What's in a Name? The Impact of U.S. Audit Partner Identification on Going Concern Audit Report Modifications

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ABSTRACT: After a lengthy and protracted debate, the Public Company Accounting Oversight Board (PCAOB) adopted new rules and related amendments to its auditing standards regarding the engagement partner and other accounting firms that took part in the audit (PCAOB 2015). The rules require disclosure of the engagement partner's name and information about other accounting firms on new PCAOB Form AP, Auditor Reporting of Certain Audit Participants (Form AP). We investigate the impact of this regulation on audit behavior in the context of the auditor's going concern modification propensity. Consistent with the PCAOB's motivation of enhancing audit partner-specific reputation, we document a reduction in the propensity to issue a going concern modification in the disclosure regime. Our results are sensitive to auditor type. Specifically, only Big Four auditors exhibit a reduction in the going modification rate. Our evidence is consistent with Big Four audit partners using auditor reporting in conjunction with partner identification to establish individual reputations for accuracy rather than conservatism.

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I. INTRODUCTION

After a lengthy and protracted debate, the Public Company Accounting Oversight Board (PCAOB) adopted new rules (Rule 3211 and related amendments commonly referred to as Form AP) to its auditing standards regarding the engagement partner and other accounting firms that take part in the audit (PCAOB 2015). The rules require disclosure of the engagement partner's name and information about other accounting firms on the PCAOB's website, with information provided to the PCAOB using Form AP, Auditor Reporting of Certain Audit Participants (Form AP). The new disclosures allow U.S.-based market participants to identify—for the first time—the individual audit partner who opined on the veracity of a client's financial statements.

During deliberations, two countervailing arguments were consistently communicated by those for and against the Form AP proposal. The first argument concerned heightened litigation risk for individual audit partners (Deloitte 2012, 2009; Ernst & Young 2012, 2009; KPMG 2012, 2009; PwC 2012, 2009). Many voiced concerns that this disclosure could lead to overly conservative partner behavior and that such behavior did not necessarily equate to higher audit quality (DeFond and Zhang 2014). Conversely, proponents – notably the PCAOB – argued that partner disclosure would increase transparency and perceptions of auditor accountability, and the disclosures would motivate audit partners to create a stand-alone reputation, apart from the audit firm for which they are employees.

Recent behavioral and experimental research provides mixed and somewhat contradictory evidence about Rule 3211's impact on audit quality. In a behavioral setting, and contrary to the PCAOB's stated purpose of enhancing audit quality, Cianci, Houston, Montague, and Vogel (2017) find that partner identification yields more aggressive write-down judgments through its negative impact on partners' self-reported measures of commitment to the profession

and, in turn, commitment to the public. In an experimental market setting, Brown, Gissel, and Vitalis (2018) examine the effects of the disclosure and investigate whether greater transparency incentivizes audit partners to build individual reputations for quality, distinct from their firms. These authors find audit quality is higher when the identity of the audit partner is publicly-known than when it is not.

In addition to the mixed results of experimental and behavioral studies, current empirical archival research also generates inconsistent results on this issue. Cunningham, Li, Stein, and Wright (2018) utilize difference-in-difference analyses with separate control groups, including a group of companies that disclosed partner identities before Rule 3211. Cunningham et al. (2018) generally fail to document any significant impact of Rule 3211 on various measures of audit quality, most notably the absolute value of discretionary accruals. In contrast, Burke et al. (2018) use a panel data approach and document a significant increase in audit quality (as proxied by discretionary accruals) in the initial year of Rule 3211 adoption. However, neither study investigates the impact of Rule 3211 on the propensity to issue a going concern audit report modification, another common outcome-based measure of audit quality (DeFond and Zhang 2014). We seek to fill this void by examining whether, and to what extent, Rule 3211 has on the propensity of audit partners to issue a going concern audit report modification.

Notwithstanding the lack of current research on this issue, there are several distinct aspects of the going concern audit report modification setting that can provide unique insights into the impact of Rule 3211 on auditor behavior. First, the going concern reporting decision is solely the responsibility of the auditor (DeFond and Zhang 2014).[1] Other audit quality measures

[1] Moreover, it is unlikely that management would favor a going concern report modification. More specifically, current research documents that going concern audit opinions exacerbate financial distress and represent a self-fulfilling prophecy by expediting subsequent bankruptcies (Gerakos et al. 2016).

such as accruals are a joint product of management and the auditor, which makes disentangling the confounding effects of client characteristics and motives difficult (Cunningham et al. 2018; DeFond and Zhang 2014). Consequently, audit quality must be inferred in the case of accruals. Second, going concern audit reporting errors are straightforward to calculate and do not have *ex post* measurement error (DeFond and Zhang 2014).[2] This is particularly important since prior research demonstrates that reputation building incentives are muted by the lack of perfect information about audit performance (Brozovsky and Richardson 1998). Third, the timely revelation of the audit reporting error is also essential for reputation building (Mayhew 2001).[3] Fourth, the auditor's report is the most direct communication between an auditor and shareholders. All four aspects unique to the audit report modification decision are singularly important considerations for reputation building (Brown et al. 2018; DeFond and Zhang 2014; Datar and Alles 2006; Brozovsky and Richardson 1998).

Finally, during Rule 3211 deliberations, many audit partners expressed concern about the potential litigation contagion effect that Rule 3211 could engender. More specifically, an audit partner responsible for an adverse financial reporting outcome for one audit client could become a more likely target for additional litigation on their other clients – but only in the presence of public disclosure (Lambert, Luippold and Stefaniak 2018). As going concern report modifications reduce the likelihood of litigation (Kaplan and Williams 2013), it would be reasonable to expect audit partners to increase their post-disclosure propensity to modify their audit opinions, regardless of its impact on audit opinion accuracy. This aspect of audit behavior

[2] There are two types of going concern reporting errors. A type I misclassification arises if the auditor issues a going concern audit report and the client does not subsequently fail. A type II error arises when the auditor does not issue a going concern report and the client later fails (Carson, Fargher, Geiger, Lennox, Raghunandan, and Willekens 2013). Carson et al. (2013) document high incidences of both types of reporting error.

[3] Restatements represent another discrete, outcome-based measure of audit quality in which audit quality is unequivocally breached (DeFond and Zhang 2014). However, *ex post* disclosure and revelation of the restatements may lag the original error by several years (DeFond and Zhang 2014).

is also very much endemic to the going concern modification——as opposed to accruals——as audit report *errors* are easily measured, publicly available, attributable solely to the identified audit partner and need not be inferred. Thus, the going concern report modification decision is a powerful test setting that isolates the impact of Rule 3211 on auditor behavior. This setting also amplifies the tension between the two primary and countervailing channels through which Rule 3211 could potentially influence auditor behavior.[4]

To examine our research question, we create a pooled sample of 1,984 financially-distressed firm-year observations that had yet to receive a going concern report modification in the year before or year of Audit Engagement Partner (AEP) identification.[5] We use first time, going concern reporting decisions since the decision model for first time modifications is different from the decision to continue or reverse a prior going concern modification (Knechel, Vanstraelen, and Zerni 2015; Blay and Geiger 2013). We document a structural shift in the propensity to issue a first time, going concern report modification. We interpret this shift as representing a *more accurate, albeit less conservative* auditor reporting philosophy (Carson et al. 2013).

We perform additional tests to examine contextual factors that may modify the impact of AEP disclosure on auditor reporting. First, we separately investigate the AEP identification effect for large versus small audit firms. We find the reputation-building effect is present only for Big Four auditors. That is, we are unable to document any impact of AEP identification on the reporting behavior of audit partners of triennially-inspected firms or 'National' firms. This may

[4] During our sample period, the Financial Accounting Standards Board (FASB) issued ASU 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (FASB 2014). ASU 2014-15 requires that *management* evaluate whether there are conditions that raise substantial doubt about the entity's ability to continue as a going concern. This pronouncement is discussed in more detail in our sensitivity analysis section. Our analyses indicate that our inferences are robust to inclusion of factors likely to be impacted by ASU 2014-15.

[5] Consistent with prior research Blay and Geiger (2013), we define a financially distressed firm as one that has either negative cash flow from operations and/or a net loss.

not be surprising as many of the small, triennially-inspected auditors have few audit partners: the partner's identity were likely publicly known and/or readily available prior to the effective date of Rule 3211. For National Four auditors, many of these audit firms have a limited number of audit partners in specific metropolitan statistical areas (MSAs). Consequently, disentangling the audit firm from the audit partner may not be as difficult as in the case for Big Four audit partners. This is consistent with Carcello and Santore (2015), who argue that Rule 3211 disclosure regime's impact would be greatest for Big Four audit partners.

To sharpen inferences, we next examine the impact of Rule 3211 on the incidence of going concern modification reporting errors. A type I going concern reporting error occurs when a firm receiving a going concern report modification is still in operation twelve months after the effective balance sheet date. If the dominant effect of Rule 3211 is that of reducing litigation, we expect there would be a concomitant reduction in type I errors. A type II going concern reporting error occur when a firm did not receive a going concern modification and subsequently declares bankruptcy in the twelve months after the balance sheet date. If the dominant effect of Rule 3211 is that of reputation building, we would also see a reduction in type II errors resulting from a more accurate assessment of a firm's economic outlook. Consistent with our prediction, we document a reduction in type II reporting errors in the Rule 3211, AEP disclosure environment.

