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Department of Accountancy
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Mark E. Peecher, Editor

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S Y M P O S I U M
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Preface

This volume contains proceedings from the 16th Symposium on Auditing Research held near the University of Illinois at Urbana-Champaign during October 7-9, 2004. As with prior symposia, invitees included approximately 50 persons, including accountancy professors and practitioners as well as UIUC faculty and doctoral students. KPMG LLP's ongoing generous support of the symposium series enabled us to bring participants together.

Consistent with tradition, many persons volunteered their time and knowledge to produce a high-quality symposium. Reviewers provided constructive comments, authors and discussants made helpful and thoughtful presentations of their ideas, and participants posed insightful and stimulating questions. Two of the authors were new scholars who presented innovative work based on their doctoral dissertations. These proceedings provide written synopses of the authors' presentations and discussants' remarks of research papers accepted for the symposium.

In addition to these papers, two special guests provided outstanding talks. Gary Holstrum, Associated Chief Auditor and Director of Research of the Public Company Oversight Board discussed audit research opportunities of high relevance to the PCAOB, and John D. Sterman, who is the Jay W. Forrester Professor of Management at MIT University, discussed how auditors could leverage systems thinking and systems dynamics to develop a rich understanding of audited organizations' business processes. These two special talks, coupled with the aforementioned presentations and discussions of research papers made the 16th Symposium on Auditing Research a most enriching event.

Mark E. Peecher, University of Illinois at Urbana-Champaign, Editor

**Audit Research Symposium
Planning Committee, 2004**

Paul Beck
Joel Pike
Mark Peecher (Chair)
Rachel Schwartz
Martin Wu

The Chief Financial Officer's Perspective on Negotiations with the Auditor about Financial Reporting

Michael Gibbins, School of Business, University of Alberta

Susan McCracken, Rotman School of Management, University of Toronto

Steve Salterio, School of Business, Queen's University

Chief Financial Officers (CFO) play a central role in a company's financial reporting process yet their voices are unheard in accounting research in general and the accounting negotiation literature in particular. Accounting research has focused on the effects of preparer reported outcomes (i.e. the audited financial statements) on investors' judgments and actions. These outcomes, however, are available only after the auditor and other actors in the corporate governance mosaic have had their input. Other accounting research has drawn on stylized, stark representations of management actions, and motivations based on agency theory and perfectly rational auditors' responses. Finally, recent accounting research has reported on how the auditor perceives the role of the CFO in accounting negotiation. Management's responsibility for the organization's financial reporting and disclosure, while always present, is becoming more explicit due to the certification requirements of the Sarbanes-Oxley Act, the increased importance of Management Discussion and Analysis in public reports, and the generally heightened scrutiny of financial reporting. Hence, it is important to study the manager with the responsibility for financial reporting in most organizations, the Chief Financial Officer (CFO).

In this paper, we critically examine the Gibbins, Salterio and Webb (GSW, 2001) claim that their accounting contextual negotiation model applies to all accounting negotiations and can be employed to study both parties to the negotiation. We note, however, that GSW corroborated their model with audit partner data, employed several auditor specific contextual features (e.g., inherent risk) and did not incorporate explicitly many aspects of managerial life in their model. Hence, we examine the management literature, the sparse research on the CFO in other disciplines and conduct in-depth interviews with nine CFOs, with a goal to suggest model revisions. We find several places where further elaborations are required to the GSW model to reflect what we call "managerial reality." These elaborations include such contextual features as the CFO's need to: manage the

organization's impressions of his/her competence; deal with accountability pressures from CEO and fellow managers to achieve specific outcomes in the financial statements; and manage external perceptions of the entity while contending with issues surrounding the strength of the accounting expertise of his/her staff.

We use this enhanced model as a guide for developing a more comprehensive questionnaire than GSW employed, including increased opportunities for respondent qualitative responses, especially in the area of negotiation process. This questionnaire gives us the opportunity to learn how the CFO describes his/her role and activities in negotiating the contents of the financial statements.

A representative sample of 101 Canadian CFOs (or equivalents), recruited from those members of the Financial Executives Institute (Canada) who identified themselves as CFOs, responded to the questionnaire. The questionnaire asked these respondents, most of whom had over twenty years of business experience, to select a negotiation experience with their auditor, arising from an initial difference in opinion on proper financial accounting treatment or disclosure, and to describe the experience and issue(s) in depth. Thus, our questionnaire was aimed at eliciting an in-depth experiential description: it was not a survey of attitudes or intentions but rather drew on participants' detailed understanding of their circumstances. In total, 70 of our respondents provided examples relating to revenue recognition, capitalization of expenditures, extent of disclosure, business combinations, and asset write-downs; mostly from within the last two years. These issues typically affected the balance sheet and income statement but usually had other implications over and above the numbers on the statements, were always material but most often not just to the current year, surprised either management and/or the auditor about half of the time and frequently were triggered by new accounting standards and/or new/complex business transactions.

CFOs reported that they considered three potential solutions during the negotiation. They characterized the process as one of determining what the issue really was, that is, the negotiation process tended to center on clarifying the facts about the accounting issue from both a business intention and an accounting perspective. The CFOs were single-issue focused, seemingly incognizant that there might be more issues on the auditor's agenda than what the auditor brought up in the current period. Among our other findings, we find that the CFO: negotiates in the context of the management team including the CEO and other senior executives; negotiates with the assistance of their accounting staff; involves governance

monitors in the negotiation process only a third of the time; views the negotiation process as being distributive (win-lose); and views the negotiated outcomes as predominantly driven by form and not substance, due to the auditor's influence.

Further, the CFO views the negotiation process as being heavily impacted by accounting and disclosure standards, his/her relationship with the audit partner, his/her perception of the competence of the audit partner, and both the organization's and the auditor's accounting expertise. CFOs reported outcomes of these negotiations to the audit committee but did not inform the members that these outcomes related to contentious matters that had been resolved through negotiation with the auditor.

Overall, our paper develops three contributions to the research literature on auditor-client management negotiation. Our first contribution stems directly from the focus on the CFO. We give "voice" to a major actor in the preparation of financial statements and related disclosures that has scarcely been heard from before. We further specify and provide evidence, from the CFO's perspective, regarding the features of the accounting negotiation process.

Second, this CFO-focused study also provides a distinct advantage over prior auditor-centered accounting negotiation research. Audit partners are constrained by professional and legal responsibilities to protect confidential client information and hence are constrained in what they can reveal to researchers. Our CFO respondents provided more detail about both the issues negotiated and the negotiation process than previous auditor research has, thus filling in a significant gap in the small but growing accounting negotiation literature.

