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Abstract: We find that auditors of more conservative clients charge lower fees, issue fewer going concern opinions, and resign less frequently, consistent with more conservative clients imposing less engagement risk on their auditors. Using path analysis we find evidence that both inherent risk and auditor business risk explain these associations. Also consistent with conservatism reducing auditor business risk, we find that client conservatism is associated with fewer lawsuits against auditors and with fewer client restatements. Taken together, our results are consistent with auditors viewing client conservatism as an important determinant of engagement risk that in turn affects auditor-client contracting decisions. Our findings should be of interest to auditors who actively manage client risk and to standard-setters who recently dropped conservatism as a desired attribute of financial reporting quality.

Keywords: *Conservatism; audit fee; going concern audit opinion; auditor resignation; litigation risk; misstatement risk*

Data Availability: *All data are publicly available from sources indicated in the text.*

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Client Conservatism and Auditor-Client Contracting

I. INTRODUCTION

Conditional conservatism is a qualitative accounting characteristic that potentially enhances financial reporting quality (Watts 2003). However, while research documents that conservatism improves debt contracting, benefits shareholders, and increases investment efficiency (Ahmed et al. 2002; Suijs 2008; Francis and Martin 2010), there is limited evidence on whether it affects auditor-client contracting. We attempt to fill this gap by investigating whether and how client conservatism affects audit fee pricing, audit opinion formation, and auditor resignation decisions.

Conditional conservatism refers to the asymmetric verification of gains versus losses, where greater verification is required to recognize gains than losses (Basu 1997). [1] The greater the difference in required verification, the greater the level of conservatism. The adoption of conservative accounting is partially motivated by the assertion that managers have stronger incentives to overstate earnings than to understate earnings (Watts 2003). Consistent with this assertion, Kothari et al. (2009) find that career concerns and compensation contracts provide incentives for managers to delay the disclosure of bad news and hasten the disclosure of good news to investors. LaFond and Watts (2008) argue that conservatism acts to offset management's inherent tendency to defer the release of bad news and accelerate the release of good news.

We posit that conservatism is likely to affect auditor engagement risk. Whether its net effects increase or decrease engagement risk, however, is difficult to predict. One way conservatism may decrease engagement risk is by reducing inherent risk. Conservatism can reduce inherent risk by mitigating aggressive financial reporting, such as premature revenue

[1] For brevity, we sometimes refer to client conditional conservatism simply as conservatism. We focus on conditional conservatism because its theoretical and empirical link to litigation risk (Chung and Wynn 2008) and misstatement risk (Ettredge et al. 2012b) is clearer than unconditional conservatism.

recognition, which often results in misstatements. Conservatism can also reduce inherent risk through the timelier recognition of bad news, such as impairment charges, which keep auditors better informed about their clients' adverse circumstances and lowers information asymmetry between the auditor and management (Kim and Zhang 2014). Conservatism may also reduce engagement risk by decreasing the auditor's business risk, which consists primarily of auditor litigation and reputation risk. Conservatism is likely to reduce litigation risk because auditors are primarily sued for financial reports that fail to reflect bad news on a timely basis (Carcello and Palmrose 1994). Timelier loss recognition is likely to make it more difficult for plaintiffs to argue that financial reports do not provide adequate warning of impending losses. Conservatism may decrease auditor reputation risk by reducing negative events, such as material misstatements, which adversely affect the auditor's ability to attract and retain clients (Weber et al. 2008). Conservative clients may also reduce engagement risk through improved governance, as evidenced by more independent boards (Lara et al. 2009), stronger internal controls (Goh and Li 2011), and reduced managerial risk-taking (Ahmed and Duellman 2013).

However, there are also reasons why conservatism may increase engagement risk. One is that the timelier recognition of bad news increases the likelihood of covenant violation (Gigler et al. 2009; Gao and Gu 2014; Zhang 2008), which in turn increases default risk and the likelihood of financial distress (Chen and Church 1992). This heightens auditor litigation risk because shareholders of distressed clients are more likely to sue their auditors (Palmrose 1997). Recent studies also find that conservatism impairs earnings quality. Barth et al. (2013) report that conservatism causes investors to fixate on negatively skewed earnings, consistent with Heflin et al. (2014), who find that conservatism harms earnings informativeness. Dichev and Tang (2008) and Chen et al. (2014) also find that conservatism increases earnings volatility and reduces

earnings persistence. Since higher audit quality is associated with more informative and predictable earnings (DeFond et al. 2014), clients with poor earnings quality pose greater reputation risk to their auditors, providing incentives for the auditor to reduce the remediable bias that arises from conservatism.

The above arguments suggest that the net effect of conservatism on auditors' risk assessment is ultimately an empirical question. We posit that these effects are likely to be reflected in the strategies auditors use to mitigate engagement risk. One such strategy is to increase audit effort. If this fails to reduce risk to tolerable levels, auditors may also charge a risk premium, passing the risk onto the client. Both audit effort and risk premia affect audit fees (Johnstone and Bedard 2004). Another strategy for mitigating risk is lowering the threshold for issuing a going concern opinion (hereafter GCO). Issuing a GCO prior to bankruptcy reduces the auditor's exposure to litigation risk and lowers settlement amounts (Kaplan and Williams 2013). Finally, auditors can also mitigate risk by resigning from risky clients (Shu 2000). Thus, if conservative clients reduce engagement risk, we expect auditors to respond by charging lower fees, issuing fewer GCOs, and resigning less frequently. Conversely, if conservative clients increase risk, we expect higher fees, more GCOs, and more frequent resignations.

We test the association between client conservatism and fees, GCOs, and resignations using data over the period 2000-2010 and conditional conservatism proxied by the firm-year specific measures employed in Khan and Watts (2009) (hereafter KW) and Givoly and Hayn (2000) (hereafter GH). We find that client conservatism is associated with lower audit fees, fewer GCOs, and less frequent auditor resignations. Further, we find these associations with each strategy individually and with all three simultaneously. Moreover, we perform tests that suggest reverse causality is unlikely to explain our findings. We also find that these effects are

economically important. Using the KW (GH) measure, moving from the bottom to the top decile of conservatism decreases audit fees by 29 (10) percent, decreases the issuance of GCOs by 2.8 (1.7) percent, and lowers the probability of resignation by 21 (11) percent, respectively.[2] Our findings are also robust to several sensitivity tests, including measuring conservatism over a long-horizon and controlling for potentially omitted correlated variables.

We also perform a path analysis to test our maintained assumption that inherent risk is the direct path, and auditor business risk is the indirect path, through which conservatism affects our outcome variables (i.e., fees, GCOs, and resignations). Consistent with this assumption, we find that conservatism directly affects the outcome variables by reducing inherent risk, and indirectly by reducing audit business risk (through reduced litigation and misstatement risk). We also perform *ex post* validation tests which find that conservatism is associated with fewer auditor lawsuits and fewer client restatements (that are unrelated to auditor litigation), corroborating the notion that conservatism reduces auditor business risk.

Finally, we find that auditors do *not* strategically respond to *unconditional* conservatism by adjusting their fees, GCO frequency, or propensity to resign. We also find that unconditional conservatism is *not* associated with lawsuits against auditors or client restatements. Therefore, our analysis is consistent with auditors not responding to unconditional conservatism because, unlike conditional conservatism, it does not affect auditor business risk.

Our study makes several contributions. One is to the literature that studies conservatism. Several studies document the benefits of conservatism in debt contracting, equity markets, and investment efficiency, but its role in shaping auditor-client contracting has drawn little attention. While it is often argued that conservatism benefits auditors through reduced litigation risk (Watts

[2] While the decreases in issuance of GCOs by 2.8 (1.7) percent is small in absolute terms, this is quite large relative to the base rate for GCOs of 3.3 (8.4) percent for the KW (GH) measure.

2003), there are also arguments that challenge this assertion (Barth et al. 2013; Gao and Gu. 2014; Gigler et al. 2009), and there is little evidence documenting this association. The only exception we are aware of is a concurrent study by Lee et al. (2014), which finds that audit fees are negatively associated with conservatism. Our study contributes beyond Lee et al. (2014) by (1) examining the effects of conservatism on GCOs and auditor resignations, (the results of which are not inferable from examining fees alone),[3] (2) using path analysis and *ex post* validation tests to identify client inherent risk and auditor business risk as important explanations for these associations, and (3) finding that unconditional conservatism, unlike conditional conservatism, is not associated with audit fees, GCOs, or resignations.

We also contribute to the literature that examines engagement risk. While prior studies examine client characteristics such as complexity, leverage, financial distress, and discretionary accruals as a source of risk, we examine the effects of conservatism, which is distinct from these other characteristics. We find that both litigation risk and misstatement risk are mediated paths through which conservatism affects auditors' contracting decisions, although litigation risk plays a relatively more important role. This supports the notion that auditors' preferences for conservatism are largely driven by their ability to mitigate litigation risk (Watts 2003).

Finally, we also add to the literature that contrasts the effects of conditional and unconditional conservatism. We extend this literature by finding that conditional conservatism affects auditors' strategic decisions in responding to client engagement risk, while unconditional conservatism does not. We further suggest that this is because unconditional conservatism, unlike conditional conservatism, does not impact the incidence of auditor litigation or client

[3] When considered in isolation, fees alone are difficult to interpret because higher fees may indicate a risk premium, additional audit effort, or a client's attempt at economic bonding to attain lenient audits. Higher fees are also infeasible when clients are unwilling to pay higher fees, or when the risks of reduced conservatism become unreasonably high. Thus, evidence from GCOs and auditor resignations provides important additional insights into the effects of conservatism that cannot be inferred from fees alone.

restatements. Thus, auditors' failure to strategically respond to unconditional conservatism is *ex post* consistent with unconditional conservatism not affecting auditor business risk.

The next section discusses related literature and the research issues we address, the third section discusses variable measurement and empirical models, the fourth section describes sample and empirical findings, and the fifth section presents findings from sensitivity tests of our primary analysis. The sixth section provides tests with unconditional conservatism. The final section concludes.

II. RESEARCH ISSUES

Conservatism and Auditors' Engagement Risk Assessment

Engagement risk consists of three components: 1) client business risk — the risk associated with the client's survival and profitability; 2) audit risk — the risk that the auditor may unknowingly fail to appropriately modify his or her opinion on financial statements that are materially misstated; and 3) auditor business risk — the risk of potential litigation costs from an alleged audit failure and the risk of other costs such as fee realization and reputational effects. Two important elements of auditor business risk are litigation and reputation risk. Litigation exposes auditors to direct financial penalties, while lost reputation impairs the ability to retain and attract clients.[4] Because engagement risk can threaten the viability of even the largest audit firm, auditors engage in several strategies to manage the risk (DeFond and Zhang 2014).

We conjecture that conditional conservatism affects the auditor's assessment of engagement risk, particularly client inherent risk and auditor business risk. Inherent risk is a component of "audit risk," which is the product of the likelihood that environmental and client factors will produce a material error ('inherent risk'), the likelihood that internal controls will not

[4] Importantly, litigation and reputation risk are not mutually exclusive. For example, auditor litigation is likely to adversely affect an auditor's reputation, and auditors' reputation is potentially damaged by non-litigation adverse events, such as negative press releases and regulatory sanctions.

prevent or detect a material error ('control risk'), and the likelihood that audit procedures will fail to detect the material error ('detection risk'). We conjecture that conservatism lowers inherent risk for two reasons. One is that conservatism is expected to reduce overstatements by mitigating aggressive managerial estimates, such as overvaluation of inventory and receivables. Since most misstatements involve overstated earnings or revenue (Dechow et al. 2011), auditors are likely to perceive a lower level of inherent risk among conservative clients. Conservatism should also offset management's tendency to withhold bad news through timelier recognition of bad news events such as impairment charges. This reduction in hidden accumulated negative information lowers the information asymmetry between auditors and clients (Kim and Zhang 2014), thereby reducing the risk of misstatement and the amount of required auditor effort.

Conservative accounting may also decrease auditor business risk, which consists primarily of litigation and reputation risk. This is because conservatism is likely to constrain management's tendency to systematically overstate earnings by acting as a governance mechanism that curbs substandard financial reporting (LaFond and Watts 2008). Guay and Verrecchia (2007) also contend that conditional conservatism reduces the opportunities for successful earnings management. Evidence in Ettredge et al. (2012a) supports this notion by finding that relatively more conservative firms are less likely to subsequently restate earnings.