We contribute to the literature by providing initial, U.S.-based evidence on the impact of audit partner identification on auditor reporting. Although our results are generally supportive of a reputation-building prediction, we caution they do not necessarily imply an increase in post-3211 audit quality. DeFond and Zhang (2014) note that the propensity to issue a going concern modification may not be an indication of audit quality, but of auditor conservatism. The risk of erroneously interpreting excessive (reduced) auditor conservatism as increased (decreased) audit

quality is a problem that affects all output-based audit quality proxies (DeFond and Zhang 2014). Our study is no exception.

Our study should be of interest to regulators, auditors, and academics as it indicates that Rule 3211 meaningfully influenced auditor behavior in the form of auditor reporting. Prior research demonstrates that partner going concern reporting styles are partner-specific and remain stable across time (Knechel et al. 2015). Our evidence suggests Rule 3211 was an exogenous shock of the requisite magnitude to significantly shift the fabric of U.S.-based audit partner reporting styles and is consistent with these partners building a reputation for reporting accuracy rather than reporting conservatism. The relevance of our findings are underscored along two dimensions. First, Rule 3211 was not intended to influence the financial reporting process, in which both management and auditors are party to and of which accruals are a product of. Second, if audit partners were attempting to establish reputations, the most direct and salient mechanism to do so would be via auditor reporting.

The remainder of this paper is organized as follows. Section two provides a discussion of the regulatory proceedings surrounding the partner identification ruling and relevant prior research. Section three develops our hypotheses. Section four presents sample selection and research design, while section five discusses the results. Section six concludes.

II. REGULATORY ENVIRONMENT AND PRIOR RESEARCH

II.a The PCAOB's Partner Identification Requirement

After much deliberation, PCAOB Rule 3211, Auditor Reporting of Certain Audit Participants (Form AP), was adopted in 2015. Public accounting firms are required to submit a

Form AP report with the PCAOB for each audit opinion issued (Tysiac 2017).[6] Each Form AP report, including the audit engagement partner's name and other accounting firms participating in the audit, is accessible in a searchable database on the PCAOB's website. The rules related to disclosure of the audit engagement partner are effective for audit opinions issued on or after January 31, 2017 (Tysiac 2017).

The PCAOB based its proposal on two conceptual underpinnings: *accountability* and *transparency*. Accountability is the quality or state that creates an obligation or willingness to accept responsibility for, or to account for, one's actions.[7] The PCAOB argued that public disclosure of the partner's name would provide additional incentives for audit partners to strive for higher audit quality.[8] That is, even if the auditing profession correctly proposes there are sufficient incentives to maintain an audit partner's reputation *within* an audit firm, there still exists another layer of accountability to the users of the financial statements. This additional accountability would lead audit partners to exercise greater due professional care (King et al. 2012).

The PCAOB also asserted that increased transparency would enable users to better assess the quality of the audit (PCAOB 2015). From the perspective of shareholders, auditing is an opaque process and audit quality is inherently unobservable. Thus, since auditing is a service-based industry provided by humans, it is reasonable to believe knowledge about *who* provided

[6] There were two predecessor versions of the partner identification rule. In the original version, the PCAOB proposed inclusion of the AEP's signature in the audit report. The ensuing proposal removed the AEP's signature from the audit report, but still disclosed the partner's name in the report. The auditing industry, most notably the Big Four audit firms, strenuously opposed both of these proposals.

[7] When discussing the concept of accountability, the PCAOB often referenced Section 302 the Sarbanes-Oxley Act (U.S. Congress 2002). The essence of Section 302 states that the CEO and CFO are directly responsible for the accuracy, documentation and submission of all financial reports as well as the internal control structure to the SEC.

[8] During the initial phase of the partner identification regulatory process, the PCAOB cited Cohen, Krishnamoorthy and Wright (2010), who find 68% of *auditors* believed that CEO/CFO certification requirement has improved the integrity of financial reports (PCAOB 2009).

the service would be informative to shareholders (King, Davis, and Mintchik 2012). Because users typically relied on brand names and other audit quality proxies, the PCAOB believed that partner identification would provide financial statement users a better gauge of audit quality.[9]

The combination of accountability and transparency creates the potential for reputation building by individual partners. Without identification, audit partners and their reputations are absorbed into their respective audit firms, leaving shareholders to rely on audit quality proxies. These proxies may vary at the audit firm or office level or be engagement-specific. Conversely, individual and public identification allows audit partners to signal *to* market participants their respective auditing abilities, permitting for a partner-level indicator of audit quality.

In general, the auditing industry has disagreed with the partner identification requirement. Several audit firms noted the potential for unintended consequences such as audit partner 'guilt by association,' overly defensive auditing with a suboptimal increase in audit costs and voluntary audit partner turnover (PCAOB 2015). While several audit firms voiced various forms of unintended consequences, all Big Four audit firms communicated concerns about additional litigation risk created by partner identification during the rulemaking process. Form AP quelled much, but not all, of these litigation-related concerns.[10,11] The PCAOB admits that while 'the

[9] The PCAOB believed additional transparency should also increase accountability at the audit firm level (PCAOB 2015). The PCAOB noted that audit firms have been lax with respect to the assignment of engagement partner and that transparency will motivate audit firms to be more circumspect with the matching of engagements to audit partners.

[10] The PCAOB argued that Form AP disclosures would not raise potential liability concerns under Section 11 of the Securities Exchange Act of 1934 or trigger the Section 7 consent requirements because the engagement partner would not be named in a registration statement or in any document incorporated by reference into one. Generally speaking, the Big Four audit firms agreed with this assertion (Ernst & Young 2015; KPMG 2015; PwC 2015). However, Deloitte (2015) averred that 'We continue to believe that providing information related to the engagement partner and other participants in the audit in the auditor's report would trigger the consent requirement of Section 7 and, thereby, subject named parties to potential liability under Section 11 of the Securities Act.'

[11] EY (2015) noted their '(c)oncern with potential liability under Section 10(b) and Rule l0b-5 of the Securities Exchange Act as expressed in prior comments would remain.' In contrast, PwC (2015) stated 'We do not believe that identifying engagement partners or other audit participants on Form AP will significantly affect the possibility of a claim against these persons under section 10(b) of the Securities Exchange Act.'

ultimate resolution of…liability is outside of its control,' it 'does not believe any such risks warrant not proceeding with the Form AP approach' (PCAOB 2015).

II.b Prior Partner Identification Research

Of the twenty largest countries (measured by market capitalizations), sixteen have some form of audit partner identification. Data availability in these countries has given rise to a plethora of audit partner identification studies (PCAOB 2015). However, U.S. capital markets are unique in the degree of litigiousness and, as King et al. (2012) note, the PCAOB did not, and could not, cite existing empirical U.S.-based evidence to support its position.

In response to the lack of U.S.-based evidence, prior research generally focuses on the two primary channels through which partner identification is hypothesized to influence partner behavior: reputation building and litigation risk. Brown et al. (2018) examine whether partner identification incentivizes audit partners to build individual audit quality reputations distinct from their audit firm. They find that in the partner identification market, partners accepted higher risk clients and reported *less* aggressively with greater reporting accuracy. The authors reason that their results are consistent with the PCAOB's position that partner identification may lead partners to create separate reputations for audit quality.

Carcello and Santore (2015) develop an analytical model in which an identified audit partner determines the level of resources devoted to the audit and whether to report aggressively on financial statements of inconclusive reporting quality. They note that identification shifts reputational consequences of reporting decisions from the firm to the partner, potentially causing the partner to become excessively, and suboptimally, conservative. They also conclude that the reputational effect will be more pronounced in larger firms since the partner was mostly anonymous and exposed to a smaller share of the reputational burden before identification.

Two experimental papers provide additional insight into the relationship between auditor reputation building and auditor reporting. First, Mayhew (2001) uses an experimental setting to show that reputation building for audit quality occurs when the market immediately rewards auditor effort. Interestingly, he also finds that reputation building occurs less when the market has a delayed reward for auditor effort, suggesting that reputation building occurs when there is immediate external recognition of the audit effort. This is a particularly important consideration as an auditor reporting error will be revealed within one year, which is not the case with accruals. Second, Brozovsky and Richardson (1998) focus on information availability and its relationship to audit firm reputation. They find that when market participants (consumers of audit services) must infer the quality of an audit, it was more difficult for auditors to charge incremental fees for their reputation for audit quality. While audit firms are not the focus of our paper, their results suggest that individual auditors will lack the incentive to build a reputation when the market cannot readily assess the quality of services provided.

Combined with the result from Mayhew (2001), the results from Brozovsky and Richardson (1998) suggest that the difficulty and time delay of clients determining audit quality *ex post* will influence the auditor's incentive to build a reputation for audit quality. AEP identification corresponding to the issuance of an audit opinion drastically decreases the information asymmetry between auditors and consumers of audit services since consumers can gauge audit partner accuracy quickly and without error. If audit partners are aware of this, this also creates the opportunity for partners to signal to the market via their audit reporting accuracy.

