the appropriate action.

All accountants may have to face these choices at some time during their career and it is a test of character which choice is made. The choice itself mav well be a function of the individuafs own ethical background influenced by the factors mentioned earlier.

Copyrighted material

National and international regulation

It is likely that there will he an increase in formal regulation as the search for greater transparency and ethical business behaviour continues.

National regulation

Money laundering - overview

There arc various estimates of the scale of money laundering ranging up to over 2% of global gross domestic product. Certain businesses are identified as being more prone to money laundering, e.g. import/export companies and cash businesses such as antiques and Ml dealers, auction houses, casinos and garages. However, the avenues are becoming more and more sophisticated with methods varying between countries, e.g. in the UK there is the increasing use of smaller non-bank institutions whereas in Spain it includes cross-border carrying of cash, money-changing at bureaux de change and investment in real estate.

Money laundering - implications for accountants

In 1997 the APB in the UK issued Practice Note 12 *Money Laundering* which required auditors to take the possibility of money laundering into account when carrying out their audit and to report to the appropriate authority if they become aware of suspected laundering.

In 1999 there was also guidance from the professional accounting bodies, e.g. *Money Laundering: Guidance Soles for Chartered Accountants* issued by the Institute of Chartered Accountants which deal with the statute law, regulations and professional requirements in relation to the avoidance, recognition and reporting of money laundering.

Since that date, there has been an intensification of efforts to control it in the KU and the UK prompted by terrorist implications and the determination to target criminal activities. For example:

- In 2001 the F.U Parliament approved a New Money laundering Directive (effective from June 2003) which stipulated that accountants are included in existing legislation requiring suspicious activities to be reported.
- In 2(M)2 the UK Parliament passed the Proceeds of Crime Act under which the Assets Recovery Agency (www.assetsrecovery.gov.uk/) began operations in February 2003 with opportunities for accountants to be employed as financial investigators to follow often complex financial arrangements in order to link the proceeds of crime to extant assets.
- In 2006 changes were made to anti-money laundering law which meant that accountants providing privileged services to clients were treated in the same way as lawyers and were not required to report suspicions to the National Criminal Intelligence Service.

Whistle-blowing - defined

Some disclosures which may be embarrassing to senior management may also be a statutory obligation, e.g. in the UK an accountant or internal auditor has the same legal duty to report to external authorities suspicions of terrorism or money laundering as any other employee. This means that there is an implicit authorisation by management. By whistle-blowing, we mean the unauthorised disclosure, in good faith, of serious information relating to questionable practices, where disclosure is perceived to be in the public interest. Such information can be extremely varied: e.g. a financial accountant may be reporting the managing director of a subsidiary company for materially padding his expenses, or an internal auditor may be disclosing audit findings.

Copyrighted material

will have to ensure that financial statements do not omit or falsify eases involving bribery and prohibit the establishment of off-the-books accounts for the purpose of bribing foreign public officials or of hiding the bribery. The consent ion has been ratified by major trading nations including the UK, USA, Japan and German). The pressure for the OECD convention came initially from the USA where there was already anti-bribery legislation and then from multinational companies which were finding that some government officials were demanding not 10ii but up to 3(1% of contract prices to award contracts; this not only made it far more difficult to conceal but was seen to be hilling the bottom line too hard. The convention had commercial support and has been ratified by major trading nations including the UK, USA, Japan and Germany. In the UK, the Ami-Terrorism, Grime and Security \c1 2)M)1 has extended the common law relating to bribery of UK officials to include the bribery of foreign officials.

Events with the European Commission have highlighted the potential tor ethical issues and the inevitability of whistle-blowing as being a logical step in the absence of an effective internal process for dealing with ethical issues. In this case, the whole Commission resigned due to the ethical malpractice of a few, brought to light by the public revelation of a whistle-blower in the accounting function.

UK regulation

In 2001 the government took action to outlaw bribery by UK nationals and companies, even in circumstances where the acts took place overseas, measures which go beyond the requirements of the Convention. In 2004 the OKCD carried out a favourable examination of the UK's progress in implementing the OHO) Bribery Charier and commended it for other aspects of the anti-bribery framework such as employee whistlcblower protection, the ability of the tax authorities to make spontaneous disclosures of suspicious information to law enforcement agencies and the support the government has provided to a number of private sector and civil society anti-corruption initiatives, including Transparency International's Business Principles on Countering Bribery, the International Business Leaders* Forum, the Commonwealth Business Council and the Extractive Industries Transparent*) Initiative conference.

32.7 The role of the accountant as guardian of business ethics

There is therefore an established need for business ethics, but the question arises: who can police the organisation for ethical breaches? This is a crucial question as any set of rules is only as effective as its enforcement mechanism allows it to be.

There needs to be some sort of 'ethical guardian' w ho can police the code of ethics w ithin an organisation to bring out any unethical practices and ensure that corrective action is taken as appropriate.

There are 'ethics committees' in some organisations which act as a court to judge ethical breaches, but in themselves they arc only part of the guardian function.

It is therefore a possible function of an accountant's role to IK* the guardian of ethics within a business because the following attributes are possessed by the accountant:

- skill - the accountant is trained in the establishment and management of control systems and ethics is simply another layer of control;
- stewardship - the accountant already acts as the steward of the shareholders* interests and the function is similar when discussing ethics;
- rule orientation the accountant is a trained follower of rules and is accomplished at ensuring others obey stated rules and regulations;

Copyrighted material

- judgement - ethics requires the application of fine judgement, an attribute common in many accountants;
- professionalism - the accountant is one of the main professionals working within businesses and the attributes of a professional arc essential to make judgements on ethical breaches.

The role of the accountant in practice

This could well prove to be a new area of responsibility for accountants in both practice and business and it is not without precedent. The work, for example, of the Audit Commission in the public sector is perhaps an indication of the future role of accountants in practice. The Commission does make judgements on the traditional accounting areas but it is also looking at other more subjective measures of performance within public sector organisations and perhaps this is a growth area, especially as the demand by society for more accountability in business becomes more powerful and politically impossible to ignore.

The role of the accountant in business

The accountant within business could also be seeing a growth in the ethical policing role as internal auditors take on the role of assessing the performance of managers as to their adherence to the ethical code of the organisation. This is already partially happening as conflicts of interest are often highlighted by internal audits and comments raised on managerial practices. This is after all a traditional role for accountants, ensuring that the various codes of practice of the organisation are followed. The level of adherence to an ethical code is but another assessment for the accountant to undertake.

Implications for training

It. as is Iikelv, the accountant has a role in the future as 'ethical guardian', additional training will be necessary. This should be done at a ver\ early stage, as in the USA, where accountants wishing to be Certified Public Accountants (CPAs) are required to pass formal exams on ethical practices and procedures before they are allowed the pri\ ilege of working in practice. Failure in these exams prevents the prospective accountant from practising in the business environment.

32.8 Growth of voluntary standards

Social, environmental and ethical reporting is at an early stage but it is receiving increasing attention from industry and commerce with the growing recognition that long-term shareholder value cannot be achieved without acknowledging rcsponsibilitv to wider stakeholder groups.[1] There has alrcad) been stakeholder pressure tor management to balance the interests of investors, employees, suppliers, customers and the public. Finally, industry, commerce and stakeholders are moving towards a common goal which is to provide innovative reports. I low ever, this requires a commitment from the directors, who are the ones who control the information, and an acceptance of the fact that it is not appropriate to produce onlv favourable comments. This has now been recognised by some of our major companies, e.g. BT's 1W9 Social Report.

The Institute of Social and Kthical Accountability was founded in 1996 as an international membership organisation, based in the UK, In November \'W the institute launched a world first international processing standard, A A KMK), enabling organisations to build quality into their existing and developing social and ethical management systems. The

Copyrighted material

Revised annually, *Financial Accounting & Reporting* is the most up-to-date text on the market. Now fully updated in its 12th edition, it includes extensive coverage of International Accounting Standards (lASs) and International Financial Reporting Standards (IFRSs).

This market-leading text offers students a clear, well-structured and comprehensive treatment of the subject. Supported by illustrations and exercises, the book provides a strong balance of theoretical and conceptual coverage. Students using this book will gain the knowledge and skills to help them apply current standards, and critically appraise the underlying concepts and financial reporting methods.

Key features

- Combines academic rigour with an engaging and accessible style
- Coverage of International Financial Reporting Standards
- Illustrations taken from real published accounts
- Excellent range of review questions
- Numerous exercises, varying in level of difficulty, with solutions where applicable
- Extensive references
- A section on the Analysis of Accounts
- A section on Accountability - includes Corporate Governance issues, Environmental and Social Reporting and Ethics

New features for this edition

- Fully updated to May 2007
- Updated coverage of International Financial Reporting Standards
- Selected chapters include new additional questions and exercises
- Includes more examples of extracts from real financial reports
- Fully supported by a comprehensive set of multiple choice questions online, covering all parts of the text

Barry Elliott is a training consultant. He has extensive teaching experience at undergraduate, postgraduate and professional level in China, Hong Kong, New Zealand and Singapore. He has wide experience as an external examiner both in higher education and at all levels of professional education.

Jamie Elliott is a Director with Deloitte & Touche. Prior to this he has lectured at university on undergraduate degree programmes and as an assistant professor on MBA and Executive programmes at the London Business School.

ISBN 978-0-273-71231-2

9 V80273'712312 M >

Front cover image:
O Getty Images

FT Prentice Hall
HNAM'IAI. IIMI-.S *an imprint of*

Additional student support at
www.pearsoned.co.uk/elliott-elliott

www.pearson-books.com

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Required:

(a) Prepare a Value Added Statement showing % for each year and % change

(b) Draft a note for inclusion in the Annual Report commenting on the Statement you have prepared.

References

1 C Lehman, *Accounting's Changing Roles in Social Conflict*, Markus Wcincr Publishing, 1992, p. 64.

2 *Ibid.*, p. 17.

3 SJ. Gray and *CM.* Roberts, *Voluntary Information Disclosure and the British Multinationals: Corporate Perceptions of Costs and Benefits, International Pressures for Accounting Change** Premice **Hall,** 1989, p. 117.

4 AICPA, *The Measurement of Corporate Social Performance,* 1977, p. 4.

5 *This Common Inheritance,* Government While Paper, 1990.

6 KPMG Peat Marwick Mcl.intock, *Environmental Considerations in Acquiring,* (Corporate Finance Briefing, 17 May 1991.

7 M. Jones, 'The cost of cleaning up'. *Certified Accountant,* May 1995, p. 47.

8 M. Campanale, 'Cost or opportunity'. *Certified Accountant,* November 1991, p. 32.

9 Sec http://www.iasplus.com/resource/0105eurocnv.pdf

10 Sec www.uncp.org

11 See http://ec.curopa.cu/environment/emas/index_en.htm

12 See www.iccwbo.org

13 Sec www.ccfic.be/

14 Sec http://cc.curopa.cu/cnvironmcnt/ncwprg/

15 See www.ccaa-acve.ca/aboutus.hnii

16 Sec www.rabnct.com/

17 See www.fcc.be/issues/othcr.htm#Sustainability

18 M.R. Matthews and M.H.B. Pcrera, *Accounting Theory and Development,* Chapman and Hall, 1991, p. 350.

19 Accounting Standards Steering Committee, *The Corporate Report,* 1975.

20 R. Gray, D. Owen and K. Maunders, *Corporate Social Reporting,* Prentice 1 fall, 1987, p. 75.

21 ASB, *Statement of Principles: The Objective of Financial Statements,* 1991, para. 9.

22 ***Ibid.*, para. 10.**

23 *Ibid.*, para. 11.

