

THE ACCOUNTING REVIEW
Vol. 77
Supplement 2002
pp. 139-167

Evaluating Financial Reporting Quality: The Effects of Financial Expertise vs. Financial Literacy

Linda McDaniel
University of Kentucky
Roger D. Martin
Laureen A. Maines
Indiana University

ABSTRACT: Audit committees evaluate financial reporting quality as part of their corporate oversight responsibilities. Given this responsibility, the national stock exchanges now require all audit committee members to be financially literate and at least one member to have financial expertise. In light of recent debates over this requirement, we provide evidence on how experts and literates differ in their evaluations of financial reporting quality. Results suggest that experts' evaluations of financial reporting quality are more strongly associated with their assessments of characteristics underlying reporting quality (e.g., relevance) espoused in Statement of Financial Accounting Concepts No. 2's framework than literates' evaluations. Additionally, literates are more likely than experts to identify concerns about reporting treatments for business activities that are prominent in the business press or are distinguished by their nonrecurring nature, while experts are more likely to raise concerns about reporting treatments for less prominent, recurring activities. This same pattern occurs in the ratings of the quality of the reporting treatments for specific financial statement items with respect to elements underlying reporting quality (e.g., neutrality); literates (experts) assess the quality elements for the reporting treatments of prominent and nonrecurring items (less prominent and recurring items) comparatively lower than experts (literates). These results suggest that including financial experts on audit committees is likely to change the structure

We thank Walt Blacconiere, Frank Hodge, Pat Hopkins, Michael Kimbrough, Bill Kinney, Bernadine Low, Elaine Maudlin, Mark Nelson, Mark Peecher, Fred Phillips, Bob Ramsey, Jerry Salamon, Geoff Sprinkle, Dan Stone, Nathan Stuart, and Greg Trompeter for written comments, and participants at Boston College, Emory University, Indiana University, University of Kentucky, and University of Missouri research workshops and *The Accounting Review's* Conference on the Quality of Earnings for comments on earlier versions of the paper. Additionally, we have benefited from discussions with Jeff Brovet, Joe Carcello, Robert Dunaway, Ed Evans, Dave Greene, John Hassell, Bill Kinney, Ganesh Krishnamoorthy, David Landsittel, Bob Libby, and Rob Parry, and the research assistance of Andrea Astill, Michael Kimbrough, Kelly McGaffrey, Craig Nichols, Dan Phan, and David Upton. Finally, we thank Ann Gibson, Larry Scott, and Art Wachholz for help in contacting experimental participants and the participants for their time and effort in completing the research study.

and focus of audit committee discussions about financial reporting quality, and may affect the committee's overall assessment of the quality of a company's financial reports.

Keywords: *audit committees; financial expertise; financial literacy; financial reporting quality.*

Data Availability: *Contact the authors.*

I. INTRODUCTION

We investigate the extent to which financial experts make judgments about financial reporting quality that differ from those of financial literates. Given that the national stock exchanges and the National Association of Securities Dealers (NASD) now require financial literacy for all audit committee members and financial expertise for at least one member (PricewaterhouseCoopers 2000a, 5), examining differences between experts' and literates' judgments is a first step in understanding how the expertise requirement may affect audit committees' behaviors.¹

While most see financial literacy as a necessary requirement to be an effective audit committee member (Association for Investment Management and Research [AIMR] 1999; Ernst & Young 2000), there is disagreement as to whether the financial expertise requirement is justified. For example, some have expressed concerns about the difficulty of finding qualified audit committee members (Kirk 2000; Olson 1999), because of increased legal exposure for designated experts (Paskell-Mede and Jackson 1999; Zacharias 2000). Perhaps a more critical argument is that audit committee members with financial expertise may actually be less effective than members with other characteristics, such as practical management experience (AIMR 1999; Olson 1999). Thus, evidence is needed on the likely effects of the financial expertise requirement on audit committee behavior. One possible effect could stem from differences in experts' vs. literates' evaluations of financial reporting quality.

We investigate whether and how financial experts' judgments related to financial reporting quality differ from those of financial literates in an experiment in which financial experts (audit managers) and financial literates (recent Executive M.B.A. graduates) assume the roles of audit committee members. Participants are asked to evaluate the financial reporting quality of a 10-Q report for a fictitious textile company in preparation for the mandatory quarterly discussion about financial reporting quality with auditors (AICPA 1999). Audit managers and Executive M.B.A. students meet the stock exchanges' definitions of financial experts and financial literates, respectively. We use these two groups as participants rather than individuals currently serving on an audit committee to isolate the effects of differences in financial knowledge on financial reporting quality judgments.² Additionally, in our experiment, we use features of the Financial Accounting Standard Board's

¹ Financial literacy is generally described as the ability to read and understand basic financial statements (Blue Ribbon Committee 1999, 26), while financial expertise typically is framed in terms of employment experience or certification in accounting/finance (PricewaterhouseCoopers 2000a, 4).

² We sought participants who differed in financial knowledge, but had similar levels of overall business-related and industry-specific knowledge. In particular, we wanted participants to have a significant amount of business experience (to qualify as potential audit committee members), but low industry experience (enabling us to separate effects of financial knowledge from effects of industry knowledge). Based on discussions with various individuals who work with audit committees, we believed that using actual audit committee members would reduce our ability to isolate the effects of financial knowledge, as opposed to other types of knowledge, including industry knowledge. However, by choosing only individuals with low industry experience, we are assuming that the influence of industry experience on individuals' evaluations of financial reporting quality does not interact with their financial knowledge.

conceptual framework, as reported in Statement of Accounting Concepts No. 2 (SFAC No. 2), *Qualitative Characteristics of Accounting Information* (Financial Accounting Standards Board [FASB] 1980), as an appropriate framework for evaluating reporting quality.

We examine two aspects of an audit committee's evaluation of financial reporting quality. First, given an audit committee's responsibility to discuss the overall quality of a company's financial reporting (SEC 1999, 2), we test for differences in experts' and literates' frameworks for evaluating reporting quality by examining the relations between assessments of overall reporting quality and assessments of three quality characteristics (relevance, reliability, and comparability) taken from SFAC No. 2. We predict that financial experts' evaluations of overall financial reporting quality will more strongly reflect their assessments of these three quality characteristics than will literates' evaluations. Specifically, we examine whether experts' assessments for the three individual quality characteristics better aggregate to the overall financial reporting quality assessment than do literates' assessments.

Second, given that audit committees address specific reporting-quality concerns about individual financial statement items in their discussions with auditors (AICPA 1999, para. 11), we examine differences in experts' and literates' identifications of reporting concerns/issues and in their evaluations of the quality of the reporting treatment for individual financial statement items. Based on their reviews of the company's financial statements, participants identified and ranked three reporting issues they deemed most critical for discussion with the auditors. Subsequently, they evaluated the quality of the reporting treatment for ten specified financial statement items with respect to selected elements of reporting quality espoused in SFAC No. 2, i.e., feedback and predictive value for the relevance characteristic, and verifiability, comprehensiveness, representational faithfulness, and neutrality for the reliability characteristic.

The reporting treatment for each of the ten specified financial statement items had potential implications for the quality of the financial statements.³ We classified each financial item into one of three salience categories (representing a within-subjects factor) based on a combination of two attributes. The two attributes related to whether the item (1) had recently received low vs. high prominence in the business press and (2) reflected a recurring, routine business activity vs. a nonrecurring, unusual business activity. We expect that literates will identify reporting concerns primarily based on an item's salience, created by its public prominence and/or nonrecurring or unusual nature (e.g., business reorganization). In contrast, we expect experts to be less influenced by an item's salience due to their broader knowledge base and greater exposure to recurring and nonrecurring business activities. Thus, we predict literates are more likely than experts to identify concerns related to the financial reporting treatment of publicly prominent, nonrecurring financial statement items, while experts are more likely than literates to raise issues about the financial reporting treatment of low prominence, recurring items. We expect that literates' and experts' ratings of the quality of the reporting treatment for specific financial items with respect to elements underlying reporting-quality characteristics (e.g., neutrality) will follow similar patterns.

Our results suggest that financial experts' frameworks for evaluating overall financial reporting quality for a set of financial statements differ from those of financial literates. Specifically, experts' individual assessments of the relevance and comparability character-

³ We interpret the term "financial statement items" broadly to include not only items reported within the body of the financial statements, but also items reported in the footnotes and MDA. Also, we use the terms "financial items" or "items" synonymously with "financial statement items."

istics of quality espoused in SFAC No. 2 better aggregate to their overall assessments of reporting quality, while literates' evaluations of overall reporting quality were unrelated to their assessments of relevance and comparability. Neither group's overall reporting-quality assessments reflected the reliability assessment.

Our results also indicate that literates were more likely than experts to raise primary concerns about the reporting treatments for high-salience financial statement items, i.e., items prominent in the business press or items distinguished by their unusual, nonrecurring nature. Literates also rated underlying elements of the quality of reporting treatments of high-salience items lower than did experts. In contrast, experts were more likely than literates to identify reporting concerns related to recurring business activities that have received little business press coverage and provided lower assessments of the underlying quality of the reporting treatment of such items than did literates.

This study identifies several differences between the judgments of financial experts and financial literates. Assuming that the individual differences found in our study extrapolate to judgments made by real audit committees in a group setting, our results form a preliminary basis for assessing how the financial expertise requirement will affect audit committee behavior. Our findings indicate that financial experts possess a framework for evaluating financial reporting quality that is more consistent with SFAC No. 2 and, thus, are likely to bring more structure to discussions of reporting quality compared to literates. These results suggest that experts and literates are unlikely to have a common basis for discussing reporting issues, and highlight the need either to educate literates on the SFAC No. 2 framework or to develop a new, shared framework for evaluating financial reporting quality, as recommended by Jonas and Blanchet (2000, 358).

Our findings also indicate that experts and literates bring differing viewpoints to the identification and evaluation of specific financial reporting concerns. Experts view as most important financial reporting concerns related to less prominent and recurring business activities while literates initially focus on concerns about nonrecurring, prominent (in the press) financial items. In addition, our results suggest that financial items that are less critical to overall reporting quality can distract literates. Overall, our findings suggest that the presence of experts may both sharpen and shift the focus of audit committees' discussions and overall evaluations of a company's financial reporting quality. These changes likely will improve audit committees' evaluations of financial reporting quality since more time and attention will be devoted to recurring issues important to financial reporting quality.

The remainder of the paper is organized as follows. Section II summarizes the background of recent activities and rule making related to audit committees and financial reporting quality, discusses relevant research, and develops the hypotheses. Section III describes the experiment, Section IV presents results, and Section V discusses implications of these results and concludes the paper.