The other channel through which Rule 3211 may influence audit partner behavior is via litigation risk. Litigation risk has historically been a singularly important factor in shaping the American auditing industry, irrespective of partner identification. At issue is whether Rule 3211

potentially introduced an additional layer of litigation risk among audit partners. In particular, concerns about 'litigation contagion' where potential litigants could use adverse outcomes from one client and transfer those same issues to another client audited by the same partner. Along these lines, Lambert, Luippold, and Stefaniak (2018) investigate how investors use audit partner disclosures in an investment setting. These authors utilize a hypothetical 'contaminated' company and ask participants how likely they would be to invest in another, uncontaminated company audited by the same partner. Lambert et al. (2018) find that investors are less likely to invest their resources into a company linked to a contaminated firm when the link is established through a shared audit partner than when the link is established only through a shared audit firm. Their evidence supports an information transfer to investors about an audit partner's audit quality, warranted or not. Moreover, the evidence is consistent with Rule 3211 introducing an incrementally stronger linkage or information transfer about poor audit quality.

The manipulated contamination in Lambert et al. (2018) was a restatement of the financials. Restatements, like audit report errors, are not prone to measurement error. However restatements, unlike audit report errors, are related to both management and the auditor's efforts. The evidence of Lambert et al. (2018) indicates partner identification can have potentially disadvantageous aspects in the sense that investors' perceptions of a company's financial statements may be tainted by a reporting failure at an unrelated company if there is a shared auditor. To wit, an audit report error is the sole responsibility of the audit partner, easily and precisely measured, and revealed in a timely manner. All of which make an auditor reporting error an attractive heuristic for plaintiff attorneys. However, these attributes about auditor reporting errors are asymmetric (Carson et al. 2013; Kaplan and Williams 2013): failure to modify the opinion of a subsequently bankrupt company (type II error) triggers far greater

litigation than if a 'going concern' company remains in operation a year past the balance sheet date (type I error).

If audit partners believe that market participants (a) use reporting outcomes incorrectly to assess audit quality at the partner level and (b) are more likely to project this audit quality assessment onto other clients, it may create additional incentives to adopt an overly conservative reporting style. In other words, by being overly conservative with the reporting of their financially distressed audit clients, partners can defuse potential litigation pertaining to their non-financially distressed clients. Consistent with this view, Francis, Michas, and Yu (2013) find a "contagion" effect suggesting that offices with clients that restate their financials tend to have other clients with signs of lower audit quality. Given their findings, it is reasonable to infer that this effect may apply to individual partners as well.

II.c. Going Concern Reporting and Related Research

Auditing Standard AU 341 (PCAOB 2010) requires auditors to modify their audit opinions when there is substantial doubt about the client's ability to continue as a going concern for twelve months past the balance sheet date. However, AU 341 does not explicitly define the term 'going concern:' it provides auditors guidance to determine whether the going concern assumption is satisfied. Thus, the decision to modify the audit opinion of a financially stressed company involves gathering and considering a great deal of relevant information and exercising professional judgment. There are potential consequences for incorrectly modifying or not modifying an audit opinion. Failure to modify an opinion for a firm that later goes bankrupt (referred to as a type II error) may result in litigation against an auditor (Kaplan and Williams 2013; Carson et al. 2013). Issuing a going concern opinion for a firm that does not subsequently enter bankruptcy (referred to as a type I error), can result in client losses for the auditor (Carson

et al. 2013). For these reasons, auditor going concern decision-making involves economic trade-offs, such as the cost of losing a client, the expected cost of being exposed to third-party lawsuits, and the potential damage to the auditor's and audit firm's reputation (Louwers 1998; Watts and Zimmerman 1986; DeAngelo 1981).

Prior research has documented that *changes* in the going concern modification rate are sensitive to *changes* in both regulatory oversight and perceived litigation risk. Gramling, Krishnan, and Zhang (2011) test whether non-Big Four auditors are more likely to issue going concern audit reports after a PCAOB inspection. They find that auditors receiving unfavorable inspection reports are more likely to issue going concern audit reports following their inspections. Geiger and Raghunandan (2001) posit the Private Securities Litigation Reform Act of 1995 (PSLRA) reduced the threat of litigation against auditors. They find the proportion of bankrupt companies receiving a prior going concern modification was 59 (45) percent in the periods before (after) the PSLRA.

In sum, the extant literature suggests that auditor going concern report modification rates are sensitive to external changes – real or perceived – in regulation and litigation risk. Rule 3211 represents a real, previously unavailable change in the opportunity for audit partners to build their individual reputations. However, it is not a necessary precondition to empirically demonstrate that Rule 3211 generated a real change/increase in litigation rates against audit partners to motivate our research question. Instead, it is sufficient that audit partners perceive enough of a Rule 3211-driven change in potential contagion-related litigation rates to compel a change towards a more conservative report modification style (Francis, Michas and Yu 2012).

III. HYPOTHESES DEVELOPMENT

The impact of partner identification on audit partner reporting is not unambiguous. If the perceived increase in litigation risk (reputation building) is the dominant effect, we would expect to see an increase (decrease) in the propensity to issue a going concern report modification. Given the lack of U.S.-based empirical evidence, combined with the conflicting accruals-based evidence of Cunningham et al. (2018) and Burke et al. (2018), we do not have an *a priori* prediction concerning the relationship between audit partner identification and auditor reporting. Thus, our first hypothesis is not directional and is given below (in null form):

Hypothesis One: Form AP regulation will not influence an audit partner's propensity to issue a going concern report modification.

There are two assumptions underpinning hypothesis one. First, we assume that in both the disclosure and non-disclosure settings, an individual audit partner decided to either modify or not modify the audit report. The assumption that – even if empirically unobservable in the non-disclosure setting – an individual audit partner ultimately decided to modify (not modify) an audit report is consistent with prior research and Generally Accepted Auditing Standards (GAAS). Second, we assume that audit partner identification did not materially affect auditor partners' competence or ability to process information when formulating their audit opinions. By assuming a constant level of auditor competence, we isolate the two countervailing effects of partner identification on auditor independence. Therefore, rejection of the null form of hypothesis one is attributable to either an increase in perceived litigation risk or an effort to establish a partner-specific reputation.

Our second hypothesis relates to a particular group of auditors. Prior research has consistently demonstrated that Big Four auditors have greater litigation risk due to both their 'deep pockets' and greater effort to maintain their reputations (DeAngelo 1981). As a result, the effect of partner identification on Big Four auditor behavior may be distinct from that of other

auditors. For example, since many of the non-Big Four auditors either have very few partners auditing publicly held companies, or few partners in a particular office, a partner's identity is likely already publicly known. This is not true for the partners of Big Four audit firms. Consequently, the relative impacts – and the change therein – of the countervailing forces of partner identification (i.e., litigation risk and partner reputation) may be different for Big Four audit partners. As was the case in our first hypothesis, we do not have an *a priori* prediction about the impact of partner identification on Big Four auditor reporting behavior. Consequently, our second hypothesis is non-directional and given below (in null form):

Hypothesis Two: Form AP regulation will not affect Big Four audit partners' propensity to issue a going concern report modification.

IV. SAMPLE SELECTION AND RESEARCH DESIGN

IV.a. Sample Selection

Details regarding the sample selection process are shown in Table 1 Panel A. We create two samples, one for each of our hypotheses. Our full (Big Four) sample initially contains all observations in the Compustat database with a fiscal year-end of December 31, 2015 to December 30, 2017 yielding a sample size of 22,130 (15,625). We exclude 6,486 (4,625) observations with foreign incorporation given that partner identification was already available in many of the foreign jurisdictions. We also remove 7,703 (6,257) firms in the financial services industry (SIC code 6000-6999) (Blay, Moon, and Paterson 2016). Consistent with prior research investigating elements of the going-concern decision process, we limit our analyses to distressed firms (DeFond, Raghunandan, and Subramanyam 2002, Blay et al. 2016). Financial distress is

defined as a negative value for either operating cash flows or income before extraordinary items (Li 2009; DeFond et al. 2002).[12] This reduces our sample by 3,457 (2,610) observations.

Going concern opinions are identified using the Audit Analytics audit opinion database. Since our study focuses on the decision to issue a *new* going concern opinion, we exclude 596 (331) companies without an audit opinion for both periods t and t-1. We further remove 194 (65) companies that received a going concern opinion for period t-1. Carey and Simnett (2006) show that a lack of client familiarity increases the propensity to issue a going concern opinion so we remove 181 (49) firm-years with a new auditor. Finally, to avoid problems attributable to scaling by small denominators, we exclude companies with missing asset values or companies that report total assets of less than $1 million at the end of the fiscal year. The final sample consists of 1,984 (1,322) financially distressed firm-year observations.

Table 1 Panel B provides the distribution of observations by industry in both sample periods. Industry representation is consistent in both disclosure periods and samples. Pharmaceutical firms represent the largest portion of financially distressed firms followed by computer, durable goods, and extraction firms, respectively. Anecdotally, this is likely a result of a more robust economy and an increase in the number of first-time going concern opinions issued in the pre-disclosure period rather than something systematic about the pharmaceutical industry.