24 F. Okcabol and A. Tinker, 'The market for positive theory: deconstructing the theory for excuses[1]. *Advances in Public Interest Accounting,* vol. 3, 1990.

25 II. Sebrcudcr, 'Employees and the corporate social report: the Dutch case', in S.J. Gray (cd.), *International Accounting and 'Transnational Decisions,* Buttcrworth, 1983, p. 287.

26 *Ibid.,* p. 289.

27 *lb,d.,p.2K7.*

2H AICPA, «ÿ». ci/., p. 243.

29 *Statement of Principles, op at.*

30 R. Gray, D. Owen and *K.* Maunders, *op. at.,* p. 44.

31 *Ibid*

32 S.J. Gray and K.T. Maunders, *Value Added Reporting: Uses and Measurement,* ACCA, 1980; B. Underwood and P.J. Taylor, *Accounting Theory and Policy Mating,* Hcincmann, 1985, p. 298.

33 *Ibid.,* p. 174.

34 M. Davies, R. Patterson and A. Wilson, *UK GAAP* (4th edition), **Ernst** & Young, 1994, p. 71.

35 R. Gray, *D.* Owen and K. Maunders, *op. cit.,* p. 48.

36 R.W. Perks and R.I I. Gray, 'Corporate social reporting - an analysis of objectives*, *British Accounting Review,* 1978, vol. 10(2), pp. 43-59.

37 Business in the Environment, *Investing in the Future,* May 2001.

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

38 See www.lbg-online.net/
39 See www.iosrcportinp.org
40 R. Bruce, *The Independent*, 25 October 1993, p. 29.
41 M. Brown, 'Greening the bottom line*, *Management Today*, July 1995, p. 73.

Bibliography

The following references have been helpful for students carrying out assignments in the developing areas of environmental and social reporting:

Association of British Insurers, *Investing in Social Responsibility - Risks ami Opportunities*, London: Association of British Insurers, 2001.

C.A. Adams, W.-Y. Hill and C.B. Roberts, 'Corporate social reporting practices in Western Europe: legitimating corporate behaviour?[1], *British Accounting Review*, vol. 30, no. I, 1998, pp. 1-22.

C.C. Adams, A. Omits and (J. Ilarte, "Corporate equal opportunities (non-) disclosure', *British Accounting Review*, vol. 27, no. 2, 1995, pp. 87-108.

P. Bart ram, 'Go green, not into the red'. *Accountancy Age*, 31 October 2002, p. 15.

J. Bebbington, 'Sustainable development: a review of the international development business and accounting literature*. *Accounting Forum*, vol. 25, no. 2, 2001, pp. 128-157.

J. Bebhington and I. Thomson, 'Commentary on: Some thoughts on social and environmental accounting education*, *Actounting Etlucation: An international journal*, vol. 10, no. 4, 2001, pp. 353-355.

F. Birkin, P. Edwards and D. Woodward, 'Some Evidence on Executives' Views of Corporate Social Responsibility*. *British Accounting Review*, vol. 33, 2001, pp. 357-397.

J.U. Blokdijk and F. Driccnhuizcn, 'The environment and the audit profession - a Dutch research study*. *The European Accounting Review*, December 1992, pp. 437 443.

K. Bondy, D. Mat ten and J. Moon, 'The adoption of voluntary codes of conduct in MXCs - a three countries comparative study', *Business and Society Review*, vol. 109, no. 4. 2004. pp. 449-478.

K. Bondy, I). Mat ten and J. Moon, 'Codes of conduct as a tool for sustainable governance in MN'Cs', in S. Benn and I). Dunphy (eds.) *Corporate Governance and Sustainabi/ity: Challenges for Theory and Practice*, Rout ledge, 2006.

'Corporate social responsibility*, Guidance for the Financial Services Sector, www.abi.org.uk

W. Chappie and J. Moon, 'Corporate social responsibility (CSR) in Asia: a seven country study of CSR website reporting*. *Business and Society*, vol. 44, no. 4, 20*15, pp. 115-136.

Commission of the European Communities, *Commission Recommendation of 30 May 2001 on the Recognition, Measurement and Disclosure of Environmental Issues in the Annual Accounts and Annual Reports of Companies*, Luxembourg: OOPEC, 2001.

A. Crane, O. Matten and J. Moon, *Corporations and Citizenships* L'K, Cambridge University Press, 2006.

I). Crowthcr, *Social and Environmental Accounting*, I larlow: Financial Times Prentice I lall, 2(HM). p. 109 (Financial Times Executive Briefings), ISBN: 0273650920.

Dcloittc & Touche, *Accounting for Carbon under the L'K Emissions Trading Scheme - Discussion Paper*, London: Deloitte & louche, 2(M)2.

C. Evans, 'Sustainability: the bottom line', *Accountancy*, vol. 131, no. 1313, January 2003, p. 16.

R. Gray, J. Bebbington. D. Walters and M. I louldin (cds.). *Accounting for the Environment*, Paul Chapman Publishing, 1993.

R. Gray, D. Owen and C. Adams, *Accounting and Accountability: Changes and Challenges in Corporate Social and Environmental Reporting*, Prentice I lall, 1996.

R. Gray. J. Bebbington and M. Houldin, *Accounting for the Environment* (2nd edition), London: Sage Publications, 2001.

A. 1 lenriques and J. Richardson, *The Triple Bottom Line: does it all add upr*, Earth scan, 2004.

R. Howes, *Environmental Cost Accounting: An introduction and practical guide*, London: C1MA, 2002.

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

PEARSON

Education

We work with leading authors to develop the strongest educational materials in business and finance, bringing cutting-edge thinking and best learning practice to a global market.

Under a range of well-known imprints, including Financial Times Prentice Hall, we craft high-quality print and electronic publications which help reades to understand and apply their content, whether studying or at work.

To find out more about the complete range of our publishing please visit us on the World Wide Web at:
www.pearsoned.co.uk

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Copyrighted material

This page wasn't downloaded by GBD

Financial Accounting and Reporting

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Question 4

A rational auditor would stop audit work when the total cost is a minimum. However, it is apparent that auditors *arc* 'risk-averse' and they perform more work than is necessary to minimise their total costs. Explain why auditors perform more work than is necessary.

Question 5

(a) Describe the value to the audit client of the audit firm providing consultancy services.

(b) Why is it undesirable for audit firms to provide consultancy services to audit clients?

(c) Why do audit firms want to continue to provide consultancy services to audit clients?

Question 6

How is the relationsh-p between the audit firm and the audit client different for

(a)the provision of statutory audit when the auditor reports to the shareholders:

(b)the provision of consultancy services by audit firms?

Question 7

Why is there a prohibition of auditors owning shares in client companies? Is this prohibition reasonable?

Discuss.

References

1 'Corporate governance in Kuropc', Report of Centre for Kuropcan Policy Studies Working Party, June 1995.

2 'Principles for corporate governance in the Commonwealth[1], Commonwealth Association for Corporate Governance Guidelines, November 1999.

3 *The Times*, \Q October, 2000, p. 29.

4 *Report of the Committee on the Financial Aspects of Corporate Governance (Cadbury Committee Report)*% Gee Publishing, December 1992.

5 *Directors' Remuneration: Report of a Study Croup Chaired by Sir Richard Greenbury (Greenbury Committee Report)*, Gee Publishing, July 1995.

6 *Committee on Corporate Governance: Final Report (Ilampel Committee Report)*, Gee Publishing, January 1998.

7 D. Higgs, *Review of the Role and Effectiveness oj Son-Executive Directors*, DTI, January 2003.

8 S. Turlcy and M. Zaman, 'Higgs and Smith: what difference will they really make?'. *Accounting & Business*, April 2003, pp. 40-42.

9 *Committee on Corporate Governance: The Combined Code* (revised). Gee Publishing, July 2003.

10 *Accountancy*, September 1995.

11 *The Times*, 30 March 1995.

12 M. Pagano, 'Package plus performance*, *Management Today*, January 1998, pp. 70-72.

13 R. Heller, 'Heads they win, tails they win*. *Management Today*, July 1997, p. 22.

14 'What is the incentive?', *Management Today*, July 1999, p. 46.

15 '2005 Annual Report and Accounts, Diagco pic.*

16 IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, IASC, July 1998.

17 ABI, *Statement ofloting Policy and Corporate Governance Good*, 1998.

Copyrighted material

This page wasn't downloaded by GBD

Pearson Education Limited

Edinburgh Gate
Harlow
Essex CM20 2JE
England

and Associated Companies throughout the world
Visit us on the Worid Wide *Web at*
www.pearsoned.co.uk

First published 1993
Second edition 1996
Third edition 1999
Fourth edition 2000
Fifth edition 2001
Sixth edition 2002
Seventh edition 2003
Eighth edition 2004
Ninth edition published 2005
Tenth edition published 2006
Eleventh edition published 2007
Twelfth edition published 2008

© Prentice Hall International UK Limited 1993. 1999
O Pearson Education Limited 2000. 2008

The rights of Barry Elliott and Jamie Elliott to be identified as authors of this work have been asserted by them in accordance with the Copyright, Designs. and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted In any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without either the prior written permission of the Publishers or a licence permitting restricted copying in the United Kingdom issued by the Copyright Ucensing Agency Ltd. Saffron House. 6-10 Kirby Street. London ECIN 8TS.

ISBN 978-0-273-7I23I-2

British Library Cataloguing-in-Publlcatlon **Data**
A catalogue record for this book is available from the British Library.

10 9 8 7 6 5 4 3 2
12 II 10 09 08

Typeset in 9/l2pt Ehrhardt by 3.
Printed by Ashford Colour Press Ltd, Gosport.

The *publisher's policy is to use poper manufactured from sustainabk forests,*

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

M.J. Jones, 'Accounting for biodiversity', *British Accounting Review** vol. 28, no. 4, 1996, pp. 281-304.

B. O'Dwycr, *The State of Corporate Environmental Reporting in Ireland,* London: Certified Accountants Educational Trust lor the Association of Chartered Certified Accountants, 2001, p. 47 (Research Report 69).

D. Owen (td.), *Green Reporting: Accountancy and the Challenge of the Nineties,* Thompson Business Press, 1992.

L.S. Paine, *Value Shift - why companies must merge social and financial imperatives to achieve superior performance.* New York: McGraw-Hill, 20412.

PricewaterhouscCoopers, *The Politics of Responsible Business - a survey of political and business opinion on corporate social responsibility* London: Pricc-watcrhouscCoopcrs in association with the Industry and Parliament Trust, 2001.

J. Rayner and W. Raven (eds.), *Corporate Social Responsibility Monitor,* I,ondon: Gee. 2002, 1 vol., looselcaf. updated.

R. Roslendcr and J.R. Dyson, 'Accounting for the worth of employees: a new look at an old problem', *British Accounting Review,* vol. 24, no. 4, 1992, pp. 311-330.

C.A. Till, Environmental policies of major companies: Australian evidence', *British Accounting Review,* vol. 29, no. 4, 1997, pp. 367-394.

