

Nonprofessional Investors' Expectations of the Improvement in the Credibility of Audit Opinions Following PCAOB Inspection Reports

Jesse C. Robertson
The University of Alabama
Culverhouse School of Accountancy
jroberts@cba.ua.edu

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ABSTRACT: The Public Company Accounting Oversight Board (PCAOB) conducts regular inspections of audit firms and issues inspection reports that describe deficiencies (i.e., departures from professional standards) identified during the inspection process. This study provides experimental evidence on the effects of the PCAOB inspection reports on nonprofessional investors' expectations of improvement in the credibility of future audit opinions. The results suggest that the anticipated improvement in the credibility of future audit opinions is higher (lower) for: (a) firms responding to the inspection reports with concessions (denials); and (b) small (large) firms. Supplemental analyses suggest additional benefits of responding to the PCAOB's findings with concessions, including increased response credibility and perceived higher motivation to comply with auditing standards. Finally, the results suggest that the PCAOB should consider increasing public awareness of its oversight role in the auditing and financial reporting process.

Keywords: Account episodes; Audit firm size; nonprofessional investors; PCAOB; PCAOB inspection reports.

Data Availability: Contact the author.

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INTRODUCTION

“My fellow Commissioners and I look forward to working with the (PCAOB) board members towards improving the integrity of the audit process and the credibility of financial reporting.” – SEC Chairman William H. Donaldson (PCAOB 2003).

This paper reports the results of an experiment that examines nonprofessional investors' expectations of the improvement in the credibility of audit firms' future audit opinions based on the PCAOB inspection process. Specifically, this study examines the effects of the severity of the deficiencies (i.e., departures from auditing and related professional standards) described in the PCAOB inspection report, the nature of the audit firm's response to those deficiencies, and the audit firm's size on nonprofessional investors' assessments of the expected improvement in the credibility of future audit opinions.

The Sarbanes-Oxley Act (SOX) created the Public Company Accounting Oversight Board (PCAOB) to oversee auditors of public companies, protect the interests of investors, and promote the preparation of informative and accurate audit reports (Sarbanes and Oxley 2002). The audit report is important to investors because it represents the audit firm's tangible contribution to the financial reporting process. Furthermore, investors can use the audit report to obtain information about the credibility of the audited company's financial reports. Consequently, it is not surprising that former SEC Chairman Donaldson elaborated on the objectives of the PCAOB by emphasizing the role of the PCAOB in improving the credibility of financial reporting (PCAOB 2003), of which a crucial element is the audit report.

To facilitate the PCAOB's objectives, SOX Section 104 requires the PCAOB to conduct annual (triennial) inspections of large (small) firms that audit public companies

(Sarbanes and Oxley 2002).¹ A growing body of academic research examines investor reactions to the various provisions of SOX. Archival research has reported negative stock market reactions to the disclosure of issuers' material internal control weaknesses in accordance with Sections 302 (e.g., Beneish et al. 2005; Hammersley et al. 2005) and 404 (e.g., Chan et al. 2005).² However, prior research has not investigated potential effects of the negative information disclosed in the PCAOB inspection reports. This study extends the SOX-related research by examining nonprofessional investors' reactions to the PCAOB inspection reports.

The independent variables represent three types of salient information contained in the PCAOB inspection reports. First, the severity of the deficiencies identified in the inspection report is manipulated as high or low. The PCAOB inspection reports issued during 2005 include deficiencies of varying degrees of severity pertaining to the Big 4 audit firms (PCAOB 2005c, 2005d, 2005e, 2005f) and smaller firms (e.g., PCAOB 2005a, 2005b).

Second, the inspected audit firm's response to the inspection results is manipulated as a concession or denial. In the inspection reports published during 2005, Ernst & Young and KPMG issued responses characterized by conceding to the PCAOB's findings (PCAOB 2005c, 2005f). Conversely, Deloitte disagreed with the PCAOB's findings (PCAOB 2005d) while PwC agreed with some aspects of the PCAOB's findings and disagreed with others (PCAOB 2005f). Hermanson et al. (2006) report similar variation in small firms' responses (see also PCAOB 2005a, 2005b).