[Insert Table 1 here]

IV.b. Research Design

We hypothesize that the AEP disclosure will impact a partner's decision to issue a going opinion. To test this assertion, we model the likelihood of a firm receiving a going concern

[12] In sensitivity analysis, we define financial distress as firm-years with negative values for both operating cash flows and income.

modification conditional on whether the AEP is identified in the PCAOB database. The logistic regression model is shown below:

$$P\left(Going\ Concern_{i,t} = 1\right) = \beta_0 + \beta_1 After_{i,t} + Controls_{i,t} + \varepsilon \qquad (1)$$

The dependent variable in the model is an in indicator variable coded '1' if the auditor issued a going concern opinion for the firm, and zero otherwise. Our variable of interest is an indicator variable labeled *After* which is coded '1' for firm-year observations during the disclosure period (i.e., reports issued on or after January 31, 2017), and coded '0' for observations preceding the disclosure period. A statistically significant positive (negative) coefficient on *After* suggests the likelihood of issuance of a going concern modification increased (decreased) once AEP identification was required, which would support rejection of the null hypothesis.

Controls is a vector of control variables known to influence the propensity to receive a going concern modification. To control for the differential propensity to modify audit opinions between Big Four and non-Big Four auditors (Blay and Geiger 2013), we include an indicator variable for observations audited by a Big Four auditor (*Big4*). Carey and Simnett (2006) find that a longer auditor-client relationship is associated with a lower propensity to issue a going concern. To control for differences in auditor tenure, the natural logarithm of the number of years the auditor has been auditing the firm (*LnTenure*) is included in the model.

We also control for several client-specific characteristics. Given that financial distress is a primary driver of going concern modifications, we include the Altman's Z-Score (*Z_Score*), which is a predictor of the probability that a firm will go into bankruptcy within two years (Altman 1968). The natural logarithm of total assets (*LnTA*) is included in the model because larger firms are more likely to avoid bankruptcy through negotiation with creditors (Read and

Yezegel 2016; Blay et al. 2016). We also include the natural logarithm of the firm's age because younger firms are more likely to fail (Dopuch, Holthausen, and Leftwich 1987).

To control for the financial health of the firm, we include *Leverage*, the change in leverage (*Cleverage*), the current ratio (*Cratio*), return on assets (*ROA*), an indicator for prior year's negative earnings (*LLoss*) and operating cash flows (*Cashflow*) since these financial measures influence the likelihood of going concern opinions (Blay et al. 2016). As these measures are indicative of financial health, we expect that as these measures worsen, the likelihood of a going concern report increases. Issuance of new debt (*NewDebt*) suggests the ability to pay future interest and principal payments, and the ability to extinguish other debts (Li 2009). We expect that firms issuing new debt will be less likely to receive a going concern audit report. Negative equity (*NegEquity*) suggests prolonged financial distress and should be positively associated with a going concern audit report (Li 2009). The model also includes an indicator if the firm is in default (*Default*) and an indicator for the identification of material weaknesses (*MatWeakness*), since both disclosures indicate a higher likelihood of a going concern modification (Read and Yezegel 2016). We control for the time between the end of the fiscal year and the issuance of the audit report (*RptLag*) because audits of financially distressed clients are more time consuming, and auditors tend to delay issuance of reports modified with going concern opinions (Chen and Church 1992; Geiger et al. 2005; Blay et al. 2016). We control for the ratio of nonaudit service (*NAS*) fees to audit fees (*FeeRatio*) because prior research has hypothesized a link between the payment of NAS fees and lower levels of going concern reporting (DeFond et al. 2002). Prior literature suggests that going concerns are associated with market measures (Blay and Geiger 2013; Blay et al. 2016), therefore we include the firm's stock market return. A firm's debt rating represents the cost of borrowing and the

firm's ability to access funds in a time of distress. To control for differences in credit ratings, we include the S&P domestic long-term issuer credit rating.[13] We also include the Rogers and Stocken (2005) litigation model to control for any change in shareholder litigation across the two periods. Finally, partners at the same firm are likely to exhibit similar tendencies due to standardize recruiting and training practices. To avoid violating the independence assumption, we cluster standard errors by audit firm.

V. RESULTS

V.a. Univariate Results

Descriptive statistics are presented in Table 2. The going concern modification rate is 6.2% in the pre-disclosure regime and 5.0% in the post-disclosure regime, which is consistent with the rate reported in Li (2009). We find a similar effect for the Big Four sample except the magnitude of the difference becomes larger. In the pre-disclosure regime, the going concern for Big Four clients is 4.4%, but the rate decreases significantly to 2.9% in the post-disclosure regime ($p = 0.07$) which is consistent with a reputation building effect. Overall, the descriptive statistics support the theory that disclosure of the audit partner's name led to reputation building and is inconsistent with an increase in perceived litigation risk

Examining the control variables in the model, we find minimal inter-period differences. Firms in our sample are mature with a median age of 12 years and have been audited by the same auditor for the past five years. They also have few assets (median total assets of $266 ($232) million in the pre- (post-) disclosure period) and reported significant losses (return on assets of -14% (-12%) in the pre- (post-) disclosure period) supporting our assertion that the firms are

[13] Many of the firms in are sample are not listed in the Compustat S&P Ratings database. If the firm does not have a debt rating in the S&P database, the firm is assigned the selective default rating. A selective default rating means that Standard & Poor's believes the obligor has selectively defaulted on a specific issue but will continue to meet its obligations on other issues.

financially distressed. Comparing the pre- to post- disclosure periods, we find four areas of difference. First, firms in the post-disclosure period have significantly lower cash flows relative to firms in the pre-disclosure. Second, firms in the post-disclosure period were significantly more likely to report a material weakness. Third, firms had significantly higher returns in the post-disclosure period relative to the pre-disclosure period which is likely to differences in the overall economy.[14] Finally, companies in the post-disclosure period had significantly lower credit ratings in the post-disclosure period relative to the pre-disclosure period. Overall, these findings do not suggest a significant different between the pre- and post-disclosure samples. While we find some differences across the two periods, there is no consistent evidence that firms in one period are more distressed than firms in the other period. [Insert Table 2 here]

Table 3 presents the Pearson correlation matrix for the variables used in the study. Consistent with our univariate results, that propensity to issue a going concern opinion is not correlated with our indicator for the post-disclosure period (*After*). We also find that a going concern opinion is positively associated with higher debt (*Leverage*) and an increase in debt (*Cleverage*), a loss in the prior period (*LLoss*), negative equity (*NegEquity*), a default on debt (*Default*), a material weakness in the internal controls (*MatWeakness*) and greater lag in completing the audit (*RptLag*) and a lower bond rating (*BondRating*). A going concern opinion is negative associated with a Big Four auditor (*Big4*), a higher Altman's Z-score (*Z_Score*), size of the firm (*lnTA*), liquidity (*Cratio*), return on assets (*ROA*), cash flows from operations (*Cashflow*), and returns (*Ret*). The remaining variables appear to be correlated in the predicted directions. While several variables are highly correlated ($\rho > 0.50$), tests for multicollinearity

[14] The S&P 500 has an annual return of 11.96% for 2016 and an annual return of 21.83% for 2017.

indicate that variance inflation factors (VIF) never exceed 10, and in most cases are less than 2. Multicollinearity does not appear to be a significant problem in any of our models.

[Insert Table 3 here]

V.b. Multivariate Results

Table 4 presents our logistic regression results for the full sample of firms. For purposes of these analyses, we separate our sample into three groups: (1) Pre-disclosure, (2) Post-disclosure and (3) pooled Pre- and Post-Disclosure. The results indicate that our regression model does a reasonably good job of predicting a going concern decision with a pseudo R^2 is 45.3%, 53.1% and 46.4% across the three samples.[15] This compares favorably to Geiger and Blay (2014) whose regressions exhibit a pseudo R^2 of in the range of 30% to 40%.

Given that we find similar results in columns (1) and (2) and that the result are generally consistent with expectations, we focus our discussion on column (3) of Table 4 (the pooled sample). Our coefficient estimates for our variable of interest, *After*, is negative and significant, suggesting audit partners are less likely, relative to the pre-disclosure period, to issue a going concern modification. This finding is inconsistent with our null hypothesis and suggests that auditors are using the disclosure of their name as a way to build their reputations. The coefficient estimates for our control variables are in the predicted direction when significant. The likelihood of receiving a going concern is positively associated with a firm's debt level (*Leverage*), increased debt (*Cleverage*), a default on the firm's debt (*Default*), a delay in completing the audit (*RptLag*), and a lower bond rating (*BondRating*). The likelihood of receiving a going concern decrease for firms with a higher Altman's Z-score (*Z_Score*), larger firms (*lnTA*), more profitable firms (*ROA*)and firms with higher returns (*Ret*). We note there does not appear to be a

[15] The area under the ROC curve is between 0.93 and 0.95, suggesting excellent discrimination (Hosmer and Lemeshow 2000) and consistent with other studies focused on the propensity to issue a going concern opinion.

statistically significant Big Four effect on the propensity to issue a going concern modification in any of the models. This lends support for our second hypothesis, examining the effects of Form AP on Big Four audit clients.

[Insert Table 4 here]

Table 5 presents our univariate and logistic regression results incorporating an interaction term to focus on the differences for clients of Big Four auditors and non-Big Four auditors in the post-disclosure period. Table 5 Panel A provides a breakdown of the going concern opinions in our sample by Big Four auditor. The percentage of firms receiving a going concern opinion (*Going_Concern*) declined in the post-disclosure period for all Big Four auditors, expect PwC. However, we are only able to reject the null hypothesis for clients of KPMG (p= 0.06). The final columns report the total change across all Big Four auditors. When we consolidate the clients of all Big Four firms, we find a significant change in the going concern rate. The going concern rate declined 34%, falling from 4.42% to 2.90%.