Reducing overstatements is likely to reduce auditor litigation risk because auditors are sued primarily for allowing overstatements (Carcello and Palmrose 1994). Because overstatements are consistent with premature recognition of good news and/or delayed recognition of bad news, greater conservatism increases the auditor's ability to curb earnings management. In line with this argument, Stice (1991) finds that growth in operating assets increases engagement risk, presumably by signaling an increased likelihood of asset write-downs. Moreover, by accelerating

the release of bad news and deferring the release of good news, conservatism may make it more difficult for plaintiffs to claim that their losses arise from aggressive financial reporting. Conservatism is also expected to reduce reputation risk. In addition to litigation, auditors are exposed to loss and injury to their professional practice from adverse events such as negative press reports, the government investigations of audit failures (Weber et al. 2008), negative PCAOB inspection reports (Abbott et al. 2013), and accounting restatements (Hennes et al. 2014). Because these events typically arise from alleged misstatements, conservatism is expected to reduce reputation risk. This is consistent with Hennes et al. (2014), who find that auditors are more likely to be dismissed when they fail to prevent misstatements. Moreover, conservatism is associated with client governance characteristics that are expected to reduce engagement risk, including more independent boards (Lara et al. 2009) and more effective internal controls (Goh and Li 2011). In addition, Ahmed and Duellman (2013) find that lower levels of conservatism are associated with management overconfidence and risk-taking, which increases the likelihood of misstatements (Schrand and Zechman 2012), and is associated with a greater frequency of mergers and acquisitions that destroy shareholder value (Malmendier and Tate 2008).

There are, however, reasons why conservatism may increase audit engagement risk. One is that timelier recognition of bad news may trigger more frequent debt covenant violations, thereby increasing client default risk and auditor business risk. This is consistent with theory in Gigler et al. (2009), who observe that "false alarm" covenant violations induced by conservatism make it difficult for debt and equity investors to draw inferences about firms' underlying economics. They argue that a higher frequency of false alarm covenant violations *decreases* debt contracting efficiency if lenders find it difficult to see through the implications of conservatism. If lenders are unable to distinguish between lower earnings that result from conservatism and

lower earnings that result from poor underlying performance, they are likely to impose harsh credit terms in the presence of conservatism, which heightens auditor business risk. Empirical evidence in Gao and Gu (2014) supports this conjecture by finding that credit rating agencies issue significantly more false alarm "debt defaults" for firms with conservative accounting, consistent with these agencies not fully adjusting for conservatism. If low credit ratings negatively affect firms' credit terms and their ability to access debt financing, it will also increase auditor business risk.

Another reason why conservatism may increase engagement risk is because it reduces earnings informativeness and persistence, which exposes auditors to higher reputation risk. For example, Givoly and Hayn (2002) argue that conservatism can create unwanted bias and noise in financial reports, which generates "soft" numbers that induce (rather than mitigate) asymmetry in the timely incorporation of economic events into reported earnings.[5] This is consistent with Barth et al. (2013), who find that conservatism reduces earnings informativeness, causing investors to fixate on negatively skewed earnings. It is also consistent with Heflin et al. (2014), who find that conservatism reduces earnings persistence and income smoothing, which in turn harms earnings informativeness (as measured by ERCs). Dichev and Tang (2008) and Chen et al. (2014) also document that conditional conservatism increases earnings volatility and reduces earnings persistence. The negative effects of conservatism on earnings informativeness and persistence has implications for auditor behavior, because higher audit quality is associated with more informative and predictable earnings (DeFond et al. 2014).[6] Thus, conservative clients may pose greater reputation risk to their auditors, providing incentives for the auditor to reduce

[5] While conservatism may result in large write-offs, contingent liabilities, and restructuring charges, these charges may also create cookie jar reserves, thereby distorting earnings informativeness over time (Levitt 1998).

[6] For example, the clients of Big 5 auditors and industry specialist auditors have higher ERCs (Teoh and Wong 1993; Balsam et al.2003) and smaller analysts' forecast errors and dispersion (Behn et al. 2008).

remediable bias that arises from conservatism. Standard-setters also believe that conservatism reduces financial reporting quality and have eliminated it as an essential qualitative characteristic of financial reporting (FASB 2010).

Auditors' Strategic Responses to Conservatism

If conservatism affects engagement risk, it should also affect the strategies auditors employ to mitigate this risk. One such strategy is to increase audit effort, which mitigates inherent risk and auditor business risk by reducing misstatement risk. For example, increased substantive testing strengthens the auditor's assurance that the financial statements are prepared in accordance with GAAP. This is consistent with experimental evidence that shows that auditors increase audit effort on riskier clients (Davis et al. 1993). If additional audit effort does not reduce engagement risk to acceptable levels, auditors may also price protect themselves by charging a fee premium, thereby passing the risk onto the client. Johnstone and Bedard (2004) support this contention by showing that auditors increase both billing hours and billing rates for riskier clients. Theory also concludes that auditors are more likely to exert greater effort for clients with a greater likelihood of misstatement or fraud (Hillegeist 1999). Both increased effort and fee premia are reflected in higher audit fees. Thus, if conservative clients impose less risk, we expect auditors to charge lower fees. Conversely, if conservative clients impose more risk, we expect higher fees.

Auditors can also reduce risk by lowering their threshold for issuing a GCO. Several studies find that auditors increase their issuance of GCOs to clients with higher litigation risk (Kaplan and Williams 2013) and to clients with larger accruals (Francis and Krishnan 1999). Issuing a GCO to financially distressed clients prior to bankruptcy lowers alleged audit failure, auditor litigation, and litigation settlements (Carcello and Palmrose 1994; Kaplan and Williams

2013). Further, Kida (1980) reports that audit partners believe that failure to issue a GCO when it is warranted is "grounds for alleging auditing negligence." Therefore, if conservative clients impose less (more) risk, we expect auditors to issue fewer (more) GCOs.

Finally, it is possible that increased effort, risk premia, and/or the issuance of GCOs may not reduce client risk to tolerable levels. In such cases auditors may choose to avoid the risk altogether by resigning from the engagement. Managers have incentives and the ability to withhold bad news and accelerate the release of good news in the hope that poor current performance will be camouflaged by strong performance in the future (Kothari et al. 2009). Because these incentives conflict with those of the auditor, they can cause a serious breakdown in the relationship between management and the auditor, hindering the auditor's ability to remediate client risk. Consistent with this argument, prior studies find that auditor resignations are more frequent when clients pose higher litigation risk (Shu 2000) and exhibit greater opportunism proxied by real activities manipulation (Kim and Park 2014). Therefore, if conservative clients impose less (more) risk, we expect auditors to resign less (more) frequently.

It is difficult to predict whether auditors will choose one or more strategy in response to client risk, because the choice is likely to be a function of client factors such as financial health. For example, since GCOs are only appropriate for clients in financial distress, lowering the threshold for GCOs is unlikely to be effective for reducing the risk posed by healthy clients. In addition, auditors are likely to resign only as a last resort. While increased effort and risk premia may seem the most feasible response in most cases, these strategies are limited by the client's willingness to pay higher fees. Therefore, given the difficulty in predicting which strategy(s) auditors are likely to choose in response to conservatism, we perform tests that examine each strategy individually as well as all three strategies simultaneously.

III. VARIABLES MEASUREMENT AND MODEL SPECIFICATION

Measuring Conditional Conservatism

We use two firm-year proxies for conditional conservatism. The first is derived from the KW conservatism score (*C_Score*), which is based on the model in Basu (1997) and is commonly used in recent studies (Ettredge et al. 2012a; Heflin et al. 2014). Following KW, we estimate *C_Score* for each firm-year using a cross-sectional approach based on size, leverage, and market-to-book ratio. The second is GH's measure of non-operating accruals. Although some non-operating accruals are dictated by GAAP, GH argue that the timing or amount of most non-operating accruals are subject to management discretion. To mitigate the effect of temporary non-operating accruals that reverse in subsequent years and to capture persistent conservatism, we use a three-year average of non-operating accruals. To ease interpretation, we multiply the non-operating accruals by negative one so that its value increases with the level of conservatism.

We use the annual decile ranks of each measure to reduce noise in the estimates and to mitigate potential non-linearity. We standardize the decile ranks to a range from zero to one, with the bottom decile valued at zero and the top decile valued at one. We refer to the two standardized rank variables as *CON_KW* and *CON_NOPA*.

Empirical Models

To test whether conservatism is associated with audit fees, we estimate the following OLS model based on prior research (Ashbaugh et al. 2003). Detailed variable definitions for all models are presented in Appendix 1.

$$\begin{aligned} LAUDIT_t = {} & \gamma_0 + \gamma_1 CONSV_{t-1} + \gamma_2 MV_t + \gamma_3 Quick_t + \gamma_4 Loss_t + \gamma_5 ROA_t + \gamma_6 LEV_t + \gamma_7 Inv\_Rec_t \\ & + \gamma_8 BM_t + \gamma_9 NSEG_t + \gamma_{10} SPITEM_t + \gamma_{11} FOPS_t + \gamma_{12} Merger_t + \gamma_{13} Finance_t + \gamma_{14} Pension_t \\ & + \gamma_{15} BigN_t + \gamma_{16} GCO_t + \gamma_{17} Busy_t + Industry\ \&\ Year\ Dummies + e_t \end{aligned} \quad (1)$$

LAUDIT is measured as the log of audit fees. In this and the following models, *CONSV* refers to our two conservatism measures, *CON_KW* or *CON_NOPA*, and all independent

variables are measured in the year concurrent with audit fees except *CONSV*, which is lagged by one-year. We use lagged conservatism in our tests to help mitigate concerns with endogeneity and reverse causality. While the auditors' choice of fees, GCO, and resignation potentially affect client conservatism in the contemporaneous year, it is unlikely that they affect prior year's client conservatism. In all models we use standard errors clustered by firm. A negative (positive) coefficient on *CONSV* is consistent with lower (higher) fees for more conservative clients.

To test whether accounting conservatism is associated with the issuance of GCOs, we estimate the following logistic model adapted from DeFond et al. (2002):

$$OPIN_t = \lambda_o + \lambda_1 CONSV_{t-1} + \lambda_2 Assets_t + \lambda_3 ZScore_t + \lambda_4 Beta_t + \lambda_5 Return_t + \lambda_6 LEV_t + \lambda_7 CLEV_t + \lambda_8 LLoss_t + \lambda_9 Investment_t + \lambda_{10} Cashflow_t + \lambda_{11} Future\_Finance_t + \lambda_{12} BigN_t + \lambda_{13} BM_t + Year\ Dummies + e_t \quad (2)$$

OPIN is an indicator variable equal to one for clients receiving a GCO for the first time, and zero otherwise. Following DeFond et al. (2002), we only retain GCO firms in the first year they receive a GCO, and estimate the model using a sample of distressed firms, defined as firms that report either negative net income or negative operating cash flows.[7] A negative (positive) coefficient on *CONSV* is consistent with fewer (more) GCOs for more conservative clients.

To test whether conservatism is associated with auditor resignations, we estimate the following logistic regression adapted from Landsman et al. (2009):

$$RESIGN_t = \beta_0 + \beta_1 CONSV_{t-1} + \beta_2 Asset\_Growth_{t-1} + \beta_3 Abs\_DA_{t-1} + \beta_4 Inv\_Rec_{t-1} + \beta_5 GCO_{t-1} + \beta_6 Clean_{t-1} + \beta_7 Tenure_{t-1} + \beta_8 ROA_{t-1} + \beta_9 Loss_{t-1} + \beta_{10} LEV_{t-1} + \beta_{11} Cash_{t-1} + \beta_{12} Disagree_{t-1} + \beta_{13} Rep\_Event_{t-1} + \beta_{14} BigN_{t-1} + \beta_{15} Assets_{t-1} + \beta_{16} Merger_{t-1} + \beta_{17} BM_{t-1} + Year\ Dummies + e_t \quad (3)$$

Following prior studies (Landsman et al. 2009; Kim and Park 2014), we estimate this model using auditor-switch firms with the independent variables measured in the year prior to

[7] As a robustness check, we examine two other samples based on alternative measures of distress. The first is from Kaplan and Williams (2013) who define distressed firms as having two consecutive years of net losses and negative retained earnings in the latest year. The second is from Geiger and Rama (2003), who define distress as having at least one of the following: negative working capital, negative retained earnings, or a loss. The results are robust to using these alternative measures of distress. When we estimate the model without restricting the sample to distressed firms, our main findings are also qualitatively similar.

the switch. *RESIGN* is an indicator variable equal to one if the auditor resigns and zero if the auditor is dismissed. A negative (positive) coefficient on *CONSV* is consistent with less (more) frequent resignations from more conservative clients.

IV. SAMPLE AND EMPIRICAL RESULTS

Sample and Data

We collect all audit-related information from the Audit Analytics database for the period 2000-2010, and merge it with Compustat and CRSP data to obtain financial and stock return variables. Because we lag conservatism by one year, it is estimated during the period 1999-2009. Consistent with prior research, we remove firms in the financial sector (SIC codes 60-69) and winsorize all continuous variables at the top and bottom one percent. Due to more restrictive data requirements, the *CON_KW* sample is smaller than the *CON_NOPA* sample.