A third contribution arises from the focus on the CFO's view of the negotiation process and its consequences to the accounting information. Prior research and the popular press have focused on an apparent tendency for external auditors to fail to negotiate or insist on the correction of problems uncovered by the auditor without considering the role of client management that allowed the problems to occur in the first place. Therefore, being informed about the CFO perspective on negotiation provides a more complete understanding of the context in which auditors may fail to negotiate or insist on correction of material adjustments.

The Chief Financial Officer's Perspective on Negotiations with the Auditor about Financial Reporting: Discussion

William S. Waller, University of Arizona

At the 2004 University of Illinois Audit Symposium, I had the honor to serve as discussant of the paper "The Chief Financial Officer's Perspective on Negotiations with the Auditor about Financial Reporting" by Gibbins, McCracken, and Salterio (GMS). Professor Salterio presented the paper at the symposium, I gave my prepared remarks, Professor Salterio retorted, and the audience raised its questions. The written discussion that follows repeats the main points of my remarks at the symposium.

Evaluation Criteria

GMS described their study as descriptive research that employs a qualitative method with survey data, in contrast to hypothesis-testing research that employs a quantitative method with archival or experimental data. After reading their paper and considering the appropriate criteria for evaluating the paper, I wondered whether there is a qualitative difference between the criteria for evaluating qualitative versus quantitative research. My conclusion was negative, i.e., the same basic criteria apply to all empirical studies, regardless of whether their methods involve the analysis of survey, archival, or experimental data. One criterion is that the study must address an interesting question that is motivated by theory or practice. Another criterion is that the method must produce empirical evidence that supports valid inferences about the world. Of course, validity has multiple dimensions (i.e., conclusion validity, internal validity, construct validity, and external validity), and empirical methods vary in their contribution to overall validity. For example, there is consensus among auditing researchers that experimental methods often enhance internal validity, whereas archival methods often enhance external validity. Despite such variation, no empirical study is exempt from the need to exceed a non-trivial threshold on at least one validity dimension.

To elaborate briefly on the four validity dimensions (see Shadish, Cook, and Campbell, 2002), conclusion validity requires that the empirical evidence supports a statistically significant relationship between observed variables,

and an effect size that is meaningful for theoretical or practical purposes. Lack of statistical power is a threat to conclusion validity. Internal validity requires an ability to refute plausible reasons for the observed relationship other than the reason proposed by the researcher. Failing to assign persons to treatments on a random basis, and instead allowing persons to select treatments, leads to various threats to internal validity. Construct validity requires a reasonable correspondence between theoretical constructs and the operational measures in the data set. An inadequate explication of constructs is a threat to construct validity. External validity requires an ability to generalize from the persons, times, and settings in the data set to other persons, times, and settings that are relevant to theory or practice. An interaction between the relationship of interest and different categories of persons, times, or settings is a threat to external validity.

Kinney (1986, p. 339) stated that: “In essence, empirical research involves *theory*, *hypothesis*, and *fact*.” Facts are observable states or events. A theory explains the relationship between groups of facts. Assuming that the theory is true, a hypothesis predicts the relationship between groups of facts in a particular data set. Empirical researchers test the hypothesis by examining the correspondence between the prediction and facts in the data set. As discussed below, the GMS paper emphasized fact-finding, rather than theory development or hypothesis testing.

The process of conducting empirical research is not necessarily as linear as the sequence “theory → hypothesis → fact” suggests. Theory development often depends on the careful observation of facts, suggesting the longer sequence of “facts in data set 1 → theory → hypothesis → facts in data set 2.” Less ambitiously, some studies focus on the subsequence of “facts in data set 1 → theory.” This approach follows the distinction in the philosophy of science between the *context of discovery*, i.e., subsequence of “facts in data set 1 → theory,” and the *context of justification*, i.e., subsequence of “theory → hypothesis → facts in data set 2” (Blaug, 1992). Although researchers normally emphasize possible threats to validity in the context of justification, validity also is a concern in the context of discovery. If the inferences from the “facts in data set 1” lack external validity, the general value of the theory based thereon is suspect.

Good Points

The most positive feature of the paper is its novel focus on Chief Financial Officers (CFO) in the process of negotiating financial reporting with the auditor. Most studies in managerial accounting curiously ignore the CFO’s role in overseeing the company’s internal accounting. Most studies in

financial accounting and auditing treat the company's management as a group, sometimes highlighting the Chief Executive Officer's (CEO) role but rarely the CFO's role. Further, except for studies that construct game-theoretic models of client-auditor interaction, most auditing studies treat the client management as a non-strategic element of the task environment. As the purpose of the audit shifts from detecting or preventing unintentional misstatements to detecting or preventing intentional misstatements, researchers should strive to "endogenize" the CFO's decision-making process. By focusing on the CFO's role in negotiating financial reporting, GMS took a step in the right direction.

How might empirical inferences about the CFO's decision-making process inform theory development in auditing? One approach is to develop a behavioral game theory of auditing (Waller, 2002; Wilks and Zimbelman, 2004). Mathematical game-theoretic models provide insights into strategic interaction between the client and auditor, but the models rely on unrealistic assumptions about human rationality. A common assumption is that all players can intuit all players' best-response functions, and apply the equilibrium strategies without cognitive effort or learning. In contrast, human players are subject to cognitive limitations, especially in game settings (Camerer, 2003). Game settings are more complex than individual settings, because players must anticipate their opponent's strategy. Each player's self-interest depends on knowing his opponent's self-interest. To conduct a strategic audit, the auditor must understand the client's strategic perspective. This consideration motivates empirical research on the CFO's decision-making process.

Using a survey questionnaire, GMS asked Canadian CFOs to recall from their experience an episode involving a negotiation about financial reporting with the external auditor. The product from the data analysis was a set of facts distilled from the CFOs' responses. Some facts were no surprise. The CFOs typically recalled episodes about material items that involved accounting standards and business transactions. Most of the items for negotiation were revenue recognition, business combinations, capitalizing expenditures, asset write-downs, or degree of disclosure. The CFOs consulted with the company's CEO, and considered the auditor's competence, as part of the negotiation process. Such facts provided reassuring confirmation of prior knowledge, but added little to extant literature.

Other facts had more surprise content, at least at first blush. The CFOs recalled episodes that involved only one issue (but note that the questionnaire gave respondents the option of selecting an episode that

involved only one issue or multiple issues). The CFOs saw negotiation as a “zero sum game,” saw themselves as more knowledgeable than the auditor about generally accepted accounting principles, and recalled episodes in which auditor acquiescence was the norm (but note that the CFOs probably preferred to report an episode that made them look good). The CFOs felt that the company’s audit committee was unimportant as part of the negotiation process (but note that the CFOs reported on episodes that occurred no later than mid-2002, prior to the Sarbanes-Oxley Act of 2002).