II. BACKGROUND AND HYPOTHESES DEVELOPMENT

Improving Audit Committee Oversight Effectiveness

Audit committee members (as representatives of the board of directors), along with management and auditors provide oversight with respect to financial reporting (Levitt 2000). Audit committees have specific responsibility for overseeing financial reporting activities (Braiotta 1999, 104). Regulators and the accounting profession have touted the role of audit

committees in protecting investors, and accounting research suggests that market participants see audit committees as providing meaningful oversight of the financial reporting process (DeFond and Jiambalvo 1991; Dechow et al. 1996; McMullen 1996; Wild 1996).⁴

Responding to the SEC's concerns about erosion in the quality of financial reporting (Levitt 1998), the NYSE and NASD sponsored the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees (Blue Ribbon Committee), which issued ten recommendations aimed at improving the oversight effectiveness of audit committees and promoting quality financial reporting (Blue Ribbon Committee 1999, 3).

The Auditing Standards Board and the SEC recently adopted one recommendation of the Blue Ribbon Committee that requires auditors to discuss on a quarterly basis the quality of financial reporting with the audit committee (AICPA 1999; SEC 1999, 2). Additionally, the New York Stock Exchange (NYSE), American Stock Exchange (AMEX), and National Association of Securities Dealers (NASD) adopted a recommendation that all audit committee members be financially literate and at least one member demonstrate a higher level of financial reporting knowledge, referred to as financial expertise (Blue Ribbon Committee 1999, 25; PricewaterhouseCoopers 2000a, 5). Financial literacy is described as the ability to read and understand fundamental financial statements (Blue Ribbon Committee 1999, 26), although the NYSE's rules allow each board of directors to interpret this term.⁵ Financial expertise is defined somewhat differently by the exchanges; however, all define financial expertise as related to past employment experience in finance/accounting or professional certification in accounting or finance (PricewaterhouseCoopers 2000a, 4).⁶

While few have questioned the merits of requiring auditors and audit committee members to discuss the quality of financial reporting, the benefits of the expertise qualification have been debated. The expertise requirement assumes that including at least one financially literate audit committee member will improve the committee's effectiveness, for example, by leading audit committee members to identify and ask questions that "make management think harder and auditors dig deeper" (Levitt 2000). Yet, even the Blue Ribbon Committee acknowledged, "a director's ability to ask and intelligently evaluate answers to such questions may not require expertise" (Blue Ribbon Committee 1999, 25). Similarly, the AIMR has taken the position that a background in accounting or finance should not be "necessary and sufficient" for qualification, and points out that individuals without formal training "can be as insightful (or in some cases more so)" than individuals with formal financial training (AIMR 1999).

⁴ For example, for over 60 years the SEC has recommended that companies form audit committees (e.g., Accounting Series Release (ASR) No. 19, SEC 1940). The NYSE instituted audit committee requirements for its listed companies in 1978. The accounting profession and several special commissions (e.g., the Public Oversight Board (POB) Advisory Panel on Auditor Independence (1994), i.e., the "Kirk Panel") have addressed the role of audit committees in corporate governance and the enhancement of the quality of financial reporting.

⁵ The literacy requirements appear to be minimal. For example, an inspection of Costales and Szurovy (1994), one of the financial literacy resources suggested by Ernst & Young (2000), indicates a focus on understanding the three basic financial statements, with little discussion of specific applications of GAAP.

⁶ Specifically, the NYSE requires one audit committee member to have accounting or related financial management expertise, while the NASD/AMEX frames its requirement in terms of past employment experience in finance or accounting, certification in accounting, or other comparable experience resulting in the individual's financial sophistication (PricewaterhouseCoopers 2000a, 4).

To initiate an inquiry into whether financial expertise improves an audit committee's effectiveness at evaluating financial reporting quality, we examine whether and how financial experts and literates differ in their evaluations of selected aspects of reporting quality.⁷ Because the Blue Ribbon Committee and national stock exchanges have provided little guidance for predicting whether and how experts and literates will differ in this regard, we rely on previous academic research to guide our predictions.

Financial Expertise in Evaluating Financial Reporting Quality

The judgment and decision-making literature provides evidence that experts and non-experts differ in their representations of judgment and decision situations (Yates 1990, 372). These differences are attributed primarily to knowledge differences that relate to either specific instances stored in memory (episodic knowledge) or abstracted general properties (semantic knowledge) (Anderson 2000, 164). Abstracted semantic knowledge holds across many instances and is often referred to as a mental model or schema (Fiske and Taylor 1991, 98). Individuals develop schemas by using experiences to form associations among instances/episodes into structured, meaningful patterns or categories (Castellan 1993, 226). In evaluating decision situations, schemas are activated (and strengthened) by explicit thought about a topic or an encounter with information relevant to the schema. Once activated, schemas influence memory retrieval, direct attention to specific types of information, and affect the decision representation and interpretation of this information (Smith 1998, 403).

We propose that financial experts' and literates' semantic and episodic knowledge about financial reporting quality differ as follows. First, we assume experts' episodic knowledge about reporting quality represents both first-hand experiences with relevant problems and second-hand experiences (e.g., discussions with other experts). In contrast, literates' episodic knowledge likely is based more on second-hand information, such as accounting events reported in the business press. Second, we assume experts' and literates' semantic knowledge (and thus their problem representations) will differ due to the number and nature of first- and second-hand encounters with reporting-quality concerns (see e.g., Libby 1995). We predict that these knowledge differences will affect the way in which experts vs. literates (1) assess overall financial reporting quality and incorporate underlying characteristics of reporting quality into these assessments and (2) identify and evaluate critical reporting issues. Specifically, we predict that experts will possess better-developed schemas or frameworks for evaluating reporting quality relative to literates. In addition, due to the absence of an experienced-based schema and limited second-hand episodic knowledge, we expect that, relative to experts, literates' identifications of critical reporting issues and evaluations of the quality of reporting treatments will be more influenced by attributes (i.e., salience) of the presented information (see, e.g., Tversky and Kahneman 1973). We discuss each of these in turn.

Framework for Evaluating Overall Financial Reporting Quality

The SEC, auditing profession, and national exchanges have not specified an explicit definition of or a framework for financial reporting quality (see e.g., Blue Ribbon

⁷ Two recent studies have addressed other issues related to expertise in audit committee settings. DeZoort and Salterio (2001) find that audit committee members who have more financial knowledge are more likely to support auditors than management in a "substance over form" revenue recognition policy dispute. DeZoort (1998) shows that more experienced audit committee members assess internal controls as stronger than less experienced members. Neither study directly examines audit committee members' evaluations of financial reporting quality.

Committee 1999, 2–3; AICPA 2000; Turner 2001).⁸ One of these groups (the Auditing Standards Board) asked the FASB for guidance on defining financial reporting quality and the FASB referred to SFAC No. 2 as an accepted framework (Jenkins 2000). We assume the framework in SFAC No. 2 is an appropriate model for an audit committee to apply in its task of evaluating the quality of a firm's reporting, and we use this framework to examine how experts and literates differ in their assessments of overall financial reporting quality (FASB 1980). Specifically, we use SFAC No. 2's characteristics of relevance, reliability, and comparability to capture characteristics related to overall financial reporting quality.

We assume that financial experts, due to their required financial-related experiences or certifications, have developed schemas for reporting quality consistent with the SFAC No. 2 framework. For example, the certification requirement (CPA or equivalent) implies study that would lead to direct knowledge of SFAC No. 2. Also, experts' knowledge (e.g., of the qualitative characteristics and their association with overall financial reporting quality) develops through experience (application of authoritative literature) in evaluating financial statements with these characteristics in mind (see e.g., Libby and Luft 1993).

We assume that individuals designated as financially literate will have some familiarity with reporting quality as described in SFAC No. 2 from second-hand exposures to the popular press, prior or continuing financial education, or discussions in meetings.⁹ However, this familiarity is likely to be more limited and to erode over time since literates do not reinforce and/or further develop the framework via practical experience. Overall, because they lack the financial certification or experience necessary to be designated a financial expert, literates will have a limited ability to form and access a well-defined financial reporting quality schema that delineates how specific characteristics are associated with overall financial reporting quality for a set of financial statements.

These arguments suggest that experts' frameworks for evaluating financial reporting quality will be better developed with respect to SFAC No. 2 quality characteristics (relevance, reliability, and comparability) than those of financial literates. This leads to the following alternative-form hypothesis:

- H1:** Financial experts' evaluations of financial reporting quality are more strongly associated with their assessments of characteristics underlying reporting quality espoused in SFAC No. 2's framework than literates' evaluations.

Identification of Critical Reporting Issues and Evaluations of the Elements of Reporting Quality for the Reporting Treatment of Specific Financial Items

While auditors and audit committees are charged with evaluating overall reporting quality, actual discussions about quality typically focus on individual financial statement items (e.g., PricewaterhouseCoopers 2000b; AICPA 2000). Such discussions likely focus

⁸ For example, former SEC Chairman Levitt defined financial reporting quality only in broad terms as a "commitment to integrity and transparency in the way...companies report their financial performance" (Levitt 1999, 1).

⁹ A review of audit-firm prepared guidance designed for their clients' audit committees and guidance developed for a corporate-governance related web site shows that terminology from SFAC No. 2 (e.g., reliability) often is used in describing issues that might be discussed in a financial reporting quality meeting with auditors. Thus, it is reasonable to expect that audit committee members would be familiar with the terms of relevance, reliability, and consistency, but not necessarily familiar with the SFAC No. 2 framework. While the participants in this study were not current audit committee members, they were exposed to the terms related to the SFAC No. 2 quality characteristics, although not the actual conceptual framework, in their class study of corporate financial accounting.

on possible concerns about specific elements of the characteristics of financial reporting quality (e.g., the neutrality element of reliability).¹⁰

We investigate whether experts and literates differ in two judgments related to the quality of the reporting treatment for ten selected financial statement items. First, given audit committee members' responsibilities to be proactive and probing in financial reporting quality discussions with auditors (Turner 2001, 3), we examine whether experts and literates identify different reporting issues for discussion with the auditors. Second, we compare their evaluations of the quality of the reporting treatment of ten selected items with respect to specific elements of reporting quality (e.g., predictive value).

Based on our previous argument, we expect that financial experts' experienced-based, well-developed schemas lead them to raise concerns about the reporting treatments of items often associated with the risk of misstatement, and thus poor reporting quality (Palmrose and Scholz 2001; Moriarty and Livingston 2001). This expectation is consistent with research documenting that individuals with significant financial experience have knowledge of misstatement frequencies for financial statement accounts (Ashton 1991), as well as the misstatements' underlying causes (Libby 1985; Solomon et al. 1999). In addition, archival evidence shows that misstatements are likely to occur in accounts associated with routine business activities such as sales and accounts receivable at least as often as in accounts associated with nonrecurring business activities such as restructurings (Kruetzel and Wallace 1986; Wright and Ashton 1989; Kinney and Martin 1994; KPMG 2000; Nelson et al. 2002; Moriarty and Livingston 2001; Palmrose and Scholz 2001; Turner 2001). This research suggests that when identifying reporting concerns and evaluating the reporting treatment of specific items with respect to reporting quality, experts will be more likely than literates to focus on items associated with recurring activities.