¹ The PCAOB (and this study) classifies audit firms as large (small) if the firm audits more than 100 (100 or fewer) publicly-traded security issuers (Sarbanes and Oxley 2002).

² Section 302 requires public companies to disclose all internal control deficiencies while Section 404 requires audit firms to opine on the effectiveness of clients' internal controls (Sarbanes and Oxley 2002).

Finally, the size of the inspected audit firm is manipulated as large or small. The PCAOB calls attention to differences in audit firm size by inspecting large (small) firms annually (triennially) and providing information concerning the number of public clients the firm audits. In addition, prior archival research suggests that large audit firms perform higher quality audits than small firms (e.g., Becker et al. 1998; Francis 2004; Beneish et al. 2005).

Nonprofessional investors' expectations concerning the improvements in the credibility of future audit opinions serves as the primary dependent measure because of the PCAOB's goal of improving the credibility of the auditing profession (PCAOB 2003; Kranacher 2006) and the forward-looking nature of the inspection process and related firm responses. Although the inspection reports are published subsequent to the completion of the audits to which they refer, the inspection process is inherently forward-looking because audit firms are expected to improve future audits based on the inspection process (PCAOB 2003). Furthermore, audit firms' responses contained within the inspection reports convey information about whether, and possibly how, the firms will act to both correct deficiencies and prevent future departures from standards.

Drawing on psychology literature (e.g., Schlenker et al 1986; Schonbach 1990; Schlenker and Wiegold 1992), nonprofessional investors are expected to anticipate higher (lower) improvement in the credibility of future audit opinions when the deficiencies are of low (high) severity and when the audit firm responds with a concession (denial). Drawing on the audit quality literature (e.g., Becker et al. 1998; Francis and Krishnan 1999; Beneish et al. 2005), nonprofessional investors are expected to anticipate higher (lower) improvement in the credibility of future audit opinions for small (large firms).

One hundred forty-three nonprofessional investor participants, obtained from MBA and EMBA classes, investment clubs, and civic groups, participated in an experiment to test the hypotheses. Consistent with theory, the results suggest that nonprofessional investors anticipate higher (lower) improvement in the credibility of future audit opinions from: (1) firms that respond to the PCAOB inspection reports with concessions (denials); and (2) for small (large) firms. Supplemental analyses suggest additional benefits of responding with concessions, including higher response credibility and greater perceived motivation to comply with auditing standards. No significant effects of the severity of the deficiencies were observed.

The results of this study may have implications for both audit firms and the PCAOB. First, the results suggest that, under certain conditions, investors may evaluate more positively audit firms that respond to the PCAOB inspection reports with concessions than with denials. Second, the majority of participants had not read an inspection report before completing the case materials. However, the participants indicated a willingness to refer to the inspection reports when making future investment decisions. Consequently, the PCAOB may consider promoting public awareness of its role in the auditing and financial reporting process. More research is needed before final conclusions can be drawn on these issues.

The remainder of the paper is organized as follows. Section II provides background information and develops the hypotheses. Section III discusses the experimental design. Section IV presents the results and supplemental analyses. Section V concludes with conclusions, limitations, and suggestions for future research.

BACKGROUND AND HYPOTHESES

The PCAOB Inspection Process

SOX does not define “investors” in charging the PCAOB with improving the credibility of financial reporting and protecting the financial interest of investors (Sarbanes and Oxley 2002). However, the presence of 34 million nonprofessional investors who invest directly in the stock market (New York Stock Exchange [NYSE] 2002) indicates that this group has an important interest in the financial reporting process and is an intended beneficiary of the provisions of SOX. Popular press articles that discuss the inspection results likely will increase nonprofessional investors’ awareness of the inspection reports (e.g., Burns 2005; Reuters 2005; Weil 2005a, 2005b).