Other Points

I instruct doctoral students to expect a clear statement of the research question in the introduction of a paper that reports an empirical study. The research question should be interesting for theory or practice, refer to a relationship between variables (e.g., does X affect Y, controlling for Z?), and suggest a feasible approach to empirical testing. A clear statement of the research question facilitates communication with readers. Because the GMS paper lacked a clearly stated research question, I imagined three possibilities: [1] What factors determine the outcomes of negotiation between auditors and their clients? [2] How does the CFO’s perspective differ from the auditor’s perspective with respect to a specific negotiation? [3] What details do CFOs say that they remember about a specific, self-selected negotiation with their auditor? The first and second questions are interesting for both theory and practice. Regarding the first question, I would like to know about the effects on negotiation of the CFO’s background (e.g., was the CFO an alum of a large auditing firm?), the CFO’s incentives (e.g., was the CFO’s compensation based on reported profit or stock price appreciation?), and the auditor’s incentives (e.g., did the company acquire non-audit services in addition to audit services?). Perhaps the authors’ data set could shed some light on the first question.¹ Regarding the second question, I would like to know about how the client’s and auditor’s perspectives diverge or converge for various kinds of accounting items, e.g., items with an upward versus a downward effect on reported profit. The authors’ data set cannot shed light on the second question, because the data set represents only one side of each negotiation. Instead of the first or second question, the study’s research question seems to be the last and least interesting of the three questions stated above.

Although the paper contains a model of the negotiation process, and an extensive list of factors that potentially affect the negotiation process and

¹ However, an attempt to pursue the first question with the current study’s data set would raise validity concerns on all four dimensions stated earlier.

outcomes, the authors did not develop a theoretical argument about their prior expectations or hazard to state a hypothesis about any relationship in the data set. A possible rationale is that the authors viewed their study in the context of discovery (“facts in data set 1 \rightarrow theory”) rather than the context of justification (“theory \rightarrow hypothesis \rightarrow facts in data set 2”). However, this rationale does not seem to fit with the current paper, given the absence of theoretical development subsequent to the data analysis. Because the authors did not state a hypothesis about any relationship between observed variables, I will not attempt to evaluate the study with respect to conclusion validity, internal validity, or construct validity (but see note 1).

Despite the absence of hypothesis testing in the paper, external validity still is a concern. As stated earlier, if the inferences from a pre-theoretical data set lack external validity, the general value of the theory based thereon is suspect. I note three possible threats to external validity. First, the authors asked the respondents to select a single negotiation episode from their experience. Despite some exceptions, the natural reaction to this request is to select an episode that makes the respondent look good in terms of besting the auditor. Although the authors’ procedure for selecting CFOs resulted in a representative set of respondents, I question whether the CFOs responded with a representative set of negotiation episodes. The GMS data set is inadequate to support the inference that auditor acquiescence is the normal outcome of negotiations about financial reporting. Second, the authors relied exclusively on the CFOs’ self-reporting, without an independent source for verifying any responses. The respondents were free to embellish their recollections as desired. Third, the authors conducted the survey in mid-2002, prior to the implementation of the Sarbanes-Oxley Act of 2002 (SOX) in the U.S. Of course, the respondents were Canadians, and perhaps a major regulatory reform in the U.S. was irrelevant to them. If so, inferences from the GMS data set (Canadian CFOs in the pre-SOX period) to other persons, times, and settings (e.g., U.S. CFOs in the post-SOX period) lack external validity, and the general value of any resulting theory of client-auditor negotiation is suspect.

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Auditor's Pre-Negotiation Information, Accuracy of Financial Reports and Non-audit Services

*Yun Clement Zhang, Fuqua School of Business, Duke University**

Financial market participants extensively use audited financial reports to contract with each other and make decisions. As accounting researchers, we are particularly interested in the process generating and factors influencing these reports. This academic interest is increasingly relevant to the real world with recent events in corporate America. Indeed, the financial reporting practices have been in the spotlight for the past several years. A series of corporate accounting scandals (e.g., Enron, WorldCom, Qwest and Tyco) and the demise of once mighty Arthur Andersen have drawn unprecedented public scrutiny to the accuracy of financial reports. A sound analysis of the reporting process can provide useful implications for regulatory actions aimed at enhancing the financial reporting accuracy.

The auditing process usually starts with the auditor conducting initial tests, e.g., analytical reviews and substantive testing. But eventually, with the knowledge gleaned from these tests, the auditor has to start a negotiation with the management about the financial reports. In other words, audited financial reports are the direct results of a negotiation game between an auditor and a manager who have divergent information and incentives.¹ This negotiation can break down. When a breakdown happens (e.g., when the auditor is unwilling to give an unqualified opinion, or when the manager

* This synopsis pertains to a paper based on my dissertation completed at Yale University. I wish to thank Rick Antle (Committee Chair), Shyam Sunder, Qi Chen, Paul Fisher, Jennifer Francis, Brian Mittendorf, Gans Narayanamoorthy, Mark Peecher, Mohan Venkatachalam, Michael Williams and Martin Wu for their encouragement and comments. I also wish to thank workshop participants at AAA 2003 Annual Conference, Duke University, Pennsylvania State University, University of Illinois at Urbana-Champaign, University of Chicago, Vanderbilt University and Yale University. All remaining errors are mine.

¹ Antle and Nalebuff (1991) are among the first to point out this negotiation feature of the financial reporting process. They show that a phenomenon, called "Auditor's Curse," emerges during this negotiation: the manager who prefers higher earnings and has private information only disputes the auditor's underestimate error but leaves the overestimate error untouched. They find that the final financial reports can be "liberal" due to this "Auditor's Curse."

refuses to make the necessary adjustments requested by the auditor), the parties may have to carry out costly additional auditing together in order to find more accurate and concrete financial information that both can agree upon.² For instance, if the auditor is not satisfied with the management's inventory presentation, one way to resolve this dispute is to physically count all inventories in the warehouse. Cost is incurred on both sides: the auditor has to spend extra personnel time while the manager needs to stop the warehouse employees' routine work to accommodate such additional auditing procedures.³

Auditor's pre-negotiation information – namely, the information partition the auditor possesses before coming to the bargaining table – influences the negotiation process. The primary focus of this paper is to analyze the impact of the auditor's pre-negotiation information on the accuracy of the financial reports.

Intuitively, one might think that the more pre-negotiation information an auditor has, the more accurate the financial reports will be. After all, an auditor is an information verifier. Shouldn't a better informed auditor do a better job at verification? Counterintuitively, I show that, exogenously giving an auditor more pre-negotiation information can lead to less accurate financial reports by lowering the likelihood of a negotiation breakdown.