Table 5 Panel B presents the results of our logistic regression model with an interaction for clients of Big Four and non-Big Four auditors in the post-disclosure period (*After* × *Big4* and *After* × *NonBig4*). The coefficient estimate on *After* × *Big4* interaction, our variable of interest, is negative and significant (*After* × *Big4* = -0.6845, $p < 0.05$), suggesting Big Four audit partners became less conservative in the partner disclosure environment. The coefficient corresponding to the after period for non-Big Four auditors (*After* × *NonBig4*) is not significantly different from zero, suggesting the results from the main model are driven by clients of Big Four audit firms.

[Insert Table 5 here]

V.c. Additional Analyses

Our supplemental analysis section focuses on two additional issues: the impact of Rule 3211 on auditor reporting accuracy and the impact of management's assessment of the going concern assumption. Each will be discussed separately.

Our analysis indicates that Rule 3211 reduced the going concern modification rate for financially distressed companies. To the extent that Rule 3211 increased the predictive accuracy of auditor reporting, we examine type I and type II reporting error rates in the pre- and post-3211 environments. type I reporting errors occur when the auditor issues a going concern report modification but the firm is still in operation twelve months after the effective balance sheet. type II reporting errors occur when an auditor fails to modify the opinion for the going concern uncertainty, but the firm declares bankruptcy. Our bankruptcy data is obtained from the Audit Analytics bankruptcy notification database. Table 6 presents univariate statistics for both types of errors for the set of sample audit reports.[17] In both cases, there is a reduction in the post-3211 error rate. While there is a lower type I error rate in the Rule 3211 setting, the low number of observations and resultant reduction in statistical power likely influenced our insignificant result. However, for type II error rates, there is an economically and statistically significant reduction in the error rate. Given that auditors have been historically overly conservative in issuing going concern report modifications (Carson et al. 2013), this evidence suggests that Rule 3211 affected auditors' reporting behavior and in a direction that suggests a concern for audit reporting accuracy. This concern and result is consistent with a reputation-building effect espoused by the PCAOB.

[Insert Table 6 here]

[17] The Audit Analytics bankruptcy notification database only has bankruptcy notifications through October 15, 2018. We exclude a small portion of our sample that has a balance sheet date after October 15, 2017.

In 2014, the Financial Accounting Standards Board (FASB) issued ASU 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, which amends ASC 205, *Presentation of Financial Statements,* specifically ASC 205-40. This ASU requires that *management* evaluate whether there are conditions that raise substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued. This was previously the sole domain of the auditor. If there is substantial doubt, ASU 2014-15 provides the required disclosures, which vary depending on whether management has a plan to mitigate the doubt and whether or not the successful implementation of that plan is probable. If it is not probable that management will be able to effectively implement its plan or if it is not probable that the plan will mitigate the relevant conditions that gave rise to the substantial doubt, the entity should also disclose a statement indicating that there is substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued. The effective date of implementation was for fiscal year ends occurring after December 15, 2016. Consequently, the standard may confound the evidence provided thus far.

In particular, ASU 2014-15 may have compelled management to take a more proactive approach in generating plans to mitigate the adverse conditions of financial distress. Behn et al. (2001) find strong evidence that the disclosure of explicit management plans to address going concern conditions are associated with a decreased likelihood of receiving a going concern audit report modification. To the extent that our results are a function of management's actions, rather than the impact of partner identification, our inferences could be jeopardized. To address this, we hand-collected 10-K (10KSB) disclosures pertaining to (a) the formal adoption of ASU 2014-15 (b) management's assessment of the going concern assumption (c) management's plan to address

the conditions arising from potential violation of the going concern assumption and (d) management's conclusion about the firm's ability to continue as a going concern.

Because of the concurrent 10-K disclosures, there are four potential combinations of management and auditor going concern assessments. In two of the four, management and auditor are in concordance with each other (i.e. both management and auditor assess that there is substantial doubt about the firm's ability to continue as a going concern or both parties assess that there is not substantial doubt/management's plans are adequate to address the conditions over the next 12 months). There are potentially two other combinations of management/auditor assessment of going concern status. In these cases, there is management/auditor disagreement (i.e., management does not believe there is a substantial doubt, whereas the auditor does believe there is substantial doubt and vice versa). However, we find that there are zero observations whereby there is a management/auditor disagreement about the going concern assumption.[18] Consequently, for our observations there is 100% agreement between management assessment and auditor reporting.

In cases of a going concern report modification, management assessments almost universally mirrored the considerations/conditions cited by the auditor in the audit report. That is, when management assessed and disclosed that there was significant doubt about the firm's ability to survive as a going concern, the three most common cited reasons were recurring losses from operations, accumulated deficits and difficulty in obtaining financing. Consistent with Krishnan et al. (2018), we document overwhelming overlap (approximately 93%) in the reasons

[18] The mainstream financial media (McKenna 2017; https://www.marketwatch.com/story/why-sears-but-not-its-auditor-gave-a-going-concern-warning-2017-03-22) misreported that, in its 2016 10-K, Sears' management assessed and disclosed substantial doubt about the going concern assumption, but that its auditor, Ernst & Young, disagreed and issued a standard, unmodified audit opinion. Sears disclosed that there was substantial doubt about the going concern, but that its plan to address the going concern assumption was sufficient to fund alleviate this doubt. Ernst & Young issued a standard, unmodified opinion and Sears was still in operation on 12/31/2017.

given by the auditor and management. In cases where management assessed that there did not exist doubt about the going concern assumption, a very large majority of firms (in excess of 80%) would simply reference the Liquidity section of the 10-K.[19]

In concluding that the firm will remain going concern for the ensuing twelve months, management has two potential avenues. First, management could conclude that current conditions (most notably a net loss) do not create substantial doubt about the firm's going concern status. Alternatively, management could conclude that the current conditions give rise to substantial doubt, but that the plans to mitigate the conditions are adequate enough to ensure firm survival for the subsequent 12 months.

We also fail to document an increase in the incidence of management plans to address the conditions surrounding financial distress. We find that 2.9%/3.6%/2.1% disclosed plans to issue more equity/issue more debt/reduce expenditures in the pre-disclosure setting. This compares to 4.4%/4,2%/1.8% disclosed plans to issue more equity/issue more debt/reduce expenditures in the post-disclosure setting, with none of the differences being significant at conventional p-values. However, there may have been an inter-temporal shift in the auditor's consideration of the plans in the post-disclosure setting. That is, auditors may have more heavily weighted management plans in their going concern report modification process in the post-disclosure environment. In this case, our observe reduction in the going concern modification rate would not be attributable to Rule 3211, but rather to an increased emphasis by the auditor when considering management's plan to address financial distress. To address this possibility, we included dichotomous variables

[19] For these firms, the ASU 2014-15 footnote disclosure generally stated 'the firm has adopted this standard and its adoption did not have a material impact on our financial statements.' In the Liquidity section, the firm would typically disclose 'we believe our cash flow from operations and our existing cash on hand will be sufficient to fund our operations for the next twelve months'.

representing the disclosure of these plans in our regressions using the definitions found in Behn et al. (2001). Inclusion of these variables did not alter the results reported in Table 5.

VI. CONCLUSION

In this paper, we investigate whether, and to what, extent the disclosure of audit partner identity has on auditor behavior. The research question is motivated by the protracted and contentious regulatory process surrounding the PCAOB's Auditor Reporting of Certain Audit Participants requirement. While proponents (generally the PCAOB) expressed a desire for greater accountability and transparency, opponents (generally the auditing lobby) voiced concerns about additional litigation costs at the individual partner level.

Our examination centers on the auditor partner's decision to issue a going concern report modification. The primary analysis is based upon a comparison of pre-disclosure audit reporting behavior to post-disclosure audit reporting behavior for samples of financially distressed clients. We believe the research setting provides several advantages to address the competing sides of the partner identification issue. Namely, auditor reporting is the solely the responsibility of the auditor, going concern modifications provide a relatively precise measure of auditor accuracy, and it is relatively straightforward to capital market participants to gauge audit partner accuracy. Our evidence indicates that the partner identification requirement modified the audit reporting behavior of a particularly important constituent: Big Four audit partners. Our tests reveal that Big Four audit partners become relatively less conservative in the post-disclosure setting, representing a convergence toward the historical rate of eventual delistings on the part of registrants. In other words, auditors that had been historically been overly conservative with their audit reports for financially distressed clients became less so. In the process, these audit partners became more accurate with their auditor reporting.

As is the case with many studies, our paper has limitations, of which two merit additional discussion. One limitation of our study is that we are unable to directly observe the audit partner going concern reporting process. As such, we infer audit partner behavior using a test setting that only utilizes the output of the auditing process, namely the audit report. Prior research has almost universally adopted a research design similar to the one employed in the current study. The audit partner going concern reporting process therefore remains somewhat of a 'black box' in this regard. Second, our evidence does not speak to the potential relevance of audit partner identification to market participants. One rationale given in support of a signature or disclosure requirement was to provide increased transparency about the audit, which should enable users to better assess the quality of the audit and allow audit partners to create a 'track record' of sorts (PCAOB, 2009, 2011). Our study only speaks to the change in auditor reporting and concomitant increase in accuracy of audit reporting in the post-disclosure regime and does not examine whether investors found the partner disclosures relevant. Prior research using other international contexts address this issue with mixed results.