Our audit fee sample totals 27,748 (41,537) firm-year observations for the *CON_KW* (*CON_NOPA*) model. Our financially distressed sample for the GCO tests totals 9,284 (12,462) firm-year observations for the *CON_KW* (*CON_NOPA*) model. Of these observations, a total of 302 (1,052) firms [3.3% (8.4%)] receive a GCO for the first time during the sample period.[8] Lastly, our auditor change sample totals 2,404 (3,117) firm-years for the *CON_KW* (*CON_NOPA*) model. This sample excludes auditors switching from Andersen in 2001-2002 since these are forced switches. The auditor change sample includes 418 (611) resignations [17.4% (19.6%)] for the *CON_KW* (*CON_NOPA*) model, while the rest are dismissals.[9] The

[8] The proportion of the firms with GCOs in our GH sample is comparable to the 9% reported in DeFond et al. (2002). The proportion of GCOs for the KW sample is lower because KW delete firms with share prices less than $1 and firms in the top and bottom one percent of the variables used in estimating *C_Score* (see KW p. 138). If we relax these filters, we find qualitatively identical results, and the proportion of GCOs is 8.9%.

[9] We note that our sample period includes the years 2004 and 2005, the years in which Section 404 was initially implemented under the Sarbanes-Oxley Act (SOX). Thus, some of our resignations may be due to capacity constraints that forced some auditors to resign due to the heavy demands required by the newly implemented internal control audits.

smaller proportion of resignations relative to dismissals is consistent with prior studies (Landsman et al. 2009; Kim and Park 2014).

Empirical Results

Audit Fee Test

Table 1, Panel A reports the sample distribution by year and industry, while Panel B shows the descriptive statistics of the variables used in the audit fee model. Panel C reports the multivariate test results and shows that the coefficients on *CON_KW* and *CON_NOPA* are significantly negative at $p<0.01$, consistent with auditors charging lower audit fees to more conservative clients. The estimated coefficient -0.293 (-0.097) on *CON_KW* (*CON_NOPA*) indicates that a one-decile increase in conservatism is associated with about a 3.3 (1.1) percent decline in audit fees.[10] Thus, the relation between conservatism and audit fees is economically significant. Consistent with prior research, audit fees are higher among clients that are larger (*MV*), have higher operating risk (*Loss* and *LEV*), have greater complexity (*NSEG*, *SPITEM*, and *FOPS*), have December year-ends (*Busy*), are less profitable (*ROA*), engage in mergers and acquisitions (*Merger*), hire a Big N auditor (*BigN*), and receive a GCO (*GCO*).

Going Concern Modified Opinion Test

Table 2, Panel A reports the sample distribution by year and industry, and Panel B reports the descriptive statistics of the variables used in the GCO model. Panel C reports the multivariate test results and shows that the coefficient on *CON_KW* is negative and significant at $p<0.05$, and the coefficient on *CON_NOPA* is negative but not significant at conventional levels. (Although in a one-tailed test this coefficient is significant at $p=0.07$). Thus, auditors are less likely to issue GCOs to more conservative distressed clients, although the results are weaker for the GH

[10] The annual decile ranks of our conservatism measures range between 0 and 1, and the difference in each decile rank is 1/9. Thus, the percentage change in fees when *CONSV* shifts from one decile to the next decile can be calculated as the coefficient estimate of *CONSV* times 1/9.

measure of conservatism. In terms of economic significance, the marginal effect of a one-decile increase in *CON_KW* and *CON_NOPA* decreases the likelihood of a GCO by 0.3% and 0.2%, respectively.[11] Consistent with prior literature, we find that firms receiving a GCO tend to have higher bankruptcy scores (*ZScore*), smaller size (*Assets*), loss-making in the prior year (*LLoss*), poorer operating cash flows (*Cashflow*), lower liquidity (*Investment*), smaller future financing (*Future_Finance*), and lower book-to-market ratio (*BM*).[12]

Auditor Resignation Test

Table 3, Panel A reports the sample distribution by year and industry, and Panel B reports descriptive statistics for the variables used for the auditor resignation model. Panel C reports the multivariate test results and shows that the coefficients on *CON_KW* and *CON_NOPA* are significantly negative at $p<0.01$, consistent with auditors being less likely to resign from more conservative clients. A one-decile increase in *CON_KW* and *CON_NOPA* reduces the propensity of auditors to resign by 2.3% and 1.2% respectively. Consistent with prior research, we also find that auditors are more likely to resign from clients with shorter auditor tenure (*Tenure*), higher leverage (*LEV*), lower cash holdings (*Cash*), more reportable events (*Rep_Event*), larger absolute discretionary accruals (*Abs_DA*), smaller size (*Assets*), and by non-Big N auditors (*BigN*).

[11] The marginal effect for a one-decline increase in conservatism measure is computed as p x (1-p) x b x 1/9, where p is the base rate (3.3% for the model using *CON_KW* and 8.4% for the model using *CON_NOPA*) and b is the estimated coefficient from the logistic regression.

[12] DeFond and Zhang (2014) argue that more GCOs are suggestive of higher audit quality, particularly in settings where auditor independence is threatened. They also argue that auditors have incentives to issue more GCOs than are appropriate in order to reduce risk exposure. Our finding is consistent with the latter argument. To confirm this, in untabulated analysis, we examine Type 1 and 2 audit opinion errors after splitting the sample based on the median value of *C_Score*. Using bankruptcy data from Audit Analytics we find that 41 firms filed for bankruptcy within 12 months following fiscal year end among the *CON_KW* sample firms. A Type 1 error (i.e., false alarms) occurs when the auditor issues a GCO report and the client does not file for bankruptcy during the subsequent 12 months. A Type 2 error (i.e., failure to warn of bankruptcy) occurs when the auditor does not issue a GCO report and the client does file for bankruptcy during the subsequent 12 months. We compute Type 1 and 2 errors following Francis (2011) and find that the Type 1 error rate for the high conservatism group (1.9%) is lower than that for low conservatism group (3.1%) with the difference significant at $p<0.01$, which indicates that auditors make more false alarms for less conservative clients. This result suggests that lowering the threshold for issuing a GCO to less conservative clients reduces the auditors' risk exposure, but also results in higher Type 1 errors. We find that the difference in Type 2 errors between high and low conservatism clients is not significant at conventional levels.

Endogeneity Tests

While we examine auditors' response to the level of conservatism chosen by their clients, conservatism may also be affected by the auditor-client contracting variables. Although we expect the use of one-year lagged conservatism in our models to alleviate this concern to some degree, we conduct formal endogeneity tests using the two-stage instrumental variable approach employed in the Durbin–Wu–Hausman test (Davidson and MacKinnon 1993). Among the five drivers of conservatism in KW, we use the length of the investment cycle (*Cycle*) and firm age (*Age*) as instrumental variables and estimate conservatism with these variables and the other control variables used in the respective models.[13] We then augment equations (1) through (3) by including the residuals (*RES*) from the first stage regression. The significance of *RES* tests for the potential existence of endogeneity. Panel A of Table 4 reports that the coefficient on *RES* is insignificant in our GCO and auditor resignation models, indicating a lack of endogeneity. However, *RES* is significant at $p<0.01$ in our audit fee model, suggesting that endogeneity may be a concern.[14] We then use the predicted value of conservatism (*Predict_CON_KW* or *Predict_CON_NOPA*) from the first stage model to replace *CONSV*. Panel B reports that the coefficient on predicted conservatism remains negative and significant at $p<0.10$ in all models, except for the GCO test with *Predict_CON_NOPA*. These results are largely consistent with those reported in the previous tables, indicating that our main findings still hold even after

[13] Conceptually, a good instrument is one that is related to conservatism but unrelated to audit fees, GCOs, and auditor resignations. We view *Cycle* and *Age* as plausible instrumental variables because KW find that conservatism is higher for younger firms that tend to have more growth options and for firms with longer investment cycles that have higher investment uncertainty. Moreover, it is less likely that these variables would exert a direct, first-order effect on fees, GCOs, and auditor resignations, while the effect of the probability of litigation (*ProbLit*), idiosyncratic uncertainly (*Volatility*), or information asymmetry (*Spread*) is more likely.

[14] We examine the effect of client conservatism on how auditors price client engagements. Nonetheless, it is possible that higher client conservatism may result from auditors exerting additional effort during their audits in order to impose greater conservatism on their clients. However, this "reverse causality" should also result in higher audit effort, which would in turn result in a positive relation between client conservatism and audit fees, thus biasing against our results.

controlling for possible endogeneity.

Following Larcker and Rusticus (2010), we conduct two tests to assess the appropriateness of the instruments. First, we perform the overidentification tests (Hansen's *J*-test), which examine whether the instrumental variables are associated with the dependent variables beyond their effects through conservatism. An insignificant test result is consistent with a failure to reject the validity of the instruments. Panel B of Table 4 reports that the p-values of the overidentification tests are all insignificant, and thus we cannot reject the null hypothesis that the instruments are valid in all model specifications. Second, we test the strength of our instrumental variables by computing partial F-statistics of the instruments used in the first-stage regressions. The partial F-statistics, as reported in panel B of Table 4, range from 12.70 to 291.08, consistently higher than the minimum benchmark of 11.59 for models with two instruments (Larcker and Rusticus 2010). Thus, we conclude that our models do not suffer from weak instruments.

Lastly, to mitigate the concern that endogeneity arising from omitted correlated variables drives our audit fee test results, we perform a change analysis by regressing the change in audit fees on changes in the continuous variables in the audit fee model and report the results in Panel C of Table 4. The results indicate that the change in conservatism is significantly negatively associated with the change in audit fees at $p<0.01$, consistent with our audit fee level test.[15]

Path Analysis

We next perform a path analysis to test our maintained assumption that inherent risk and auditor business risk are the paths through which conservatism affects fees, GCOs, and

[15] We are only able to perform a meaningful change analysis for the audit fee model. Because audit fees are continuous, they are able to change in response to small changes in conservatism. In contrast, because GCOs and resignations are indicator variables, they do not change continuously in response to changes in conservatism. This is why prior research typically performs change analyses only for models that have continuous independent and dependent variables.

resignations. Path analysis uses a structural equation model to answer *how* a source variable (in our case conservatism) affects an outcome variable (in our case fees, GCOs, or resignations) by decomposing the correlation between the source variable and an outcome variable into their direct path, and their indirect paths through mediating variables. (Baron and Kenny 1986). We expect inherent risk to be a direct path through which conservatism affects our outcome variables; and we expect auditor business risk to be an indirect path that is mediated by litigation and misstatement risk. A direct path includes only one path coefficient, while an indirect path includes a path coefficient between the source variable and the mediating variable as well as a path coefficient between the mediating variable and the outcome variable. The total magnitude of the indirect path is the product of these two path coefficients. The path analysis automatically standardizes all variables in the model with a mean of zero and a standard deviation of one, allowing comparison of the magnitudes of the coefficients.

In addition to auditor litigation risk, we also use misstatement risk as a mediating variable, because misstatements (even in the absence of litigation) expose auditors to loss and injury, such as negative press reports and PCAOB sanctions. Our proxy for expected auditor litigation risk (*ShuScore*) is the annual decile rank of Shu's (2000) score, and our proxy for expected misstatement risk (*Misstate_Risk*) is the average annual decile rank of Dechow et al.'s (2011) F-score, Beneish's (1999) M-score, and Dechow and Dichev's (2002) accrual quality. We use expected measures because the likelihood of future litigation and misstatement is uncertain at the time of the audit. Following prior studies that use path analysis (Pervzner et al. 2014), we estimate the following model:

$$DepVar_t = \beta_0 + \beta_1 CONSV_{t-1} + \beta_2 ShuScore_t + \beta_3 Misstate\_Risk_t + Controls + e_t \quad (4A)$$

$$ShuScore_t = \alpha_0 + \alpha_1 CONSV_{t-1} + e_t \quad (4B)$$

$$Misstate\_Risk_t = \delta_0 + \delta_1 CONSV_{t-1} + e_t \quad (4C)$$

Equation (4A) includes a dependent variable (*DepVar*) for each outcome variable (i.e., audit fees, GCOs and resignations) and relevant control variables (*Controls*) from equations (1)-(3). The path coefficient β_1 is the magnitude of the direct path from conservatism to the *DepVar*, while the path coefficient $\alpha_1*\beta_2$ ($\delta_1*\beta_3$) is the magnitude of the indirect path from conservatism to the *DepVar* mediated through auditor litigation risk (misstatement risk). The significance of the indirect effect is estimated using the Sobel (1982) test statistics. Figure 1 illustrates posited direct and indirect paths for the above model along with their coefficients and predicted signs.