The explanation for this result is as follows. The auditor faces liability for inaccurate reports, but is also concerned with the additional auditing cost following a negotiation breakdown. As a result, the auditor's optimal negotiation strategy trades off these two factors. Giving the auditor more pre-negotiation information effectively reduces the auditor's uncertainty regarding the true earnings and the auditor's expected liability from inaccurate reports, thus making the auditor more lenient in the sense that the auditor is less willing to push the negotiation to a disagreement. It is precisely this diminished likelihood of a negotiation breakdown that robs the financial reporting process of the additional auditing and consequently leads to less accurate reports.

This paper then endogenizes the auditor's pre-negotiation information by allowing the manager to strategically influence this information. Generally speaking, the manager has superior local information relative to the auditor:

² The manager may also fire the auditor in case of an audit negotiation breakdown (Dye, 1991).

³ It is unlikely that the auditing contracts can anticipate all future contingencies such that all of the auditor's additional auditing cost is reimbursed by the management.

the former is more familiar with the firm's operations and has relatively unrestricted access to internal documents. It is quite reasonable to posit that the manager strategically influences the auditor's pre-negotiation information in order to advance the manager's own benefit.⁴

When the manager makes the strategic information delegation decision – namely, whether to give more information access to the auditor – the manager trades off between two forces. On the one hand, the negotiation breakdown and costly additional auditing are less likely to occur with a more informed auditor. Since the manager also bears part of the additional auditing cost, the manager clearly has incentives to delegate more information to the auditor to avoid this cost. On the other hand, a more informed auditor is able to bring to the negotiation table a more accurate earnings estimate. This may erode the rents the manager otherwise enjoys from an inflated financial report. When the expected additional auditing cost savings are larger than the expected forgone rents, the manager prefers to grant the auditor a finer information partition. Otherwise, the manager prefers to keep the auditor uninformed.

The main implication of this paper deals with the controversial auditor's non-audit services. If, consistent with the so-called "Knowledge Spillover" argument, the auditor's non-audit services can be used as a particular channel for the manager to strategically influence the auditor's pre-negotiation information, this paper shows that non-audit services can be related to inaccurate financial reports even when auditor independence concerning fees is not likely to be an issue by assumption.⁵ On the one hand, this finding weakens the accounting industry's claim that knowledge spillover from non-audit services enhances audit quality. On the other hand, it cautions readers against drawing quick conclusions about auditor independence impairment from fees upon empirically observing the positive association between non-audit fees and measures of financial reporting

⁴ In this paper, at the time when the manager influences the auditor's information, the former is assumed not to possess private information. In other words, the manager's information delegation decision is not a signal of what the manager knows, hence it contains no new information. Furthermore, I assume that the manager cannot falsify information. That is, all communications are assumed truthful.

⁵ Admittedly, there is not a single agreed-upon definition of auditor independence. In this paper, I assume both the audit and non-audit fees are determined and paid before the reporting negotiation starts and do not influence either party's negotiation behavior. Thus, the manager is not able to condition the non-audit fees on the audited financial reports. This assumption is likely to alleviate most, if not all, concerns over independence issues.

inaccuracy such as the absolute abnormal accruals. The manager's desire to strategically manipulate the auditor's pre-negotiation information and the negotiation nature of the financial reporting process alone can also generate this association.

As an extension of the paper, preliminary findings indicate that the auditor sometimes prefers a higher level of liability for a given amount of reporting error. The intuition behind this is as follows. As the auditor's liability for the reporting error increases, the auditor becomes tougher, increasing the likelihood of the additional auditing. Consequently, the manager is more likely to make the auditor informed in the pre-negotiation stage, saving both parties the additional auditing cost. The auditor may trade off the loss from larger liability against the gain from more pre-negotiation information. A non-minimum amount of liability can be preferred by the auditor in order to convince the manager to offer more pre-negotiation information.

Furthermore, the financial reporting process between an auditor and a manager is a repeated process, lasting many fiscal years. If the auditor's liability in later periods increases with the error made in early periods, it is quite conceivable that the auditor may intentionally err early on in order to convince the manager to delegate more information later. An analysis on this dynamic aspect of the reporting process could yield interesting findings. Third, this paper adopts a partial equilibrium perspective toward the financial reporting negotiation which excludes the principal from its analysis. Future research may consider the principal's optimal contracting problem when the performance measure is a negotiated result.

Unfortunately, the negotiation nature of the auditor-manager relationship has been somewhat overlooked by the accounting literature. This paper intends to establish one step further to understand the strategic information game played in the bargaining between a manager and an auditor.

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Pattern Identification and Industry-Specialist Auditors

*Jacqueline S. Hammersley, University of Georgia**

Auditors' failure to identify and report complex financial-statement misstatements has had severe consequences for financial statement users and for auditors themselves. Financial-statement misstatements that are complex are hard to diagnose because they are likely to be described by a pattern of individually innocuous cues.¹ The problem of diagnosing such misstatements is further complicated when the pattern is incomplete. In this study, I examine whether industry-specialist auditors' unique knowledge structures allow them to diagnose such misstatements. Specifically, I investigate whether specialists use mental models about the misstatement contained in incomplete industry-specific patterns to identify the increased risk present and to direct the search for evidence about the misstatement.²

It is important to understand the determinants of how well auditors interpret incomplete patterns suggestive of misstatement. Auditors must make judgments and decisions during the planning and evidence collection stages

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¹ A pattern is composed of multiple pieces of information that must be combined, like the individual pieces of a mosaic, for the misstatement to emerge. When a pattern exists, no single piece of information is informative enough, on its own, to identify the misstatement. Rather, all of the cues forming the pattern must be perceived and appropriately processed for the misstatement to be conclusively identified.

² Mental models are cognitive representations of complex phenomena that can be used to "run" thought experiments that allow inferences to be made (Greeno 1989).

of the audit with incomplete information. Additionally, the division of labor among audit team members suggests the possibility that different auditors will collect the pieces of information that form a pattern. Individual auditors, who likely have seen only part of the pattern, would not have enough information, on their own, to identify the potential increased risk of misstatement. Consequently, unless at least one team member receives all of the information forming the pattern, the risk of misstatement may be assessed too low or identification of a misstatement may be delayed, negatively impacting both audit effectiveness and efficiency. Moreover, because individual pieces of information are not, in themselves, very suggestive of misstatement, they are unlikely to be communicated.³

The prior literature suggests that industry experience is helpful in improving audit quality under some circumstances (cf., Bedard and Biggs 1991; Solomon, Shields, and Whittington, 1999). I contend that use of industry specialists will improve audit quality when industry-specific knowledge is necessary to identify a misstatement and when knowledge of general accounting and audit testing, and thinking by analogy are not adequate substitutes for this knowledge. I contend that one situation where such industry-specialist knowledge is necessary is misstatement identification when a partial error pattern is present. Specialists' cognitive representations may allow them to draw inferences from partial patterns of cues that are diagnostic of misstatement in their area of expertise.