The evidence is consistent with a reputation-building effect on the part of Big Four audit partners. This concept was championed this concept by the PCAOB during the partner identification deliberations. While our study is the first to provide evidence on the auditor reporting effect of partner identification on U.S.-based audit partners, we recognize that our paper represents only a fraction of the research that needs to be conducted to more fully understand the consequences, costs, and benefits of audit partner identification in the United States. We hope that our paper provides an impetus for future research in this area.

Appendix 1
Variable Definitions

Variable	Definition
Going_Concern	An indicator equal to 1 for firm-year observations whose auditor expressed a going concern modified opinion, and otherwise equal to 0.
After	An indicator equal to 1 for firm-year observations with an audit report of January 31, *2017* and later, otherwise equal to 0.
Big4	An indicator equal to 1 for firm-year observations that had a Big Four audit opinion, and otherwise equal to 0.
lnTenure	The natural log of the length, in years, of the auditor-client relationship.
Z_Score	The likelihood of corporate failure, proxied by Altman's Z-Score (Altman 1968). Z-Score values *are converted* into deciles from 0 to 9.
lnTA	The natural log of total assets for the firm (Compustat AT).
lnAge	The natural log of the age, in years, of the firm.
Leverage	Leverage, calculated as the ratio of total liabilities to total assets (maximum value of one).
Cleverage	Change in leverage, calculated as the change in leverage from year *t-1* to *t*.
Cratio	The current ratio, calculated as *ratio* of current assets to current liabilities.
ROA	Return on assets, calculated as earnings scaled by total assets.
LLoss	An indicator equal to 1 for firm-year observations with negative earnings in the prior fiscal year (*t-1*), and otherwise equal to 0.
NewDebt	An indicator equal to 1 for firm-year observations with issuance of new debt, and otherwise equal to 0.
NegEquity	An indicator equal to 1 for firm-year observations with a negative value for total equity, and otherwise equal to 0.
Cashflow	Operating cash flows, scaled by total assets.
Default	An indicator equal to 1 for firm-year observations in which the firm is in default (if the firm had long-term debt in period t-1, zero long-term debt in period t, and an increase in long-term in current liabilities for period t), and otherwise equal to 0.
MatWeakness	An indicator equal to 1 for firm-year observations in which the firm received a material weakness, and otherwise equal to 0.
RptLag	The amount of time, in days, between the fiscal year-end date and the date of the audit opinion.
FeeRatio	The proportion of fees attributable to non-audit services, calculated as non-audit fees scaled by total fees.

Variable	Definition
Ret	The firm's stock return over the fiscal year.
BondRating	The S&P domestic long-term issuer credit rating. Firms are assigned a value between 2 (AAA rating) and 29 (selective default).
Litigation	The litigation risk score calculated using the Rogers and Stocken (2005) model.

REFERENCES

Altman, E. 1968. Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance* 23 (September): 589-609.

Blay, A. and M. Geiger. 2013. Auditor fees and auditor independence: evidence from going concern reporting decisions. *Contemporary Accounting Research* 30(2): 579-606.

Blay, A., J. Moon and J. Paterson. 2016. There's no place like home: the influence of home-state going-concern reporting rates on the going-concern opinion propensity and accuracy. *Auditing: A Journal of Practice and Theory* 35 (2): 23-51.

Bowler, B. 2016. Are going concern opinions associated with lower audit impact? Working paper. University of Florida.

Brown, V., J. Gissel and A. Vitalis. 2018. Mandatory disclosure of audit engagement partners: impact on audit quality. Working paper. University of Waterloo.

Brozovsky, J. A., and F. M. Richardson. 1998. The effects of information availability on the benefits accrued from enhancing audit-firm reputation. *Accounting, Organizations and Society*, *23*(8), 767-779.

Carcello, J. and R. Santore. 2015. Engagement partner identification: a theoretical analysis. *Accounting Horizons* 29(2): 297–311.

Carey, P. and R. Simnett. 2006. Audit partner tenure and audit quality. *The Accounting Review* 81(3): 653-76.

Carson, E., N. Fargher, M. Geiger, C. Lennox, K. Raghunandan, and M. Willekens. 2013. Audit reporting for going concern uncertainty: a research synthesis. *Auditing: a Journal of Practice and Theory* 32 (1): 353-384.

Cianci, A., R. Houston, N. Montague and R. Vogel. 2017. Audit partner identification: unintended consequences on audit judgment. *Auditing: A Journal of Practice & Theory* 36 (4): 135–149.

Cohen, J., G. Krishnamoorthy and A. Wright. 2010. Corporate governance in the Post Sarbanes-Oxley era: Auditor Experiences. *Contemporary Accounting Research* 27(3): 751-786.

Cole, C. 2014. Audit partner accountability and audit transparency: partner signature or disclosure requirement. *Journal of Accounting and Finance* 14 (2): 84–101.

Cunningham, L., C. Li, S. Stein and N. Wright. 2018. What's in a name? Initial evidence of U.S. audit partner identification using difference-in-differences analyses. *The Accounting Review*, forthcoming.

Datar, S. and M. Alles. 1999. The formation and role of reputation and litigation in the auditor-manager relationship. *Journal of Accounting, Auditing and Finance* 14(4): 401-428.

DeAngelo, L. E. 1981. Auditor independence, 'low balling', and disclosure regulation. *Journal of Accounting and Economics* 3 (2): 113-127.

DeFond, M., K. Raghunandan, and K. Subramanyam. 2002. Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions. *Journal of Accounting Research* 40 (4): 1247-1274.

DeFond, M., and J. Zhang. 2014. A review of archival auditing research. *Journal of Accounting and Economics* 58 (2-3): 275-326.

Deloitte & Touche, LLP (Deloitte). (2009). Comment letter on: concept release on requiring the engagement partner to sign the audit report. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/020_DT.pdf

Deloitte & Touche, LLP (Deloitte). (2012). Comment letter on: improving the transparency of audits: proposed amendments to PCAOB auditing standards and Form 2. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/037b_DeloitteTouche.pdf

Deloitte & Touche, LLP (Deloitte). (2015). Comment letter on: improving transparency through disclosure of engagement partner and certain other participants in audits. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/027c_Deloitte.pdf

Dopuch, N., R. Holthausen, and R. Leftwich. 1987. Predicting audit qualifications with financial and market variables. *The Accounting Review* 62 (3): 431-454.

Ernst & Young, LLP (E&Y). (2009). Comment letter on: concept release on requiring the engagement partner to sign the audit report. Retrieved from: http://pcaobus.org/Rules/Rulemaking/Docket029/007_EY.pdf

Ernst & Young, LLP (E&Y). (2012). Comment letter on: improving the transparency of audits: proposed amendments to PCAOB auditing standards and Form 2. Retrieved from: http://pcaobus.org/Rules/Rulemaking/Docket029/023b_EY.pdf

Ernst & Young, LLP (E&Y). (2015). Comment letter on: improving transparency through disclosure of engagement partner and certain other participants in audits. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/032d_EY.pdf

Francis, J. R. 2011. A framework for understanding and researching audit quality. *Auditing: A Journal of Practice & Theory* 30 (2): 125–152.

Geiger, M. A., and K. Raghunandan. 2001. Bankruptcies, audit reports and the reform act. *Auditing: A Journal of Practice & Theory* 20 (1): 187–196.

Gramling, A., J. Krishnan, and Y. Zhang. 2011. Are PCAOB identified audit deficiencies associated with a change in reporting decisions of triennially inspected audit firms? *Auditing: A Journal of Practice & Theory* 30 (3): 59–79.

Kaplan, S. and D. Williams. 2013. Do going concern audit reports protect auditors from litigation? A simultaneous equations approach. *The Accounting Review* 88(1): 199-232.

Kida, T. 1980. An investigation into auditors' continuity and related qualification judgments. *Journal of Accounting Research* 18 (2): 506–523.

King, R., S. Davis, and N. Mintchik. 2012. Mandatory disclosure of the engagement partner's identity: potential benefits and unintended consequences. *Accounting Horizons* 26 (3): 533–561.

Knechel, R. W., A. Vanstraelen, and M. Zerni. 2015. Does the identity of engagement partners matter? An analysis of audit partner reporting decisions. *Contemporary Accounting Research*, *32*(4), 1443-1478.

KPMG, LLP. (2009). Comment letter on: concept release on requiring the engagement partner to sign the audit report. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/021_KPMG.pdf

KPMG, LLP. (2012). Comment letter on: improving the transparency of audits: proposed amendments to PCAOB auditing standards and Form 2. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/019b_KPMG.pdf

KPMG, LLP. (2015). Comment letter on: improving transparency through disclosure of engagement partner and certain other participants in audits. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/039d_KPMG.pdf

Lambert, T.A., B. L. Luippold, and C. M. Stefaniak. 2018. Audit partner disclosure: an experimental exploration of accounting information contagion. *Behavioral Research in Accounting* 30(1): 27-38.

Li, C. 2009. Does client importance affect auditor independence at the office level? Empirical evidence from going concern opinions. *Contemporary Accounting Research* 26 (1): 201-230.