The inspection reports are published on the PCAOB’s web site, www.pcaob.com. An inspection report opens with a description of the inspection process, which is followed by three sections that pertain to deficiencies (PCAOB 2004). First, a publicly-available portion describes audit-related deficiencies identified during the inspections. Second, a nonpublic portion identifies deficiencies in the firm’s quality control systems, which are disclosed only if the firm does not satisfactorily address those deficiencies within one year of the report date. Finally, the inspected firm has the option of providing a written response to the PCAOB’s findings.³ The majority (86 percent) of audit firms with at least one deficiency identified in the inspection reports, including all the Big 4, provided written responses within the inspection reports (Hermanson et al. 2006).⁴

³ The focus of this study is on the first (disclosed deficiencies) and third (firm response) sections of the PCAOB inspection reports.

⁴ This statistic is computed as of June 12, 2006 and does not include the 2003 Limited Inspection Reports of the Big 4 firms. Of the 183 firms that had at least one deficiency identified, 157 (86 percent) provided a written response. 127 firms did not have a deficiency identified in the reports (Hermanson et al. 2006).

Academic Research Concerning Sarbanes-Oxley

A growing body of research investigates market reactions to negative information disclosed per the provisions of SOX. This literature has reported negative stock market reactions to the disclosure of internal control weaknesses in accordance with Sections 302 (e.g., Beneish et al. 2005; Hammersley et al. 2005) and 404 (e.g., Chan et al. 2005) of SOX. However, prior research has not examined investor reactions to the negative information disclosed per Section 104 of SOX, which requires the PCAOB to conduct regular inspections of audit firms (Sarbanes and Oxley 2002). This study extends this literature by examining nonprofessional investor reactions to three salient types of information contained in the PCAOB inspection reports: the severity of the deficiencies described in the reports, the nature of the audit firm's response to the deficiencies, and the size of the inspected firm.

Failure Events

A failure event refers to a situation in which the performance of an entity deviates from expectations (Schonbach 1990). The PCAOB inspection reports publicly disclose descriptions of failure events (i.e., departures from auditing standards) that occur during the audit process. This study adapts a model from psychology research that describes the evaluation process wherein credibility is either repaired or further damaged following a failure event. A two-step evaluation process typically occurs following the identification of the failure event: (1) the target provides a response; and (2) interested parties evaluate the target based on the failure event and response (Schonbach 1980, 1990). In this study, nonprofessional investors evaluate the improvement in the credibility of future audit opinions for the firms that are the target of the inspection reports based on the severity of the deficiencies presented in the inspection reports, the nature of the firm's response, and the size

of the inspected firm. Firm size is expected to be an important target characteristic that may affect the valuation process because the PCAOB inspection process highlights differences between large and small firms (e.g., inspection frequency; number of annual auditees).

The first step following the identification of the failure event is the target's (the audit firm's) response to the criticism. The purpose of the response is to reconcile the conduct of the target with the expectations placed on it to minimize negative reactions to the failure(s) (i.e., deficiencies identified) (Schlenker et al 1986; Schonbach 1990; Schlenker and Wiegold 1992). The second step is the evaluation of the target by an interested party (e.g., nonprofessional investors). Evaluators typically consider both the criticism and ensuing response provided by the target before making a judgment (Schonbach 1990).

Severity

The PCAOB inspection reports include severities of varying degrees of severity. Psychology research suggests that, as failures increase in severity, evaluators are more likely to assign responsibility to the violator (Walster 1966; Gleason and Harris 1976; Lerner 1980; Schonbach 1990). Furthermore, high severity deficiencies represent deeper problems and are less likely to require simple adjustments to prevent in future tasks.

Psychology research distinguishes between varying levels of severity in terms of the consequences of the failure event (e.g., a destroyed car compared to a fender bender after an automobile accident, Walster 1966). Similarly, this study distinguishes deficiencies of high severity from those of low severity based on consequences by defining deficiencies in terms of the likelihood that they would influence the probability that an audit will fail to detect material misstatements. Low severity deficiencies (e.g., documentation failures) are unlikely to materially affect the financial statements. High severity deficiencies (e.g., failures to detect

material GAAP departures or perform tests for financial statement assertions) significantly increase the probability that an audit will fail to detect a material misstatement and consequently are likely to influence the judgments of financial statement users.