In contrast, because they lack experienced-based schemas, we expect that literates' identifications and evaluations of reporting issues will be influenced more by the salience of the financial items from one of two sources. The first source relates to the premise that literates will obtain episodic knowledge (and potentially develop schemas) about reporting issues predominantly from second-hand sources (e.g., the business press). The acquisition of such knowledge likely is influenced by the public prominence of the issues. Specifically, psychology research indicates that individuals' frequency assessments are formed using the availability heuristic, in which instances that are easier to recall are perceived as more frequent (Tversky and Kahneman 1973). The ease with which individuals recall items can be influenced by factors unrelated to their true frequency, including their vividness and the degree to which issues related to these items are publicized (Lichtenstein et al. 1978). Thus, literates will emphasize financial items prominent in the business press such as restructuring charges.

The second source of salience in identifying reporting issues is based on the proposition that literates will rely more on attributes of the presented information itself and their attention will be drawn to distinctive or unusual items. Research indicates that individuals tend to notice unexpected (Payne et al. 1993, 180–181) or distinctive (Taylor 1982, 190) information, for example, reporting of infrequent activities such as reorganizations and litigation settlements. Infrequent activities also may be emphasized by their financial statement presentation, e.g., income from discontinued operations or the effect of a change in an

¹⁰ SFAC No. 2 identifies elements of reporting quality that underlie the three qualitative characteristics. Relevance includes two elements, predictive value for the future and feedback value for past performance; reliability includes elements of verifiability, neutrality, and representational faithfulness (which encompasses comprehensiveness of disclosure). Hereafter, we refer to these elements of reporting-quality characteristics or elements associated with financial reporting quality simply as "elements" or "elements of reporting quality."

accounting principle (Maines and McDaniel 2000), and discussions of such items in footnotes and the MD&A (e.g., accounting changes). Thus, literates will be more likely to attend to financial items related to nonrecurring activities in their identifications and evaluations related to financial reporting quality.

In summary, we posit that experts and literates will differ in their identifications of critical issues for discussion with the auditors and in their evaluations of the quality of the reporting treatments for specific financial items. Financial literates, with less experience with specific reporting issues, will be more likely than experts to identify critical reporting issues based on salience. Specifically, we predict that literates will be more likely than experts to identify issues that are both prominent and nonrecurring. The experienced-based episodic knowledge and better-developed schemas of experts will cause them to be less influenced by salience than literates, and thus to select recurring activities of low prominence more often than literates.

This leads to the following alternative-form hypothesis, stated as a joint hypothesis comparing experts' and literates' judgments since our theoretical development is based on relative, rather than absolute, behavior. Additionally, in an experimental setting with restrictions on the number of provided financial items, there are limits on the number of reporting issues participants can list, which results in an interdependence between issues raised and not raised. For example, if participants are limited to identifying a single reporting issue, the decision to discuss a high prominence, nonrecurring item, by design, precludes raising a low prominence, recurring item.

H2: In identifying critical financial reporting issues from a set of financial statements for discussion with the external auditors, financial literates will be more likely than financial experts to identify reporting issues about activities that are prominent in the business press and nonrecurring, while financial experts will be more likely than financial literates to identify reporting issues about recurring activities of low prominence.

Similarly, in evaluating the quality of the reporting treatment for specific items presented in the financial statements with respect to selected elements of reporting quality, we predict that literates will rate the quality of the elements (e.g., predictive value) lower than experts for high prominence, nonrecurring financial items. Conversely, we predict experts' quality ratings of these elements will be lower than literates for low prominence, recurring items.

H3a: In evaluating the quality of the reporting treatment for specific items presented in the financial statements, financial literates will rate the elements of reporting quality lower than financial experts for items related to high prominence, non-recurring activities.

H3b: In evaluating the quality of the reporting treatment for specific items presented in the financial statements, financial experts will rate the elements of reporting quality lower than financial literates for items related to low prominence, recurring activities.

III. EXPERIMENTAL METHOD

The study employs a 2 (financial designation) \times 3 (financial item salience classification) mixed design, with financial designation as a between-subjects factor and financial item

salience classification as a within-subjects factor. The between-subjects factor represents two levels of financial designation: financial expertise and financial literacy. Our objective was to select two groups of participants with significant and similar amounts of overall business-related experience, one with experience in accounting/finance and the other with experience in other functional areas or general business experience. The first group, referred to as "financial experts," includes 20 practicing audit managers from a Big 5 CPA firm, who averaged 8.33 years of public accounting experience and 0.50 years of general business experience. This group is a surrogate for the audit committee member who is a financial expert under the Blue Ribbon Committee's and the exchanges' guidelines. The other group, referred to as "financial literates," comprises 18 recent Executive M.B.A. program graduates who had taken at least one financial and one managerial accounting course, which provided the requisite understanding of the three basic financial statements. The Executive M.B.A.s averaged 9.31 years of general business experience outside of accounting and 0.31 years of experience in accounting or finance. This group is a surrogate for the literate but not expert audit committee member.

Participants received financial statements and related information associated with an audit committee review of quarterly (10-Q) financial disclosures prior to their release. Each was instructed to assume the role of an audit committee member for a mid-cap NYSE textile company. The task was to review the first quarter financial statements, MD&A, and disclosure information in preparation for a discussion with the independent auditor about the 10-Q report. As part of this task, participants read background information on the textile industry and information related to the fictional company, including a description of its products, factors affecting revenues, and factors affecting costs.

The financial statements contained ten specific items for which participants subsequently evaluated the quality of the item's reporting treatment with respect to elements of reporting quality. In selecting and creating descriptions of these items, we consulted both a controller of a mid-cap textile manufacturer and an audit partner for a mid-cap textile company engagement, and examined the financial statements of several textile companies. Based on these discussions and our analysis, we selected ten items that are both likely to affect reporting quality for textile companies and classifiable along two salience dimensions (prominence/recurring). We classified each item into one of three salience combinations that represents the within-subjects' manipulation: high prominence/nonrecurring, high prominence/recurring, and low prominence/recurring.¹¹ Table 1 summarizes the ten items.¹²

The first category (high prominence/nonrecurring) includes a realignment initiative, an

¹¹ We did not include any low prominence/nonrecurring financial statement items. None of the financial items initially identified by the controller and partner or subsequently identified from our examinations of other firms' financial statements in this industry fell naturally within this classification. Nonrecurring items have been extensively covered in SEC policy initiatives, the POB Report (1994), and/or by the Blue Ribbon Committee (1999), with the result that these items are not realistically viewed as having low prominence.

¹² To assess the prominence of the ten financial statement items, we did two things. First, we read transcripts of all 41 speeches given by the SEC chairman, commissioners, or staff during the first five months of 2001, searching for these ten specific items. In addition, we conducted keyword searches for these ten items in the context of financial reporting quality in the *Wall Street Journal*, *Business Week*, *Fortune*, and *Barron's* for the period January 2000 to April 2001. The search results indicate that all items designated as high prominence were mentioned at least twice as many times as any item designated as low prominence. Second, we asked 11 auditors (as experts) and five first-year E.M.B.A. students (as literates) who did not participate in the study to classify each of the ten items as to its prominence and recurring nature on scales from 1 (low) to 7 (high). Based on the average assessments, both groups classified realignment, litigation settlement, and revenue recognition issues as the most prominent. The literates rated the accounting reclassification as the next highest in terms of prominence, while the experts' average assessment for reclassification was preceded by the availability of debt financing. Each group classified the realignment, reclassification, and litigation settlement as the least recurring.

TABLE 1
Descriptions of the Selected Financial Statement Items and their Potential Reporting-Quality Implications Classified by Saliency Dimension^a

<i>Reporting Item</i>	<i>Description of Financial Item and Potential Reporting-Quality Implications</i>
<i>High Prominence/Nonrecurring</i>	
Realignment initiative	The Company implemented an efficiency initiative two years ago to improve its competitiveness in light of foreign competition. The initiative involved a reduction of sales, manufacturing, and administrative staffs. The cost was reflected in income two years ago, with most of the implementation “essentially complete” by the 4th quarter of the prior year. Of the \$20 million reserve established two years ago, a \$1.5 million balance remains at the current quarter-end. <i>This remaining reserve might be questioned as being an excess reserve based on the completion status of the initiative.</i>
Reclassification of SGA expense	In the current quarter, the Company changed the criteria for items to be included in selling, general, and administrative (SGA) to conform to industry practice. This change resulted in a reclassification of about \$3.0 million from SGA to Cost of Sales in the current quarter. The company restated prior year income statements to reflect the change. <i>The justification for and the timing of the accounting change might be questioned in a discussion of reporting quality.</i>
Settlement of class action litigation	In the prior year, a group of employees had filed a lawsuit against the company in connection with their terminations due to the realignment initiative. Although management believes that the Company would have prevailed in court, it reached a settlement with these employees to avoid the cost of protracted litigation. The settlement amount of \$0.9 million is reflected in current quarter earnings. <i>A concern about the likelihood of other related litigation and the need to disclose that risk might be raised in a discussion of reporting quality.</i>
<i>High Prominence/Recurring</i>	
Revenue alliance with Laksmi	The Company has an alliance with Laksmi, an Indian company, in which Laksmi purchases denim from the Company. In return, the Company markets sportswear produced by Laksmi outside the Indian sub-continent. The final price paid by Laksmi for the denim varies inversely with the level of sales over a 12-month period. Revenues are recorded at estimated prices, with adjustments made for changes in estimates. <i>The reasonableness of these estimates could be a topic for a discussion of reporting quality.</i>
Revenue related to Mexican joint venture	The Company entered into a joint venture with a production facility in Mexico five years ago. Denim fabric for orders is sent from U.S. plants to the Mexican facility, which assembles the garments and ships orders to the customer. The Company records revenue based on weekly planned shipment schedules, with adjustments for deviations from the schedule made as needed. <i>The reasonableness of this recording of revenue and the timing of the related adjustments could be raised in a discussion of reporting quality.</i>

(Continued on next page)

TABLE 1 (Continued)