I experimentally examine whether differences in industry specialists' mental models about a seeded misstatement lead to task-performance differences. Industry-specialist auditors complete two cases, one matching and one not matching (as a benchmark) their industries of specialization. I manipulate whether they receive full, partial, or no patterns diagnostic of a misstatement embedded in case materials between participants. Auditors judge the likelihood of misstatement, explain what misstatement(s), if any,

³ The review process will result in formalized information sharing; however, evidence from court documents suggests that the review process does not always result in complete information sharing. For example, testimony from Lincoln Savings and Loan reveals that for the Continental Ranch land sale the manager in charge of the audit of AMCOR (the subsidiary recording the sale) was not aware that Lincoln had loaned the down payment to the buyer. This condition should have prohibited AMCOR from recording the \$9 million gain on sale. Lincoln and AMCOR had separate audit teams who did not discover the loan of the down payment (Erickson, Mayhew and Felix 1996).

about which they are concerned, determine necessary additional audit procedures, and perform surprise recalls for each case.

Consistent with expectations, I find that matched specialists develop more complete mental models about the seeded misstatement when they receive partial or full cue patterns than when they receive no cue patterns. Critically, matched specialists in the partial pattern condition develop more complete mental models than do mismatched specialists who receive the same information. Additionally, matched specialists who receive partial and full cue patterns assess the likelihood of misstatement higher than matched specialists who receive no cue patterns. A mediation analysis confirms the role played by mental models for matched specialists. Specifically, mental model completeness significantly mediates the influence of the pattern manipulation on matched specialists' likelihood assessments. Matched specialists respond to a partial cue pattern that potentially indicates misstatement by developing more complete mental models about the seeded misstatement, assessing higher risk of misstatement, and suggesting procedures that will be efficient and effective at discriminating the presence of the seeded misstatement.

In contrast, mismatched specialists generally do not develop more complete mental models about the seeded misstatement, even when they receive full cue patterns. Additionally, despite assessing higher general misstatement risk when receiving a partial cue pattern versus no cue pattern, mismatched specialists' suggested procedures do not focus on the seeded misstatement.

Overall, these results imply that matched specialists are able to interpret and fill in partial cue patterns. They respond to partial cue patterns by increasing the assessed risk of misstatement and suggesting efficient and effective audit procedures. Mismatched specialists do not suspect the seeded misstatement under these conditions. This suggests that identification of incomplete patterns of misstatement may be a comparative advantage for industry specialist auditors.

My study contributes to the audit-knowledge literature by expanding our understanding of the conditions under which performance will improve due to industry specialization. Previous research has demonstrated that matched industry-specialist auditors know more non-error explanations for unusual fluctuations than mismatched specialists (Solomon, et al. 1999). This gives rise to the concern that industry specialists may "explain away" anomalous facts as non-errors, rather than seriously consider them as indicators of misstatement. I provide evidence that matched industry specialists develop more complete mental models, use these representations to assess higher

likelihoods of misstatement, and specify discriminatory procedures to determine whether the seeded misstatement exists.

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The Effects of Corporate Governance on Firms' Credit Ratings

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This study investigates whether firms that exhibit strong corporate governance benefit from higher credit ratings relative to firms with weaker governance. Prior research that investigates the effects of governance on factors related to the cost of debt financing tends to focus on a limited number of governance attributes. We examine a broad set of governance attributes based on a framework of governance developed by Standard & Poor's that reflects four major components of governance: ownership structure and influence, financial stakeholder rights and relations, financial transparency and information disclosure, and board structure and processes. The individual governance attributes we examine within each of these components are designed to increase the monitoring of management's actions to promote effective decision making, limit their opportunistic behavior, and reduce the information asymmetry between the firm and its lenders. To the extent a governance attribute reduces information asymmetry and contributes to the overall credit worthiness of the firm, we expect a positive relation between the governance attributes and firms' credit ratings. In contrast, if a governance attribute increases agency problems between lenders and managers or increases the likelihood that equity stakeholders extract rents from debt stakeholders, we expect the attribute to be negatively related to firms' credit ratings.

We document, after controlling for risk characteristics, that firm credit ratings are negatively associated with the number of blockholders that own at least a 5% ownership in the firm. This finding is consistent with the claim that concentrated owners can exercise undue influence on management to secure benefits that are detrimental to debt stakeholders. We find that credit ratings are positively related to weaker shareholder rights in terms of takeover defenses, which suggests that mechanisms that place greater power in the hands of shareholders are also viewed negatively by debt stakeholders. Our results indicate that firms with more transparent financial information have better credit ratings. We also document that credit ratings are positively related to over-all board independence, board stock ownership and board expertise, and negatively related to CEO power on the board. These findings support the notion that firms with more

independent, active, and committed board of directors, *ceteris paribus*, subject debt stakeholders to relatively less credit risk.

To provide an indication of the economic significance of our results, we document that moving from the lower quartile to the upper quartile of the governance variables nearly doubles a firm's likelihood of receiving an investment grade credit rating. During the time frame of our analysis, the average yield for firms with investment grade debt with a ten year maturity was approximately 6.00%. In contrast, the average yield for firms with speculative grade debt with a ten year maturity was approximately 14.0%. This 800-basis point spread translates into an annual interest cost differential of \$74.7 million for the median firm in our sample with \$934 million of outstanding debt.

Our results suggest that weak governance can result in firms incurring higher debt financing costs. So why are some firms willing to bear additional debt costs by not practicing good governance? We approach this question by considering how CEOs can appropriate rents from weak governance. One way CEOs can appropriate these rents is through excess compensation. To investigate this conjecture, we estimate CEO excess compensation following the work of Core, Holthausen and Larcker (1999). We document that CEOs of firms with weaker governance (greater CEO power or management entrenchment) receive more excess compensation relative to the CEOs of firms with stronger governance (less management entrenchment). Furthermore, we show that firms with speculative grade debt have a greater propensity to overcompensate their CEOs than do firms with investment grade debt.