T. Tinker and T. Puxy, *Policing Accounting Knowledge: The Market for Excuses Affair,* Paul Chapman Publishing, 1995.

J.S. Toms, *Environmental Management. Environmental Accounting and Financial Performance,* London: Chartered Institute of Management Accountants, 2000.

Copyrighted material

This page wasn't downloaded by GBD

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Financial Accounting and Reporting

TWELFTH EDITION

Barry Elliott and Jamie Elliott

FT Prentice Hall
FINANCIAL TIMES

-*n inpnnf o/Pearson Education
Harlow, England • London • New York • Boston • San Francisco • Toronto • Sydney • Singapore • Hong Kong
Tokyo • Seoul • Taipei • New Delhi • Cape Town • Madrid • Mexico City • Amsterdam • Munich • Paris • Milan

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

flicts arise between their duties of loyalty to an employer, to the profession and to society as well as their own self-interest. It should be implicit in any such code that a professional accountant's responsibility to satisfy the needs of an individual client or employer is not paramount and satisfying public interest is also important, e.g.:

- financial institutions and investors rely on the integrity of independently audited financial statements when making loan and investment decisions;
- financial executives contribute to the efficient and effective use of the organisation's resources;
- internal auditors provide assurance about a sound internal control system which enhances the reliability of the external financial information of the employer;
- tax experts help to establish confidence and efficiency in, and the fair application of, the tax system.

Fundamental principles

Professional accountants should carrv out their work with

- *integrity* - being straightforward and honest;
- *objectivity* - acting fairly and not allowing prejudice or bias, conflict of interest or influence of others to override objectivity;
- *professional competence* - applying up-to-date technical and professional standards;
- *confidentiality* - respecting the confidentiality of information acquired during the course of performing professional services.

32.8.2 National response in the UK

In 2003 the final report from the government's Co-ordinating Group on Auditing and Accounting Issues required auditors to comply with the Auditing Practice Board's Ethical Standards on auditor independence, rather than those of the professional accountancy bodies. The APH issued its Consultation Paper *Draft Ethical Standards for Auditors* in November 2003, issued as a standard in December 2004.

How have **professional** bodies responded to the **APB** Ethics Standard 2004?

There are five Ethical standards issued in December 2004. These are:

- ES 1 - Integrity, objectivity and independence,
- ES 2 - Financial, business, employment and personal relationships,
- ES 3 - Long association with the audit engagement,
- ES 4 - Fees, remuneration and evaluation policies, litigation, gifts and hospitality, and
- ES 5 - Non-audit services provided to audit clients.

The ASB approach in the Standards has been to set down rules to ensure that auditors are perceived by stakeholders to be independent. This approach has been criticised by the professional audit institutes who favour the IFAC principle-based approach described above.

Following their issue there was concern expressed by the auditing institutes that the Standards restrict a number of activities previously permitted to be carried out by practitioners for their clients such as auditors undertaking accounting work for audit clients who do not have knowledgeable management. The Standards also placed restrictions on fee

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

concentration that would significantly affect businesses[1] choice of practitioners by prohibiting the audit of any client that would constitute more than 10% of practice income.

Another concern expressed was that the Standards were not appropriate for smaller entities and various exemptions are set out in the ASB's Provisions for Small Entities, such as being permitted to provide non-audit services provided there is a discussion of objectivity and independence issues with those concerned with corporate governance.

32.9 Conflict between Codes and Targets

On the one hand we see companies developing Codes of Ethical Conduct whilst on the other hand we sec some of these same companies developing Management by Objectives which set staff unachievable targets and create pressures that lead to unethical behaviour. Where this occurs there is the risk that an unhealthy corporate climate may develop resulting in the manipulation of accounting figures and unethical behaviour.

There is a view[5] that there is a need to create an ethical climate that transcends a compliance approach to ethics and focuses instead on fostering socially harmonious relationships. An interesting article[6] proceeds to make the argument that the recent accounting scandals may be as much a reflection of a deficient corporate climate, with its concentration on setting unrealistic targets and promoting competition between the staff, as of individual moral failures of managers.

r,nnvrinhted mnto

This page wasn't downloaded by GBD

7 Select one philosophical viewpoint of ethics and prepare a single A4 piece of paper with a set of notes summarising the viewpoint

8 With your researches produced for Question 7 discuss how this viewpoint may be applied to a named business of your choice to help develop appropriate ethics for this business.

9 The management of a listed company has a fiduciary duty to act in the best interest of the shareholders and it would be unethical for them to act in the interest of other shareholders if this did not maximise the existing earnings per share.' Discuss.

10 The financial direaor of a listed company makes many decisions which are informed by statute. e.g. the Companies Act and the Public Interest Disclosure Act and by mandatory pronouncements by, e.g. the ASB. the APB and his professional accounting body. What guidance is available when there is a need for an ethical decision which does not contravene statutory or mandatory demands - how can there be confidence that the decision is right?

11 An approach has been made to the Board to support a takeover bid where the offer price exceeds the current market capitalisation.
   (a) Discuss situations where you consider it (i) ethical to recommend the offer to shareholders and (ii) unethical; and
   (b) Discuss whether an aggrieved shareholder should be able to obtain relief from the court *H* the decision was unethical.

12 The finance director has been carrying out some sensitivity analysis and produced figures that show that the return on capital employed could be improved if the company were to downsize. make existing staff redundant and replace them with lower-paid temporary staff. The current return on capital employed and PE ratio exceed the industry average but the change of policy would take the company into the top quartile with a favourable impact on the directors' performance targets and bonuses. This is a common commercial practice. Discuss whether there is an ethical problem in (a) the company pursuing such a policy, (b) the finance director submitting such a proposal; and (c) the finance director failing to submit such a proposal.

13 Discuss the following;
   (a) Why an accountant should be involved with designing or monitoring ethical codes.
   (b) What additional training this would require.
   (b) How an accountant could become an effective 'guardian of business ethics".

14 Confidentiality means that an accountant in business has a loyalty to the business which employs him/her which is greater than any commitment to a professional code of ethics. Discuss.

15 Lord Borrie QC has said[7] of the Public Interest Disclosure Bill that came into force in July 1999 that the new law would encourage people to recognise and identify with the wider public interest not just their own private position and it will reassure them that if they act reasonably to protect the legitimate interest of others, the law will not stand idly by should they be vilified or victimised. Confidentiality should only be breached, however, if there is a statutory obligation to do so. Discuss.

16 The following is an extract from a *European Accounting Review*[6] article;

> on the teaching front there is a pressing need to challenge more robustly the tenets of modern day business, and speoficalfy accounting, education which have elevated the principles of property rights and narrow self-interest above broader values of community and ethics.

Discuss how such a challenge might impact on accounting education.

Copyrighted material

17 The International Association for Accounting Education and Research states that The Professional ethics should pervade the teaching of accounting' (www.iaaer.org). Discuss how this can be achieved on an undergraduate accounting degree.

References

1 Simon Webley, *Company Philosophies and Codes of Business Ethics,* Institute of Business Ethics (1988).
2 'Dispute resolution', *Accountancy,* May 1998, p. 99.
3 Andrew Bolger, *Financial Times,* 2 July 1998, p. 10.
4 www.accountability21.net.
5 '1*. Morris, *If Aristotle Ran General Motors,* Henry Holt and Company, New York, N.V., 1997. pp. 118-145.
6 J.F. Castellano, K. Roscnweig anil II.P. Rochm, 'How Corporate Culture Impacts Unethical Distortion of Financial Numbers*, *Management Accounting Qiiarterty,* Summer 2004, vol. 5, no 4.
7 W. Raven, 'Social auditing'. *Internal Auditor,* February 2000. p. 8.
8 D. Owen, 'CSR after Enron: a role for the academic accounting profession?', *European Accounting Review,* vol. 14, no. 2, 2005.

Bibliography

C.A. Adams, *The Xature and Processes of Corporate Reporting on Ethical Issues,* I.ondon: CIMA, 1999.

C. Adams and N. Kuasirikun, 'A comparative analysis of corporate reporting on ethical issues by UK and German chemical and pharmaceutical companies', *European Accounting Review,* vol. 9, no. 1,2000, pp. 53-79.

T. Cannon, *Corporate Responsihlty: A Textbook on Business Ethics, Governance, Environment: Roles and Responsihlities,* Pitman, 1994.

A. Chatzidakis, S. Mibbert and A. Smith, ^Ethically concerned, yet unethically behaved: towards an updated understanding of consumer's (un)ethical decision making*. *Advances in Consumer Research,* vol. 32, pp. 693-698.

11. Collins and E. \Yray-Bliss, 'Discriminating ethics*, *Human Relations,* 2005.

A. Crane and D. Mattcn, 'Questioning the domain of the business ethics curriculum', *Journal of Business Ethics,* vol. 54, no. 4, 2004, pp. 357-369.

I.A. Davies and A. Crane, 'Ethical decision-making in the fair trade companies'. *Journal nf Business Ethics,* vol. 45. no. 1/2, 2003. pp. 79-92.

J. Donaldson, *Key Issues in Business Ethics?.* Academic Press, 1989.

Trevor Gambling and Rifaat Ahmed Abdel Karim, *Business and Accounting Ethics in Islam,* Mansell, 1991.

V. Henderson, *It hat's Ethical in Business?,* McGraw Hill, 1992.

Institute of Applied Professional Ethics - www.cats.ohiou.edu/cthics.

International Business Ethics Institute - www.businccss-ethics.org.

Jack Maurice, *Accounting Ethics,* Pitman Publishing, 1996.

Marcia P. Miceli and Janet P. Near, *Blowing the IVhistte: The Organizational and Legal Implications for Companies and Employees,* Lexington Books, 1992,

D. Matten and A. Crane, 'What is stakeholder democracy? Perspectives and Issues', *Business Ethics: A European Review,* vol. 14, no. 1, 2005, pp. 6-13.

Peter Pratlcy, *The Essence of Business Ethics,* Prentice Hall, 1995.

William Shaw and Vincent Barry, *Moral Issues in Business* (7th edition), Wadsworth, 1998.

M. Velasquez, *Business Ethics: Concepts and Cases,* Prentice Hall, 1992.

Simon Webley, *Codes of Ethics and International Business,* Institute of Business Ethics, 1997.