	<i>Low Prominence/Recurring</i>
Renewal of contracts for key customers	Three customers account for approximately 60–65 percent of sales revenue. The Company has three-year purchase agreements with these companies. One of these agreements is up for renewal in the 3rd quarter of the current year. Management believes the relationship has been positive, but there is no guarantee of renewal. <i>A discussion of reporting quality might include the likelihood of this renewal and the adequacy of management's discussion of the matter in the disclosures.</i>
Collection of accounts receivable	<i>Nothing in the financial statements indicated anything unusual with the presentation or valuation of accounts receivable on the current balance sheet or with consistency with prior years. Collectibility might be a concern given the estimates and adjustments related to the revenue recognition items described above, and because the failure to renew the major purchase agreement might also indicate a lower realizable value of the associated receivables.</i>
Cotton purchase program	The Company has entered into cotton purchasing programs to ensure an uninterrupted supply of cotton. Some contracts leave the Company subject to commodity price fluctuations, with the general trend of increasing cotton prices likely to continue. <i>The adequacy of the disclosure of this risk could be questioned in a discussion of reporting quality.</i>
Future debt financing	The information provided in the financial statements showed the balance of long-term and short-term debt, payments due over the next five years, and sources of debt (8.5 percent debentures, term loans, and working capital line of credit). <i>Debt financing is key to success in this industry, so the ability to obtain future financing and the associated impact on continued viability and profitability could be important in discussions about reporting quality.</i>
Property, plant, and equipment transactions	<i>Nothing in the financial statements indicated anything unusual with property, plant, and equipment. Little detail was provided about property, plant, and equipment, however, so in a discussion of reporting, quality questions could be raised about the investment program and the related disclosures.</i>

^a Financial statement items are listed by Prominence/Recurring category. Participants received background information that included these ten financial items and were asked to assess the quality of the reporting treatment for each of the ten specified items with respect to six elements underlying the quality characteristics. Statements in italics in this table reflect potential reporting-quality implications for each item; all but the italicized statements were included in the experimental materials.

accounting change (expense reclassification), and a litigation settlement related to the realignment. The second category (high prominence/recurring) concerns revenue recognition—a recurring activity emphasized recently by the SEC and covered heavily in the business press. The first item relates to a revenue alliance with a company in India; the second relates to revenues associated with a joint venture in Mexico. Finally, the third category (low prominence/recurring) consists of five recurring business activities that have received relatively little exposure in the press. The activities include a purchase program for raw materials, collection of accounts receivable, a contract renewal for a key customer, future debt financing, and transactions in property, plant, and equipment. We chose reporting

treatments that raise quality concerns such as the accuracy of estimates in the financial statements, the reasonableness of an accounting change, and adequacy of disclosure.¹³

After reading the financial statement information, participants answered two sets of questions. The first question set elicited responses on 11-point scales for the overall assessments of financial reporting quality and assessments of qualitative characteristics of relevance, reliability, and comparability for the financial statements taken as a whole. Participants also identified three critical reporting issues to be discussed in the audit committee's meeting with the external auditors and listed their specific concerns related to each issue.¹⁴

In the second question set, participants assessed the quality of the reporting treatment of each of the ten specific reporting items presented in Table 1 with respect to six elements of reporting quality. The elements were the degree to which the reporting treatment (1) provides knowledge about future operations/economic events, (2) provides knowledge about past operations/economic events, (3) provides for comprehensive and transparent presentation, (4) reflects the company's business activities, (5) is neutral, and (6) is based on measures with little uncertainty and few assumptions. The first two elements underlie the relevance quality characteristic, while the last four are elements of reliability.¹⁵ Each question included a description of the element to ensure a common interpretation and the responses were elicited on seven-point scales from low to high.¹⁶ Finally, participants provided demographic information.

IV. RESULTS

Table 2 presents descriptive data on participants' backgrounds and self-evaluations of their own business and financial expertise. The self-evaluations are consistent with participants' actual experience levels (previously reported) and our designations of experts and literates. As seen in Panel B of Table 2, both groups report similar perceived levels of business expertise (means of 4.44 vs. 4.40 for literates and experts, respectively, on a seven-point scale; $t = 0.15$, $p < .880$), but literates rate their financial expertise significantly lower than the experts (means of 2.64 and 5.15, respectively; $t = -7.38$, $p < .001$). In addition, the financial literates perceive themselves more as general business experts than financial experts ($t = 7.33$, $p < 0.001$ one-tailed), while experts perceive themselves more as financial

¹³ All financial amounts related to the ten financial statement items exceeded typical quantitative benchmarks for materiality, i.e., 5 percent of pretax income, which was \$300 (thousand) for the fictional textile company.

¹⁴ We restricted both the total number of financial items presented to participants and the number of critical reporting issues to be discussed. We made this design choice given realistic constraints on the amount of time participants could spend reading and completing the experiment. The restriction is not unrealistic in that the number of reporting issues available for discussion for companies is relatively unlimited yet the meeting time between the audit committee and auditors for discussion generally is fixed. In addition, the SEC recommends that firm advisors (including audit committees) "should identify the three, four or five most critical accounting [issues]" (Pitt 2001).

¹⁵ We did not ask participants to evaluate the comparability of the ten financial statement items since only one of our specified items, the reclassification due to an accounting change, relates to comparability across years. Additionally, participants did not receive financial statements for comparative companies.

¹⁶ We expected that our participants would be familiar with the definitions of relevance, reliability, and comparability based on their classroom experiences and exposure to the popular press; however, because the specific names labeling the elements underlying the reliability and relevance characteristics are not used consistently, we provided descriptions of the elements within the experimental materials. In our descriptions, we avoided the use of specific SFAC No. 2 terminology that would likely be more familiar to experts and instead used terminology consistent with the elements listed in SFAC No. 2 and Jonas and Blanchet (2000). For example, the description of the "representational faithfulness" component asked participants to assess the degree to which information accurately reflects the company's business activities. See Table 5 for complete descriptions.

TABLE 2
Descriptive Statistics: Participants' Work Experience and Expertise Self-Assessments

Panel A: Experience^a

	<i>Literates</i> (<i>n</i> = 18)		<i>Experts</i> (<i>n</i> = 20)		<i>Test: Literates vs.</i> <i>Experts^b</i>	
	<i>Mean</i>	<i>Std.</i> <i>Devn.</i>	<i>Mean</i>	<i>Std.</i> <i>Devn.</i>	<i>t</i>	<i>Pr</i> > <i>t</i>
Business work experience (years)						
Accounting/Finance	0.31	0.83	8.33	3.61	-9.19	0.001
General business	9.31	5.87	0.50	1.00	6.61	0.001
Total	9.61	5.57	8.83	3.82	0.51	0.612
Number of board positions held	0.17	0.38	0.15	0.37	0.14	0.892

Panel B: Self-Assessments^c

	<i>Literates</i> (<i>n</i> = 18)		<i>Experts</i> (<i>n</i> = 20)		<i>Test: Literates vs.</i> <i>Experts^b</i>	
	<i>Mean</i>	<i>Std.</i> <i>Devn.</i>	<i>Mean</i>	<i>Std.</i> <i>Devn.</i>	<i>t</i>	<i>Pr</i> > <i>t</i>
Business Expert	4.44	0.98	4.40	0.82	0.15	0.880
Financial Expert	2.64	1.16	5.15	0.93	-7.38	0.001
Financially Literate	4.72	1.23	6.25	0.91	-4.39	0.001
Familiar with the textile business	2.17	1.15	2.50	1.79	-0.67	0.505
Expert in Generally Accepted Accounting Principles (GAAP)	2.39	1.38	5.80	0.95	-8.96	0.001

Panel C: Tests of Differences in Self-Assessments within Participant Groups

	<i>t</i>	<i>Pr</i> > <i>t^b</i>
<i>Literates (n = 18)</i>		
Business Expert > Financial Expert	7.33	0.001
Financially Literate > 4 (scale midpoint)	2.50	0.023
4 (scale midpoint) > Financial Expert	4.98	0.001
<i>Experts (n = 20)</i>		
Business Expert < Financial Expert	4.27	0.001
Financially Literate > 4 (scale midpoint)	11.05	0.001
Financial Expert > 4 (scale midpoint)	5.51	0.001

^a "Work experience," measured in years, is reported for (1) full-time accounting-related or finance-related experience, and (2) full-time general business experience that is nonaccounting and nonfinance. "Number of board positions" is the number of Board of Director member positions held currently or in the past.

^b Test results for testing for differences in mean responses of financially literate individuals and financial experts. Wilcoxon tests of the distributions provide qualitatively equivalent results.

^c Self-assessments are reported on a seven-point scale (ranging from 1 = completely disagree to 7 = completely agree). Participants were asked the extent to which they agree with each of the statements: "I consider myself [a(n)]..."

than general business experts ($t = 4.27, p < .001$). While literates believe they are financially literate (i.e., the mean of 4.72 is significantly greater than the scale midpoint of 4.0; $t = 2.50, p < .023$), they do not believe they are financial experts (i.e., the mean of 2.64 is significantly less than 4.0; $t = 4.98, p < .001$). In contrast, those designated as experts consider themselves to be financial experts (i.e., the mean of 5.15 is greater than the scale midpoint of 4.0; $t = 5.51, p < .001$) and to be more expert in generally accepted accounting principles than do literates (5.80 vs. 2.39, respectively; $t = -8.96, p < .001$). Finally, the two groups do not differ in their perceived familiarity with the textile industry (2.17 and 2.50 for literates and experts, respectively; $t = -0.67, p < .505$), suggesting that any differences in their assessments of financial reporting quality are unlikely to be due to differences in industry-specific knowledge.¹⁷

Assessments of Overall Financial Reporting Quality

Hypothesis 1 predicts that financial experts' evaluations of overall financial reporting quality will be more strongly associated with their assessments of relevance, reliability, and comparability relative to the evaluations of financial literates. We first present descriptive data related to participants' overall reporting quality and the three quality characteristics assessments, and then provide specific tests of H1.

Panel A of Table 3 presents participants' assessments of overall financial reporting quality and individual assessments of relevance, reliability, and comparability for the financial statements taken as a whole (on 11-point scales with endpoints labeled "Low" and "High" and the midpoint label "Moderate"). Since we make no predictions about differences between the levels of literates' and experts' quality assessments, we present descriptive results for these variables. Panel A shows that literates assessed overall reporting quality for the financial statements taken as a whole higher relative to experts (8.11 vs. 7.05, respectively; $t = 1.99, p < .054$). While the literates' and experts' assessments of the overall relevance and reliability of the financial reporting do not differ (7.50 vs. 7.55; $t = -0.10, p < .922$ for relevance and 7.39 vs. 6.55; $t = 1.37, p < .178$ for reliability), literates assessed the comparability of the financial reporting lower than the experts (6.00 vs. 7.20, respectively, $t = -1.89, p < .067$). Together, these results suggest that literates' frameworks or schemas for evaluating financial reporting quality may not be internally consistent, or that literates' frameworks include factors not represented by SFAC No. 2 characteristics. First, the literates' mean assessment of overall reporting quality is significantly higher than that of the experts even though literates' assessments for each of the three underlying characteristics are lower than or not statistically different from those of the experts. Second, eight out of 18 literates assessed overall reporting quality higher than any of their three individual characteristics' assessments, while only one out of 20 experts had this same pattern ($p < .007$ based on Fisher's exact test).