Much of the prior literature that addresses corporate governance takes an equity stakeholder's perspective of the benefits of strong corporate governance. Our study provides a comprehensive analysis of the relevance of corporate governance from the perspective of debt stakeholders. Although generally aligned, the interests of bondholders and shareholders can diverge when there are differing stakes in firm performance and differing views on management's investment policies. Our study provides insights into the potential conflict between bondholders and shareholders in terms of governance features and provides insights into the characteristics of governance that are likely to affect the cost of debt financing. We also provide one explanation for why some firms continue to operate with weaker governance when doing so may mean lower credit ratings.

The Effects of Corporate Governance on Firms' Credit Ratings: Discussion

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Ashbaugh et al. (2004), hereafter ACL, investigate the association between a firm's overall credit rating and various corporate governance mechanisms, and seek to demonstrate, via a compensation analysis, the incentives for managers to resist corporate governance to increase credit ratings. Similarly to Shleifer and Vishny (1997), I will define these governance mechanisms as those that ensure that investors in corporations get a return on their investments. There are two broad sets of investors that these mechanisms can protect, shareholders and debtholders. Recent work on governance has begun to consider how these different investors demand different types of governance mechanisms. For example, Bushee et al. (2004) investigate how different types of institutional equity investors have different preferences for various governance mechanisms. Along this vein, ACL consider how some governance mechanisms benefit shareholders at the expense of blockholders.

The governance mechanisms examined in ACL are organized into four categories, developed by Standard and Poor's. These categories are (1) ownership structure and influence, (2) financial stakeholder rights and relations, (3) board structure and processes, and (4) financial transparency and information disclosure. A strength of their paper, relative to other work in the area, is the comprehensiveness of the mechanisms considered. However, given my perspective as an accountant, I am most interested in the fourth category and would find a more thorough analysis of this component interesting. In particular, I am interested in whether more conservative accounting would be associated with higher credit ratings. As Sloan (2001) argues, when accountants seek to better understand corporate governance, accountants should focus on the role of accounting in the governance process.

As the ACL paper states, Standard & Poor's, Moody's and Fitch Ratings "have developed infrastructures and invested significant resources to evaluate firms' governance structures" so presumably credit ratings do reflect corporate governance (p 32). The primary research question in the paper is essentially whether this presumption is true. There are several

ways one could address this question. One could directly survey employees of the rating agencies and ask them whether corporate governance is considered in their ratings. Alternatively, one could run an experiment on a group of employees from a rating agency to assess the extent to which corporate governance influences their credit ratings. Instead, ACL take an archival approach and directly test for a relation between governance and credit ratings.

What is the motivation for examining this relation? Are the rating agencies unsure of whether their investments in evaluating governance structures are being reflected in the ratings they assign? Similarly, do managers of the firms issuing debt doubt whether the rating agencies are incorporating governance into their analyses? I believe the more interesting research question is whether corporate governance is serving to increase the likelihood that debtholders get their expected return on their investment (i.e., whether the debt agreement is fulfilled). Because the authors do not answer this fundamental question, it would be helpful to the reader if they would discuss the literature on the predictive ability of credit ratings. If credit ratings predict the likelihood that interest and principal are paid as contracted, then the investigation into the association between credit ratings and governance becomes more interesting.

Many of the primary results of the ACL paper confirm findings in the literature. For example, Sangupta (1998) and Bhojraj and Sangupta (2003) find that bond ratings are increasing in a measure of financial transparency and the percent of independent directors on the board and decreasing in the number of blockholders. What appears to be new in ACL is the finding that credit ratings are increasing in the percent of independent directors that also serve on other boards and the percent of directors that own stock, and decreasing in a composite score of shareholder rights and the power of the CEO.

As stated above, the part of the paper that I find the most interesting is the investigation of the impact of financial transparency and the timeliness of disclosure on credit ratings. The primary proxy they rely on for financial transparency and timeliness is the squared residual from regressing, by industry, cross-sectional returns on earnings. The assumption for reliance on this proxy is that earnings that are highly correlated with changes in market values are more transparent and timely. I believe this measure captures timeliness but not disclosure and is similar to a measure used in Bushman et al. (2004). Bushman et al. find that their similar measure is higher for geographic and industry concentrated firms and is lower for growth firms. This causes me to be unsure of whether this proxy is

adequately capturing financial transparency. Although, I do find comfort in the authors' report that this proxy is correlated with AIMR disclosure ratings. I believe the authors should report more detailed information on this relation and I would like to see a more thorough investigation of the role of different earnings characteristics on credit ratings.

The compensation analysis used to investigate managerial incentives for resisting corporate governance is interesting. They find that managers of firms with speculative grade debt are 'over paid' more than managers of firms with investment grade debt, and they further observe that, for speculative grade debt firms, excessive pay is 100 to 1000 times larger than the managers' share of the risk premium associated with speculative grade debt. ACL argue that this implies that managers choose to have weak governance because, under better governance, their loss of excess pay would exceed their direct benefit from a reduced interest expense.

I have three concerns with this interpretation. First, the paper implies that moving from speculative to investment grade debt is simply a matter of better governance. I would argue that this is not a likely scenario. Credit ratings are most likely driven by the riskiness of the underlying cash flows of the firm. Second, the interpretation implies that managers are the determinant of the level of governance rather than the board of directors, shareholders, and/or regulators, and this may not be the case. And finally, the analysis only considers one benefit of better governance. Management would benefit in other ways from stronger governance, such as a lower cost of equity capital and a better reputation.

Overall, the paper addresses an important and timely topic. Investigating the governance mechanisms that are valued by credit rating agencies helps us understand the role of governance in protecting debtholders. Furthermore, this paper is unique in that it attempts to quantify the costs and benefits to management of stronger corporate governance to the extent that governance protects debtholders. Some interesting questions remain. Do ratings agencies that better incorporate corporate governance do a better job of predicting insolvency? Which corporate governance mechanisms are most effective in protecting bondholders?

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Market Information and Predictive Accuracy of the Going Concern Opinion

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Audit reporting for companies that subsequently enter into bankruptcy is an issue that continues to attract significant attention from legislators and the public. For example, the Private Securities Litigation Reform Act (1995) has elevated going concern reporting to the status of a legal requirement, and former regulators have issued calls for mandatory reviews of audits where companies file for bankruptcy subsequent to receiving 'clean' audit opinions (Breedon 2002).

Early research suggests that statistical models using financial statement information outperform auditors in predicting bankruptcy (e.g., Altman and McGough 1974; Altman 1982). However, Hopwood, McKeown and Mutchler (HMM 1994) show that evidence relating to relative superiority of the auditor or the model is sensitive to assumptions regarding misclassification costs, i.e., the relative costs of issuing going-concern modified audit opinions (henceforth GC opinions) for non-bankrupt firms versus costs of issuing clean opinions for bankrupt firms. In an earlier paper, HMM (1989) also show that audit opinions have incremental explanatory power in predicting bankruptcy after controlling for financial statement-based variables.