Table 5 presents the path coefficients of interest. Panel A reports the results for the audit fee test. We focus our discussion on *CON_KW* as the results with *CON_NOPA* are similar. The direct path coefficient between conservatism and audit fees [p(*CON_KW, LAUDIT*)] is significantly negative at p<0.01, consistent with lower inherent risk from higher conservatism directly decreasing auditor effort. The path coefficient between conservatism and auditor litigation risk [p(*CON_KW, ShuScore*)] is significantly negative, indicating that auditors face less litigation risk from more conservative clients. The path coefficient between auditor litigation risk and audit fees [p(*ShuScore, LAUDIT*)] is significantly positive, consistent with higher litigation risk leading to higher fees. The total mediated path for litigation risk [p(*CON_KW, ShuScore*) x p(*ShuScore, LAUDIT*)] is significantly negative at p<0.01, with a coefficient of -0.049. The coefficient implies that a one-standard-deviation increase in *CON_KW* results in a 0.049-standard-deviation decrease in audit fees through *CON_KW*'s impact on auditor litigation risk. This suggests that the proportion of the total effect (the sum of the direct and the mediated path coefficients) of *CON_KW* on audit fees that is attributable to litigation risk is about 35% [=-0.049/(-0.089-0.049-0.003)]. The path coefficient between conservatism and misstatement risk [p(*CON_KW, Misstate_Risk*)] is also significantly negative, suggesting that auditors face lower

misstatement risk from more conservative clients. The path coefficient between misstatement risk and audit fees [p(*Misstate_Risk*, *LAUDIT*)] is significantly positive, indicating that higher misstatement risk is associated with higher fees. The total mediated path for misstatement risk [p(*CON_KW*, *Misstate_Risk*) x p(*Misstate_Risk*, *LAUDIT*)] is statistically significant at $p<0.05$, with a coefficient of -0.003, which implies that a one-standard-deviation increase in *CON_KW* results in a 0.003-standard-deviation decrease in audit fees through *CON_KW*'s impact on misstatement risk. This suggests that the proportion of the total effect attributable to misstatement risk is about 2% [=-0.003/(-0.089-0.049-0.003)]. Hence, while both auditor litigation risk and misstatement risk are significant channels through which conservatism affects audit fees, the analysis finds that litigation risk is a relatively more important channel when compared to misstatement risk.[16] Table 5, Panel B and C report the results when the dependent variable is GCOs and auditor resignations, respectively. As with the audit fee tests, the two panels show that conservatism has both significant direct and indirect effects on GCO and resignation. They also provide similar evidence in terms of the relative importance of auditor litigation risk compared to misstatement risk. Specifically, in Panel B, the total mediated path through auditor litigation risk is -0.020, which is about 31% of the total effect of *CON_KW* on GCO [=-0.020/(-0.039-0.020-0.005)]. In Panel C, the total mediated path through auditor litigation risk is -0.025, which is about 26% of the total effect of *CON_KW* on auditor resignation [=-0.025/(-0.065-0.025-0.008)]. In both panels the total mediated path for misstatement risk is smaller, with about 8% of the total effect of *CON_KW*. This evidence is

[16] The results also suggest that the direct path is a relatively more important channel than the indirect paths for audit fees. However, comparing the magnitude of the direct and indirect paths is subject to limitations because the comparison may be affected by measurement errors in our empirical proxies for the unobservable constructs of "auditor business risk" and by the possibility of omitted paths. Since the direct path, by construct, captures the residual effects not explained by our proxies for the indirect paths, the measurement errors and possible omitted paths are likely to induce an underestimation (overestimation) of the importance of the indirect (direct) path (Baron and Kenny 1986).

consistent with Watts (2003), who argues that an important reason for auditors' preference for conservative accounting is to mitigate litigation concern.

Validating Auditor Litigation Risk and Misstatement Risk as Mediated Path

Our path analysis uses *ex ante* proxies for auditor litigation risk and misstatement risk as mediated auditor business risk paths. To examine whether these paths are *ex post* valid, we examine the association between conservatism and the incidence of auditor litigation and financial restatements. Significant associations would provide corroborating evidence that they are important channels through which conservatism affects auditor-client contracting. We first perform the auditor litigation analysis using the following logistic model adapted from Shu (2000):

$$\begin{aligned} LITIG_t = {} & \alpha_0 + \alpha_1 CONSV_{t-1} + \alpha_2 Assets_{t-1} + \alpha_3 Inventory_{t-1} + \alpha_4 Receivable_{t-1} + \alpha_5 ROA_{t-1} + \alpha_6 Current_{t-1} \\ & + \alpha_7 LEV_{t-1} + \alpha_8 Sales\_Growth_{t-1} + \alpha_9 Return_{t-1} + \alpha_{10} Volatility_{t-1} + \alpha_{11} Beta_{t-1} + \alpha_{12} Turnover_{t-1} \\ & + \alpha_{13} Delist_{t-1} + \alpha_{14} Tech\_Dummy_{t-1} + \alpha_{15} GCO_{t-1} + \alpha_{16} BM_{t-1} + \alpha_{17} Signed\_DA_{t-1} \\ & + Year\ Dummies + e_t \end{aligned} \quad (5)$$

The dependent variable (*LITIG*) is an indicator variable that equals one if the auditor is named as the defendant in a lawsuit during the year, and 0 otherwise. All independent variables are measured in the year prior to the lawsuit. A negative coefficient on *CONSV* is consistent with conservative financial reporting decreasing the likelihood of auditor litigation. We add two control variables to the original model in Shu (2000): *BM*, following the suggestion in KW, and *Signed_DA* because Heninger (2001) reports that auditor litigation is associated with upward manipulation of discretionary accruals.

To test whether conservatism is associated with the incidence of accounting restatements we estimate the following model adapted from Cao et al. (2012):

$$\begin{aligned} RESTATE_t = {} & a_0 + a_1 CONSV_{t-1} + a_2 MV_t + a_3 Volatility_t + a_4 BM_t + a_5 LEV_t + a_6 ROA_t + a_7 LOSS_t \\ & + a_8 BigN_t + a_9 MERGER_t + a_{10} FINANCE_t + a_{11} NSEG_t + a_{12} FOPS_t + a_{13} Inv\_Rec_t \\ & + a_{14} Return_t + Year\ Dummies + e_t \end{aligned} \quad (6)$$

RESTATE equals one if the earnings for the firm-year or any quarter in the firm-year are subsequently restated downward, and 0 otherwise. Thus, *RESTATE* captures the misstatement

year that is subsequently restated. All independent variables are measured in the concurrent year except *CONSV*, which is lagged by one-year. A negative coefficient on *CONSV* is consistent with conservatism reducing the incidence of restatements.

The sample for our auditor litigation test is from the Auditlegal database of Audit Analytics. After merging with CRSP and Compustat, our final sample includes 101 (147) lawsuits against auditors using *CON_KW* (*CON_NOPA*).[17] The control firms have no auditor litigation. In the restatement test we only consider material incoming-decreasing financial restatements (defined as restatements that reduce income by more than a one million dollar) that do not trigger auditor litigation.[18] The final sample consists of 1,126 (1,251) restatements for the test with *CON_KW* (*CON_NOPA*). The control firms include all non-restated firm-year observations during the sample period, which did not experience auditor litigation.

Table 6, Panel A reports that the coefficients on *CONSV* are negative and statistically significant at $p<0.01$, consistent with client conservatism reducing auditor litigation risk. Panel B reports the results for the restatement tests. The coefficients on *CONSV* are significantly negative at $p<0.01$, consistent with conservative clients posing less misstatement risk. Thus, the analysis in Table 6 corroborates our conclusion that an important reason for auditors' response to clients' conditional conservatism is to mitigate auditor business risk.

V. SENSITIVITY TESTS

This section reports several robustness tests of our primary analysis. Because the results with the two proxies for conservatism are similar, we present the results based on the *CON_KW*

[17] This is a reasonably large sample when compared to other auditor litigation studies. For example, Heninger (2001), Stice (1991), and Lys and Watts (1994) examine 67, 49, and 40 lawsuits against auditors, respectively.

[18] We examine only material income-decreasing restatements to capture restatements that are likely to significantly harm shareholders and thus auditors. Callen et al. (2006) find that the market response to income-increasing restatement announcements is not significantly different from zero.

for parsimony. The results of all of our sensitivity tests are summarized in Table 7. To conserve space, we do not report the coefficients on the control variables.

Tests with Adjusted Conservatism

KW show that a higher *C_Score* is associated with higher probabilities of litigation, longer investment cycles, higher idiosyncratic uncertainty, lower firm age, and higher information asymmetry. Thus, we perform sensitivity tests using adjusted conservatism (*ADJ_CONKW*) which is orthogonal to these variables. This estimation procedure is summarized in Appendix 3, and results in a smaller size due to additional data requirements. Panel A of Table 7 indicates the coefficients on *ADJ_CONKW* remain negative and significant in all tests.

Joint Estimation of Auditor Decisions

Because it is possible that auditors use a combined strategy in response to client conservatism, we jointly estimate all three models (models 1 through 3 above) using a system of equations. We perform this test with all common observations (n=17,010), without restrictions for distress or auditor switches. Panel B of Table 7 shows that the coefficients on *CON_KW* continue to be significantly negative in all three models, suggesting that conservatism is important even when the three decisions are jointly considered.

Controlling for Corporate Governance

To ensure that governance is not an omitted correlated variable, we repeat our tests after including several governance variables (following Lara et al. 2009): the G-index (*Gindex*) (Gompers et al. 2003); whether the CEO is chairman (*Duality*), proportion of executives on the board (*Executive*), and the number of board meetings during the year (*Meeting*).[19] Table 7, Panel

[19] The external governance data (*Gindex*) are obtained from Andrew Metrick's web page and the internal governance data are from the Execucomp and Investor Responsibility Research Center (IRRC) databases. Due to a large number of observations with missing governance data, we use the modified zero-order regressions suggested

C shows that the coefficients on *CON_KW* remain significantly negative in all tests. Other potential omitted governance variables include audit committee independence and expertise. Because SOX requires audit committees to be fully independent and to have at least one financial expert, we can partially control for the effect of audit committee attributes by conducting our analysis during the post-SOX period, when the attributes are more homogenous. Untabulated results indicate that the coefficient on *CON_KW* is negative and significant at $p<0.01$ for the fee and resignation tests, while it is negative but insignificant for the GCO test.

Controlling for Discretionary Accruals

Prior studies document that discretionary accruals (DA) are associated with auditor litigation (Heninger 2001), audit fees (Gul et al. 2003), and GCOs (Butler et al. 2004). Because DA potentially reflect conservatism, we repeat our tests after controlling for signed, absolute value, and income-increasing DA. Panels D and E of Table 7 report that the coefficients on *CON_KW* continue to be negative and significant at conventional levels in all tests.[20]

The Effect of Big N Auditors

We repeat our analysis separately for Big N and non-Big N auditor clients. The results reported in Panel F indicate that the coefficients on *CONSV* are all significant and negative for both Big N and non-Big N auditor clients, similar to the results for the full sample.[21]

Other Robustness Checks

We also perform several untabulated robustness checks. Following the suggestion in KW, our reported analysis includes controls for firm size, leverage, and the book-to-market ratio.

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by Greene (2003). This method has fewer assumptions about missing values and substitutes a zero for missing values and adds an indicator variable coded one if the corresponding variable is missing.

[20] Specifically, of the 12 coefficients on *CON_KW* in Panels D and E, eight are significant at $p<0.01$ and four are significant at $p<0.10$.

[21] When we include an interaction term between *CONSV* and Big N indicator in the pooled sample to examine whether the effect of conservatism on auditor-client contracting outcome variables is more pronounced for Big N auditor, our untabulated results indicate that the sign of the interaction term is mixed across the tests. Thus, we find that there is no systematic pattern on the incremental effect of Big N auditor.

However, since *CON_KW* is likely to be correlated with the three variables, we check the variance-inflation factors (VIF) for the independent variables in each model. We find they are all less than 6, suggesting that multicollinearity is unlikely to influence our results. We also repeat our analysis excluding firm size, leverage, and the book-to-market ratio and find that the coefficients on *CON_KW* continue to be negative and significant at $p<0.05$ in all tests. In addition, we define size, book-to-market and leverage following the auditing literature, which sometimes differs from the definitions used in KW to estimate *C_Score.* Thus, we also repeat our analysis after measuring these variables as in KW. We find that the coefficients on *CON_KW* continue to be negative and significant at $p<0.05$ in all tests.

Since GH argue that conservatism in one period can lead to non-conservatism in subsequent periods, we repeat our analyses after estimating *CON_KW* over the previous three years (*CON_KW3*). The results indicate that that the coefficients on *CON_KW3* remain negative and significant at $p<0.10$ in all tests. We also control for internal control weakness (*ICW*) and earnings volatility (*EVOL*) in our main models.[22] The results indicate that the coefficients on *CON_KW* are still significantly negative at $p<0.10$ in all tests.

Since we use one-year lagged conservatism in our main models, we perform a sensitivity analysis using contemporaneous conservatism for the audit fee and GCO models. The results indicate that the coefficients on *CON_KW* remain significantly negative at $p<0.05$ in both tests. In addition, endogeneity concerns may be reduced during the first three quarters because quarterly reports are typically reviewed rather than audited. Thus, we repeat our analyses using *CON_KW* measured over the first three quarters (in the concurrent year for audit fee and GCOs,

[22] *ICW* is defined 1 if the auditor issues an adverse opinion for internal control over financial reporting under SOX Section 404, and 0 otherwise. *EVOL* is the standard deviation of ROA over the three-year period. The sample size for this sensitivity test is smaller because *ICW* is available only in the post-SOX period and the calculation of *EVOL* further restricts the sample.

and in the previous year for resignations). We find that the coefficients on *CON_KW* remain negative and significant at $p<0.01$ for the audit fee and resignation tests, while the coefficient is negative and only significant in a one-tailed test for the GCO test ($p=0.09$).