To test H1, we regress participants' overall financial reporting quality evaluations on their assessments of relevance, reliability, and comparability to evaluate whether experts' reporting quality evaluations more strongly reflect their assessments of the three underlying quality characteristics than do literates' evaluations. Panel B of Table 3 reports individual regression results for literates and experts, while Panel C shows the combined regression that tests for differences between literates' and experts' regression coefficients.

The adjusted R^2 for the literates' model in Panel B of Table 3 is -0.063 and none of the coefficients achieves significance. In contrast, the adjusted R^2 for the experts' model is

¹⁷ Untabulated results indicate literates' and experts' perceived familiarity with the textile industry are similar and both are below the response scale midpoint of 4.0 ($t = -6.76, p < .001$ and $t = -3.74, p < .002$, respectively).

TABLE 3
Assessments of Overall Financial Reporting Quality and Underlying Quality Characteristics

Panel A: Assessments of Overall Financial Reporting Quality and Underlying Quality Characteristics^a

	<i>Literates</i> (<i>n</i> = 18)		<i>Experts</i> (<i>n</i> = 20)		<i>Test: Literates vs. Experts^b</i>	
	<i>Mean</i>	<i>Std. Devn.</i>	<i>Mean</i>	<i>Std. Devn.</i>	<i>t</i>	<i>Pr > t </i>
Financial Reporting Quality	8.11	1.28	7.05	1.90	1.99	0.054
Relevance	7.50	1.65	7.55	1.47	−0.10	0.922
Reliability	7.39	1.54	6.55	2.14	1.37	0.178
Comparability	6.00	1.85	7.20	2.04	−1.89	0.067

Panel B: Regressions for Literates' and Experts' Assessments of Underlying Quality Characteristics on Overall Financial Reporting Quality

Financial Reporting Quality = *a*₀ + *b*₁**Relevance* + *b*₂**Reliability* + *b*₃**Comparability*

	<i>Coefficient Estimates (t-statistics) [p-values]^c</i>				<i>F</i>	<i>Prob > F</i>	<i>Adj. R²</i>
	<i>Intercept</i>	<i>Relevance</i>	<i>Reliability</i>	<i>Comparability</i>			
Literates (<i>n</i> = 18)	5.82 (2.91) [0.011]	0.07 (0.30) [0.384]	0.08 (0.39) [0.351]	0.19 (0.95) [0.178]	0.67	0.587	−0.063
Experts (<i>n</i> = 20)	−1.76 (−1.00) [0.331]	0.84 (3.99) [0.001]	0.13 (0.85) [0.205]	0.23 (1.36) [0.096]	9.09	0.001	0.561

Panel C: Combined Regression of Assessments of Underlying Quality Characteristics on Overall Financial Reporting Quality^d

Financial-Reporting Quality = *a*₀ + *a*₁**Literate* + *b*₁**Relevance* + *b*₂**Literate*Relevance* + *b*₃**Reliability* + *b*₄**Literate*Reliability* + *b*₅**Comparability* + *b*₆**Literate*Comparability*

<i>Intercept</i>	<i>Literate*</i>		<i>Literate*</i>		<i>Literate*</i>		<i>Literate*</i>
	<i>Intercept</i>	<i>Relevance</i>	<i>Relevance</i>	<i>Reliability</i>	<i>Reliability</i>	<i>Comparability</i>	<i>Comparability</i>
−1.76 (−0.98) [0.334]	7.58 (2.86) [0.008]	0.84 (3.90) [0.001]	−0.77 (−2.47) [0.010]	0.13 (0.83) [0.207]	−0.05 (−0.17) [0.432]	0.23 (1.34) [0.096]	−0.04 (−0.14) [0.443]

(Continued on next page)

TABLE 3 (Continued)

^a Characteristics related to overall financial reporting quality were measured on 11-point scales (1 = Low, 11 = High). The specific questions asked for each item are as follows:

Financial Reporting Quality = The quality of financial reporting is typically determined in relation to the usefulness of the financial information to external users (e.g., creditors and investors). Please rate the overall financial reporting quality of Forrest and Sons, Inc.'s 1st quarter 10-Q information;

Relevance = Please rate the overall relevance of Forrest and Sons, Inc.'s 1st quarter 10-Q information;

Reliability = Please rate the overall reliability of Forrest and Sons, Inc.'s 1st quarter 10-Q information; and

Comparability = Please rate the overall comparability of Forrest and Sons, Inc.'s 1st quarter 10-Q information.

^b Reported results are for tests of differences of overall mean assessments between financially literate individuals and financial experts. Wilcoxon tests of the distributions provide qualitatively equivalent results.

^c Reported p-values reflect two-tailed tests for the intercept term and one-tailed tests for the estimated coefficients for Relevance, Reliability, and Comparability.

^d "Literate" is a dummy variable with Literate = 0 for experts and Literate = 1 for literates.

^e Reported p-values reflect two-tailed tests for the intercept and Intercept*Literate coefficients and one-tailed tests for the estimated coefficients for Relevance, Literate*Relevance, Reliability, Literate*Reliability, Comparability, and Literate*Comparability.

0.561, indicating that experts' assessments of reporting quality with respect to some underlying quality characteristics are aggregated into their overall assessments. Specifically, the coefficient on relevance is significantly positive ($t = 3.99$, $p < .001$, one-tailed) and the comparability coefficient is marginally significant ($t = 1.36$, $p < .096$, one-tailed). The coefficient on reliability is not significant at conventional levels ($t = 0.85$, $p < .205$, one-tailed).¹⁸ The combined regression in Panel C shows that the literates' model statistically differs from that of the experts in terms of both the intercept (literate*intercept coefficient = 7.58, $p < .008$) and relevance (literate*relevance coefficient = -0.77, $p < .010$). However, experts' and literates' reliability and comparability coefficients are not statistically different. Overall, these results suggest differences between experts' and literates' financial reporting quality frameworks; specifically, literates' overall reporting-quality evaluations do not aggregate their assessments of the SFAC No. 2 characteristics, while at least some of the qualitative characteristics in the SFAC No. 2 framework are reflected in the experts' overall reporting-quality models.

Sensitivity Analyses

Because of small sample sizes, we examined the regressions used to test H1 for the presence of influential observations using procedures in Belsley et al. (1980), and re-estimated the regressions excluding two influential observations from each group. The adjusted R^2 of the literates' regression increased to 0.224, and the coefficient on relevance became marginally significant ($p < .094$). The adjusted R^2 of the experts' regression increased to 0.670, and all three coefficients were at least marginally significant ($p < .001$ for relevance, $p < .089$ for reliability, and $p < .015$ for comparability). Thus, our general

¹⁸ We also performed regressions including interactions among relevance, reliability, and comparability. None of the interactions was significant for either the literates' or experts' model, consistent with research showing that individuals' judgments typically are based on a linear combination of information (Dawes 1979).

conclusions about the differences between literates' and experts' frameworks for evaluating financial reporting quality are robust to the elimination of influential observations.

A possible explanation for the literates' failure to incorporate quality characteristics in their overall assessments of financial reporting quality is that they lack knowledge about the SFAC No. 2 definitions of relevance, reliability, and comparability. As indicated earlier, because these participants were directly exposed to, and were expected to be familiar with, these general terms we did not test our participants' knowledge of these definitions. We can provide, however, some evidence of the effects of having a reminder of the definitions of two of the characteristics, relevance and reliability, based on results from a pilot test conducted prior to our experiment. In the pilot test, definitions of relevance and reliability were provided to the 22 participants when we asked for assessments of overall financial reporting quality, relevance, and reliability.¹⁹ Results indicated that the literates' reporting-quality model that included only variables for relevance and reliability exhibited a stronger association with SFAC No. 2 characteristics. Specifically, the coefficients on both relevance and reliability were significantly positive (0.51, $p < .001$ and 0.31, $p < .003$, respectively).²⁰ However, comparing these results with those of the experts' model based on data from the actual experiment that include only relevance and reliability as independent variables shows the literates' relevance coefficient still is smaller than the comparable coefficient for experts ($p < .049$), and there is no statistical difference between literates' and experts' reliability coefficients ($p < .603$).²¹ These results suggest that while providing SFAC No. 2 definitions for relevance and reliability improves the aggregation of literates' assessments of these two quality characteristics into their overall reporting-quality evaluations, literates' models still exhibit differences from experts' models with respect to the weight placed on relevance.

Identification of Critical Reporting Issues and Evaluations of the Elements of Reporting Quality for the Reporting Treatment of Specific Financial Items

Hypothesis 2 predicts that in identifying critical reporting issues for discussion, financial literates will be more likely to select financial items that are prominent in the business press and distinctive (i.e., nonrecurring), while financial experts will be more likely to identify low prominence reporting items related to recurring activities. Similarly, H3a states that in evaluating the quality of the reporting treatment for selected items, literates will provide lower assessments of the elements of reporting quality for the more salient financial items than will experts; H3b predicts that experts will provide lower assessments of elements underlying the quality of the reporting treatment for low prominence, recurring reporting items than will literates. Collectively, these hypotheses predict that we should observe the greatest differences between experts' and literates' identifications and evaluations of specific reporting treatments in the high prominence/nonrecurring vs. low prominence/recurring category (i.e., reporting treatments for items of high salience vs. low salience on both dimensions).

¹⁹ The assessment of comparability was excluded as the research question, design, and context of the pilot experiment differed slightly from the experiment used in the primary study. Thus, our pilot results cannot address the effects of providing a definition for comparability.

²⁰ For the literate participants in the actual experiment, the estimated coefficients with only relevance and reliability included in the model are 0.18 and 0.06, respectively, and neither is significantly different from zero.

²¹ For the expert participants in the actual experiment, the estimated coefficients with only relevance and reliability included in the model are 0.93 and 0.22, respectively, which are significantly greater than zero at $p < .001$ and $p < .062$.