Recent research in finance (Shumway 2001) finds that stock market information (in particular market values and returns) is more important than financial statement information for predicting bankruptcy and that conventional financial statement ratios have little or no ability to predict bankruptcy beyond market information. However, prior research comparing audit opinions and statistical models has not considered the role of market information. In this paper, we examine the relative and incremental ability of audit opinions vis-à-vis a model that includes both financial statement and market information in predicting bankruptcy.

Our sample comprises non-financial firms with available data for fiscal years ending during the 1996-2002 period. Since we examine bankruptcies over a 12 month period after the date of the audit report, our bankruptcy sample spans the period up to April 2004. HMM (1994) note that: (1)

bankruptcy prediction models do not work adequately for strategic or non-stressed bankruptcies, and (2) the use of a matched-pairs approach is problematic in the context of comparing audit opinions and bankruptcy prediction models. Therefore, we restrict our sample to all firms that are in the highest quintile of bankruptcy probabilities estimated using Zmijewski's (1984) model. After such partitioning, our final distressed sample consists of 6,843 firm-years, including 1,021 firms (14.9%) with going-concern opinions and 337 firms (4.9%) that subsequently filed for bankruptcy.

Consistent with HMM (1994), we find a model using only financial statement variables does not dominate the audit opinion in predicting subsequent bankruptcy over a plausible range of cost-ratios. In contrast, a model that includes market information in addition to financial ratios significantly outperforms audit opinions in predicting subsequent bankruptcy over the entire range of cost-ratios examined—at a minimum, the model provides an almost 20% improvement in misclassification costs over the audit opinion.

The dominance of the model over the auditor raises the question of whether the auditors possess any private information beyond that reflected in financial ratios and stock prices. Accordingly, we next examine the incremental ability of the GC opinion in predicting bankruptcy beyond both financial statement and market information. Consistent with HMM (1989), we show that audit opinions are incrementally informative in predicting bankruptcy beyond financial statement information. More important, we find that audit opinions have incremental explanatory power even after including market information. The audit opinion dominates most other variables in the model in terms of marginal effect, which suggests that the audit opinion is an important variable in explaining subsequent bankruptcy even in the presence of financial statement and market-based variables.

It is puzzling that a model that includes financial statement and market information dominates the audit opinion, even though the audit opinion has incremental ability to predict bankruptcy. We hypothesize that the inability of the auditor to outperform the model despite possessing valuable private information arises because auditors do not properly use information at their disposal. Empirical evidence from a variety of contexts suggests that professionals incorrectly use information (Dawes et al. 1989), including stock analysts (e.g., De Bondt and Thaler 1990) and investors (e.g., Bernard and Thomas 1990). Accordingly, we compare the relative weighting of various financial ratios and market variables by auditors with that of the statistical model. Our results indicate that auditors overweight conventional

financial ratios (e.g., current ratio) and operating cash flows, but underweight market information.

Overall, we conclude that auditors sub-optimally use publicly available information. Hence, even though auditors are experts and have access to private information not available to the markets, audit opinions underperform statistical models that use both market and financial information in predicting bankruptcy. Our results suggest that auditors have considerable scope to improve their predictive ability through proper weighting of financial and market information.

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Market Information and Predictive Accuracy of the Going Concern Opinion: Discussion

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Raghunandan and Subramanyam (2004) evaluate the accuracy of going concern opinions in predicting bankruptcy. That is, their study looks at the audit as if it were a bankruptcy prediction task. The authors motivate their study in that journalists, regulators and others view the going-concern modification as a warning of bankruptcy. With the recent addition of the Sarbanes-Oxley requirement for the auditors' evaluation of internal control, I believe that, more than ever, auditors will receive the blame when the next recession occurs and companies with clean audit reports go bankrupt. It is therefore timely to consider how going concern modifications relate to the prediction of bankruptcy. The authors do acknowledge that the going concern opinion is not an evaluation of bankruptcy, but following a long academic tradition, this assumption is maintained for the purposes of their study and my discussion.

I. Going Concern Accuracy

The manuscript does not specifically state any hypotheses. The first research objective is "to compare the accuracy of audit opinions vis-à-vis a model that includes both financial and market variables for predicting bankruptcy." The key finding is that a model including market information outperforms a going concern opinion in predicting bankruptcy.

In some sense this is 'back to the future' as a number of studies previously have found that bankruptcy models outperform the audit opinion in predicting bankruptcy (see Hopwood, McKeown and Mutchler 1994 for a summary). Indeed the primary evidence that the audit opinion the better predictor appears in Hopwood, McKeown and Mutchler (1994), who essentially allow the auditor a handicap to compensate for the cost of incorrectly giving a going concern opinion for a firm that fails to go bankrupt. The current study reports that the bankruptcy model is more accurate, even allowing for the particular cost function allowed by Hopwood, McKeown and Mutchler, when the analysis is applied to a sample of distressed firms. The paper could better separate the reason for differences in results to prior studies with respect to the improved

bankruptcy model accuracy as distinct from the impact of the choice of sample.

This paper focuses on the information contained in recent stock returns for improving the predictive accuracy of bankruptcy prediction. Other than that the decision to enter bankruptcy is a function of both recent stock returns and equity value, what information is contained in these returns that may be of interest to auditors?

Effect of industry or market downturn

It would be interesting to identify which elements of stock returns help predict bankruptcy. The return variable could be decomposed into market, industry, and idiosyncratic return components. That is, do auditors 'underweight' the impact of market-wide downturns, industry downturns, or firm-specific bad news when determining going-concern modifications? (See Fargher and Wilkins 1998 for empirical evidence on shifts in systematic and unsystematic risk around audit qualifications.)

Timing of returns

The stock returns window in the symposium version of the study covers twelve months of returns prior to the earnings announcement. This period includes quarterly reporting information, management statements on firm performance, debt covenant violations, restructuring announcements, and any other indication of trouble. The returns period can cover the expectation, and even the management announcement, of a likely going concern opinion. The partitioning of returns by quarter and the end of period reporting season would provide some insight into the timeliness of news to be considered. The distribution of returns also could be of interest as to whether bankruptcy is more likely following rapid decline in market value.

Types of bankruptcy

Following Argenti (1976) studies have identified clusters of bankruptcy in different situations. As the current sample is of distressed firms, examination of sudden, unexpected bankruptcy events is precluded. Other types of bankruptcies include small fledgling companies failing to establish viability and firms that gradually slide into bankruptcy. It would be of interest to footnote the audit forecast accuracy for differing size and age of bankrupt firms.