Louwers, T. J. 1998. The relation between going-concern opinions and the auditor's loss function. *Journal of Accounting research*, 36(1), 143-156.

PriceWaterhouseCoopers LLP (PwC). (2009). Comment letter on: concept release on requiring the engagement partner to sign the audit report. Retrieved from: http://pcaobus.org/Rules/Rulemaking/Docket029/014_PWC.pdf

PriceWaterhouseCoopers LLP (PwC). (2012). Comment letter on: improving the transparency of audits: proposed amendments to PCAOB auditing standards and Form 2. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/033b_PwC.pdf

PriceWaterhouseCoopers, LLP (PwC). (2015). Comment letter on: improving transparency through disclosure of engagement partner and certain other participants in audits. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/026d_PwC.pdf

Public Company Accounting Oversight Board (PCAOB). 2009. Concept release on requiring the engagement partner to sign the audit report. PCAOB Release No. 2009-005. Washington, D.C. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/2009-07-28_Release_No_2009-005.pdf

Public Company Accounting Oversight Board (PCAOB). 2010. The auditor's consideration of an entity's ability to continue as a going concern. AU 341. Washington, D.C. Retrieved from: https://pcaobus.org/Standards/Auditing/Pages/AU341.aspx

Public Company Accounting Oversight Board (PCAOB). 2015. Improving the transparency of audits: rule to require disclosure of certain audit participants on a new PCAOB Form and related amendments to auditing standards. PCAOB Washington, D.C. Retrieved from: https://pcaobus.org/Rulemaking/Docket029/Release-2015-008.pdf

Read, W. and A. Yezegel. 2016. Auditor tenure and going concern opinions for bankrupt clients: additional evidence. *Auditing: A Journal of Practice and Theory* 35 (1): 163-179.

Reynolds, K., and J. Francis. 2000. Does size matter? The influence of large clients on office-level auditor reporting decisions. *Journal of Accounting & Economics* 30 (3): 375-400.

Rogers, J. L., and P. C. Stocken. 2005. Credibility of management forecasts. *The Accounting Review* 80 (4): 1233–1260.

Tysiac, K. 2017. What audit committees need to know about PCAOB's Form AP. *Journal of Accountancy*. June 20.

U.S. House of Representatives. 2002. The Sarbanes-Oxley Act of 2002 (SOX). Public Law 107–204 [H.R. 3763]. Washington, DC: Government Printing Office.

Venkataraman, R., J. Weber and M. Willenborg. 2008. Litigation risk, audit quality and audit fees: evidence from ipos. *The Accounting Review* 83 (5): 1315-1346.

Watts, R., and Zimmerman, J. 1986. Positive theory of accounting. *Englewood Cliffs, NY: Prentice-Hall*.

Table 1
Sample Attrition

Panel A: Sample Attrition:	**Sample**	**Big Four Sample**
Observation in Compustat with fiscal year ends between 12/31/2015 and 12/30/17.	21,030	15,625
Less: Non US companies	(6,486)	(4,625)
Less: Financial and utility companies (SIC codes 6000-6999).	(7,703)	(6,257)
Less: Companies with positive net income and operating cash flows for period t.	(3,457)	(2,610)
Less: Companies not in Audit Analytics*	(596)	(331)
Less: Companies not in CRSP	(1,499)	(344)
Less: Companies with a going concern in the prior year	(194)	(65)
Less: New auditors	(181)	(49)
Less: Companies with missing asset values or reported total assets of less than $1 million for period t.	(30)	(22)
Final Sample	**1,984**	**1,322**

We exclude any company that does not have an audit opinion in Audit Analytics for periods t and t-1.

Table 1, continued
Panel B: Industry

	Full Sample				Big Four Sample			
	Pre-Disclosure		Post-Disclosure		Pre-Disclosure		Post-Disclosure	
	N	Percent of Sample	N	Percent of Sample	N	Percent of Sample	N	Percent of Sample
Agriculture	0	0.00%	3	0.22%	0	0.00%	0	0.00%
Mining	43	4.18%	29	3.40%	31	4.42%	21	3.39%
Food	10	0.97%	11	1.10%	5	0.71%	4	0.65%
Textile	15	1.60%	12	1.43%	14	1.99%	10	1.61%
Chemical	20	1.90%	18	1.75%	17	2.42%	15	2.42%
Pharmaceuticals	237	23.05%	243	26.64%	170	24.22%	175	28.23%
Extraction	106	11.28%	93	10.75%	69	9.83%	65	10.48%
Durable Goods	188	18.16%	177	17.87%	105	14.96%	87	14.03%
Transportation	36	3.69%	35	4.06%	27	3.85%	24	3.87%
Retail	64	6.09%	67	6.80%	41	5.84%	42	6.77%
Service	75	7.19%	74	7.02%	54	7.69%	41	6.61%
Computers	230	21.26%	189	18.75%	168	23.93%	133	21.45%
Other	5	0.41%	4	0.22%	1	0.14%	3	0.48%
Total	1,029		955		702		620	

*See Appendix One for variable description and calculations. ***, **, * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.*

Table 2
Descriptive Statistics

Panel A: Dichotomous Variables

	Full Sample Means			Big Four Sample Means		
Variable	Pre-Disclosure	Post-Disclosure	Difference t-test	Pre-Disclosure	Post-Disclosure	Difference t-test
Going_Concern	0.062	0.050	1.15	0.044	0.029	1.47*
LLoss	0.661	0.668	0.34	0.652	0.658	0.22
NewDebt	0.480	0.446	1.52	0.509	0.474	1.25
NegEquity	0.078	0.085	0.58	0.077	0.089	0.77
Default	0.019	0.023	0.71	0.016	0.014	0.17
MatWeakness	0.098	0.073	1.98**	0.073	0.061	0.83
Observations	1,029	955	1,984	702	620	1,322

****, **, * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.*

Table 2, continued

Panel B: Continuous Variables

	Full Sample Means				Full Sample Medians				Big Four Sample Means				Big Four Sample Medians			
Variable	Pre-Disclosure	Post-Disclosure	Difference t-test		Pre-Disclosure	Post-Disclosure	Difference Wilcoxon z-score		Pre-Disclosure	Post-Disclosure	Difference t-test		Pre-Disclosure	Post-Disclosure	Diff Wilcoxon z-score	
Tenure (years)	7.00	6.91	0.37		5.00	5.00	0.14		7.86	7.82	0.14		7.00	6.00.	0.82	
Z_Score	5.27	5.26	0.11		6.00	5.00	0.11		5.50	5.40	0.72		6.00	5.00	0.83	
TA (millions)	1,843.2	1,801.2	0.19		265.8	231.5	1.59		2,493.0	2,511.4	0.06		466.3	415.0	0.86	
Age (years)	16.87	16.88	0.02		12.01	12.01	0.69		16.30	15.75	0.69		11.76	10.01	0.39	
Leverage	0.51	0.53	0.94		0.50	0.51	0.93		0.53	0.54	0.79		0.53	0.53	0.75	
Cleverage	0.01	0.03	1.52		0.02	0.02	0.14		0.01	0.02	1.29		0.02	0.03	0.67	
Cratio	4.05	3.73	1.56		2.35	2.20	0.42		4.12	3.81	1.21		2.36	2.21	0.20	
ROA	-0.26	-0.26	0.08		-0.14	-0.12	0.57		-0.22	-0.23	0.80		-0.12	-0.12	1.02	
Cashflow	-0.10	-0.13	2.84	***	-0.00	-0.01	1.89	*	-0.06	-0.11	3.05	***	0.01	0.01	1.92	*
RptLag (days)	67.21	67.11	0.16		66.00	66.00	0.54		63.15	63.52	0.58		60.00	60.00	0.12	
FeeRatio	0.16	0.14	1.52		0.08	0.06	1.38		0.16	0.15	0.78		0.09	0.07	1.62	
Ret	-0.20	0.04	10.62	***	-0.27	-0.04	10.79	***	-0.18	0.05	8.11	***	-0.24	0.00	8.44	***
BondRating	26.83	27.38	2.09	**	29.00	29.00	2.10	**	25.83	26.40	1.56		29.00	29.00	1.67	*
Litigation	0.04	0.04	1.75	*	0.03	0.03	5.29	***	0.04	0.04	0.46		0.04	0.03	2.72	***
Observations	1,029	955			1,029	955			702	620			702	620		