Assuming that investors are able to distinguish between deficiencies of high and low severity, they are expected to behave consistently with outcomes described in research concerning reactions to failure events (e.g., Walster 1966; Schonbach 1990). In the context of developing expectations about improving the future credibility of audit opinions based on deficiencies identified by the PCAOB during the most recent inspections, deficiencies of high severity are expected to have a larger negative effect on assessed improvement in credibility than deficiencies of low severity. Furthermore, the fundamental bases of high severity deficiencies (e.g., lack of due diligence) likely are more difficult to resolve than the roots of documentation failures (e.g., an oversight). Consequently, the following hypothesis is proposed:

H1: Nonprofessional investors will anticipate higher (lower) improved credibility of future audit opinions when deficiencies of low (high) severity are identified within the PCAOB inspection reports.

Response

The second hypothesis concerns the effect of the inspected audit firm's response to the deficiencies identified by the PCAOB on nonprofessional investors' expectations of the improvement in the credibility of the firm's future opinions. The response following a failure event is a strategic activity intended to minimize negative reactions following criticisms (i.e., the deficiencies described in the PCAOB inspection report), restore trust, and maintain a positive reputation (Schlenker et al. 1986; Bies and Sitkin 1992). Investigating the effect of firm response is important because it may have implications for audit firms' strategies when

preparing responses to the deficiencies identified in future inspection reports and perhaps in other situations in which negative information about the firm becomes publicly-available.

Psychology research classifies responses to failure events into one of four categories: concessions, excuses, justifications, and denials (Schonbach 1980; Schlenker and Wiegold 1992).⁵ This study examines nonprofessional investors' reactions to two of these response types: (1) concessions, which imply acknowledgement of guilt; and (2) denials, which involve claiming the failure event did not occur or disagreeing with the identifier of the failure event concerning whether the issue was in fact a departure from expectations (Schonbach 1990). This study investigates these response types because audit firms have responded to the PCAOB reports using both concessions and denials. Specifically, Ernst & Young and KPMG utilized a concession strategy (PCAOB 2005c, 2005e) while Deloitte utilized a denial strategy (PCAOB 2005d) in response to the deficiencies identified in the 2004 PCAOB inspection reports.⁶ Furthermore, Hermanson et al. (2006) report similar variation in small firms' responses to the deficiencies described by the PCAOB (see also PCAOB 2005a, 2005b).

Denials represent disagreement with the identifier of the deficiency (i.e., the PCAOB) and often are accompanied by statements explaining the target's position as to why a deficiency did not occur (Schonbach 1990). A denial likely will improve trust and signal improvements in the credibility of future audit opinions more than a concession if investors believe either that the firm's disagreement is more credible than the PCAOB's position or that a conceding audit firm is insincere and more concerned with improving perceptions than audits. However, given the potential recency effects of the accounting scandals that prompted

⁵ Excuses deny responsibility for the failure event by appealing to human shortcomings or ignorance; justifications deny negative outcomes of the failure event (Schonbach 1980; Schlenker and Wiegold 1992).

⁶ PwC's response includes elements of both concessions and denials (PCAOB 2005f).

SOX, investors likely will view the PCAOB's position as more credible than disagreements by audit firms and desire expressions that convey acceptance of mistakes from audit firms.

Alternatively, concessions imply acceptance of blame, remorse, and willingness to make future corrections, all of which are expected to restore confidence in and credibility to the audit firm. Prior research suggests that concessions are more effective than denials in controlling negative assessments and restoring credibility because concessions are less defensive and more admmissive of culpability than denials (e.g., Schonbach 1990; Schlenker and Wiegold 1992). Another advantage of concessions is that the target (i.e., the audit firm) recognizes the value of the corrective process (Schlenker and Wiegold 1992). Consequently, the following hypothesis is proposed:

H2: Nonprofessional investors will anticipate higher (lower) improved credibility of future audit opinions for firms that respond to the deficiencies identified in the PCAOB inspection reports with concessions (denials).