The sample period includes the late 1990s. Many unqualified reports were issued to fledgling technology companies that did not reach the following reporting period. Arguably auditors paid too much attention to the market

for these companies. Specifically, I suggest that auditors did not adequately consider going concern opinions on reports accurately portraying a precarious financial position because of the expectation that such companies had access to additional finance. Robustness checks could consider the influence of both the sub-sample of technology firms and the sub-sample of firms receiving clean fiscal year 2000 reports prior to bankruptcy.

II. Predicting Bankruptcy

The study's second objective is to examine the incremental predictive ability of the going concern opinion for predicting subsequent bankruptcy. The going concern opinion is found to be incrementally informative. These results support prior evidence using alternate tests (e.g. Chen and Church 1996, Holder-Webb and Wilkins 2000). These results are consistent both with auditors identifying the extent of risks not previously disclosed and the self-fulfilling nature of the going concern opinion itself. Unfortunately it is not possible to separate these explanations.

The results, however, do contrast with Lennox (1999) who shows that the audit report does not signal incremental information when industry sector and economic cycle are included in the bankruptcy prediction model. In focusing on the incremental information content of the audit opinion, the tests rely on the need to condition prediction of bankruptcy on the widest available information about the probability of bankruptcy including industry and economic cycle. As stock returns likely reflect the best aggregation of publicly available data, the results presented in this paper are likely to remain even after considering additional controls.

III. Comparison of Bankruptcy and Going Concern Models

The last section of the paper compares bankruptcy prediction and going concern models. This section attempts to illuminate the precise coefficients that are 'underweighted' in predicting going concern opinions as distinct from predicting bankruptcy.

The abstract of the paper prominently feature this section's reported results, and yet this section is the least developed one in the paper. The motivation is vague and not well constructed. For example, are auditors really 'not trained to consider market information'? Given evidence of financial distress and declining stock price, it is likely that auditors are aware that these firms face going concern issues but prefer to allow for the resolution of mitigating factors that later happen to unfavorably resolve. (This interpretation of the findings, of course, does not mitigate the possibility

that auditors assess the probability of survival too high for some firms, but it is a much less naive interpretation.)

Prior research would suggest some differences between going concern and bankruptcy prediction models. For example, Lennox (1999) reports that companies are more likely to fail if the economy was expected to move from a boom to recession, however these cyclical variables have insignificant effects on audit reporting. Similarly, financial distress tends to be higher for certain industries in certain periods leading to bankruptcies, but this is not reflected in audit reporting. As stock returns likely reflect cyclical influences the results presented seem to be consistent with, and add to, our understanding of the prior research.

This section relies strongly on the maintained assumption that the going concern modification is a prediction of bankruptcy. Having acknowledged the difference between considering the going concern issue and predicting bankruptcy early in the paper, the authors make very strong assertions regarding the 'underweighting' of information by auditors relative to a task that the researchers have defined.

The paper reports tests comparing slope coefficients from non-nested models (different dependent variables). The authors argue that such comparisons are acceptable because both dependent variables are binary. While both variables are on similar binary scales, I suggest that similar explanatory power could be achieved between models with distinctly different combinations of intercepts and slope coefficients in each model, and therefore the comparisons being drawn should be interpreted with care.

To the extent that the authors are comparing coefficients across equations in a multivariate setting, the assumed relation between going concern opinion and bankruptcy becomes important. Rejection of the null that the partial correlation of, say, recent stock returns with going concern opinion is equal to the partial correlation of recent stock returns with bankruptcy, is assumed to indicate an alternate hypothesis that auditors 'underweight' recent stock returns. A plausible alternate hypothesis is that the distribution of (probability of) going concern opinions is different from the distribution of bankruptcies, and that it is therefore unsurprising that partial correlations between two different dependent variables with any given independent variable are unequal. If the implicit assumption is that the bankruptcy model is the true model then a lens model approach may be appropriate. If the implicit assumption is that the going concern is the expectation of bankruptcy, and that this section is a test of rational expectations, then the assumed relation between these two dependent variables is important. Such

a model could equate to the current comparison under certain assumptions. My concern is that, given a difference in the probability of the going concern opinion and the probability of bankruptcy, the equation linking these variables requires additional parameters significantly confounding the analysis.

The study reports no sensitivity analysis in this section. For example, the type of cost function considered when analyzing the accuracy of going concern modifications (Hopwood, McKeown and Mutchler 1994) also could be considered in this section. Conference participants also raised the issue of the sensitivity of the results to the time period within the sample period. Are comparisons of the coefficients by year, or within some partitions of the sample period with sufficient data, similar to the results for the entire sample period?

IV. Other Comments

Measurement issues - definition of 'going concern'

Further discussion of the precise criteria to identify going concern warnings would be helpful. Does the sample include only opinions where the auditor mentions the term 'going concern', or does the sample also identify reports that mention either bankruptcy proceedings or a material business uncertainty? For discussion of this issue and the reporting problems in commercial databases see Butler, Leone and Willenborg (2004).

Frequency of going concern modifications

This study also contributes to the literature by providing data for a relatively recent period on going concern modification rates. While journalists and regulators focus on bankruptcies not preceded by a going concern modification, it is important to note that in any given year many more companies receive going concern modifications and do not indeed go bankrupt.

Will investors be better off or just auditors?

While auditors might reduce litigation costs by increasing qualification rates to reflect market impounded information, can the marginal investor be better off? If the auditor places greater weight on market returns, investors will be warned more often of a bankruptcy where the market already reflects the default risk. Future research is needed to consider the more important issue of identifying the unexpected bankruptcy.

The conference participants pointed to the need to consider the strategic use of bankruptcy by some companies (Delaney 1992, Vairo 2004). This

discussion was within the context of considering that some larger clients declare bankruptcy without a going concern when negotiations regarding disposition of assets fail. Potentially some large bankruptcies aimed at mitigating asbestos or similar liabilities through restructuring might be identified in the sample and sensitivity to these observations considered.

V. Conclusion

I commend the authors for revisiting important issues with respect to the accuracy of going concern modifications in predicting bankruptcy. These issues have not received sufficient attention in recent research. The extent to which auditors should consider recent equity returns in considering the future viability of a client is a topic of particular interest that arises out of this research.

Consistent with similar studies of this type, the researchers cannot examine the full role of the auditor in the period leading up to the declaration of bankruptcy. Unfortunately, researchers have few avenues to research the complex issues leading to bankruptcy or survival for even these distressed firms.

While I have hopefully made some suggestions for improvements, many of the fundamental limitations in this area arise from the limited data that is typically available, and this should be considered in evaluating this criticism. I wish the authors all the best with this research.

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