****, **, * indicate significance at the 0.01, 0.05, and 0.10 levels (two-tailed), respectively.*

Table 3
Correlation Matrix

	Going_Concern	*After*	*Big4*	*lnTenure*	*Z_Score*	*lnTA*	*lnAge*	*Leverage*	*Cleverage*	*Cratio*	*ROA*	*LLoss*	*NewDebt*	*NegEquity*	*Cashflow*	*Default*	*MatWeakness*	*RptLag*	*FeeRatio*	*Ret*	*BondRating*
After	-0.03																				
Big4	**-0.12**	-0.03																			
lnTenure	-0.01	0.00	**0.22**																		
Z_Score	**-0.31**	0.00	**0.11**	**-0.09**																	
lnTA	**-0.22**	-0.03	**0.48**	**0.28**	**0.15**																
lnAge	-0.04	0.00	**-0.13**	**0.53**	**-0.12**	**0.21**															
Leverage	**0.18**	0.02	**0.08**	**0.17**	**-0.53**	**0.27**	**0.19**														
Cleverage	**0.20**	0.03	-0.04	**0.16**	**-0.32**	0.00	**0.18**	**0.35**													
Cratio	**-0.08**	-0.03	0.02	**-0.19**	**0.40**	**-0.21**	**-0.28**	**-0.56**	**-0.26**												
ROA	**-0.40**	0.00	**0.15**	**0.12**	**0.42**	**0.45**	**0.20**	-0.03	**-0.24**	**-0.09**											
LLoss	**0.10**	0.01	-0.03	**-0.24**	**-0.13**	**-0.36**	**-0.30**	**-0.10**	-0.03	**0.20**	**-0.29**										
NewDebt	-0.03	-0.03	**0.08**	**0.15**	**-0.14**	**0.38**	**0.16**	**0.39**	**0.11**	**-0.29**	**0.17**	**-0.25**									
NegEquity	**0.18**	0.01	0.01	0.02	**-0.30**	0.00	0.04	**0.49**	**0.14**	**-0.14**	**-0.22**	**0.05**	**0.11**								
Cashflow	**-0.29**	**-0.06**	**0.15**	**0.17**	**0.29**	**0.51**	**0.25**	**0.13**	**-0.06**	**-0.22**	**0.75**	**-0.34**	**0.23**	**-0.12**							
Default	**0.30**	0.02	**-0.06**	0.02	**-0.09**	**-0.06**	-0.02	0.04	0.02	**-0.05**	**-0.08**	0.04	-0.04	**0.05**	0.00						
MatWeakness	**0.07**	**-0.04**	**-0.10**	-0.01	**-0.05**	**-0.06**	0.02	0.04	**0.05**	**-0.09**	-0.01	**-0.06**	0.01	0.03	0.02	**0.06**					
RptLag	**0.25**	0.00	**-0.40**	**-0.16**	**-0.23**	**-0.56**	**-0.08**	-0.02	-0.02	0.01	**-0.23**	**0.16**	**-0.09**	**0.08**	**-0.25**	**0.11**	**0.25**				
FeeRatio	0.01	-0.03	0.02	0.04	0.01	**0.10**	**0.06**	**0.08**	-0.01	-0.03	**0.05**	**-0.07**	**0.09**	0.00	**0.06**	**0.05**	0.00	-0.04			
Ret	**-0.16**	**0.23**	0.04	0.02	**0.24**	**0.11**	**0.06**	-0.03	**-0.12**	0.01	**0.21**	**-0.07**	-0.03	**-0.05**	**0.16**	**-0.06**	-0.01	**-0.13**	-0.03		
BondRating	**0.10**	**0.05**	**-0.24**	**-0.27**	**0.06**	**-0.66**	**-0.31**	**-0.29**	**-0.04**	**0.22**	**-0.21**	**0.35**	**-0.33**	**-0.07**	**-0.29**	**0.05**	0.00	**0.31**	**-0.09**	**-0.07**	
Litigation	**0.09**	-0.04	**0.18**	0.03	**-0.11**	**0.15**	**-0.09**	**0.06**	**0.08**	**0.06**	**-0.16**	**0.06**	0.03	**0.08**	**-0.14**	0.04	**-0.05**	**-0.13**	**0.06**	**-0.40**	**-0.07**

*See Appendix One for variable description and calculations. All continuous variables are winsorized at the top and bottom 1%. Pearson correlations significant at p-value less than or equal to 0.10 are in bold***.**

Table 4

Logistic Regression Estimating the Likelihood of a Going Concern Opinion - Full Sample

	Predicted	(1) Pre-Disclosure		(2) Post-Disclosure		(3) Pre- and Post-Disclosure	
Variable	sign	Estimate	t-value	Estimate	t-value	Estimate	t-value
Intercept	(?)	-8.3314	-1.94*	-11.7039	-2.75***	-9.8565	-4.45***
After	(?)					-0.4438	-2.18**
Big4	(?)	0.1168	0.22	-0.6383	-1.31	-0.2011	-0.70
lnTenure	(?)	0.1423	0.30	0.6759	1.16	0.4114	1.38
Z_Score	(-)	-0.1086	-0.97	-0.2290	-1.42*	-0.1352	-1.55*
lnTA	(-)	-0.3753	-1.60*	-0.0068	-0.03	-0.1732	-1.29*
lnAge	(-)	-0.3783	-1.19	-0.0966	-0.22	-0.2917	-1.10
Leverage	(+)	2.3923	1.79**	2.8919	2.07**	2.6903	2.81***
Cleverage	(+)	2.8209	1.91**	1.7065	2.63***	1.9706	2.57***
Cratio	(-)	0.0254	0.26	0.0570	0.92	0.0330	0.61
ROA	(-)	-1.0897	-1.62*	-1.5749	-1.98**	-1.1392	-2.66***
LLoss	(+)	0.6643	1.15	-1.1338	-1.47*	-0.0403	0.08
NewDebt	(+)	-0.1139	-0.24	-0.5496	-0.91	-0.2356	-0.57
NegEquity	(+)	-0.5768	-0.97	0.0315	0.05	-0.3679	-0.77
Cashflow	(-)	0.0258	0.03	-0.3837	-0.44	-0.3803	-0.70
Default	(+)	4.1197	4.75***	3.7276	6.30***	3.6028	7.49***
MatWeakness	(+)	-0.1906	-0.23	0.6358	1.37*	0.1664	0.32
RptLag	(+)	0.0331	1.87**	0.0610	5.73***	0.0457	4.65***
FeeRatio	(-)	-1.0558	-1.22	0.2604	0.36	-0.2238	-0.52
Ret	(-)	-1.0558	-1.78**	-1.3447	-1.95**	-1.0379	-2.88***
BondRating	(+)	0.0997	0.96	0.0491	0.58	0.0745	1.96**
Litigation	(+)	3.3421	0.39	5.5018	0.97	4.8766	0.89
Pseudo R^2			0.4530		0.5305		0.4642
Area under the ROC			0.9368		0.9507		0.9397
Going Concern N			64		48		112

No Going Concern N	965	907	1,872
N	1,029	955	1,984

*Our dependent variable equals 1 for firms issue a going concern modification, and 0 otherwise. All variables are defined in Appendix 1. ***, **, * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.*

Table 5

Big Four Going Concern Opinions

Panel A: Univariate Analysis - Pre- and Post-Disclosure

	PwC		***Ernst and Young***		***Deloitte***		***KPMG***		***Total***	
	N	*GC Rate*	*N*	*GC Rate*	*N*	*GC Rate*	*N*	*GC Rate*	*N*	*GC Rate*
Pre-Disclosure	163	0.0307	281	0.0498	116	0.0431	142	0.0493	702	0.0442
Post-Disclosure	140	0.0360	246	0.0325	111	0.0270	123	0.0161	620	0.0290
Difference (t-value)		0.25		1.00		0.66		1.54*		1.47*

****, **, * indicate significance at the 0.01, 0.05, and 0.10 levels (two-tailed), respectively.*

Table 5, continued

Panel B: Logistic Regression Estimating the Likelihood of a Going Concern Opinion – Big Four and Non Big Four Firms			
Variable	Predicted sign	Estimate	t-value
Intercept	(?)	-9.9213	-4.46***
Big4	(?)	-0.0007	-0.00
After ×Big4	(-)	-0.6845	-2.36**
After ×NonBig4	(-)	-0.2288	-0.64
lnTenure	(?)	0.4046	1.45
Z_Score	(-)	-0.1383	-1.57*
lnTA	(-)	-0.1747	-1.29*
lnAge	(-)	-0.2998	-1.13
Leverage	(+)	2.6391	2.69***
Cleverage	(+)	1.9775	2.58***
Cratio	(-)	0.0319	0.58
ROA	(-)	-1.1178	-2.63***
LLoss	(+)	0.0242	0.05
NewDebt	(+)	-0.2459	-0.61
NegEquity	(+)	-0.3402	-0.69
Cashflow	(-)	-0.3870	-0.72
Default	(+)	3.5594	7.27***
MatWeakness	(+)	0.1674	0.33
RptLag	(+)	0.0461	4.60***
FeeRatio	(-)	-0.2330	-0.53
Return	(-)	-1.0372	-2.90***
Bondrating	(+)	0.0757	2.02**
Litigation	(+)	5.2109	0.95
After ×Big4 > After ×NonBig4		p = 0.19	

Pseudo R^2	0.4651
Area under the ROC	0.9395
Going Concern N	112
No Going Concern N	1,872
N	1,984

*Our dependent variable equals 1 for firms issue a going concern modification, and 0 otherwise. All variables are defined in Appendix 1. ***, **, * indicate significance at the 0.01, 0.05, and 0.10 levels, respectively.*

Table 6
Panel A: Type I Errors
Bankruptcy Rates for Companies Receiving a Going Concern

	Bankruptcy	**No Bankruptcy**
Pre-Disclosure	4	60
Post-Disclosure	1	47

Difference (p-value) = 0.27

Panel B: Type II Errors
Bankruptcy Rates for Companies Not Receiving a Going Concern

	Bankruptcy	**No Bankruptcy**
Pre-Disclosure	19	946
Post-Disclosure	7	892

Difference (p-value) = 0.03