Firm Size

Prior archival research suggests that large audit firms perform higher quality audits than smaller firms (see Francis 2004). This literature has used various *ex post* proxies for audit quality, including abnormal accruals (e.g., Becker et al. 1998) and auditor conservatism (e.g., Francis and Krishnan 1999). This study extends the firm size literature by examining nonprofessional investors' reactions to deficiencies noted in PCAOB inspection reports.

Prior research also has investigated the effects of audit firm size on market reactions to negative information disclosed per the provisions of SOX. Beneish et al. (2005) find that companies disclosing internal control weaknesses experience negative market reactions. However, this negative effect was mitigated by the presence of a Big 4 auditor, suggesting that investors believe large firms perform higher quality audits than small firms, which in turn

implies that smaller firms have greater room for improvement in audit quality than large firms.

The PCAOB inspection process provides an opportunity for audit firms to receive feedback on their performance, which can be used to improve the quality of their audits. Because investors likely believe that small firms have more room for improvement than large firms, investors are expected to view the PCAOB inspection process as providing greater opportunities for improvement for small firms. Consequently, the following hypothesis is proposed:

H3: Nonprofessional investors will anticipate higher (lower) improved credibility of future audit opinions for small (large) firms based on PCAOB inspection reports that contain deficiencies.

METHOD

Participants

Table 1 presents descriptive statistics for the 142 participants included in the final sample and used for statistical analyses. The majority of participants either had investment experience in the stock market or intended to invest within five years (96 percent) and had postsecondary degrees (96 percent).⁷ The majority of the participants had heard of the PCAOB (60 percent), 25 percent of which (15 percent of all participants) had read a PCAOB inspection report. The majority (94 percent) of participants had read a financial statement and 40 percent had read an audit opinion. The average age of the participants was 41 years.⁸

Insert Table 1 about Here

The participants were obtained from three sources: (1) investment clubs; (2) MBA and EMBA classes at a large state university; and (3) civic groups (Exchange Club; Junior Chambers of Commerce). The use of graduate business students as surrogates for

⁷ The use of participants who plan to invest in the next five years is consistent with Hodge (2001).

⁸ None of the demographic variables (e.g., age) significantly affected the results.

nonprofessional investors is consistent with prior research (e.g., Maines and McDaniel 2000; Hodge 2001; Hodge et al. 2004). The civic groups were chosen because these groups often consist of professionals who typically have investment experience. All participants were eligible to enter a drawing for four cash prizes of \$50.

Experimental Design

A 2 x 2 x 2 between-subjects design was used to test the hypotheses. Participants were randomly assigned to one of the eight experimental conditions. Participants in all conditions read a hypothetical PCAOB inspection report that described two deficiencies in the audits performed by a hypothetical firm, and answered questions related to the report to capture their judgments about the firm.

Exhibit 1 presents the levels of the three independent variables. The severity of the deficiencies described in the PCAOB inspection reports (*SEVERITY*) was manipulated as high or low. The firm's response (*RESPONSE*) to the deficiencies identified in the report was manipulated as a concession or denial. The size of the firm that was inspected by the PCAOB (*SIZE*) was manipulated as large or small.

Insert Exhibit 1 about Here

The case materials consisted of four parts. Following the instructions, the second part contained background information about the audit process, the PCAOB and the inspection process, the manipulations described above, and questions to capture participants' judgments about improvement in the credibility of future audit opinions and related measures. The third part contained manipulation checks and questions about the PCAOB inspection process. The fourth part contained questions to obtain the demographic information described above.

Dependent Variables

The primary dependent measure was the nonprofessional investors' anticipated improvement in the credibility of future audit opinions (*FUTOP*) for the firm that was the subject of the inspection report. The item used to measure *FUTOP* asked participants to assess whether the PCAOB inspection process will improve the credibility of the firm's future opinions on a scale ranging from "1 = strongly disagree" to "9 = strongly agree." The experiment also included questions pertaining to the audited financial statements issued during the period that was subject to the most recent PCAOB inspection by the firm's clients, general issues related to audit performance, and the inspection process. These questions were measured using Likert-type 9-point scales.