In our audit fee test, we note that the correlation between *CON_KW* and firm size (*MV*) is relatively high ($r=-0.32$), which potentially biases toward the negative association between conservatism and audit fees. To alleviate this concern we split the sample into five groups based on firm size, in an attempt to make client size similar across observations. We then estimate the audit fee model for each group and find that the coefficient on *CON_KW* continues to be negative and significant at $p<0.05$ in four of the five groups.

We also repeat our audit fee tests after removing firms with non-clean opinions; and because we only include firms that receive GCOs for the first time in the GCO test, we also repeat our GCO tests after including firms that receive multiple GCOs. In addition, we repeat our resignation tests using firms that do not change auditors ($n=22,407$) as the control group, instead of firms that dismiss their auditor. We exclude *Disagree* and *Rep_Events* from the model since they are relevant only to auditor-switching firms. Finally, we include industry fixed effects in the GCO and resignation models. In all of these tests we continue to find that *CON_KW* remains significantly negative at $p<0.05$.

Finally, we examine if the effects of conservatism on auditor-client contracting are greater when CEOs are more likely to report conservatively. Following LaFond and Roychowdhury (2008), we construct a variable, *CONSV_CEO*, which equals one if CEO ownership is lower than the sample median and zero otherwise. LaFond and Roychowdhury (2008) argue that as managerial ownership declines, the severity of agency problems increase, increasing the demand for conservatism. We then repeat our main analyses after including *CONSV_CEO* and

CONSV_CEO CON_KW* in each model. Untabulated results show that the interaction term is significantly negative for the fee and GCO tests at $p<0.05$, and negative but insignificant at conventional levels for the resignation test. Thus, this finding suggests that the effects of conservatism on audit fees and GCOs are greater when CEOs are more likely to report conservatively.

VI. TESTS WITH UNCONDITIONAL CONSERVATISM

As previously discussed, conditional conservatism requires a higher degree of verification for the recognition of gains than for the recognition of losses. Unconditional conservatism, in contrast, biases earnings downward, but is applied irrespective of whether the news is easily verified (Qiang 2007). It is unclear, however, whether auditors are likely to respond to unconditional conservatism as they do to conditional conservatism. This is because unconditional conservatism during the current period can reduce conditional conservatism in future periods (Beaver and Ryan 2005). For example, firms that take excessive depreciation in the current period are less likely to take asset impairment write-downs in future periods. Further, unconditionally conservative earnings in the current period can lead to earnings overstatements in subsequent periods. This is the case, for example, when excessive loss reserves in the current period reverse in future periods they overstate future earnings. Several studies support this concern by finding that measures of unconditional conservatism are negatively associated with measures of conditional conservatism (Beaver and Ryan 2005).[23] In addition, because the level of unconditional conservatism is largely determined by accounting standards (e.g., expensing

[23] While Qiang (2007) reports that auditor litigation risk induces both conditional and unconditional conservatism, Ettredge et al. (2012b) suggests that this may be because her proxy for auditor litigation risk (Big N membership) is very indirect.

R&D expenditures) or by legitimate accounting choices (e.g., LIFO versus FIFO inventory method), it is unlikely to be associated with auditor business risk.

In this section, we explore the effects of unconditional conservatism on auditors' strategic responses. We begin by repeating our tests of audit fees, GCOs, and resignations with two proxies for unconditional conservatism. One is from Penman and Zhang (2002), based on the LIFO reserve, R&D, and advertising expenses over the previous five years. The other is from Beaver and Ryan (2000), who estimate a conservatism bias component by regressing the book-to-market ratio on current and lagged returns in the prior six years. We use the firm-specific coefficient estimate multiplied by negative one as our second proxy. Table 8, Panel A reports that neither proxy is related to GCO and auditor resignation, and only the Beaver and Ryan (2000) measure is significantly negatively associated with audit fees. Although not tabulated, when we include a conditional measure (*CON_KW*) in each model, we find that while *CON_KW* continues to be significantly negative, the unconditional conservatism measures are mostly insignificant. Thus, we do not find a robust association between the proxies for unconditional conservatism and the strategies auditors use in dealing with engagement risk.

To explore why auditors do not strategically respond to unconditional conservatism, we repeat our tests of auditor litigation and restatement after replacing *CONSV* in equations (5) and (6) with the two unconditional conservatism measures. Table 8, Panel B shows that neither of our unconditional conservatism proxies is associated with auditor litigation or restatements. Thus, auditors' failure to strategically respond to unconditional conservatism is *ex post* consistent with the fact that unconditional conservatism does not affect auditor business risk.

VII. CONCLUSION

We examine the role of client conservatism in formulating auditor-client contracting. Our empirical tests find that auditors of more conservative clients charge lower audit fees, issue fewer GCOs, and resign less frequently, consistent with client conservatism reducing engagement risk. Using path analysis, we find that conservatism has a negative direct effect on the outcome variables. Further, auditor business risk captured by auditor litigation risk and misstatement risk are significant mediated paths that explain the association between conservatism and the outcome variables. We also find that client conservatism is negatively associated with the incidence of auditor litigation and restatements, suggesting that auditors' *ex ante* concerns about the effects of conservatism on auditor business risk are valid.

We extend the literature by examining how conservatism affects auditor-client contracting. Our evidence suggests that conservatism is an important factor that influences the auditors' strategic contracting decisions. The results are potentially of interest to managers, auditors, regulators, and audit committees. Managers may be interested because our results suggest that a benefit of conservative accounting is that it reduces fees, unfavorable audit opinions, and the incidence of auditor resignations. Auditors may gain insights from our study because they actively manage engagement risk, and we find support for the notion that conservatism is associated with lower inherent risk and auditor business risk. Moreover, given the significant variation in conservatism among public firms, regulators and audit committees may benefit by better understanding the effects of conservatism on auditor behavior and auditor-client relations.

Like most studies, however, our analysis is subject to caveats. One is that although we do our best to control for reverse causality and omitted correlated variables, we cannot completely rule out these threats. Another is that while we consider *ex ante* auditor litigation and

misstatement risks as two mediated paths, these two risks are not necessarily independent, which limits our interpretation of relative importance of the path coefficients.

Appendix 1: Variable Definitions

Dependent and test variables

LAUDIT	=	log of audit fees;
OPIN	=	1 if the firm receives a going concern opinion for the first time, and 0 otherwise;
RESIGN	=	1 if the auditor resigns, and 0 otherwise (dismissed);
CON_KW	=	annual decile rank of conservatism score (*C_Score*) developed by Khan and Watts (2009), scaled from 0 to 1, with higher values indicating higher conservatism. A detail of *C_Score* estimation is provided in Appendix 2;
CON_NOPA	=	annual decile rank of non-operating accruals (NOPA), scaled from 0 and 1. NOPA is the three-year average of non-operating accruals as in Givoly and Hayn (2000), Higher values of *CON_NOPA* indicate higher conservatism. NOPA is computed as follows (all items deflated by beginning total assets): NOPA = [(Net Income + Depreciation) − Cash flow from operations] − (Δ Accounts receivable + Δ Inventories + Δ Prepaid expenses − Δ Accounts payable − Δ Taxes payable);
LITIG	=	1 if the auditor is named as the defendant in the lawsuit, and 0 otherwise;
RESTATE	=	1 if the earnings for the firm-year or any quarter in the firm-year are subsequently restated downward, and 0 otherwise. In other words, *RESTATE* captures the misstatement year.

Control variables

Assets	=	log of total assets;
Inventory	=	inventories deflated by total assets;
Receivable	=	receivables deflated by total assets;
ROA	=	income before extraordinary items deflated by total assets;
Current	=	current assets divided by current liabilities;
LEV	=	total debts to equity ratio;
Sales_Growth	=	growth in sales;
Return	=	the compounded stock return over the fiscal year;
Volatility	=	the standard deviation of the residual from the market model over the fiscal year;
Beta	=	the slope coefficient of a regression of daily stock returns on equally weighted market returns over the fiscal year;
Turnover	=	the proportion of shares traded at least once during the fiscal year, computed as in Shu (2000);
Delist	=	1 if the firm is delisted due to financial difficulties within the next year, and 0 otherwise;
Tech_Dummy	=	1 if the firm is in a high-tech industry, and 0 otherwise. The classification of high-tech industries follows from Shu (2000);
GCO	=	1 if the firm receives a going concern opinion, and 0 otherwise;
BM	=	book-to-market ratio;
Signed_DA	=	performance-adjusted signed discretionary accruals obtained by subtracting from each firm's abnormal accrual the median abnormal accrual from the corresponding ROA-industry decile to which the firm belongs. Discretionary accrual is estimated by modified Jones model for each year and each two-digit SIC code industry with minimum 10 observations;
MV	=	log of market capitalization;
Loss	=	1 if the firm reports a loss and 0 otherwise;
BigN	=	1 if the firm is audited by a Big 4 or Big 5 audit firm, and 0 otherwise;
Merger	=	1 if the firm is engaged in a merger or acquisition, and 0 otherwise;

Finance	=	1 if long term debt or number of shares increased by at least 10%, and 0 otherwise;
NSEG	=	the number of business segments;
FOPS	=	1 if the firm has a foreign operation, and 0 otherwise;
Inv_Rec	=	sum of inventories and receivables, divided by beginning total assets;
Quick	=	current assets minus inventories, divided by current liabilities;
SPITEM	=	1 if the firm reports a special item, and 0 otherwise;
Pension	=	1 if the pension assets or periodic pension cost is greater than $1 million, and 0 otherwise;
Busy	=	1 if the fiscal year end is December, and 0 otherwise;
ZScore	=	Zmijewski's (1984) bankruptcy score;
Age	=	natural logarithm of the age of the firm in a given year, measured as the number of years with return history on CRSP;
CLEV	=	change in *LEV* during the year;
LLoss	=	1 if the firm reports a loss for the previous year, and 0 otherwise;
Investment	=	cash, cash equivalents, and short- and long-term investment securities deflated by total assets;
Cashflow	=	operating cash flows deflated by total assets;
Future_Finance	=	1 if long term debt or number of shares increased by at least 10% in the following year, and 0 otherwise;
Asset_Growth	=	growth in assets;
Abs_DA	=	absolute values of performance-adjusted discretionary accruals;
Clean	=	1 if the auditor issues a clean, unqualified audit opinion, and 0 otherwise;
Tenure	=	auditor tenure in years;
Cash	=	cash deflated by total assets;
Disagree	=	1 if the 8-K filing discloses an accounting disagreement with the incumbent auditor, and 0 otherwise;
Rep_Event	=	1 if the 8-K filing discloses a reportable event, and 0 otherwise;
Industry Dummies	=	industry membership as defined in Frankel et al. (2002).

Appendix 2 & 3 are posted at
https://accountancy.smu.edu.sg/sites/default/files/accountancy/faculty/pdf/Chew_Yeow_additional_mat.pdf

REFERENCES

Abbott, L., K. Gunny, and T. Zhang. 2013. When the PCAOB talks, who listens? Evidence from client firm reaction to adverse, GAAP-deficient PCAOB inspection reports. *Auditing: A Journal of Practice & Theory* 32(2): 1-31.

Ahmed, A., B. Billings, R. Morton, and M. Harris. 2002. The role of accounting conservatism in mitigating bondholder–shareholder conflict over dividend policy and in reducing debt cost. *The Accounting Review* 77, 867–890.

Ahmed, A. and S. Duellman. 2013. Managerial overconfidence and accounting conservatism. *Journal of Accounting Research* 51(1):1–30.

Ashbaugh, H., R. LaFond, and B.W. Mayhew. 2003. Do nonaudit services compromise auditor independence? Further evidence. *The Accounting Review* (Jul): 611-639.

Balsam, S., J. Krishnan, and J.S. Yang. 2003. Auditor industry specialization and earnings quality. *Auditing: A Journal of Practice & Theory* (September): 71-97

Baron, R. M., and D. A. Kenny. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 51: 1173-1182.

Barth, M., W. Landsman, V. Ravel, and S. Wang. 2013. Conservatism and the information content of earnings. Working paper, Stanford University and the University of North Carolina.

Basu, S. 1997. The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics* 24: 3-37.

Beaver, W., and S. Ryan. 2005. Conditional and unconditional conservatism: concepts and modeling. *Review of Accounting Studies* 10 (2-3): 269-309.

Beaver, W. and S. Ryan. 2000. Biases and lags in book value and their effects on the ability of the book-to-market ratio to predict book return on equity. *Journal of Accounting Research* 38: 127–148.

Behn, B.K., J-H. Choi, and T. Kang. 2008. Audit quality and properties of analyst earnings forecasts. *The Accounting Review* 83(2): 327-349

Beneish, M. D. 1999. The detection of earnings manipulation. *Financial Analysts Journal* 55: 24–36.

Butler, M., A. J. Leone, and M. Willenborg. 2004. An empirical analysis of auditor reporting and its association with abnormal accruals. *Journal of Accounting and Economics* 37: 139–166.

Callen, J. L., J. Livnat, and D. Segal. 2006. Accounting restatements: Are they always bad news for investors? *Journal of Investing* 15(3): 57-113.