Identification of Critical Financial Reporting Issues

For H2, participants identified, in order of importance, three reporting issues they deemed most critical to address in a one-hour reporting-quality discussion with the auditors, and stated the single most important question related to each issue. This exercise was a free-generation task in which participants could list any reporting issue contained in the financial statements, as well as any issue not explicitly presented (e.g., integrity of management). Table 4 presents the percentages of participants in each group who selected a specific reporting issue as their first, second, or third choice for discussion, and the overall percentages for whether an issue was listed among the participants' three choices. Panel A reports participants' responses that correspond to any of the ten specified items identified as having greatest implication for reporting quality by our analysis of textile companies' reports and our discussions with two independent experts, a controller and an audit partner (see Section III). The identified issues in this panel are classified within one of the three prominence/recurring categories. Panel B of Table 4 reports issues participants raised that did not relate to the ten specified items—i.e., issues with lesser reporting-quality implications.²²

While we predict experts' and literates' identifications will differ most between the high prominence/nonrecurring and low prominence/recurring categories, we first compare the percentage of experts vs. literates who identified concerns related to one of the ten specific financial items, i.e., the percentage of issues raised across the three prominence/recurring categories combined (Panel A of Table 4 subtotal), relative to all other issues identified (i.e., Panel B subtotal). Overall, 81.7 percent (of the combined top three choices) of the experts' selected issues related to the ten specific items, compared to 65.0 percent of the literates. In comparison, 18.3 percent of the experts' combined top issues related to items not within the set of the ten specified items, compared to 35.4 percent of the literates ($p < .034$ based on Fisher's exact test). This same pattern also holds for the identifications of the 1st, 2nd or 3rd issues individually (although differences are not statistically significant).

As shown in Panel B of Table 4, inventory concerns dominated the literates' list of issues unrelated to the ten specific items; primarily, literates raised concerns about the company's use of both the FIFO and LIFO methods of inventory accounting. We did not expect inventory to be a significant issue; thus, literates' identification of inventory as a concern is consistent with H2 in that literates likely perceive the use of both FIFO and LIFO as unusual or distinctive based on their prior exposure to the topic from introductory accounting textbooks that tend to focus on consistency issues and the use of one method or the other for a single company. These results indicate that experts appeared more likely than literates to identify reporting concerns in areas previously identified as important to the reporting quality of textile companies. In contrast, literates were distracted by items not identified as critical to reporting quality.

Next we examine differences between literates' and experts' overall distributions for identifications that relate only to the ten specific reporting items. We focus on participants' first selected reporting issue, since limited time for most discussions between the audit committee and auditors suggests that audit committee members' first questions will receive the most attention (Olson 1999, 6). We also report results for the comparisons of the distributions for all three issues combined for just this subset of identified issues.

²² Two independent coders classified the reporting issues identified by participants into one of the four categories listed in Table 4, based on both participants' indicated issue and specific question. There was 77 percent agreement between the two coders. All disagreements were resolved through discussions.

TABLE 4
Reporting Issues Identified by Participants as Most Critical for Discussion with External Auditors^a

Identified Reporting Issue	Literates (n = 18)				Experts (n = 20)			
	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
	% Responses	% Responses	Listing	Issue:	% Responses	% Responses	Listing	Issue:
	1st	2nd	3rd	Within Top 3	1st	2nd	3rd	Within Top 3
Panel A: Issues Participants Raised that Were Included in the Set of Ten Specified Critical Reporting Issues, by Prominence/Recurring Category^b								
High Prominence/Nonrecurring								
Realignment initiative	11.1	5.6	11.1	9.3	15.0	15.0	30.0	20.0
SGA reclassification	27.8	5.6	11.1	14.8	—	15.0	10.0	8.3
Settlement of litigation	—	11.1	5.6	5.6	—	5.0	5.0	3.3
Category total	<u>38.9</u>	<u>22.3</u>	<u>27.8</u>	<u>29.7</u>	<u>15.0</u>	<u>35.0</u>	<u>45.0</u>	<u>31.7</u>
High Prominence/Recurring								
Revenue recognition								
Laksmi	16.7	5.6	5.6	9.3	10.0	5.0	—	5.0
Mexican joint venture	—	11.1	—	3.7	5.0	5.0	5.0	5.0
Laksmi & Mexican JV	—	11.1	5.6	5.6	25.0	10.0	5.0	13.3
Category total	<u>16.7</u>	<u>27.8</u>	<u>11.2</u>	<u>18.6</u>	<u>40.0</u>	<u>20.0</u>	<u>10.0</u>	<u>23.3</u>
Low Prominence/Recurring								
Key customer contracts	5.6	5.6	—	3.7	25.0	5.0	15.0	15.0
A/R collection	—	—	—	—	—	—	—	—
Raw materials (cotton)	5.6	5.6	5.6	5.6	—	15.0	5.0	6.7
Debt	—	5.6	5.6	3.7	—	5.0	5.0	3.3
Property, plant & equipment	—	5.6	5.6	3.7	5.0	—	—	1.7
Category total	<u>11.2</u>	<u>22.4</u>	<u>16.8</u>	<u>16.7</u>	<u>30.0</u>	<u>25.0</u>	<u>25.0</u>	<u>26.7</u>
Subtotal—Panel A issues raised	<u>66.8</u>	<u>72.5</u>	<u>55.8</u>	<u>65.0</u>	<u>85.0</u>	<u>80.0</u>	<u>80.0</u>	<u>81.7</u>

(Continued on next page)

TABLE 4 (Continued)

Identified Reporting Issue	Literates (n = 18)				Experts (n = 20)			
	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
	% Responses Listing Issue:				% Responses Listing Issue:			
	1st	2nd	3rd	Within Top 3	1st	2nd	3rd	Within Top 3
Panel B: Issues Participants Raised That Were Not Included in the Set of Ten Specified Critical Reporting Issues ^c								
Revenue recognition—vague	—	—	5.6	1.9	—	—	—	—
Risk factors—SFAS No. 133	—	—	5.6	1.9	—	5.0	10.0	5.0
Consolidation	5.6	—	5.6	3.7	—	—	5.0	1.7
Inventory	22.2	16.7	11.1	16.7	—	5.0	5.0	3.3
Statement of cash flows	—	—	5.6	1.9	5.0	—	—	1.7
Estimates and reserves	—	—	—	—	5.0	—	—	1.7
General disclosure detail	—	5.6	5.6	3.7	—	10.0	—	3.3
Management quality	—	—	—	—	5.0	—	—	1.7
Long-term business outlook	5.6	5.6	—	3.7	—	—	—	—
International expansion	—	—	5.6	1.9	—	—	—	—
Subtotal—Panel B issues raised	33.4	27.9	44.7	35.4	15.0	20.0	20.0	18.3
Total (Panels A and B combined) ^d	100	100	100	100	100	100	100	100

^a We instructed participants that the audit committee and the external auditor planned to meet for approximately one hour to discuss issues with the greatest potential influence on the company's financial reporting quality for the quarter's 10-Q. We asked participants to list their three most critical issues (in order of priority) to discuss with the external auditor, and for each issue, to specify the single most important question they wished to address. Independent coders, without knowledge of the participant's group (i.e., literate vs. expert), categorized all responses. There was 77 percent agreement between the two coders; all disagreements were resolved through discussions.

^b Panel A includes responses corresponding to the ten specific items identified as having greatest implications for financial reporting quality by our analysis of textile companies' reports and our discussions with two independent experts, a controller and an audit partner. Responses are classified within one of three prominence/recurring categories.

^c Panel B includes responses that did not correspond to the ten specific items identified as having greatest implications for financial reporting quality by our analysis of textile companies' reports and our discussions with two independent experts.

^d Columns may not sum to 100 due to rounding. Columns (a), (b), and (c) report the percentage of each participant group that listed the specific issue as the 1st, 2nd, or 3rd topic, respectively, for discussion with the external auditor; (d) reports the percentage of each participant group's responses that listed the issue as any of the top three choices.

A comparison of Columns (a) in Panel A of Table 4 supports the general expectation that the frequency of issues selected first across the three salience categories differs between literates and experts. Specifically, 38.9 percent of the literates' first issues fall within the high prominence/nonrecurring category compared to 15.0 percent for the experts, while

16.7 percent (40.0 percent) of the literates (experts) raised concerns in the high prominence/recurring category as their first issue. In addition 11.2 percent of the literates' compared to 30.0 percent of the experts' primary concerns related to low prominence/recurring business activities. The distribution of frequencies for these three categories differs at the .10 level between experts and literates (based on Fisher's exact test).

Hypothesis 2 predicts that literates, relative to experts, will be more likely to identify as critical those issues that are salient on both dimensions (i.e., high prominence/nonrecurring), and experts will be more likely than literates to identify concerns related to low prominence/recurring items. The results in Panel A of Table 4 support this prediction for the first-raised critical reporting issue. Specifically, 38.9 percent (15.0 percent) of literates (experts) raised concerns related to a high prominence/nonrecurring item as their first selection while 11.2 percent (30.0 percent) of literates (experts) identified a low prominence/recurring item as their first choice. A test of literates' and experts' first issues within these two categories shows that the two groups have different patterns across the two categories ($p < .077$ based on Fisher's exact test).²³ These results suggest that experts and literates focus on different types of reporting issues in identifying their primary financial reporting quality concerns to discuss with the external auditor.

As previously noted, the distributions considering all three issues identified by participants (including issues with lesser reporting-quality implications) differed between experts and literates. However, excluding the issues raised that are not included among the ten specified items, the distribution of frequencies across all salience categories for all three issues identified (i.e., Column (d) for literates and experts in Panel A of Table 4) does not differ between literates and experts ($p < .755$ based on Fisher's exact test). A test of literates' vs. experts' combined three choices within the high prominence/nonrecurring and low prominence/recurring categories does not support H2 ($p < .314$ based on Fisher's exact test).²⁴

The results based on Table 4 suggest that experts and literates focus on different types of financial reporting issues in evaluating financial reporting quality. Overall, experts are more likely to identify issues consistent with the ten financial items identified as important by our analysis of textile companies' reports and our discussion with two experts, while literates raise concerns about items with less impact on reporting quality. Experts and literates also differ with respect to the single issue they consider most critical when considering only the set of ten selected financial reporting items: experts are more likely than literates to identify ongoing activities as their most critical issue, while literates identify prominent, nonrecurring issues. When all three reporting issues listed by participants within this set of ten items are considered, however, there is no difference between groups.

Evaluation of Quality Elements of the Reporting Treatment for Specific Financial Items

Hypotheses 3a and 3b predict that financial literates will rate the quality of elements underlying the reporting treatment for specific financial items lower than experts for items

²³ A comparison of the identification rate for high prominence/nonrecurring items vs. all others indicates literates are more likely than experts to raise these issues for the first choices listed ($p < .097$, one-tailed, based on Fisher's exact test). A comparison of the identification rate for low prominence/recurring items vs. all other issues indicates experts are not more likely to raise these items than literates ($p < .118$, one-tailed, for the first issue raised based on Fisher's exact test).