RESULTS

Manipulation Checks

The case materials were distributed to 171 participants. Manipulation checks were measured using Likert-type 9-point scales because dichotomous expressions could not effectively capture the nature of the manipulations. Participants who did not respond to at least one of the manipulation checks or responded on the extreme ends of the scale in the opposite direction of their conditions (i.e., 1 and 2; 8 and 9) were eliminated. Participants passed manipulation checks as follows: *SEVERITY* (90 percent), *RESPONSE* (97 percent), and *SIZE* (96 percent). For conservatism, participants who failed at least one manipulation check were eliminated, resulting in the elimination of 28 participants (16 percent) and a final sample of 142 participants.⁹

⁹ One participant was eliminated for failing to respond to all questions.

Participant Groups

Table 2 presents means and standard deviations for the responses of each participant group concerning the primary dependent measure, *FUTOP*. There were no differences among the responses of the three participant groups ($F = 0.20, p = 0.82$).

Insert Table 2 about Here

The PCAOB Inspection Process

Several tests were conducted in relation to participants' awareness of the PCAOB and the inspection process to provide preliminary evidence concerning the effects of the disclosures made per the provisions of SOX Section 104 on nonprofessional investors. Of the 84 participants (60 percent) who had heard of the PCAOB, 21 had read a PCAOB inspection report (15 percent of the 142 usable responses and 25 percent of the 84 participants who had heard of the PCAOB). Participants also indicated that, when making investment decisions about the stock of a public company, they are more likely to read the PCAOB inspection report of the company's audit firm after completing the case (Mean (M) = 5.41 on a scale from "1 = never" to "9 = always") than before completing the case ($M = 2.33; t = 16.09, p < 0.01$, two-tailed). Finally, participants in all conditions believed that the PCAOB is better able to evaluate whether an audit firm's audits are performed in compliance with professional standards than the firm ($M = 3.56$ with "1 = PCAOB," "5 = equally able," and "9 = the audit firm").¹⁰

Primary Analyses

Table 3 presents means and standard deviations for the dependent measure (*FUTOP*) by experimental conditions. Panel A of Table 4 presents the results of the ANOVA model

¹⁰ The mean of 3.56 is significantly less than the scale midpoint of 5.00 ($t = 8.69, p < 0.01$, two-tailed).

related to the hypothesis tests. Panel B of Table 4 provides the means and standard deviations for *FUTOP* for each main effect.

Insert Tables 3 and 4 about Here

Hypothesis 1 predicts that nonprofessional investors will anticipate higher (lower) improved credibility of future audit opinions when the PCAOB inspection report contains deficiencies of low (high) severity. Contrary to H1, the main effect of *SEVERITY* is not significant ($F = 1.80$, $p = 0.18$, two-tailed).¹¹

Hypothesis 2 predicts that nonprofessional investors will anticipate higher (lower) improved credibility of future audit opinions when the audit firm responds to the deficiencies identified in the inspection report with a concession (denial). Consistent with H2, the main effect of *RESPONSE* is significant ($F = 5.16$, $p = 0.01$, one-tailed) in the expected direction.

Hypothesis 3 predicts that nonprofessional investors will anticipate higher (lower) improved credibility of future audit opinions for small (large) firms based on the PCAOB inspection reports. Consistent with H3, the main effect of *SIZE* is significant ($F = 2.10$, $p = 0.08$, one-tailed) in the expected direction.

Supplemental Analyses Concerning Firm Responses

The results concerning H2 suggest that nonprofessional investors anticipate higher improvements in the credibility of future audit opinions for firms responding to the PCAOB inspection reports with concessions than with denials. To provide further insight into this finding, participants' assessment of response credibility was examined. Participants assessed higher response credibility for firms making concessions ($M = 6.13$ with "1 = not at all credible" and "9 = very credible") than denials ($M = 5.18$; $F = 6.84$, $p = 0.01$, two-tailed).