Copyrighted material

This page wasn't downloaded by GBD

Copyrighted image

Chapter I

Question 1

(i)

(£000)	**Jan**	Feb	Mar	Apr	May	Jun
Cash balance c/f	17.55	(17.85)	(70.05)	(51.75)	(55.95)	(47.25)

(ii) Operating cash flow at 30 June 20X1 (143.55)

Question 2

(b)

(£000)	Jan	**Feb**	**Mar**	Apr	May	Jun
Cash balance c/f	(28.80)	(26.40)	(18.10)	(12.10)	(7.70)	(0.80)

(c) Operating cash flow at 30 June 20X8 29.20

Chapter 2

Question 1

(a)

(€000)	Jan	Feb	Mar	Apr	May	Jun
Cash balance c/f	17.25	(17-25)	(69.75)	(74.25)	(63.75)	(4.65)

(b) Net profit 47.90
Net capital employed 263.90

Question 2

(b)

(9000)	Jan	**Feb**	**Mar**	Apr	May	Jun
Cash balance c/f	85.90	67.50	87.15	104.95	119.55	142.30

(c) Net profit 34.87
Net capital employed 184.87

Chapter 3

Question 2

Economic income: V, = £153. V, = £168,)\ = £185

Question 3

(a) (i) Accounting income = £36,700; (ii) Realisable income = £26,200; (iii) Economic income *ex ante* — £27,894; (iv) Economic income *ex post* = £35,000

Copyrighted material

Chapter 4

Question 1 Income statements and balance sheets show:

(i) I listorical profit = £3.800; Total assets **£13,800**

<ii) *CPPi* Monetary gains = £11.200; Monetary losses = £(6.000); Net income = £10,720; Total assets £23,520

(iii) *Replacement cost:* Realised holding gains = £3.200 (Fixed assets £1,200 + Inventory £2,000); Unrealised holding gains = £6,900 (Fixed assets £4,S00 + Inventor, £2,100); Net income = £10,700; Total assets £20,700

(iv) *Ctmlinuous contemporary accounting:* Operating income = £5,000; Price \ariation adjustments = (£1,900); Capital maintenance (£2,800); Net income = £300; Total assets £13,100

Question 3

(a) MWCA = £6.190

Question 4 (£000)

(a) (i) D>st of goods sold = 39,162; (ii) Inventory = 11,735; (iii) Depreciation charge = 10,083 or 10.614; (iv) Kquipmcnt = 49,822

Question 6

		£
GPP net profit before loss on monetary items	=	263.859
Loss on monetary items	=	(J42.003)
GPP net profit		121,856
RCA profit	=	236,083
NRV operating gain	=	241.800
Molding gain	=	18.188
		259,988

Chapter 7

Question I

(a) Turnover = £200; Charge for goods sold = £64; Wealth created by operations = £97

(b) Realisable increase in net assets = £157

Chapter 8

Question 1 (€000)

(a) Gross profit = 5,724; Profit before tax = 2.795; Profit for year = 2,233

(b) Trading profit = 2,820; Profit on ordinary activities before tax = 2.795

Question 2 (S000)

(a) Profit before tax = 14.243; Profit for vear = 8,895

Copyrighted material

Chapter 9

Question 1 (£000)

(a) Gross profit = 12.IHM); Operating profit continuing operations = 6,710, discontinued operations = 210; Profit for the year = 4,970

Question 2 (€000)

(a) Gross profit = 1,902.9; Profit for the year = 447

(b) Net capital employed = 2,058; Net current assets = 405

Chapter 10

Question 3

(ft) ***Balance** sheet at at 3/ Dec 20X1:* Ordinary shares = £1,005,000; CRR = **£80,000;** Reserves = (£.i8(MHM»); Debentures = £400,000; Creditors = £400,000

Chapter 12

Question I

Finance charge for year 1 = £284,375; Carrying value in balance sheet = £2,309.375

Question 2

Finance charge for year 1 = £518,900; Balance sheet = £958,900

Chapter 13

Question 2

Present value of obligation

	20X2 £000	20X3 £000	20X4 £000
PV of obligation at end of year	3,600	3,500	3,200
Fair value of plan assets			
FY of plan assets at year-end	3,400	3,600	3,600
Income statement			
Operating cost			
Current service cosi	(15D)	(160)	(170)
Financing cost			
Interest cost	(210)	(180)	<H0)
Expected return on plan assets	(320)	(306)	(288)
Expense recognised in year	40	34	22

Copyrighted material

This page wasn't downloaded by GBD

Chapter 19

Question 3

(b) Stock = £3,000; Long-term contracts = £44,900; Amount recoverable on long-term contract £30,000

Question 5

Profit 20X0 €62,500; 20X1 €37,500

Chapter 20

Question 7

Non-current assets £192.000; Current assets £150,000; Current liabilities £(>0.000

Question 8

(a) Non-current assets £330,000; Current assets £170,000; Current liabilities £140,000

Chapter 21

Question 1

(Krm) Non-current assets 392; Current assets 300; Current liabilities 160

Chapter 22

Question 1

Profit before tax £146,377; Minority interest £7,350; Retained profit for year £49,021

Question 2

Profit before tax £310,000; Minority interest £5.200; Retained profit for year £97.800

Chapter 23

Question 1

(a) Profit before tax £149,300; Minority interest £2,300; Retained profit for year £68,000

(b) Non-<iirrent assets £247,600; Investment in associate £4/i,IKM); Current assets £410,800; Current liabilities £194,000; Minorit) interest £20.000

Chapter 24

Question 1

Profit on exchange: Alamos £3,709; Bank £5,357

Loss on exchange: Texas £1,282; Chicago £2,640; American Hank £5,357

Copyrighted material

This page wasn't downloaded by GBD

This page wasn't downloaded by GBD

Copyrighted material

A-scorcs 716-17
AAI000 Assurance Standard 835-6, 863-4
All! *see* Association *if British Insurers
absences, compensated *ISii*
ACCA *see* Association of Chartered Certified Accountants
Actor 146
Accountancy Foundation 8.57-8
accountants
environmental and social reporting 836-7
ethics 856-66
external reporting 3-4
internal reporting 3, :LJi
public view of 101
role SI 1-12, Bfi2=3
status of 138
view of income, capital and value 43-6, 55
voluntary standards 863-6
see also auditors
accounting
bases Mi
capital 44-5
income 44
policies 206-11
principles Mi
ratios *see* ratios
accounting numbers, role in defining contractual entitlements 98-9
Accounting Standards Hoard (ASB) 105
approach to inflation 81-2
convergence project 147
function lUi
Operating and Financial Rev lew (<>FR| 106-14, 718, 812
replaces ASC 103
Reporting Standard/Statement I (2005/2006) 111-13
reissue as Reporting Statement (2006)113
review of narrative reporting 114
Statement on Interim Financial Reporting 120-1, 151
Statement of Principles (1999) H2, 104. 163-74. 388, 779
tee also Financial Reporting Standards (1'RSs); Statements of Standard Accounting Practice (SSAPs)
Accounting Standards Board of Japan (ASBJ) 147
Accounting Standards Committee (ASC) 102. 103. 104
Accounting Standards Steering Committee (ASSC) 102
accounting theory 138-9. 139-60
accrual accounting U^ 22-39
adjusting cash payments 27
adjusting cash receipts 24, 24-7
balance sheet 27-8. 29
and cash How statement 32-4
concept of 24
fixed assets 29-32
views on 32
acid test ratio 421
acquisitions
fair value 542-4
review of implementation of IFRS 3 478-80
standards 100 1
see alio consolidated accounts
actuarial gains and losses 349-50
adjustments
balance sheet 29.2
cash Oow statement 650-2
income statement 70-2. Ifl9.
administrative expenses 19^255
advance corporation tax (ACT) 377-8
AEI, takeover by GF.C lmi I
Africa, accounting standards 127
agency costs 8
aggressive earnings management 734
agricultural activity 507 10
Ahold 131
A1CPA *see* American Institute of Certified Public Accountants
Altman's /-score 713 14
Amadeus 687
American Institute of Certified Public Accountants (AICPA) 154. 174-5
Amoco Corporation 825
amortisation 189, 404-5. 462-7
analysis techniques
A-scores 716-1 /
balanced scorecards 718-19
11-scores 715-16
historical summaries 710
horizontal analysts 71 In-8
multivariate analvsis 713-15
trend analysis 708-9
vertical analysis 710-13
/-scores 713-15
see also ratios
annual reports 184—5
chief executive's report 215
directors' report 184, 214-15
environmental reporting 81 > ? ?
historical summaries I1U
ue also published accounts
innuit) method, depreciation 410 11
anticipated income sll-2
APB *we* Auditing Practice Hoard
Arioso International 223-4
ASB *see* Accounting Standards Hoard
ASC*M Accounting Standards Committee
ASSC *set* Accounting Standards Steering Committee
assets
asset turnover ratio 668. 669, 672
asset utilisation ratios 672-3
biological 507-10
contingent assets 305-6, 309
definitions 28-9, 289
financial assets 519
held for sale 419-20
net asset cover 295 6
non-monetary assets 72-3
property, plant and equipment (PPK) 399-432
valuation 197
tee also fixed assets; intangible avscts
Associated British l-'oods pic 855. 861
associated companies
acquired during the vear 584
consolidated accounts 5811-94
definition 5&Q
joint ventures 585-7
unrealised profits 583
Association of British Insurers (AB1) 778-9. *m=z*
Association of Chartered Certified Accountants (ACCA) 781
Environmental Reporting Awards 816-17
ethics S5K
Astra/eneca 191.211.216, 275
audit committees 776

Auditing Practice Board (APB), Draft Ethical Standards for Auditors 865-6
auditors 729, 795-804
  competence 797-8
  consultancy services 799-S1I2
  independence 798-9
  principal qualities 796-7
  see also accountants
auditor's report 795-6
Australia
  accounting standards 145, 153
  Australian Prudential Regulatory Authority (APRA) ~56-7
  corporate governance 768
  XBR1.757
Austria, accounting standards 211
availahlc-for-salc assets 331
average cost (AVCO), inventory valuation 493. 494
Avivia 479

balance sheet
  accrual accounting 27-8, 29
  assets and liabilities 290
  cash flow accounting 12-14
  consolidated accounts 552-64. 5HI-3
  construction contracts 519, 520-1
  converting lo IFRS 293-4
  current cost accounting 73-5, "8-9
  events after balance sheet date ?9?-S
  explanatory notes 197--9
  and income statement 284-5
  leases 438. 439-42. 445
  movements 707-8
  pension schemes 346
  preparation of 236-7
  prescribed formats 196-9
  presentation of 173
  strengthening 296-7
  tax expense 379
  as valuation document 294-6
balanced scorecards 718-19
Balfour Beany pic 26. 321.351. 525
banks, Germany 132
Barlow orld Ltd 67^ 710, 822
basic earnings per share (BEPS) *tee* earnings per share
Bays pic 679, 682-3
Bayer Group 108-9. 394. 6X3-4
Bayer Schering Pharma AG 814
behavioural entity, economy as i3
benchmarking 832
benefits in kind, directors 782-3
Bcrcnclsen 144
Beta Sjstems Software AG 735
BIDYest Group 263
biological assets 507-10
board of directors 771, 773-4
  see also directors
BOC Group 109.193
Body Shop 814
bonds 555
bonus Issues 619
bonus plans 316
Boots pic 725-6
borrowing
  costs 401-3
  reasons for 285-6
BorsodChemRi 412, 537-8
brand accounting 471-3
briber) 855.861-2
British Airways 390
British Gas pj$_c$ 390
British Petroleum pic (UP) 29, 276. 390
British Sky Broadcasting pic 420
British Telecommunications pic (BT) 263. 690
Brixton pic 390
buildings, leases 444-5
Business Charier for Sustainable I)evclopmcnt Mil
business combinations *see* consolidated accounts
business ethics *see* ethics
Business Review 113. 114
buyhack of shares 620-1