Cao, Y., A. L. Myers, and C. T. Omer. 2012. Does company reputation matter for financial reporting quality? Evidence from restatements. *Contemporary Accounting Research* 29(3):956-990.

Carcello, J. V., and Z. V. Palmrose. 1994. Auditor litigation and modified reporting on bankrupt clients. *Journal of Accounting Research* (Supplement): 1-30.

Chen, K. C. W., and B. K. Church. 1992. Default on debt obligations and the issuance of going concern opinions. *Auditing: A Journal of Practice & Theory* 11 (2): 30–49.

Chen L.C., D.M. Folsom, W. Paek, and H.Sami. 2014. Accounting conservatism, earnings persistence, and pricing multiples on earnings. *Accounting Horizons* 28(2): 233-260.

Chung, H., and J. Wynn. 2008. Managerial legal liability coverage and earnings conservatism. *Journal of Accounting and Economics* 46: 135-153.

Davis, L. R., D. N. Ricchuite, and G. Trompeter. 1993. Audit effort, audit fees, and the provision of nonaudit services to audit clients. *The Accounting Review* 68: 135-150.

Davidson, R. and J. G. MacKinnon. 1993. Estimation and inference in econometrics. New York: Oxford University Press.

Dechow, P. M., and I. Dichev. 2002. The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review* 77 (Supplement): 35–59.

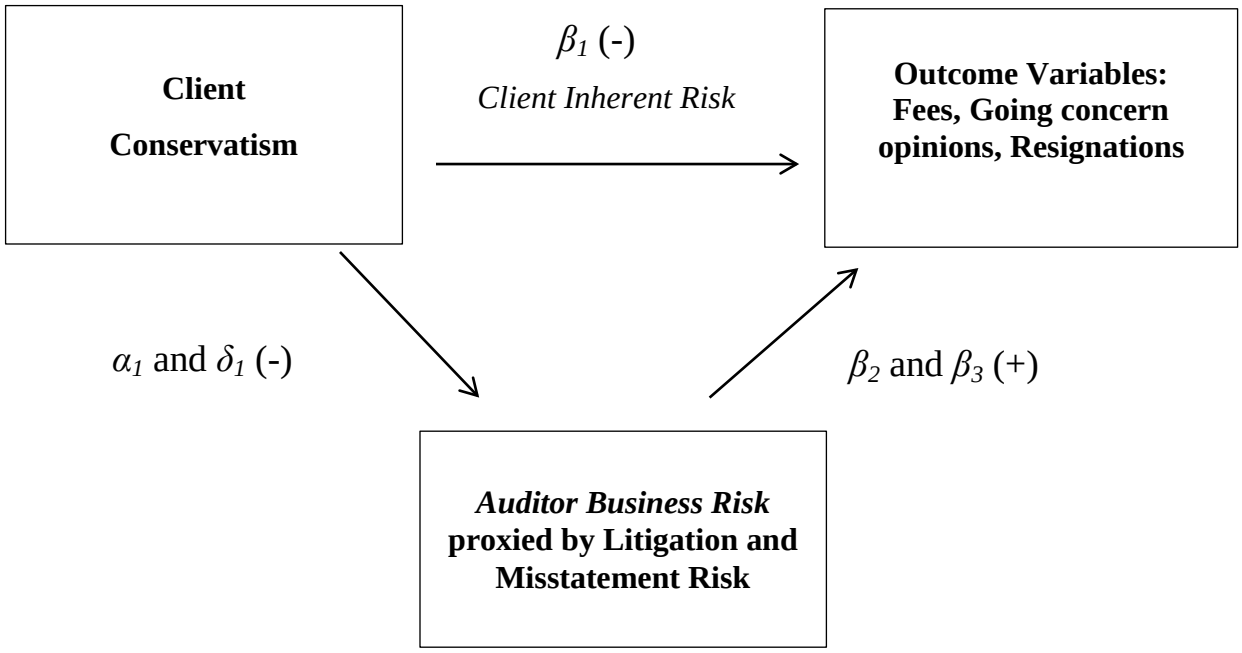
Dechow, P.M., W. Ge, C. Larson, and R. Sloan. 2011. Predicting material accounting misstatements. *Contemporary Accounting Research* 28(1): 17-82.

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

DeFond, M. L., D.H. Erkens, and J. Zhang. 2014. Do client characteristics really drive the Big N audit quality effect? Working paper, University of Southern California.
DeFond, M. and J. Zhang. 2014. A review of archival auditing research. *Journal of Accounting and Economics* 58: 275-326.
Dichev I., and V.W. Tang. 2008. Matching and the changing properties of accounting earnings over the last 40 Years. *The Accounting Review* 83(6): 1425-1460.
Ettredge, M., Y. Huang, and W. Zhang. 2012a. Earnings restatements and differential timeliness of accounting conservatism. *Journal of Accounting and Economics* 53 (3): 489-503.
Ettredge, M., Y. Huang, and W. Zhang. 2012b. Does accounting conservatism deter litigation? Working paper, University of Kansas.
Financial Accounting Standards Board (FASB). 2010. Statement of Financial Accounting Concepts No. 8. FASB, Norwalk, CT.
Francis, J. R. 2011. A framework for understanding and researching audit quality. *Auditing: A Journal of Practice & Theory* 30(2): 125-152.
Francis, J. R., and J. Krishnan. 1999. Accounting accruals and auditor reporting conservatism. *Contemporary Accounting Research* 16 (1): 135-165.
Francis, J. R. and X. Martin. 2010. Acquisition profitability and timely loss recognition. *Journal of Accounting and Economics* 49: 161–178.
Frankel, R. M., M. F. Johnson, and K. K. Nelson. 2002. The relation between auditors' fees for non-audit services and earnings management. *The Accounting Review* 77: 71-106.
Gao, Y. and Z. Gu. 2014. Bond rating accuracy and timely loss recognition in earnings. Working paper, University of Minnesota.
Geiger, M. and D. Rama. 2003. Audit fees, nonaudit fees, and auditor reporting on stressed companies. *Auditing: A Journal of Practice & Theory* 22: 53–69.
Gigler, F., C. Kanodia, H. Sapra, and R. Venugopalan. 2009. Accounting conservatism and the efficiency of debt contracts. *Journal of Accounting Research* 47(3): 767-797.
Givoly, D., and C. Hayn. 2002. Rising conservatism: implications for financial analysis. *Financial Analysts Journal* 58(1):56-74.
Givoly, D., and C. Hayn. 2000. The changing time series properties of earnings, cash flows and accruals: has financial reporting become more conservative? *Journal of Accounting and Economics* 29 (3): 287-320.
Goh, B.W. and D. Li. 2011. Internal controls and conditional conservatism. *The Accounting Review* 86: 975-1005.
Gompers, P., Ishii, J., and A. Metrick. 2003. Corporate governance and equity prices. *The Quarterly Journal of Economics* 118: 107–155.
Greene, W. H. 2003. *Econometric Analysis*, 5th ed. New Jersey: Pearson Education Inc.
Guay, W., and R. Verrecchia. 2007. Conservative disclosure. Working paper, University of Pennsylvania.
Gul, F, C., Chen, and J., Tusi. 2003. Discretionary accounting accruals, managers' incentives, and audit fee. *Contemporary Accounting Research* 20: 441-464.
Heflin, F., C. Hsu, and Q. Jin. 2014. Accounting conservatism and street earnings. *Review of Accounting Studies* forthcoming.
Heninger, W. 2001. The association between auditor litigation and abnormal accruals. *The Accounting Review* 76: 111-126.
Hennes, K. M., A. J. Leone, and B. P. Miller. 2014. Determinants and market consequences of auditor dismissals after accounting restatements. *The Accounting Review* 89(3): 1051-1082.
Hillegeist, S. A. 1999. Financial reporting and auditing under alternative damage appointment rules. *The Accounting Review* 74(3): 347-369.
Johnstone, K. M. and J. C. Bedard. 2004. Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review* 78 (4): 1003-1025.
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
Khan, M., and R. Watts. 2009. Estimation and empirical properties of a firm-year measure of accounting conservatism. *Journal of Accounting and Economics* 48: 132-150.

Kida, T. 1980. An investigation into auditors' continuity and related qualification judgments. *Journal of Accounting Research* 18 (2): 506–523.
Kim, Y., and M.S. Park. 2014. Real activities manipulation and auditors' client retention decisions. *The Accounting Review* 89(1):367-401.
Kim, J.-B., and L. Zhang 2014. Accounting conservatism and stock price crash risk: Firm-level evidence. *Contemporary Accounting Research* forthcoming.
Kothari, S. P., S. Shu, and P. D. Wysocki. 2009. Do managers withhold bad news? *Journal of Accounting Research* 47 (1): 241-276.
LaFond, R. and S. Roychowdhury. 2008. Managerial ownership and accounting conservatism. *Journal of Accounting Research* 43(1): 101-135.
LaFond R., and R. Watts. 2008. The information role of conservatism. *The Accounting Review* 83: 447-478.
Lara, J. M. G., B. Osma, and F. Penalva. 2009. Accounting conservatism and corporate governance. *Review of Accounting Studies* 14: 161-201.
Landsman, W., K. Nelson, and B. Rountree. 2009. Auditor switches in the pre- and post-Enron eras: Risk or realignment? *The Accounting Review* 84 (2): 531-558.
Larcker, D. F., and T. O. Rusticus. 2010. On the use of instrumental variables in accounting research. *Journal of Accounting and Economics* 49: 186-205.
Lee, H., X. Li. and H. Sami. 2014. Conditional conservatism and audit fees. *Accounting Horizons* forthcoming.
Levitt, A. 1998. The "Numbers Game." Remarks of SEC Chairman A. Levitt at the New York University Center for Law and Business, New York, NY, September 28.
Lys, T., and R. L. Watts. 1994. Litigation against auditors. *Journal of Accounting Research* 32: 65-93.
Malmendier, U., G. Tate. 2008. Who makes acquisitions? CEO overconfidence and the market's reaction. *Journal of Financial Economics* 89: 20– 43
Palmrose, Z. V. 1997. Audit litigation research: Do the merits matter? An assessment and directions for future research. *Journal of Accounting and Public Policy* 16: 355-378.
Penman, S. and X. Zhang. 2002. Accounting conservatism, the quality of earnings, and stock returns. *The Accounting Review* 77: 237–264.
Pervzner, M., F. Xie, and X. Xin. 2014. When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcement. *Journal of Financial Economics* forthcoming.
Price, R., and N. Sharp, and D. Wood. 2011. Detecting and predicting accounting irregularities: A comparison of commercial and academic risk measures. *Accounting Horizons* 25(4):755-780.
Qiang, X. 2007. The effects of contracting, litigation, regulation, and tax costs on conditional and unconditional conservatism: Cross-sectional evidence at the firm level. *The Accounting Review* 82: 759-796.
Schrand, C. M., and S. Zechman. 2012. Executive overconfidence and the slippery slope of financial misreporting. *Journal of Accounting and Economics* 53: 311–329.
Shu, S. 2000. Auditor resignations: Clientele effects and legal liability. *Journal of Accounting and Economics* 29: 173-205.
Sobel, M. 1982. Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology* 13: 290-312.
Stice, J. 1991. Using financial and market information to identify pre-engagement factors associated with lawsuits against auditors. *The Accounting Review* 66: 516-553.
Suijs, J. 2008. On the value relevance of asymmetric financial reporting policies. *Journal of Accounting Research* 46: 1297-1321.
Teoh, S. H., and T. J. Wong. 1993. Perceived auditor quality and the earnings response coefficient. *The Accounting Review* 68 (April): 346-366.
Watts, R. 2003. Conservatism in accounting Part I: Explanations and implications. *Accounting Horizons* 17: 207-221.
Weber, J., M. Willenborg, and J. Zhang. 2008. Does auditor reputation matter? The case of KPMG Germany and ComROAD AG. *Journal of Accounting Research* 46 (4): 941-972.
Zhang, J. 2008. The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of Accounting and Economics* 45: 27–54.
Zmijewski, M. 1984. Methodological issues related to the estimation of financial distress prediction models. *Journal of Accounting Research* 22: 59-82.

Figure 1: Paths between Conservatism and Auditor-Client Contracting Outcome Variables



This Figure depicts the direct and indirect paths through which accounting conservatism is expected to affect our outcome variables (fees, going concern opinions, and resignations). We expect conservatism to directly affect the outcome variables through its effect on inherent risk, and indirectly affect the outcome variables through its effect on auditor business risk (as proxied by mediating variables of expected litigation and misstatement risk). Expected auditor litigation risk is estimated using the annual decile rank of Shu's (2000) score; and expected misstatement risk is estimated using the average annual decile rank of Dechow et al.'s (2011) F-score, Beneish's (1999) M-score, and Dechow and Dichev's (2002) accrual quality. The following models are estimated in the path analysis:

$$DepVar_t = \beta_0 + \beta_1 CONSV_{t-1} + \beta_2 ShuScore_t + \beta_3 Misstate\_Risk_t + Controls + e_t$$
$$ShuScore_t = \alpha_0 + \alpha_1 CONSV_{t-1} + e_t$$
$$Misstate\_Risk_t = \delta_0 + \delta_1 CONSV_{t-1} + e_t$$

The dependent variables (*DepVar*) in the first equation above are our outcome variables (i.e., audit fees, GCOs or resignations). *Controls* are relevant control variables from the fees, GCO, and resignation models. The path coefficient β_1 is the magnitude of the direct path from conservatism to the outcome variables. The path coefficient α_1 (δ_1) is the magnitude of the path coefficient from client conservatism to auditor litigation risk (misstatement risk). The path coefficient β_2 (β_3) is the magnitude of the path from litigation risk (misstatement risk) to the outcome variables. The path coefficient $\alpha_1 * \beta_2$ ($\delta_1 * \beta_3$) measures the magnitude of the indirect path from conservatism to the *DepVar* mediated through auditor litigation risk (misstatement risk). The predicted signs of the path coefficients are included in parentheses.