¹¹ This p-value is two-tailed because the means are in the opposite direction as the prediction in H1.

This result is consistent with the results of the primary analysis and lends further support for H2.

The firm's response to the inspection report also affected participants' assessments of the firm's motivation to comply with auditing standards. The participants expected firms providing concessions ($M = 6.90$) to be more motivated than firms providing denials ($M = 6.26$; $F = 4.05$, $p = 0.05$, two-tailed). This result is consistent with H2 (the main effect of *RESPONSE* on *FUTOP*).

The supplemental analyses provide additional evidence in support of H2 and highlight two potential benefits of responding to the PCAOB inspection reports with concessions. Relative to denials, concessions improve not only nonprofessional investors' expectations of the improvement in the credibility of the firm's future audit opinions, but also the credibility of the response and the firm's perceived motivation to comply with auditing standards.

DISCUSSION

This paper reports the results of an experiment that examines nonprofessional investors' expectations concerning improvements in the credibility of future audit opinions based on the PCAOB inspection reports. Nonprofessional investors anticipate higher (lower) improvement in the credibility of future audit opinions when firms respond to the deficiencies identified by the PCAOB with concessions (denials). This effect is consistent with psychology research that suggests denials only will improve credibility if evaluators believe the target's position is more credible than the identifier of the deficiency (e.g., Schonbach 1990). The nonprofessional investors in this study indicated that the PCAOB is better able to evaluate audit deficiencies than the inspected audit firms, which may explain the main effect of response type.

Additional research on the effects of response type is needed before final conclusions can be drawn on this issue. For example, future research could investigate the effects of response type on other users of the PCAOB inspection reports (e.g., analysts) or whether there are certain situations in which audit firms can more effectively restore credibility by responding to the PCAOB with denials or other response types.

The results concerning response type may also have implications for psychology research. Prior research concerning account episodes (e.g., Schonbach 1990) examines individual reactions to deficiencies concerning the behavior of, and the ensuing responses provided by, other individuals. The results of this study suggest that individuals evaluate the responses of certain organizations (i.e., audit firms) in a similar manner in which they evaluate the responses of other individuals by favoring less defensive responses (concessions) over more defensive responses (denials).

Nonprofessional investors also anticipate higher improvements in the credibility of future audit opinions of small audit firms than large firms based on the deficiencies identified by the PCAOB. This result is consistent with Beneish et al. (2005), who report that having a large auditor mitigates the negative effect of internal control weaknesses disclosed per section 302 of SOX. This result is also consistent with prior archival research that suggests large audit firms provide higher quality audits than small firms (see Francis 2004), implying that small firms have greater room for improvement based on the results of the PCAOB inspection process.

Finally, the results may have implications for the PCAOB. While the majority of participants had heard about the PCAOB, only 15 percent had read an inspection report. Furthermore, the participants indicated some willingness to read inspection reports when

making future investment decisions. These results suggest that the PCAOB should consider increasing public awareness of its oversight role in the auditing and financial reporting process. Additional research is needed to better understand whether the inspection process provides value to nonprofessional investors and how increased familiarity with the inspection reports would affect nonprofessional investors' perceptions concerning audit firms.

This study's results should be interpreted in light of the following limitations. While the experimental materials were designed to be as consistent as possible with the actual PCAOB inspection reports, a condensed version of the reports were used in the experiment to allow the participants to complete the case materials in a reasonable time frame. In addition, the response manipulation consisted of absolute concessions and denials. In the actual reports, audit firms may concede some deficiencies and disagree with the PCAOB on others.