Cadbury Committee Report 118, 122, 770-1,854
Cal Micro 505
calendar, financial 185-6
Canada
  corporate go\ernance 768
  environmental auditing &22
capacity to adapt concept 6J
capital
  accountants' views 43-6
  definitions 53-4
  intellectual capital 475-8
  maintenance 31-2. 53-4. 61
  working capital 13-14, 652-3
  tee also share capital
capital allowance 373
capita! gearing 286-8
capital profits *ih*
capitalization
  bonus issue 619
  R&D expenditure 458-9
earning amount 415. 419
cash earnings per share 42
cash cqui\alcnts 644-5, 649
cash flow accounting
  balance sheets 12-14
  critique 6.54-6
  external 3-4, 16,17
  fixed assets 14-15
  internal 3,4-8, *[h*
  periodic financial statements 8-12
  reliability 15-16
cash flow hedge 336
cash flow risk 324-5
cash flow statements 642-63
  accrual accounting 24-7, 32-4
  analysing 652-4
  consolidated 649 -52
  development nfft4?-3
  format 645-6
  IAS 7 (revised) 64^ Ml-O
cash generating unit (CGU) 414-15
CCA *tee* current cost accounting
CCAB *see* Consultative Committee of Accountancy Bodies (CCAB)
Cclcmi 476, iZZ
Centft for Intcrfirm Comparison 686
changing prices 54. 159
  see also inflation accounting
Chartered Institute of Public Finance and Accountancy (CIPFA) 859-
chief executive's report 215
China
  corporate governance 761
  international convergence 147
Chloride Group 25
Chrvsler Qirporation 825
Coals Viyclla pic 49]
(arf" ii *tee* Continuous Contemporary Accounting
Code of Kthics 850-2. 866
coffee, inventory value 495
Coil SA 402.41*3.726-7
Combined Code 117, 118.777.UiU
  Revised (June 2(KW>) 117. 118-20
dimmer/bank III
Committee on Accounting for Smaller Entities 126
Committee of Kuropean Securities Regulators (CKSR) 116
commodity contracts 319
common si/e statements 710-13
companies *tee* private companies; public companies
Companies Act (1929) 40
Companies Act (1981) U5
Companies Act (1985)
  annual report 214
  treasury shares 277
Companies Act (2006)
  creditor protection ?6A-7
  distributable profits 267-S, 26S
  share issues 2A1
  and small companies 126-7
Companies House, use of XBRL 757
Company Watch 215
compensated absences iiii
completeness, cash flow reporting 15
compound instruments 320-1
concessions, construction contracts

confidentiality 855, 861
conflicts of interest 854, 865-6
consignment stocks 290-1
consolidated accounts
  alternative methods 538-9
  associated companies 5HH–94
  balance sheets 5-51-.64
  cash flow statements W9-52
  deferred tax 387
  first IFRS accounts 202
  foreign currency transactions MM S
  income statements 565-79
  inter-company balances 554-6
  interpretation problems *till*
  joint ventures 585-7
  pre* and post-acquisition profits

  reasons for 511=2

statement of changes in cquitv (SOCE)5fi2=a
subsidiary acquired during the \car 569-71
uniform policies 560
unrealised profit on inter-company sales 556-60
Consolidated Communications Corporation pic 717-18
construction contracts .516-31
definition ilh
constructs t obligations }\\\
consultancy services, bv auditors 299=802
Consultative Committee of Accountancy ladies (CCAB) [2^124, 125
contingent assets 305 6. 309
contingent liabilities 305, 307-9
continued professional education (CPK) 797-8
Continuous Go&ttniponrj Accounting (CoCoa)61
contracts, construction contracts 516-31
control, definition 5U-H
convertible bonds 628-9
convertible preference shares 264, 628-9
Coordinating CJroup on Accounting and Auditing Issues 116
copyright 473
corporate failure, prediction 716-17
corporate governance 765-810
auditors 795-804
directors* remuneration 777-91
guidelines 765-6
institutional investors 791-4
national differences 766-8
reports on 770-6
requirements 768-70
corporate social responsibility (CSK) £U_2
corporation tax 372-7
corporation tax systems 373-4
classical system 373
imputation system 321
partial imputation system *iH*
COS\ *tee* cost of sales adjustment
cost of sales adjustment (COSA) 70-1
cost-plus contracts 5iii
cost/benefit analysis* small and medium enterprises 12V
costs
agency costs 8
of borrowing 401-3
contract costs s17-?l
cost of sales 70-1,1KH-VI, 233
development costs 456-7
direct costs Ntt^ 189-91,496
distribution costs 192, 233
finance costs 322-3
overheads 496-9
past service costs 350
stafl" costs 199
CPPA *Ut* current purchasing power accounting
creative accounting 503-5. 665-6
credit ratings 731
credit risk 324, 326-7
managing *UXl*
creditors
protection of 265-7
share capita] reduction 272
cumulative exchange differences, transition to IKRS 2U9.
cumulative preference shares 264
currcnev, foreign currency transactions
currcnev risk 324
current cost accounting (CCA) 69-81
critique of CCA statements TO XI
current entry cost accounting *see* replacement cost accounting
current exit cost accounting w net realisable value accounting
current purchasing power accounting (CPPA) 60-1, 62-5, 85
virtues and defects 63- ft
current ratio 668. 669-70
current value accounting (CYA) 60
cut-off procedures *Sill*
CVA *see* current value accounting

Daimler Bcnz *Uli*
Daimler/Chrysler iii
damaged inventory items 506
Dc La Roc 632-3
I>e Ycrc Ciroup pic 688
1 k.mnt: Committee 102 3
debentures 274-5
debt, perpetual jjfcj
debt emenanti 733-4
debt factoring 292
decommissioning cons* provisions 304
deductive approach, financial reporting 160, 161-2
deferred taxation 381-93
critique 389-91
provisions, calculation 382-4
detined benefit pension funds, transition in IMLS 209
Denmark, Generally Accepted Accounting Principles (GAAP) 216-20
depreciation
accrual accounting 29 30
annuity method 410-11
calculation 408-12
corporation ta\ 373
cost of sates 189, 191
current cost accounting 71
definition 403-6
diminishing balance method 408, 409
formula 406-7
machine-hour method 410
residual \alue 407.41)8
straight line method 408, 409, 411-12
sum of the units mcthml 404-10
derecognition, of assets 332-3
derivatives
definition 328
embedded 333
transition to IFRS 210
Deutsche Bank Lu
de\eloping world, standards 127
development costs 456-7
see also research and development (R&D)
Diagco pic 781-5
diluted earnings per share 617
diminishing balance method, depreciation 408, 409
direct costs 188. 189-91.4%, 500-1
directors
benefits in Lind 782-3
bonuses 783-4
Combined Code 117. 1 IS. 777. 780
Combined Code (Revised -June 2006) 117,118-20
pension entitlements 784-5
remuneration 770, 771, 772. 773. 777-91,794-5
reports on 771-6
share options 785-91
directors" report 113, 114, 184, 214-15
disclosure
directors' remuneration 779-8*1, 786-91
earnings per share (KPS) 631-4
employees 199
environmental information 815- 16
finance lease 433-4
financial instruments 324-8
income statement 195-6, 235-6
intangible assets 4ft9-7l
inventories 506-7
non-financial liabilities 311-12
operating lease 438-9
pension schemes 354-5, 364-5
property, plant and equipment (PIT.) 420-1
provisions 302-4
related parties ?4? %
research and development 457
of risk HW-11.324-5. 326-8, 729-30
segmental accounts 681-2
tax expense 379
under IFRS 210-11
discontinued operations 193-5. 2_H
first ll'RS accounts 210
discounted cash How (DCF) *£L* SO
disposal group 194
distributable profits 26S-9
distributable reserves 261
distribution costs 192. 233
dividend cover 675
dividends
consolidated accounts 568-9
inter-company 556
policies 42
DNB Computer Systems 717
I)mv Jones Sttstainabilit) Indexes *021*
I Ircsdncr Bank 137
Du Pont 821

earnings before interest, tax. depreciation and amortisation (EBITDA) 671
earnings before interest and tax (KBIT) 184.671
earnings before tax (KBT) 184

earnings per share 615-41
limitations as performance measure 618
earnings per share (EPS)
basic earnings per share (BEPS) 616-17.625-6,630-1
calculation 616^17,618-21
dilution 626-9
disclosure 631-4
and fixed assets 425
improved 226
and income measurement 41
and inventories 5112
as performance measure 718
ratio analysis u23
rights issue 621-6
share price 262
and shareholders 617-18
Hast man Kodak 494
Eco-Management and Audit Scheme (EMAS) &12=1S
economic income 47 53, 55
economic value added (EVA) 724, 726-8
economists, view of income measurement 47-53, 54
economy, as behavioural entity 49
KIXiAR()nlineIncl2iL^
efficiency ratio (net profit margin) 668, 669
K.MAS *ue* Eco-Managcmcnt and Audit Scheme
embedded derivatives *Mi*
empirical inductive approach, financial reporting 160-1
employee benefits 342-71
long-service 355
short-term 355
see aiso pension schemes; share based awards; termination benefits
cmpIo)ces, information about 199
employment practices, ethics 856
Enron 121131.147.800,801
environmental auditing
activities involved 823-6
international initiatives 822-3
Environmental Protection A gene v (EPA) 825-6
environmental reporting
annual reports 812 22
economic consequences 821
international charters and guidelines 817-20
stand-alone reports 816-17
equity
investors 260-1
statement of changes in equity 199-200,201
equity accounting, joint ventures SJtZ
equity compensation plans 345
equity instrument 319
equity-settled payments 359-61
errors, in income statement 239
Eskom 560
Essilor International i 11
ethics 848-69
accountants 856-66
business ethics 848 57
definition 848
ethical codes 850-2,866
failures 853
individual's stvlc 852
international regulations 861-2
national regulation 860-1
role in business 854-7
self-regulation 851
voluntary standards 863-6
Europe. XHRE - developments 757
European Environmental Reporting Awards (EERA) 816
European Union
auditor* 801
corporate governance 7ft?
Directives 142—3
Fourth (company accounts) 135, 815
Seventh (consolidated accounts) 815,816
Transparency Obligations 122
environmental auditing 823
environmental reporting 814-16, 817 18.822
international accounting standards 144
Eurovestech 213—14
exceptional items 708
executive directors 771
extensible Husincss Reporting language (XBRL) 729, 748-62
adoption process 755-6
advantages 752
Australia 757
description 749-52
developments in Europe 757
New Zealand 757
specification elements 750
Eybl International ACS 536

fair override provisions 212-14
challenge by Financial Reporting Review Panel 213
fair value
accounting 84-5
acquisitions 542-4
disclosure 327
hedging 335-6
measurement 172
fair view treatment, published accounts 211-14
faithful representation, cash How reporting 15
FAME (Financial Analysis Made Easy) 686, 687
far index
FASIJ «Y Financial Accounting Standards Hoard
fictitious transfers iiU
FIFO *see* first-in-first-out
Finance Acts 372.379
finance costs 322-3
finance lease 436, 439 44. 446-7, 447-8
Financial Accounting Standards Hoard (FASB) (United Slates)
accounting standards 103, 154
accrual accounting 24, *M*
Emerging Issues Task Force 154
see also Statements of Financial Accounting Standards
financial assets 319
financial calendar 185—6
financial capital 54
financial capital maintenance concept 31-2,62-3
financial decision model i=6
financial instruments
definitions 319, 328-31
derecognition 332-3
disclosure 324-8
hedging 327-8,335-6
international standards 318-38, 328-38
measurement 333-5
offsetting 323-4
presentation 320 I
recognition 332
risks 109
transistion to IFRS 209-111
financial leverage multiplier 666, 668
financial liabilities 320
financial ratios *see* ratios
financial reporting
Combined Code 117, 118,777
conceptual framework 15S-83
deductive approach 160, 161-2
empirical inductive approach 160-1
European Union 122
harmonisation and standardisation 141-53
history of 1 S9«6fl
intellectual capital 475-8
interim reports 120-2
international standards 141 55
internet 748-62
interrelationships 2S4-5
national differences 135-41, 755
national differences reasons for 155-9
accidents of history 159
character of national legal sxslcm 135-ft
extent to which accounting theory is developed 158-9
influence and status of accounting profession 158
language 139
method of financing industry 156-7
relationship of tax and reporting systems 137-8
operating and financial review 106-14
pension schemes 543
property, plant and equipment (PPE) 423-5
Revised Combined Code (June 20W>) 117, 118-20
shareholder information needs 729-51
small companies 122-9
standards 98-106, 150-1, 158-62
see also published accounts
Financial Reporting Council (FRQ 103, 104. 105. 106.857 X