Table 1: Analysis of Conservatism and Audit Fees

Panel A: Sample distribution by year and industry

Year	*CON_KW* sample	*CON_NOPA* sample	Industry	*CON_KW* sample	*CON_NOPA* sample
2000	1,999	2,688	Agriculture	117	177
2001	2,503	3,407	Chemicals	758	1,180
2002	2,730	4,193	Computers	4,855	7,325
2003	2,797	4,391	Durable manufacturers	7,276	10,590
2004	2,860	4,379	Extractive	1,075	1,871
2005	2,725	4,219	Food	681	927
2006	2,632	4,011	Mining and Construction	515	1,170
2007	2,510	3,797	Pharmaceuticals	1,672	3,184
2008	2,270	3,578	Retail	3,266	4,305
2009	2,356	3,518	Services	3,151	4,901
2010	2,366	3,356	Textiles and printing/publishing	1,399	1,816
			Transportation	1,778	2,929
			Utilities	1,205	1,162
Total	27,748	41,537		27,748	41,537

Panel B: Descriptive Statistics

	CON_KW sample					*CON_NOPA sample*				
	Mean	Q1	Median	Q3	Std Dev	Mean	Q1	Median	Q3	Std Dev
LAUDIT	13.36	12.38	13.34	14.22	1.30	12.91	11.81	12.86	13.93	1.49
CONSV	0.50	0.22	0.56	0.78	0.32	0.50	0.22	0.56	0.78	0.32
MV	6.17	4.78	6.12	7.48	1.92	5.18	3.42	5.23	6.91	2.52
Quick	2.44	0.99	1.56	2.75	2.80	2.37	0.83	1.41	2.59	3.16
Loss	0.30	0.00	0.00	1.00	0.46	0.43	0.00	0.00	1.00	0.50
ROA	-0.01	-0.02	0.03	0.07	0.22	-0.32	-0.14	0.02	0.07	1.57
LEV	0.62	0.01	0.27	0.75	1.15	0.49	0.00	0.17	0.70	2.07
Inv_Rec	0.25	0.11	0.23	0.36	0.18	0.26	0.09	0.22	0.38	0.20
BM	0.62	0.30	0.50	0.77	0.48	0.57	0.21	0.44	0.78	0.52
NSEG	6.50	3.00	4.00	9.00	4.83	5.71	3.00	3.00	9.00	4.53
SPITEM	0.62	0.00	1.00	1.00	0.49	0.61	0.00	1.00	1.00	0.49
FOPS	0.28	0.00	0.00	1.00	0.45	0.26	0.00	0.00	1.00	0.44
Merger	0.20	0.00	0.00	0.00	0.40	0.17	0.00	0.00	0.00	0.37
Finance	0.34	0.00	0.00	1.00	0.47	0.37	0.00	0.00	1.00	0.48
Pension	0.07	0.00	0.00	0.00	0.25	0.10	0.00	0.00	0.00	0.30
BigN	0.83	1.00	1.00	1.00	0.37	0.70	0.00	1.00	1.00	0.46
GCO	0.01	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.32
Busy	0.67	0.00	1.00	1.00	0.47	0.68	0.00	1.00	1.00	0.47

The sample period is 2000-2010 and detailed definitions of the variables are provided in Appendix 1. Industries are defined as in the classification in Frankel et al. (2002), which is based on the following SIC codes: agriculture (0100–0999), mining and construction (1000–1999, excluding 1300–1399), food (2000–2111), textiles and printing/publishing (2200–2799), chemicals (2800–2824, 2840–2899), pharmaceuticals (2830–2836), extractive (2900–2999, 1300–1399), durable manufacturers (3000–3999, excluding 3570–3579 and 3670–3679), transportation (4000–4899), utilities (4900–4999), retail (5000–5999), services (7000–8999, excluding 7370–7379) and computers (3570–3579, 3670–3679, 7370–7379).

Table 1 (continued)

Panel C: OLS Regression of Audit Fee Model

$$LAUDIT = \gamma_0 + \gamma_1 CONSV + \gamma_2 MV + \gamma_3 Quick + \gamma_4 Loss + \gamma_5 ROA + \gamma_6 LEV + \gamma_7 Inv\_Rec + \gamma_8 BM + \gamma_9 NSEG + \gamma_{10} SPITEM + \gamma_{11} FOPS + \gamma_{12} Merger + \gamma_{13} Finance + \gamma_{14} Pension + \gamma_{15} BigN + \gamma_{16} GCO + \gamma_{17} Busy + Industry \& Year\ Dummies + e$$

Variable	Predicted Sign	*CONSV = CON_KW*		*CONSV = CON_NOPA*	
		Coef.	t-statistic	Coef.	t-statistic
CONSV	-	-0.293	-7.42***	-0.097	-5.30***
MV	+	0.441	46.94***	0.360	70.84***
Quick	-	-0.041	-15.36***	-0.052	-23.79***
Loss	+	0.152	10.01***	0.229	17.96***
ROA	-	-0.190	-5.08***	-0.060	-13.89***
LEV	+	0.133	20.37***	0.020	7.40***
Inv_Rec	+	0.725	13.56***	0.470	10.84***
BM	-	-0.448	-26.35***	-0.000	-2.85***
NSEG	+	0.027	14.31***	0.038	18.83***
SPITEM	+	0.233	20.26***	0.355	33.59***
FOPS	+	0.129	7.04***	0.176	9.65***
Merger	+	0.098	7.86***	0.112	8.94***
Finance	+	0.039	4.03***	0.079	8.56***
Pension	+	0.088	3.97***	0.019	0.98
BigN	+	0.298	13.84***	0.603	31.43***
GCO	+	0.124	2.39***	0.075	2.94***
Busy	+	0.065	3.56***	0.082	4.81***
Intercept	?	9.870	107.75***	10.344	176.88***
Industry & Year Dummies		YES		YES	
n		27,748		41,537	
Adj R^2 (%)		79.09		76.52	

The variables used in the regression model are as defined in Appendix 1. We run the OLS regression clustered by firm. For each variable, we report the OLS regression coefficient, followed by the robust t-statistic. To conserve space, we do not report the coefficient estimates for the industry and year dummies. '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 2: Analysis of Conservatism and Going Concern Opinions

Panel A: Sample distribution by year and industry

	CON_KW sample		*CON_NOPA* sample			*CON_KW*	*CON_NOPA*
Year	n	# of GCOs	n	# of GCOs	Industry	sample	sample
2000	987	66	1,296	147	Agriculture	32	41
2001	1,113	53	1,363	144	Chemicals	173	221
2002	985	28	1,429	154	Computers	2,326	3,006
2003	899	18	1,267	74	Durable manufacturers	2,412	3,138
2004	809	16	1,058	77	Extractive	303	416
2005	750	20	1,019	76	Food	135	174
2006	729	20	971	65	Mining and Construction	188	259
2007	705	26	932	85	Pharmaceuticals	1,194	1,755
2008	807	34	1,142	107	Retail	825	1,142
2009	834	12	1,143	66	Services	803	1,079
2010	666	9	842	57	Textiles and printing/publishing	329	440
					Transportation	426	645
					Utilities	138	146
Total	9,284	302	12,462	1,052		9,284	12,462

Panel B: Descriptive Statistics

	CON_KW sample					*CON_NOPA sample*				
	Mean	Q1	Median	Q3	Std Dev	Mean	Q1	Median	Q3	Std Dev
OPIN	0.03	0.00	0.00	0.00	0.18	0.08	0.00	0.00	0.00	0.28
CONSV	0.50	0.22	0.44	0.78	0.32	0.51	0.22	0.56	0.78	0.31
Assets	5.12	3.96	5.04	6.11	1.61	4.64	3.37	4.60	5.80	1.83
Zscore	-3.29	-4.32	-3.52	-2.55	1.32	-3.00	-4.18	-3.29	-2.18	1.58
Age	2.53	2.08	2.48	2.94	0.64	2.51	2.08	2.48	2.94	0.61
Beta	1.00	0.45	0.94	1.46	0.69	0.93	0.39	0.85	1.38	0.69
Return	0.01	-0.42	-0.13	0.24	0.68	0.07	-0.50	-0.16	0.26	1.12
LEV	0.69	0.00	0.17	0.76	1.39	0.92	0.00	0.20	0.87	2.00
CLEV	0.16	-0.01	0.00	0.14	1.11	0.37	-0.01	0.00	0.19	2.11
LLoss	0.62	0.00	1.00	1.00	0.49	0.68	0.00	1.00	1.00	0.47
Investment	0.30	0.06	0.21	0.49	0.27	0.30	0.06	0.21	0.49	0.28
Cashflow	-0.04	-0.10	-0.01	0.05	0.39	-0.06	-0.13	-0.01	0.05	0.42
Future_Finance	0.50	0.00	0.00	1.00	0.50	0.49	0.00	0.00	1.00	0.50
BigN	0.77	1.00	1.00	1.00	0.42	0.71	0.00	1.00	1.00	0.45
BM	0.74	0.31	0.58	0.97	0.62	0.87	0.29	0.59	1.07	0.98

The sample for the going concern opinion test consists of financially distressed firms, defined as firms that report either negative net income or negative operating cash flows during the current fiscal year. The sample period is 2000-2010. 302 (1,052) firms receive going concern opinions for the first time in the *CON_KW* (*CON_NOPA*) sample. Detailed definitions of the variables are provided in Appendix 1. Industries are defined as in the classification in Frankel et al. (2002), which is based on the following SIC codes: agriculture (0100–0999), mining and construction (1000–1999, excluding 1300–1399), food (2000–2111), textiles and printing/publishing (2200–2799), chemicals (2800–2824, 2840–2899), pharmaceuticals (2830–2836), extractive (2900–2999, 1300–1399), durable manufacturers (3000–3999, excluding 3570–3579 and 3670–3679), transportation (4000–4899), utilities (4900–4999), retail (5000–5999), services (7000–8999, excluding 7370–7379) and computers (3570–3579, 3670–3679, 7370–7379).

Table 2 (continued)

Panel C: Logistic Regression of Going Concern Opinion Model

$$OPIN = \lambda_o + \lambda_1 CONSV + \lambda_2 Assets + \lambda_3 ZScore + \lambda_4 Beta + \lambda_5 Return + \lambda_6 LEV + \lambda_7 CLEV + \lambda_8 LLoss + \lambda_9 Investment + \lambda_{10} Cashflow + \lambda_{11} Future\_Finance + \lambda_{12} BigN + \lambda_{13} BM + Year\ Dummies + e$$

Variable	Predicted Sign	*CONSV = CON_KW*		*CONSV = CON_NOPA*	
		Coef.	Wald statistic	Coef	Wald statistic
CONSV	-	-0.863	3.86**	-0.222	2.27
Assets	-	-0.378	7.89***	-0.493	125.55***
ZScore	+	0.439	115.36***	0.415	231.21***
Beta	+	0.369	7.14***	0.006	0.01
Return	-	-0.227	2.20	-0.087	2.36
LEV	+	-0.023	0.22	0.025	0.89
CLEV	+	-0.018	0.14	0.001	0.01
LLoss	+	0.693	17.76***	0.637	38.31***
Investment	-	-2.133	35.87***	-1.946	67.15***
Cashflow	-	-1.088	16.25***	-1.302	32.42***
Future_Finance	-	-0.529	12.72***	-0.402	24.26***
BigN	+	0.170	0.86	0.154	1.89
BM	-	-0.456	9.15***	-0.093	4.12**
Intercept	?	0.730	0.76	0.651	9.78***
Year Dummies		YES		YES	
n		9,284		12,462	
Wald-statistic		389.56		843.86	
Pseudo R^2 (%)		20.93		30.35	
Percent Concordant		80.8		84.6	

The variables used in the regression model are as defined in Appendix 1. We run the logistic regression clustered by firm. For each variable, we report the logistic regression coefficient, followed by the robust Wald statistic. To conserve space, we do not report the coefficient estimates for the year dummies. '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 3: Analysis of Conservatism and Auditor Resignations