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TABLE 1
Descriptive Statistics
(n = 142)

<i>Stock Investment Experience</i>		
Prior Investments		77%
Plan to Invest within Five Years		91%
Prior Investments or Plan to Invest		96%
<i>Familiarity with the PCAOB</i>		
Heard of the PCAOB		60%
Read a PCAOB Inspection Report		15%
<i>Familiarity with Accounting Reports</i>		
Read an Audit Opinion		40%
Read a Financial Statement		94%
<i>Postsecondary Degree</i>		
Yes		96%
No		4%
<i>Gender</i>		
Female		32%
Male		68%

TABLE 2
Responses to *FUTOP* by Participant Source
(n = 142)

	Mean	SD	N
Investment Clubs	6.26	1.990	34
MBA/EMBA	6.36	1.664	61
Civic Groups	6.32	1.682	47
<i>OVERALL</i>	<i>6.32</i>	<i>1.740</i>	<i>142</i>

The results do not differ by participant group ($F = 0.196$, $p = 0.822$, two-tailed)

TABLE 3
Responses by Experimental Conditions
(n = 142)

Means, (Standard Deviations), and [Cell Sizes] for FUTOP ^a

RESPONSE		SIZE			
		<i>Large</i>		<i>Small</i>	
		<i>Concede</i>	<i>Deny</i>	<i>Concede</i>	<i>Deny</i>
SEVERITY	<i>High</i>	7.07	5.80	6.73	6.45
		(1.624)	(1.735)	(1.438)	(1.699)
		[15]	[20]	[15]	[20]
	<i>Low</i>	6.05	5.67	6.88	6.17
(1.988)		(1.633)	(1.453)	(1.978)	
		[22]	[15]	[17]	[18]

^a The overall mean, (standard deviation), and sample size are 6.32, (1.740), and [142].

TABLE 4
Hypothesis Tests
(n = 142)

PANEL A: ANOVA Results for *FUTOP*

Variable	Hypothesis	F	p-value^a
<i>SEVERITY</i>	H1	1.800	0.182
<i>RESPONSE</i>	H2	5.157	0.013
<i>SIZE</i>	H3	2.097	0.075
<i>SEVERITY</i> x <i>RESPONSE</i>		0.385	0.536
<i>SEVERITY</i> x <i>SIZE</i>		1.230	0.269
<i>RESPONSE</i> x <i>SIZE</i>		0.294	0.589
<i>SEVERITY</i> x <i>RESPONSE</i> x <i>SIZE</i>		1.873	0.173

PANEL B: Cell Means for *FUTOP*

	Mean	SD	N
<i>SEVERITY</i> (p = 0.182)			
High	6.49	1.681	71
Low	6.15	1.794	71
<i>RESPONSE</i> (p = 0.013)			
Concede	6.62	1.690	69
Deny	6.04	1.751	73
<i>SIZE</i> (p = 0.075)			
Large	6.11	1.812	72
Small	6.54	1.648	70

^a *P-values for RESPONSE and SIZE are one-tailed. All other p-values are two-tailed.*

Variable Description:

FUTOP = Anticipated credibility of the firm's future audit opinions;
measured on a continuous scale from 1 = Strongly Disagree to 9 = Strongly Agree

SEVERITY = Severity of the deficiencies in the most recent inspection report; low or high

RESPONSE = The audit firm's response to the deficiencies; concede or agree

SIZE = The size of the inspected audit firm; large or small

EXHIBIT 1

Independent Variable Levels

SEVERITY

High

On Audit I, ABC's failure to identify, or address appropriately, a departure from Generally Accepted Accounting Principles (GAAP) that related to a potentially material misstatement in the audited financial statements concerning inventory.

On Audit II, ABC's failure to perform and document sufficient audit tests related to the accuracy, existence, and collectibility of accounts receivable.

Low

On Audit I, deficiencies in ABC's documentation of inventory counts.

On Audit II, deficiencies in ABC's documentation of procedures related to accounts receivable.

RESPONSE

Concede

We agree with the PCAOB's findings in the report. We have thoroughly evaluated each matter described in the report and have taken action where appropriate.

Deny

In its report, the PCAOB noted certain deficiencies. We respectfully disagree. We believe that we conducted the audits in accordance with professional audit standards.

FIRM SIZE

Large (Small)

Audit Firm ABC is a large international (relatively small) audit firm that audits approximately 500 (six) public companies annually. Consequently, ABC is inspected every (third) year by the PCAOB.