Financial Reporting Exposure Drafts (FREDs) 147. I4K
Financial Reporting Review Panel (FRRP) 105.114-17
Activity Report (2006) 116 17
Financial Reporting Standard for .Smaller Entities (FRSSE) 107. 123-7, 152
revised 126. 127
Financial Reporting Standards [FRJi
1 Cash Flow Statements 107, UL 125, 148
2 Accounting for Subsidiary Undertakings 10^ 124, 150
j Reporting Financial Performance o"2, 107. 148, 718
4 (Capital Instruments 107
5 Reporting the Substance of Transactions 10^ 127, 525, 800
6 Acquisitions and Mergers 107,14S
7 Fair Values in Acquisition Accounting 102
8 Related Partv Disclosures 107. 125. ISO
9 Associates and Joint Ventures 107. 150
10 Goodwill and Intangible Assets 107.124,126,151
11 Impairment of Fixed Assets and Goodwill 107.151
12 Provisions, Contingent Liabilities and Contingent Assets 107, 151, 815
13 Derivatives and Other Financial Instruments 107
14 Earnings per Share 1112
li Tangible Fixed Assets 29,107,149, 150,403
\h Current Tax 107, 125, H<>, 372. .IS I
17 Retirement Benefits 107. 14M.
LB Accounting Policies 107,125. 148
19 Deferred Tax J07, 125, 149, 372, 388-9
20 Share-based Payment 107,147
21 Events Afier the Balance Sheet Date 107,127, 148
22 Earnings per Share 107. 124. 151
23 The Effects of Changes in Foreign Exchange Rates 107, 150
24 Financial Reporting in I hiurnnHatimurv EcoHQtnkl 107,150
25 Financial Instruments: Disclosure and Presentation 107. 148, 151
26 Financial Instruments: Measurement 107. 148. 151
27 I-ife Assurance 1112
28 Corresponding amounts 1112
29 Financial Instruments: Disclosures (IFRS7) IflZ
list of 102
Financial Services Aulhorilv (FSA) 117
financial statements
elements of 168-9
for external users, contents 23
interests in other entities 174
measurement in 171-2
objective of 22-3, 162, 164-6
presentation of information 172-4
qualitative characteristics 166-8
recognition in 169-70
reporting entity 166
reporting performance 200-5
see also financial reporting
financing ratio (financial leverage multiplier) 666, 6M
Finddplc W1.215, 216. 329
Finland, accounting policies 144
first-in-first-out (FIFO)
com of sales lfflaSO
inventorv valuation 493
Fisher, Irving 49-50
Fisons 722
fixed assets
accrual accounting *2*)-}!*
cash flow model 14*15
impairment 412, 414-19
fixed-price contracts 516
FLS Industries A/S 536
Ford 454
foreign currency
conversion, definition iiii
transactions 595-frl?
translation, definition i£5
France 134. LIS
finance of industry 137
legal system Lift
shares'UI
fraud iiii
stt also creative accounting
I"R(. *stt* Financial Reporting Council
FRFI)s *stt* Financial Reporting Exposure Drafts
free cash flow tiii
freehold land 405-6
FRRP w Financial Reporting Review Panel
FRSs *stt* Financial Reporting Standards
I'RSSF *stt* Financial Reporting Standard tor Smaller Kncitics
FSA *set* Financial Services Authority
FTSE4Good Index Scries 821
functional currency 595-6
funds flow statement 642*3, 655
future cash flows, annual report 1K4-5
future economic benefit (FKK) 464
future value iH

G4+I group 446-7
Gamma I folding W 673
GAPP *stt* Generally Accepted Accounting Principles
gearing 75-7, 2H6-S
ratio 2%, 467, 670-1
General Electric (GEC) I MM. 391), 2Sfl
General Ledger 753,15K
general price index (GPI) 65^ *111*
general purchasing power (CiPP) *set* current purchasing power accounting
General!v Accepted Accounting Principles (GAAP)
change to IFRS 209, 210-11
comparison with IAS 216-20
Denmark 216-20
United Kingdom (UK GAAP) 378-9, 2il
United States (US GAAP) 147, 152, 153-5,403, 735,751,800-1
Germany 134.115
accounting s\ stem Uil
banks li2
finance of industry U2
legal system 13fi
national differences 735
shares UZ
Getronics 264
Gcvcke nv Amsterdam 727
gifts, ethics 855-6
GlaxoSmithKlinc 454
Global Reporting Initiative (GR1) 834
Go-Ahead 421-2
going concern assumption 30-1, 46-7. 717-18
Gold Mines of Sardinia Ltd 304
Goldficlds405
goodwill 459-67
accounting standards 460-2, 464-5
amortising 462-7
consolidated accounts 540, 553-4, 538
definition 459
identification and \aluation 479-K0
inadequate reporting 478-9
internal!) generated 459-6(1
negative goodwill 462, 540
purchased 460
review of implementation of IFRS i 478-80
government grants 421-2
biological assets 510
Grand Met 778
Great Plains Software 263
Cireat Portland Instates pic 390
(ireenhury Report 1 [7^ 772, liii
Gretag Imaging Holdings AG 12
GRI *stt* Global Reporting Initiative
gross domestic product (GDP), listed companies as percentage 766
groups
definition 535
stt also consolidated accounts
GUS 390

11 sLnrcN 715 16
I bmpel Report 117, 772-3, Sil
Hanson pic tiil
harmonization and standardisation, financial reporting 141-53
Harris (Jueenswa* 5112
Hart pic 346-7
IICA *stt* historical cost accounting
hedging 327-8,335-6
held-to maturity investments 330
Hicks John ill"
I liggs Report 773-5. 776-7, 794
historical cost accounting (1 ICA)
comparison with other models 62-5
convention 23

income measurement 43-4
problems of 59-60, 85
replacement attempts &]
historical summaries 110
HM Revenue & Customs, use of XBRL 757
Uolmcn AB508
Hon;-* Kong, corporate governance 768
Hooker Chemicals Corporation B13
horizontal analysis 70f>-8
HTML *see* Hyper Text Mark-up Language
human rights 833-4
HypCT Text Mark-up Language (HTML) 24& 243
hyperinllation S:. \

IASB *see* International Accounting Standards Itoard
IASCJW International Accounting Standards Committee
IASs *see* Intcmational Accounting Standards
ICAKW *tee* Institute of Chartered Accountants in England and Wain
ICAS *see* Institute of Chartered Accountants of Scotland
ICI 154-5,404.416
IFAD *tee* International Forum on Accountancy Development
IFRIC, 12 Service Concession Agreements 526
IFRSswr International Financial Reporting Standard*
IIMR *see* Institute of Investment Management and Research
Illustrious SpA 231-7
IMACE *tee* Industrial Members Advisory Committee on Kthics
Impact on Socici> H33-4
impairment
ofwea 412,414-19
goodwill 464
Incentive (iroup 218-20
income and expense *see* income statement
income measurement
accountant's view 43-6
economist's view 47-53
role and objective 40-3
income statement
administratis expenses)91$_x$ 233
and balance sheet 284-5
consolidated accounts 565-79, 583
construction contracts 518-19. 520
gist of sales 188-91. 233
current cost accounting 77, !iU
disclosures 195-6, 235-6
discontinued operations 193-5
distribution costs 192. 233
going concern 30
internal 231-2
leases 442-3. 445
other comprehensive income (OCI) 203,205
other operating income *Mil*
pension schemes 346,351
preparation of 231-6, 236-41
prescribed formats 186-8, 232-6
profit calculation UJ2
reporting performance 200-5
tax expense 379
trial balance 231-2
income stream 416
index numbers 708-9
India, corporate governance 768
Industrial Members Advisory Committee on Ethics (IMACK)fl5S=2
industrial property i l i
inflation 54, 423-4
inflation accounting
ASB approach 81-2
hvperinllation 8U4
IASC/IASB approach &*L=A*
models 60-8
operating capital maintenance 68-79
information needs
of internal users 3, > 8
of managers 3, 4=5
of shareholders 3-4.729-31
Inland Revenue 43
insider dealing 854
Instance document 755-6
Institute of Business Ethics 850. £53
Institute of Chartered Accountants in England and Wales (1CAEW)
information reporting 730. 731
risk reporting 110 11,729-30
shareholder value reporting 1311
Institute of Chartered Accountants of Scotland (ICAS]
Business Reporting: the inevitable change? 731
Making Corporate Reports Valuable (MCRV) report 175-6,178
Institute of Investment Management and Research (IIMR)uil_Z
Institute of Social and Ethical Accountability 863-4
institutional investors 137, 791-4
intangible assets
acounting treatment subsequent to initial recognition 46J2
brand names 471-3
definition 467
disclosure 46'i=.7J
goodwill 459 67
intellectual property 473-8
recognition criteria 46S
reporting of lilLJ
research and development 45 > 0.
intellectual property 47S-8
financial reporting models 476-7
intcr-compam balances 554-6
inter-firm comparisons, financial ratii»s 685-9,691-2
Interbrew 685
interest cover 288, 653
interest rate risk 324, 326
interim reports 120-2
internal rate of return (IRR) 7
International Accounting Standards Board (IASB)
approach to inflation S3 4
Exposure Drafts
Proposed amendments to IAS 23 Borrowing Costs 403
small and medium-sized entities 129
improvement project 146-7, 633-4
small and medium-sized entities 128-9
work of 142
International Accounting Standards Committee (IASC)
Framework for the Presentation and Preparation of Financial Statements 142, 162-3, 212, 289, 297.307.391.458.4%
and IOSCO 143-4
Statement of Intent: Comparability of Financial Statements i i i
work of 141-2
International Accounting Standards (IASs)
1 Presentation of Financial Statements 142, 148.152. 160.186 7.195. 196-7, 199. 200.206. 207. 211-13.237.239,372
2 Inventories 148,158, 160, 197, 401, 423,457.490,492-500.507
7 Cash Flow Statements 33-4. 148, 642, 643-9.655-6
8 Accounting Policies, Changes in Accounting Estimates and Errors 148,207.211,237.379.387
10 Events After the Balance Sheet Date 148. 222_8$_i$ 556
11 Construction Contracts 148. 516-20. 526
12 Income Taxes 149, 194,372, 379-89.392.421.735
14 Segment Reporting 193, 2QL *l£L* 680, liiil
li Information Reflecting the Effects of Changing Prices fcL3
Hi Property, Plant and Equipment 29, 149, 197. 387,400-13, 553. 735
17 Leases 149, 162, 289, 423,433-48
18 Revenue 25-6, 149,393
19 Employee Benefit! 149, 311. 342-57
19 (revised) Employee Benefits 348
20 Accounting for Government Grants and Disclosure of Government Assistance 150. 421-2, 510
21 The E fleets of Changes in Foreign Exchange Rates 150, 387. 395 6. 606,608-9
22 Business Combinations 461
23 Borrowing Costs 150, 401-2, 403
24 Related Party Disclosures 150. 198-9, 242-3
26 Accounting and Repining by Retirement Benefit Plans 150. 342.336 7,363 5
27 Consolidated and Separate Einancial Statements 150. 515, 536, 552, 560