²⁴ A comparison of the identification rate for high prominence/nonrecurring items vs. all others indicates literates are not more likely than experts to raise these issues among the three issues raised ($p < .669$ based on Fisher's exact test), nor are experts more likely than literates to identify low prominence/recurring items vs. all others ($p < .144$ for all three issues raised based on Fisher's exact test).

categorized as high prominence/nonrecurring and financial experts will evaluate lower quality than literates for items in the low prominence/recurring category, respectively. Table 5 reports the literates' and experts' assessments on seven-point scales of the two elements underlying the relevance characteristic and four elements of reliability, and the averages for the overall relevance and reliability characteristics for the reporting treatment of the ten specific items grouped according to the item's salience category. To test H3a and H3b, we examine the averages of the participants' ratings for the respective quality elements underlying the characteristics of relevance and reliability, since our theory does not predict which elements will be affected for individual salience categories.

Hypothesis 3a predicts that literates, relative to experts, will assign lower quality ratings to the reporting treatment for high prominence/nonrecurring items (all p-values in Panel A of Table 5 are one-tailed given the directional prediction of H3b). As reported in Panel A of Table 5, literates' average relevance assessment for the reporting treatments of these items was lower than that of experts (4.66 vs. 5.09; $t = -1.72$, $p < .047$). Literates' average assessment over all four reliability elements also was lower than that of the experts (4.15 vs. 4.61; $t = -1.67$, $p < .052$). Finally, relative to experts, literates had lower overall combined ratings for the elements underlying the relevance and reliability characteristics for the reporting treatment of the high prominence/nonrecurring items (4.32 vs. 4.77, respectively; $t = -2.09$, $p < .022$).

Results in Panel C of Table 5 are consistent with the prediction that experts will ascribe lower quality to reporting treatments of the low prominence/recurring items than will literates (all p-values are one-tailed given the directional prediction of H3b). The average of experts' assessments for the two relevance elements is significantly below that of the literates (3.42 vs. 4.07, respectively $t = -2.45$, $p < .001$). Experts also assessed lower values for the reliability elements for these items, as indicated by their lower average of 3.67 vs. 3.95 for the literates ($t = -1.54$, $p < .067$). Finally, experts' average evaluation of all six relevance and reliability elements combined for the low prominence/recurring category is lower than that of literates (3.55 vs. 3.97; $t = -2.31$, $p < .014$).

Our theory provides no specific prediction for the relation between experts' and literates' assessments for the high prominence/recurring items (i.e., revenue recognition items). Experts should raise concerns about these items because of their association with misstatements, while literates should be concerned because of these items' prominence. Results in Panel B of Table 5 suggest there are no statistically reliable differences between experts' and literates' assessments of the quality of the reporting treatments except for the neutrality element, where literates ascribed greater neutrality than experts to the reporting treatment of the items ($p = .042$). The average assessment for relevance and reliability combined for experts does not differ relative to that of literates (3.78 vs. 3.25, respectively; $t = 1.54$, $p < .134$); neither do the separate average assessments for relevance (3.87 vs. 3.50, respectively; $t = 0.92$, $p < .363$) or reliability (3.70 vs. 3.11, respectively; $t = 1.62$, $p < .114$).

Overall, these results suggest that differences between literates' and experts' knowledge not only direct their attention to different reporting issues, but also affect their assessments of the quality of the reporting treatment of specific financial items. Consistent with our expectations, literates (relative to experts) assign a lower quality rating to the reporting treatment of items that have received prominence in the business press and are unusual in their nature or presentation, and experts provide lower quality ratings than literates for recurring activities with low prominence.

TABLE 5
Participants' Mean Assessments for Elements of Reporting-Quality Characteristics for Specific Financial Items by Recurring/Prominence Categories^a

Panel A: Mean Assessments for High Prominence/Nonrecurring Financial Items

<i>Component^b</i>	<i>Mean Assessment</i>		<i>t-value^c</i>	<i>Pr < t</i>
	<i>Literates</i>	<i>Experts</i>		
Relevance components				
Future	4.51	4.47	0.11	0.545
Past	4.80	5.72	-3.04	0.002
Relevance average	4.66	5.09	-1.72	0.047
Reliability components				
Comprehensive	4.43	5.32	-2.77	0.004
Reflects business activities	4.08	4.32	-0.54	0.295
Neutral	3.35	4.11	-1.58	0.061
Little uncertainty	4.72	4.75	-0.08	0.468
Reliability average	4.15	4.61	-1.67	0.052
Overall average	4.32	4.77	-2.09	0.022

Panel B: Mean Component Assessments for High Prominence/Recurring Financial Items

<i>Component</i>	<i>Mean Assessment</i>		<i>t-value</i>	<i>Pr > t </i>
	<i>Literates</i>	<i>Experts</i>		
Relevance components				
Future	3.50	3.30	0.42	0.678
Past	4.25	3.70	1.02	0.316
Relevance average	3.87	3.50	0.92	0.363
Reliability components				
Comprehensive	3.28	3.23	0.11	0.913
Reflects business activities	4.65	3.75	1.68	0.102
Neutral	3.89	3.00	2.11	0.042
Little uncertainty	2.89	2.63	0.54	0.591
Reliability average	3.70	3.11	1.62	0.114
Overall average	3.78	3.25	1.54	0.134

Panel C: Mean Component Assessments for Low Prominence/Recurring Financial Items

<i>Element</i>	<i>Mean Assessment</i>		<i>t-value</i>	<i>Pr > t</i>
	<i>Literates</i>	<i>Experts</i>		
Relevance elements				
Future	4.06	3.58	1.44	0.079
Past	4.20	3.33	3.06	0.002
Relevance average	4.07	3.42	2.45	0.001
Reliability elements				
Comprehensive	3.51	3.10	1.29	0.103
Reflects business activities	4.04	3.75	1.05	0.151
Neutral	4.13	3.93	0.70	0.245
Little uncertainty	3.93	3.78	0.94	0.177
Reliability average	3.95	3.67	1.54	0.067
Overall average	3.97	3.55	2.31	0.014

(Continued on next page)

TABLE 5 (Continued)

^a For each of the ten financial items described in Table 1, participants separately rated each of the six elements of reporting-quality characteristics. For example, for "Future," participants were instructed to rate as "7" the economic issue for which the financial information provides the highest relative degree of knowledge about future operations and/or future economic events. Then they were to rate as "1" the item for which the financial information provides the lowest relative degree of knowledge about future operations and/or future economic events. Finally, they were asked to rate each of the remaining items between 7 (high degree) and 1 (low degree), inclusive, relative to the other nine financial reporting items. Precise wording provided to participants for each of the six elements evaluated is as follows:

Future = the degree to which financial information provides knowledge about future operations and/or future economic events;

Past = the degree to which financial information provides knowledge about past operations and/or past economic events;

Comprehensive = the degree to which financial information is presented in a comprehensive and transparent manner;

Reflects business activities = the degree to which financial information appropriately reflects the company's business activities (e.g., operating or investing activities);

Neutral = the degree to which financial information is presented by management in a neutral manner; and

Little uncertainty = the degree to which financial information is measured with little uncertainty and is based on few assumptions.

^b "Relevance" is the average of "Future" and "Past" assessments, and "Reliability" is the average of "Comprehensive," "Reflects business activities," "Neutral," and "Little uncertainty." "All elements" is the average of all six individual element assessments.

^c Reported t-value results are for tests of differences between overall mean assessments of Literates vs. Experts. In Panel A (C) the prediction is that mean assessments for Literates (Experts) will be lower than for Experts (Literates), so the p-value is the probability of a t-statistic that is more negative (positive) than the observed value. There is no directional prediction for Panel B comparisons, so we report two-tailed p-values.

V. DISCUSSION AND CONCLUSION

This paper explores some possible effects of rules related to audit committee members' qualifications and offers evidence on the question of how individuals "assess the quality of a company's reporting" (Jonas and Blanchet 2000, 358). Specifically, we provide evidence on how financial expertise vs. financial literacy affects individuals' overall assessments of reporting quality, their identifications of critical reporting issues that warrant discussion with auditors, and their assessments of the quality of the reporting treatment for specific financial statement items.

Our results suggest experts' frameworks or schemas of financial reporting quality reflect some of the quality characteristics (e.g., relevance) espoused by the FASB's SFAC No. 2. On the other hand, financially literate individuals' assessments of overall financial reporting quality do not reflect these characteristics consistently, even though these individuals were exposed previously to the SFAC No. 2 characteristics. The finding that experts incorporate relevance into their overall financial reporting quality assessments to a greater degree than literates is important in that information relevance is at the heart of several recent SEC and FASB initiatives. For example, fair value reporting and forward-looking information are both considered ways to improve the relevance of information for investors even if reliability is reduced. Given that audit committees are required to evaluate and discuss the overall quality of a company's financial reporting, the results suggest that inclusion of financial experts on audit committees is likely to add structure to the discussion of overall reporting quality and improve the consistency of assessments of overall reporting quality.

Experts and literates also differ in their identifications of reporting issues for discussion with the auditors and their assessments of the quality of selected reporting treatments,

suggesting that experts and literates bring different perspectives to the discussions with auditors about financial reporting quality. Specifically, financial experts appear to identify as most critical for discussion those issues that are related more to recurring activities, i.e., activities which their experiences would suggest are associated with quality concerns (e.g., restatements). In contrast, financial literates initially select issues for discussion based on items that have received prominent coverage in the business press and are nonrecurring/distinctive in nature or have less important implications for reporting quality. While both types of items are important for the overall quality of financial reporting and for overall business risk, our results suggest that including experts on the audit committee is likely to bring a focus on issues that may be accorded lower priority by audit committee members who are only financially literate.

This paper raises several issues for future research. First, auditors served as financial experts in our experiment. While auditors meet the exchanges' definition of a financial expert, it is not clear that other types of financial experts (e.g., chief financial officers) would make the same reporting-quality judgments as did the auditors in our study. There is no such concept as a "generic" financial expert; each type of expert brings specific experiences to the task of assessing financial reporting quality. Further research could investigate whether and how various types of financial experts differ in their reporting-quality judgments.

Recent survey evidence indicates that auditors believe audit committee member diversity in terms of both financial and nonfinancial experiences leads to more effective discussions about reporting quality (Krishnamoorthy et al. 2002). Our findings suggest that experts and literates bring at least somewhat differing perspectives to discussions and evaluations of financial reporting quality, but our study does not investigate how other types of experience and knowledge (e.g., general business, industry) affect audit committee effectiveness. Future research could examine whether and how such nonfinancial experience might provide benefits to audit committee performance.