28 Investments in Associates 150, 524, 580
29 Finaiuial Reporting in I Ivperinrtationary Economies 83-4, 150
30 Disclosures in the Financial Statements of Hanks 337
Jl Interests in Joint Ventures 150, 585-7
32 Financial Instruments: Disclosure and Presentation 151, 2(W. 286, 318-28,337
M Financial Instruments: Presentation {new name) 338
33 Kamings per Shiirc 151, ft lft 17, *u 11-4*
34 Interim Financial Reporting 151, 208
35 Discontinuing Operations 193,419
3ft Impairment of Assets 40, 151, 412, 414-19,540
37 exposure draft (ED) Non-linancial Inabilities 297, 306-12, 357
37 Provisions, Contingent Liabilities and Contingent Assets 151, 197, 298-306,343.357, 401, 544, 555, 735, 787-90
38 Intangible Assets 151. 189. 29ft. 309, 453-8,459-60. 464. 467-71
39 Financial Instruments: Recognition and Measurement 151, 197, 209-10, 292,318, 328-36, 459. 597, 735
40 Investment Pruperl) 152,422-3
41 Agriculture 152, 422, SOL U
comparison with GAAP 216-20
comparison with national standards 147-52,735
convergence 147-52
proposed amendments 200-3, 204
sec alsu International Financial Reporting Standards (IFRSs)
international bodies, international standards 141-53
International Chamber of Commerce, environmental reporting S19~?0
International Federation of Accountants (IFAQ795
Code of Ethics for Professional Accountants 797-9,864-5
International Kducation Standards 796
International Financial Reporting Interpretations Committee 152
International Financial Reporting Standards (IFRSs)
1 First-time Adoption of International Financial Reporting Standards 147.208-11
2 Sharc-Hased Payments 147, 342. 357-63,*1KLM*
3 Business Combinations 84, 148, 209, 387.459,460,461-2.464-7, 478-80. 537. 538. 543-4. 735
i Insurance Contracts 148
5 Non-current Assets I leld for Sale and Discontinued Operations 148. 193, 194. 196.237.241. 419-20,536-7,581
6 Exploration for and Evaluation of Mineral Resources 148, 405-6
7 Financial Instruments Disclosures 148,318,328,337-8
8 Operating Segments 14S, 206, 680, uitl
comparison with UK standards 147-52
converting to 144-53, 208-11, 293-4
and European Union 144
production of 142
and taxation 378-9
see aim International Accounting Standards (lASs)
International Forum on Accountancy Development (IFAD) 158-9
International Organisation of Securities Commissions (IOSCO) 143-4
International Organization for Standardization (ISO), ISO 14001 S2U
international standards
convergence with UK standards 147-52
future 147. 152-3
international bodies 141-4
International Standards of Accounting and Reporting (ISAR) 127
International Standards on Auditing (ISAs)
540 Auditing Accounting Estimates and Related Disclosures 734
21M1 The Auditor's Report on Financial Statements 795
Internet
compam information 6K9-9U
financial reporting 748-62
inventories 490-515
control 502-3
controversy 491—2
creative accounting SULJ
definition 490
disclosure 5l)ft-I
valuation 490-500
work-in-progress 500-2
vear-end count 505-6
inventory turnover 672
investment companies, distributable profits *2h&*
investment propcrt) 422 3
investment ratios 666r 66S? 6x3__i
IOSCO *u<* International Organisation of Securities Commissions
ISAR *$tt* International Standards of Accounting and Reporting (ISAR)
ISAs *set* International Standards on Auditing

Japan
corporate governance 263
finance of industry Ul
international convergence 147
legal system *ISix*
shares 265
Johnson Matthcy 98-9, 518-19
joint ventures 585-7
journal adjustments 504
juM-in-tiim-(JIT)497 s

key performance indicators (kIMs) 111-13
Kingfisher 479, 831
kinestun Communications (HULL) '469 70
knowledge management (KM) 477-8
kPMU *Kb*
kuoni Travel Molding AG ilLi
Kyoto Protocol 822

Laing, John pic 262-3
land
agricultural 510
freehold 405-6
leases 438, 444-5
language, and accounting systems 139
last-in-lirst-out (UFO), inventor) valuation 492*494-5
leasing
accounting by ICSAVS 438-44
accounting In lessors 447-8
classification 437-8
commercial advantage 434-5
controversy 435-7
definition 435
finance leases 436, 439-44, 447-8
land and buildings 438, 444-5
new accounting approach 446 7
off balance sheet financing iii_6
operating leases 436, 438-9, 446-7, 448
tax advantage 434
leasing industry, growth in 434
legal systems, national I ^ '*
lessors 447 8
Lcxmaric 505
liabilities
contingent liabilities 305. 307-9
definitions 28, 289t 307
financial liabilities 320
non-financial 307—12
set also balance sheet
LIFO *set* last-in-first-out
limited liabiliiv companies, creditor protection E6fi
Lindel09
liquidity ratio* 668, 669 70. till
liquidity risk 324
listed companies *set* public companies
London Benchmarking Group 812
long-service benefits 355
stt also pension schemes
losses
capital reduction 270-5
tax fam 380
Love Canal 813

machine-hour method, depreciation 410
Majestic Metals Inc 825-6
MAN 400-1
management strategy 684-5

managers
performance 728
reporting to 3, 4-5m 16-17
Manchester United pic 305
mandator)- standards MS-103
need for 100-1
market risk 324
market value added (MVA) 724
Marks *Si* Spencer 390, 726, 831-2, 833-4
materiality 7%
measurement
contingent liabilities 308-9
financial instruments 333-5
income measurement 40-53
as means of control 41-2
as means of prediction 42
value 171-2, 724-8
medium-sized companies, definition 121
Miha 152
mineral resources 405-6
Miniscribc Corporation 503, 504
minority interests 540-2, 560
Mitchell & Butler pic 725
monetary items *Sllii*
monetary working capital adjustment (M\VCA)71-2
money capital 53, 54
mnnev laundering Bfifl
MuU«nt,A&Jplc422
multivariate analysis 713-15
Myners Report 792-4

Napster 475
narrative reporting, ASB review 114
National Association of Pension Funds 793
national differences
corporate governance 766-8
financial reporting 135- 41, 735
reduction nf 140-1
Ncmctschek AC- 597
Nestle Group 185-6,198, 207, 344-5, 433-4,819-20
net asset cover 295-6
net investment hedge 336
net present value (NPV) 7,9
net profit margin 668, 669
net realisable \alue accounting (NRVA) 61,62-5,84
virtues and defects 67-ft
net realisable value (NRV) 499-500, 504
Netherlands, accounting theory 139
neutrality, cash Bow reporting 15
New Zealand
accounting standards 145, 146
XBRL 757
Nokia 144, 243, 343-4
non-cash movements 649, 650, 651
non-cumulative preference shares 264
non-distributable reserves *2hl*
nonexecutive directors (NEDs) 771,

non-financial liabilities 307-12
non-monetary assets 72-3, 5%
normative approach, ethical code 851-2
Norwalk agreement 144, 154
Norway, accounting system 139
Novartis Group 26-7
NPV *set* net present value
NRVA *see* net realisable value accounting

02 836
obligating event 300
Occidental 813
OECD *set* Organization for Economic Cooperation and development
off balance sheet finance 288-9
leasing 445-6
oil, inventory value 495
onerous contracts 311
provisions 303
OncSource 686, 687
operating activ ities, cash flows 644-5
operating capacity capital 53
operating capital maintenance 64
example 68-79
adjustments that affect profit for rear 70-2
*
borrowings 75-7
current cost balance sheet 73-5
current cost balance sheet - closing 77
gearing adjustment 75
Real Terms Svstcm 77
restating opening balance sheet to current cost 69-70
unrealised holding gains on non-monetary assets 72-3
Operating expenses 187-H
Operating and Financial Review (OFR) *see* Accounting Standards Board
operating lease 436, 438-9, 446 7, 44S
operating profit 652
operating ratio (return on capital employed) 666. ditfUi
operating return on cquitv 666, 668
options, shares 627, 785-91
urdinarv shares *see* shares
organic growth 685
Organization for Economic Cooperation and Development (OECD) 474, 475, 768-9,861-2
OrUa Group 727-8
other comprehensive income (OC1) 203, 2ili
overheads 189,496-9, 501-2, 504

Pacific Breweries Ltd 145
participating preference shares 264
PAS-score (performance analysis score) Hi
past service costs 350
payables turnover ratio 673
Pearson 470, 813-14
peer listing 688
pension schemes
curtailments and settlements 353-4
defined benefit schemes 344-5, 346-8, 363-4
defined contribution schemes 343-4, 345-6, 363
directors 784-5
disclosures 354-5,364 5
employee interest 342
equity compensation plans 345
ex gratia payments 343
illustration 351-3
liabilitv for costs 348-51
multi employer plans 354
performance, prediction of future 3
performance analvsis score (PAS-score) 213
performance monitoring 725-6
Pergamon Press UH
perpetual debt 321
PF1 *see* private finance initiative
Pilkington's Tiles Group 271
Porsche AG 122
Port of Tauranga Ltd 146
posittvist approach, ethical code 850
potential consumption capital 53
PPE *see* property, plant and equipment
PPPs *see* public-private partnerships
pre-acquisiiion profits 552-4. 568-9
Precious Woods Group 50*1
prediction 42
preference shares *see* shares
preferred shares 555
preliminary announcements 12J
present value (PV) 47-9, 310
presentation currency iiiii
price index 60-1, hi
price risk 324
price/earnings (PE) ratio 41, 615-16. 674
primarv financial ratios 666-70
private companies
distributable profits ?67 -ft
see also unquoted companies
private finance initiative (PPi) 522-4
products and process, ethics 855-6
Professional Oversight Board (POB) liSfi
profit
calculation of 192
capital profits 46
concept of 44
consolidated accounts 552-4
distributable profits ?fttt-Q
unrealised profits 4^ 583
profit and loss account, percentage changes 707-8
profit-sharing 356
profitability ratio! 676
propcrtv, plant and equipment (PPE) 399-432
cost of 401-3
definition 400
depreciation 403-12
disclosure 420-1
financial reporting 423-4
first IFRS accounts 209
government grants 421-2
impairment nf assets 414-19
investment properties 422-3
revaluation 412-14
subsequent expenditure 403
provisions 298-305,307

decommissioning corns 304
disclosures >0?-4
environmenui liabilities 304
measurement 300-1
onerous contracts 303
restructuring 303-4
prudence 2Uii
cash How reporting 15
income measurement i£
PSA Peugeot Citroen 854, 855
Psion 263
Public Accounting Oversight Board (PCAOB) 802-1
public companies, distributable profits 268
public interest accounting 827
public-private partnerships (PPPs) 521-6
published accounts
accounting policies 2iln_l I
balance sheet 196-9, 236-7
comparison between companies 215-20
fair view treatment 211-14
financial calendar 185-6
income statement 1S6 96,231-6
inter-firm comparisons 685-6
preparation of 231-56
segment reporting ?0i-6
statement of changes in equity 199-200,201
unreliability 665-6, 729
see aha financial reporting
Punch Tiverns pic 406.688
purchasing power 61, (tl
PV *see* present \alue

quick ratio *see* acid test ratio

Rank 1 lovis McDougall iSli
rational grounds 124
ratios
anaKMs 664 7»5
application of 676-9
asset turnover ratio 66S, 669, 672
asset utilisation ratios 672-3
gearing ratio 2%, 467, 670—1
inter-firm comparisons 685-9
investment ratios 666, 668, 673-5
limitations of 691-2
liquidity ratios 668. 669-70, 671
noil financial ratios 690
price/caming* (Mt)^{rjn}" 41. 615 16, 674
primary ratios 666 70
profitability ratios 676
p>ramid of ratios 666, 667. 677
segmental analysis 679 85
subsidiary 670-7
RCA *uc* replacement cost accounting
Real Terms System 77
receivables ratio *{Ql*
recognition, financial instruments 332-3
reconciliation statements 215
redeemable preference shares 264
regulations *see* standards
reimbursements 310
related parties 198,242=3
relevant accounts *Ihll*
reliability
cash flow accounting Is 16
published accounts 665-6, 729
remuneration committees 770. 772, 773, 781-2
replacement cost accounting (RCA) 61, 62-5.66-7.85.495-6
research and development (R&D) 45t-9
residual value 407, 408
restructuring 311
provisions 303-4
retail price index (RPI) 61. 65^ 708
retirement benefits *see* pension schemes
return on capital employed (ROCE) 425, 466-7. 507, 536. 666, 668-9
Reuters 390
revaluation
assets 386-7,424
in income statement 239
revenue
accrual accounting 24-7
contract revenue 516-21
Rhone-Poulenc Rorer 722
risk
assessment 731-4
disclosure 109-11. 324-5. 326-8, 729-30
risks, financial instruments 109
Roche Group 392 3,416
Rolls-Royce 276, 457-8. 794
Rover 140
Royal Hank of Scotland 264
Renal \umico£Z
Roval Ten Catc NY 6X4- 5
Russia, corporate governance 767

SABMileriuii
St Ives 6AJ
salary, directors 782
sales
cost of sales 70-1, 188-91. *2.U*
sale and repurchase agreements 291-2
Sarbanes-Ovley Act (2002) 802=3
Schering AG 557. 672, 81X
Scottish Power 304, 813
Securities and Exchange Commission (SEC) (United States) 121^ 139, 144, 157.799-S01
segmental accounting 205 6. oTJ Ss
i.isb flow statements 64*)
convergence of International and *US* standards 681-2
disclosures 681-2
management approach 680
selling, ethics of 856
Sepracor 674
sen ice concession agreements 526
Severn Trent 213, 390
SKASs *stt* Statements til Financial Accounting Standards
Sfi Group Ltd fc82
share capital
maintenance 265—7
minimum *Zhl*
reduction 269 h
repayment 275
share-based payments
first II'RS accounts 2112
recognition of expenses 357-8
recognition and measurement of charges 358-62
cash-settled payments 361-2
equity-settled payments 359-61
transactions which may be sertled in cash or shares 362-3
shareholder value analysis (SVA) 7,23-4
shareholder value <SV) 724-5.2311
shareholders
and capital reduction 271—5
and timings per share (KPS) 617 l>j
funds 262-5
information needs 3-4, 729-31
institutional 791 4
relations with *211*
shares
accounting entries 264-5
buytndt 275-8*620-1
issuing of2Mj 263-4
new issue at full market value 62')
numbers nf 618-21
options 627, Tx; <*i
ordinary shares 261, 262-3
preference shares 261^ 264, 276, 320, 628-9
preferred shares 555
rights issue 621-6
share splits 619
treasury shares 276-8
unquoted companies 719-23
value 264-5, 683 4, 719 23. 734
warrants 621
uc aiso earnings per share
Shell 211. WW
short-term benefits 355-6
short-lermtsm 793
significant influence 5£il
silver, inventory value 496
Singapore
accounting standards 145
corporate governance 768-9
shares 277
Skandia 467. 477
Skeichlev pic 13)1
Slough Estates pie 390
small companies I?[1] '*
definition 123
mandator) requirements 123 7
standards 123-7
statistics 122-3
statutory requirements 123
Smith Report 776-7
Social Accountability International (SAI) 856 7
social accounting 826-3(1
socially responsible investing (SKI) S2I
Somerfieid 494
Son\ 212—I
SORPs *ut* Statements of Recommended Practice
Spain, accounting svstcm 139

special purpose entities (SPKs) 147, 800-1
Spirit Gnup Ltd "88. *(m*
SSAPs *set* Statements of Standard Accounting Practice
SSI, International pic 195
staff cons 199
stakeholders, social accounting 826
Standard Chartered *$j}l*
standard cost, inventor) valuation 493-4
standards
arguments against 104-5
arguments for 103-4
conceptual framework 158=J3
developing world 127
effectiveness 1311-1
mandator) 9Ji= 103
national differences 135-41, 735
regulatory framework 105-6
statement of changes in equity (SOCE) 199-200, 201
consolidated accounts 567-8
Statements of Financial Accounting Standards (SI- ASs) (USA)
34 402-3
!£i Statement of t lash Flows 642
\W Accounting for Income Taxes 384
J21 Accounting for Stock-Hascd Compensation 787-91
130 Reporting (lomprehensi\e Income 203,205
131 Disclosures about Segments ol an Enterprise and Related Information 680, 6HJ
144 Accounting for the Impairment or Disposal of I-ong-Livctl Assets 193
Statements of Recommended Practice (SORPs)106, 108, 150
Statements of Standard Accounting Practice (SSAPs)
i Accounting for Government Grants 107, 150
5 Accounting for Value Added Tax 107. 392-3
9 Stocks and Long-term Contracts 107, 125, 148. 149
li Accounting for Research and Development 107, 151, 454, 455-6
\h Current Cost Accounting 81
19 Accounting for Imestmenl Properties 107, 152
20 Foreign Currency Translation 1H2
21 Accounting for [.eases, and Hire Purchase Contracts U1L M9i 435
21 Accounting for Goodwill 460-1
25 Segmental' Rqwrting [07, 149, 680, 681
list of 107
stewardship
assessment of performance 41
cash How reporting 12-13, *Ui*
financial statements 22
Stock Kxchangc 117
Stora Knso **144**
straight-line method, depreciation 408, 409,411-12
subsidiaries .err consolidated accounts
substance over form 289-92, 391
cash (low reporting *Ih*
leasing 436
Sud/uckcrAG402,498,735
sum of the units method, depreciation 409-10
sustainability 812, 834-7
SVA *set* shareholder \alue anal) sis
Syskoplan 674

Tafflcr*sZ-SCO»7M
tax ha\ens i76
taxation
advance corporation tax (ACT) 322=8
avoidance 375-6
corporation tax 372-7
deferred taxation 381-93
evasion 375-6
indIFRS22&=9
income measurement 42-3
national differences 137-8
value added tax (VAT) 392-5
taxonomies, XBRL 750.751.752, 755, 757-8
Tcchnotrans 303
termination benefits I56a3
termination costs 311
Tesco493
The Corporate Report 826-30
Tl Group 390
Tomkins pic 782 3
total owners* equity *2hl__2*
tool shareholder return (TSR) 725-6
total shareholders[1] funds 262-5
Toyoa454
trading losses, capital reduction 270-5
Trafalgar House 114 15
trcasun shares 276-8
trend analysis 70S-9, 735
(rial balance 231-2
triple bottom line reporting 834—7
true and fair view 212, 796
Tuflow Ofl pic 438
Turkivc Petrol Rjh'nt-rilcri S3-4
turnover
accrual accounting 26
asset turnover ratio 668, 669, 672
unincorporated businesses* capital maintenance 266
Uniq Group 606
Unique Pubs Ltd 688
United Kingdom
auditors 8U2
husiness ethics 854, 858-6 L Mi2
comparison with international standards 147-52
corporate governance 766-9
Generally Accepted Accounting Principles {UK GAAP) 378-9. 751
legal system 135 ft
mandatory standards 9S-103
regulatory framework 105- 6
United Nations (Conference on Trade and Development (UNCTAD) 127
United Nations Knvironmcntal Programme (UNEP) 813
United States
accounting standards 139, 140. jfaj
auditors MIL
comprehensive income reporting 203, ***m***
corporate governance 766-*)
environmental auditing 822-3, 825-6-6
environmental reporting SI4, 818
finance ofindustn 132
foreign companies 154
Generally Accepted Accounting Principles (US GAAP) 147, 152. 153-5,735,751,800-1
legislation 153-4
SarhanevOxlcy Act (2002) 802 1
uc also financial Accounting Standards Board; Securities and I s change Commission
unquoted companies
share valuation 719-23
MY *also* private companies
unrealised profits 4^ 583
unusual acth ities 237, 239
UPMKvmmcnel44
Urgent Issues Task Force (UITF) 103, 779
useful life 4IH-5, 407
utilisation ratio (asset turnover) 668. fttfl

valuation document, balance sheet 2**4-6
value
of assets 197
of inventories 490 - 500
measuring and reporting 171-2, 724-8
shareholder value (SV) 724-5
of shares 264-5, 683-4. 719-23. 2ii
to the business 81
of unconsumed costs of assets 45-6
in use 416, 418
value accounting 85
value added reports 828
value added tax (VAT) 392-5
value platform 730-1
vertical analysis 710-13
VIAG \G 669
Vossloh AG 203,205

WACG *ttt* weighted average cost of capital
\\ aikato Management School iiii
warrants, shares *h21*
Wartsila Corporation i l l
Watford Incisure pic 263
wealth distribution, and standards UiU
weighted average cost of capital (WACQ 727-8
Wcssanen 146
Wcthcrspoon, JD pic
common si/e statements i l l__li

horizontal analysis "07
intcr-rirm comparisons 688 9
ratio Analysis 67ft ')
trend analysis 7(W
whistle-blowing 855,86QzJ
wider markets initiative (WMI) *ill*
Wokeley pic 25-6, 390
work-in-progress <WIP), in\cntorv 5(H) 2
working capital 13 14,652 3
World Intellectual Propcm Organization **(WIPO) 473*4**
world wide web tec internet
WPP 471,429
XBRL *set* eXlensiblc Business Reporting **Language**
year-end manipulations ili3
Z-scorcs 713-15
Zeia model 714

Copyrighted material

Copyrighted material

This page wasn't downloaded by GBD

Copyrighted material

Copyrighted material

Copyrighted material

Copyrighted material

This page wasn't downloaded by GBD