Future research also could examine whether the results of this study extend to audit committees in an interactive group setting. Although our study did not address the effects related to possible group dynamics among experts and literates within an audit committee setting, we argue that our results related to differences in individuals have implications for audit committees for several reasons. First, while groups tend to outperform individuals, the best individual typically will outperform the group as a whole (Hastie 1986). Additionally, research suggests that the accuracy of an interacting group's judgment is a function of the group's ability to recognize the most accurate individual in the group and weight that person's judgments more heavily (Libby et al. 1987; Sniezek 1989). Given the financial expert in an audit committee will be designated as such *a priori* (rather than the audit committee assessing this during the group's interaction), the expert's evaluation of reporting quality likely will be weighted more heavily in the audit committee's discussion than the judgments of the financially literate audit committee members. Thus, understanding individual experts' evaluations of reporting quality is relevant in understanding how the expertise requirement might affect the audit committee's discussion or judgments.

Future research could use interacting groups to investigate directly whether the results of our study have implications for audit committees, specifically whether the inclusion of a financial expert leads to a focus on reporting-quality issues that are not addressed by a committee comprised only of literates. Additionally, because group performance depends on many factors (Tindale 1989), it is possible that the selection of issues for the financial reporting quality discussion may be less diverse if literates defer to the judgment of the

expert, rather than raising their own issues. Thus, future research could include a more in-depth investigation of the effects of expertise in an interactive audit committee group setting.

REFERENCES

- American Institute of Certified Public Accountants (AICPA). 1999. *Audit Committee Communications*. Statement on Auditing Standards No. 90. New York, NY: AICPA.
- . 2000. *Quality of Accounting Principles—Guidance for Discussions with Audit Committees*. Practice Alert 2000-2. New York, NY: AICPA.
- Anderson, J. R. 2000. *Cognitive Psychology and Its Implications*. New York, NY: Worth Publishers.
- Ashton, A. H. 1991. Experience and error frequency knowledge as potential determinants of audit expertise. *The Accounting Review* 66 (April): 218–239.
- Association for Investment Management and Research (AIMR). 1999. Letter from the Financial Accounting Policy Committee to the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees. January 28, 1999. Charlottesville, VA: AIMR.
- Belsley, D. A., E. Kuh, and R. E. Welsch. 1980. *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. New York, NY: John Wiley & Sons, Inc.
- Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees. 1999. *Report and Recommendations of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees*. New York, NY: New York Stock Exchange and The National Association of Securities Dealers.
- Braiotta, L., Jr. 1999. *The Audit Committee Handbook*. 3rd edition. New York, NY: John Wiley & Sons, Inc.
- Castellan, N. J., Jr. 1993. *Individual and Group Decision Making*. New York, NY: Lawrence Erlbaum Associates.
- Costales, S. B., and G. Szurovy. 1994. *The Guide to Understanding Financial Statements*. New York, NY: McGraw-Hill, Inc.
- Dawes, R. M. 1979. The robust beauty of improper linear models in decision making. *The American Psychologist* 34 (July): 571–582.
- Dechow, P. M., R. G. Sloan, and A. P. Sweeney. 1996. Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research* 13 (Spring): 1–36.
- DeFond, M. L., and J. Jiambalvo. 1991. Incidence and circumstances of accounting errors. *The Accounting Review* 66 (July): 643–655.
- DeZoort, F. T. 1998. An analysis of experience effects on audit committee members' oversight judgments. *Accounting, Organizations and Society* 23 (January): 1–21.
- , and S. Salterio. 2001. The effects of corporate governance experience and financial reporting and audit knowledge on audit committee members' judgments. *Auditing: A Journal of Practice & Theory* 20 (September): 31–47.
- Ernst & Young. 2000. *Audit Committees: Implementing the New Rules*. New York, NY: Ernst & Young LLP.
- Financial Accounting Standards Board (FASB). 1980. *Qualitative Characteristics of Accounting Information*. Statement of Financial Accounting Concepts No. 2. Stamford, CT: FASB.
- Fiske, S. T., and S. E. Taylor. 1991. *Social Cognition*. New York, NY: McGraw-Hill.
- Hastie, R. 1986. Review essay: Experimental evidence on group accuracy. In *Information Pooling and Group Decision Making: Proceedings of the Second University of California, Irvine, Conference on Political Economy*, edited by B. Grofman and G. Owens. Greenwich, CT: JAI Press.
- Jenkins, E. L. 2000. Letter to the Auditing Standards Board. April 18. Norwalk, CT: FASB.
- Jonas, G. J., and J. Blanchet. 2000. Assessing quality of financial reporting. *Accounting Horizons* 14 (September): 353–363.
- Kinney, W. R., Jr., and R. D. Martin. 1994. Does auditing reduce bias in financial reporting? A review of audit-related adjustment studies. *Auditing: A Journal of Practice & Theory* 13 (Spring): 149–155.

- Kirk, D. J. 2000. Experiences with the Public Oversight Board and corporate audit committees. *Accounting Horizons* 14 (March): 103–111.
- KPMG Audit Committee Institute. 2000. *Audit Committee Survey*. New York, NY: KPMG LLP.
- Krishnamoorthy, G., A. Wright, and J. Cohen. 2002. Audit committee effectiveness and financial reporting quality. *Australian Accounting Review* (forthcoming).
- Krutzfeldt, R. W., and W. A. Wallace. 1986. Error characteristics in audit populations: Their profile and relationship to environmental factors. *Auditing: A Journal of Practice & Theory* 6 (Fall): 20–43.
- Levitt, A. 1998. The numbers game. Speech to the NYU Center for Law and Business, New York, NY, September 18.
- . 1999. Quality information: The lifeblood of our markets. Speech to The Economic Club of New York, New York, NY, October 18.
- . 2000. Speech before the Conference on the Rise and Effectiveness of New Corporate Governance Standards, New York, NY, December 12.
- Libby, R. 1985. Availability and the generation of hypotheses in analytical review. *Journal of Accounting Research* 23 (Autumn): 648–667.
- , K. T. Trotman, and I. Zimmer. 1987. Member variation, recognition of expertise, and group performance. *Journal of Applied Psychology* 72 (1): 81–87.
- , and J. Luft. 1993. Determinants of judgment performance in accounting settings: Ability, knowledge, motivation, and environment. *Accounting, Organizations and Society* 18 (5): 425–450.
- . 1995. The role of knowledge and memory in audit judgment. In *Judgment and Decision-Making Research in Accounting and Auditing*, edited by R. H. Ashton, and A. H. Ashton, 176–206. Cambridge, U.K.: Cambridge University Press.
- Lichtenstein, S., P. Slovic, B. Fischhoff, M. Layman, and B. Combs. 1978. Judged frequency of lethal events. *Journal of Experimental Psychology: Human Learning and Memory* 4 (November): 551–578.
- Maines, L. A., and L. S. McDaniel. 2000. Effects of comprehensive-income characteristics on non-professional investors' judgments: The role of financial-statement presentation format. *The Accounting Review* 75 (April): 179–207.
- McMullen, D. A. 1996. Audit committee performance: An investigation of the consequences associated with audit committees. *Auditing: A Journal of Practice & Theory* 15 (Spring): 87–103.
- Moriarty, G. B., and P. B. Livingston. 2001. Quantitative measures of the quality of financial reporting. *Financial Executive* 17 (July/August): 53–56.
- Nelson, M. W., J. A. Elliott, and R. L. Tarpley. 2002. Evidence from auditors about managers' and auditors' earnings-management decisions. *The Accounting Review* (Supplement): 175–202.
- Olson, J. F. 1999. How to make audit committees more effective. *The Business Lawyer* 54 (May): 1097–1113.
- Palmrose, Z.-V., and S. Scholz. 2001. The accounting causes and legal consequences of non-GAAP reporting: Evidence from restatements. Working paper, University of Southern California.
- Paskell-Mede, M., and P. Jackson. 1999. Meeting expectations. *CA Magazine* 132 (November): 49–50.
- Payne, J. W., J. R. Bettman, and E. J. Johnson. 1993. *The Adaptive Decision Maker*. Cambridge, U.K.: Cambridge University Press.
- Pitt, H. L. 2001. How to prevent future Enrons. *Wall Street Journal* (December 11): A18.
- PricewaterhouseCoopers LLP. 2000a. *Audit Committee Update 2000*. New York, NY: PricewaterhouseCoopers LLP.
- . 2000b. *Audit Committee Effectiveness—What Works Best*. 2nd edition. Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation.
- Public Oversight Board (POB) Advisory Panel on Auditor Independence. 1994. *Strengthening the Professionalism of the Independent Auditor*. Stamford, CT: POB.
- Securities and Exchange Commission (SEC). 1940. *In the Matter of McKesson & Robbins, Inc.* Accounting Series Release No. 19. Washington, D.C.: Government Printing Office.

- . 1999. *Audit Committee Disclosure*. Release No. 34-42266. December 22. Washington, D.C.: Government Printing Office.
- Smith, E. R. 1998. Mental representations and memory. In *The Handbook of Social Psychology*, 4th edition, edited by D. T. Gilbert, S. T. Fiske, and G. Lindzey, 391-440. Boston, MA: McGraw-Hill.
- Snizek, J. A. 1989. A examination of group process in judgmental forecasting. *International Journal of Forecasting* 5: 171-178.
- Solomon, I., M. D. Shields, and O. R. Whittington. 1999. What do industry-specialist auditors know? *Journal of Accounting Research* 37 (Spring): 191-208.
- Taylor, S. E. 1982. The availability bias in social perception and interaction. In *Judgment under Uncertainty: Heuristics and Biases*, edited by D. Kahneman, P. Slovic, and A. Tversky, 190-200. Cambridge, U.K.: Cambridge University Press.
- Tindale, R. S. 1989. Group vs. individual information processing: The effects of outcome feedback on decision making. *Organizational Behavior and Human Decision Processes* 44: 454-473.
- Turner, L. E. 2001. Quality, transparency, accountability. Speech to the Financial Executives Institute-AICPA's "Benchmarking the Quality of Earnings" Conference, New York, NY, April 26.
- Tversky, A., and D. Kahneman. 1973. Availability: A heuristic for judging frequency and probability. *Cognitive Psychology* 4 (September): 207-232.
- Wild, J. J. 1996. The audit committee and earnings quality. *Journal of Accounting, Auditing and Finance* 11 (Spring): 247-276.
- Wright, A., and R. H. Ashton. 1989. Identifying audit adjustments with attention-directing procedures. *The Accounting Review* 64 (October): 710-728.
- Yates, J. F., 1990. *Judgment and Decision Making*. Englewood Cliffs, NJ: Prentice Hall, Inc.
- Zacharias, C. A. N. 2000. New rules, new responsibilities. *Journal of Accountancy* 190 (August): 53-55.