Panel A: Sample distribution by year and industry

Year	*CON_KW* sample n	*CON_KW* sample # of Resignations	*CON_NOPA* sample n	*CON_NOPA* sample # of Resignations	Industry	*CON_KW* sample	*CON_NOPA* sample
2000	27	4	34	4	Agriculture	-	1
2001	742	25	894	44	Chemicals	67	94
2002	189	42	307	72	Computers	397	536
2003	303	80	404	107	Durable manufacturers	774	1,003
2004	314	79	380	110	Extractive	101	139
2005	231	54	298	85	Food	56	70
2006	181	41	219	54	Mining and Construction	40	51
2007	115	14	160	23	Pharmaceuticals	129	189
2008	120	25	176	34	Retail	256	329
2009	115	46	159	63	Services	231	286
2010	67	8	86	15	Textiles and printing/publishing	102	123
					Transportation	144	205
					Utilities	107	91
Total	2,404	418	3,117	611		2,404	3,117

Panel B: Descriptive Statistics

	CON_KW sample					*CON_NOPA sample*				
	Mean	Q1	Median	Q3	Std Dev	Mean	Q1	Median	Q3	Std Dev
RESIGN	0.17	0.00	0.00	0.00	0.38	0.20	0.00	0.00	0.00	0.40
CONSV	0.50	0.22	0.56	0.78	0.32	0.49	0.22	0.44	0.78	0.31
Asset_Growth	0.09	-0.07	0.03	0.15	0.35	0.07	-0.11	0.02	0.15	0.42
Abs_DA	0.07	0.02	0.04	0.09	0.10	0.10	0.02	0.05	0.11	0.14
Inv_Rec	0.28	0.11	0.24	0.40	0.20	0.29	0.11	0.25	0.41	0.21
GCO	0.02	0.00	0.00	0.00	0.15	0.08	0.00	0.00	0.00	0.28
Tenure	8.92	3.00	7.00	12.00	7.64	8.59	3.00	7.00	11.00	7.39
ROA	-0.04	-0.04	0.02	0.06	0.25	-0.13	-0.12	0.01	0.06	0.42
Loss	0.36	0.00	0.00	1.00	0.48	0.46	0.00	0.00	1.00	0.50
LEV	0.45	0.01	0.30	0.82	0.50	0.29	0.00	0.27	0.86	1.15
Cash	0.13	0.02	0.07	0.17	0.16	0.14	0.02	0.07	0.19	0.17
Disagree	0.02	0.00	0.00	0.00	0.15	0.02	0.00	0.00	0.00	0.15
Rep_Event	0.14	0.00	0.00	0.00	0.35	0.15	0.00	0.00	0.00	0.35
BigN	0.81	1.00	1.00	1.00	0.39	0.76	1.00	1.00	1.00	0.43
Assets	5.65	4.26	5.45	6.85	1.95	5.21	3.63	4.99	6.54	2.14
Merger	0.20	0.00	0.00	0.00	0.40	0.18	0.00	0.00	0.00	0.38
BM	0.66	0.31	0.55	0.85	0.50	0.67	0.27	0.53	0.89	1.48

The sample of the auditor resignation test consists of auditor switching firms over the period 2000-2010 and excludes former Andersen clients. Of these auditor changes, 418 (611) are resignations for the *CON_KW* (*CON_NOPA*) sample, while the remaining changes are client-initiated. Detailed definitions of the variables are provided in Appendix 1. Industries are defined as in the classification in Frankel et al. (2002), which is based on the following SIC codes: agriculture (0100–0999), mining and construction (1000–1999, excluding 1300–1399), food (2000–2111), textiles and printing/publishing (2200–2799), chemicals (2800–2824, 2840–2899), pharmaceuticals (2830–2836), extractive (2900–2999, 1300–1399), durable manufacturers (3000–3999, excluding 3570–3579 and 3670–3679), transportation (4000–4899), utilities (4900–4999), retail (5000–5999), services (7000–8999, excluding 7370–7379) and computers (3570–3579, 3670–3679, 7370–7379).

Table 3 (continued)

Panel C: Logistic Regression of Auditor Resignation Model

$RESIGN = \beta_0 + \beta_1 CONSV + \beta_2 Asset\_Growth + \beta_3 Abs\_DA + \beta_4 Inv\_Rec + \beta_5 GCO + \beta_6 Clean + \beta_7 Tenure + \beta_8 ROA + \beta_9 Loss + \beta_{10} LEV + \beta_{11} Cash + \beta_{12} Disagree + \beta_{13} Rep\_Event + \beta_{14} BigN + \beta_{15} Assets + \beta_{16} Merger + \beta_{17} BM + Year\ Dummies + e$

Variable	Predicted Sign	*CONSV = CON_KW*		*CONSV = CON_NOPA*	
		Coef.	Wald statistic	Coef	Wald statistic
CONSV	-	-1.434	24.35***	-0.671	16.82***
Asset_Growth	+	0.338	3.30*	0.118	0.85
Abs_DA	+	1.089	2.58	0.847	3.80**
Inv_Rec	+	0.525	2.98*	0.107	0.17
GCO	+	0.488	2.19	0.742	16.42***
Tenure	-	-0.039	12.18***	-0.034	14.60***
ROA	-	-0.299	1.17	0.008	0.00
Loss	+	-0.072	0.23	0.170	2.05
LEV	+	1.184	67.96***	0.248	6.75***
Cash	-	-1.051	6.17***	-0.915	7.90***
Disagree	+	-0.087	0.05	0.261	0.78
Rep_Event	+	0.933	35.03***	0.766	32.10***
BigN	-	-0.975	47.67***	-0.936	64.41***
Assets	-	-0.347	28.46***	-0.081	4.58**
Merger	?	-0.085	0.23	-0.113	0.57
BM	-	0.042	0.08	-0.089	5.88**
Intercept	?	1.111	6.20***	-0.184	0.50
Year Dummies		YES		YES	
n		2,404		3,117	
Wald-statistic		207.08		244.71	
Pseudo R^2 (%)		18.65		15.25	
Percent Concordant		73.9		72.5	

The variables used in the regression model are as defined in Appendix 1. We run the logistic regression clustered by firm. For each variable, we report the regression coefficient, followed by the robust Wald statistic. '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 4: Tests for Endogeneity

Panel A: Durbin-Wu-Hausman Test

	CONSV = CON_KW			*CONSV = CON_NOPA*		
	Fee test	Going concern opinion test	Resignation test	Fee test	Going concern opinion test	Resignation test
RES	0.243***	-14.725	0.225	1.674***	-3.304	-0.320
	(9.05)	(1.97)	(0.05)	(11.40)	(1.27)	(2.32)
Other explanatory variables	YES	YES	YES	YES	YES	YES
n	27,713	9,250	2,261	41,471	12,429	2,936
R-square (%)	79.16	21.72	19.35	76.88	30.51	18.87

Panel B: Two-stage Instrumental Variables Estimation

	CONSV = Predict_CON_KW			*CONSV = Predict_CON_NOPA*		
	Fee test	Going concern opinion test	Resignation test	Fee test	Going concern opinion test	Resignation test
CONSV	-1.741***	-14.158*	-1.796*	-1.712***	-3.342	-2.369***
	(-5.58)	(-3.29)	(-2.66)	(-11.87)	(-2.40)	(-8.15)
Controls	YES	YES	YES	YES	YES	YES
n	27,713	9,250	2,261	41,471	12,429	2,936
R-square (%)	78.17	21.36	19.43	76.87	30.46	15.25
1st stage *F*-statistic	14.17	18.53	12.70	291.08	258.53	49.54
(p-value)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Hansen's *J*-statistic	0.001	2.495	2.174	0.191	0.667	0.659
(p-value)	(0.98)	(0.11)	(0.14)	(0.66)	(0.41)	(0.42)

Panel C: Change Analysis for Audit Fee Test

	CONSV = CON_KW	*CONSV = CON_NOPA*
Δ*CONSV*	-0.048***	-0.063***
	(-5.67)	(-8.60)
Δ*Controls*	YES	YES
n	22,012	35,044
R-square (%)	21.52	12.54

Panel A reports the result of the Durbin-Wu-Hausman test to examine whether each model is affected by the endogeneity of conservatism. In the first stage, we regress conservatism on our instrumental variables, *Cycle* and *Age*, and other explanatory variables. In the second stage, we regress our dependent variables (i.e., fee, GCO, and resignation) on the residual (*RES*) from the first stage regression along with conservatism and the other explanatory variables. A significant coefficient on *RES* rejects the exogeneity of conservatism. The panel reports the result of the second stage of the Durbin-Wu-Hausman test. Panel B reports the result of the two-stage instrumental variable approach which uses the predicted value of conservatism (*Predict_CON_KW* or *Predict_CON_NOPA*) in the second stage model to control for the potential endogeneity associated with conservatism. The partial *F*-statistics in the first stage test the strength of our instrumental variables (Larcker and Rusticus 2010). The Hansen's *J*-statistics test the overidentification of our instrumental variables. Panel C reports the result of the change analysis for the audit fee test where we regress the change in audit fees on the changes in the continuous variables in the audit fee model. The robust t-statistic (Wald statistic) is reported in the parenthesis below the coefficient estimate for the audit fee test (going concern opinion and resignation tests). '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 5: Path analysis

Panel A: Audit Fee Test

	CON_KW	*CON_NOPA*
Direct Path	-0.089	-0.019
P(*CONSV, LAUDIT*) = $\hat{\beta}_1$	(-9.73)***	(-4.14)***
Mediated Path for auditor litigation risk		
P(*CONSV, ShuScore*) = $\hat{\alpha}_1$	-0.583	-0.020
	(-109.45)***	(-3.34)***
P(*ShuScore, LAUDIT*) = $\hat{\beta}_2$	0.084	0.172
	(15.01)***	(37.75)***
Total mediated path for auditor litigation risk (= $\hat{\alpha}_1 * \hat{\beta}_2$)	-0.049	-0.003
	(-15.59)***	(-4.33)***
Mediated Path for misstatement risk		
P(*CONSV, Misstate_Risk*) = $\hat{\delta}_1$	-0.197	-0.030
	(-25.47)***	(-4.13)**
P(*Misstate_Risk, LAUDIT*) = $\hat{\beta}_3$	0.017	0.016
	(3.73)***	(3.53)***
Total mediated path for misstatement risk (= $\hat{\delta}_1 * \hat{\beta}_3$)	-0.003	-0.001
	(-2.20)**	(-2.09)**
Controls	Yes	Yes
n	15,375	18,491

Panel B: Going Concern Opinion Test

	CON_KW	*CON_NOPA*
Direct Path	-0.039	-0.002
P(*CONSV, OPIN*) = $\hat{\beta}_1$	(-2.57)***	(-1.14)
Mediated Path for auditor litigation risk		
P(*CONSV, ShuScore*) = $\hat{\alpha}_1$	-0.503	-0.022
	(-45.87)***	(-1.73)*
P(*ShuScore, OPIN*) = $\hat{\beta}_2$	0.040	0.058
	(3.24)***	(5.04)***
Total mediated path for auditor litigation risk (= $\hat{\alpha}_1 * \hat{\beta}_2$)	-0.020	-0.001
	(-3.63)***	(-1.76)*
Mediated Path for misstatement risk		
P(*CONSV, Misstate_Risk*) = $\hat{\delta}_1$	-0.189	-0.035
	(-13.31)***	(-2.81)***
P(*Misstate_Risk, OPIN*) = $\hat{\beta}_3$	0.029	0.017
	(2.04)**	(1.50)
Total mediated path for misstatement risk (= $\hat{\delta}_1 * \hat{\beta}_3$)	-0.005	-0.001
	(-2.02)**	(-1.25)
Controls	Yes	Yes
n	4,653	6,413

Table 5 (continued)

Panel C: Auditor Resignation Test

	CON_KW	*CON_NOPA*
Direct Path	-0.065	-0.071
P(*CONSV*, *Resign*) = $\hat{\beta}_1$	(-1.84)*	(-3.09)***
Mediated Path for auditor litigation risk		
P(*CONSV*, *ShuScore*) = $\hat{\alpha}_1$	-0.428	-0.020
	(-19.12)***	(-2.82)***
P(*ShuScore*, *Resign*) = $\hat{\beta}_2$	0.059	0.154
	(2.17)**	(7.03)***
Total mediated path for auditor litigation risk (= $\hat{\alpha}_1 * \hat{\beta}_2$)	-0.025	-0.003
	(-2.60)***	(-2.11)**
Mediated Path for misstatement risk		
P(*CONSV*, *Misstate_ Risk*) = $\hat{\delta}_1$	-0.093	-0.047
	(-3.43)***	(-1.94)*
P(*Misstate_Risk*, *Resign*) = $\hat{\beta}_3$	0.083	0.041
	(3.38)***	(1.86)*
Total mediated path for misstatement risk (= $\hat{\delta}_1 * \hat{\beta}_3$)	-0.008	-0.002
	(-2.38)**	(-1.33)
Controls	Yes	Yes
n	1,328	1,679

This table reports the results from a path analysis that examines the effect of conservatism on auditor fees, GCOs, and resignations through *ex ante* auditor litigation risk and misstatement risk. p(X1,X2) stands for the standardized path coefficient. The *t*-statistics of the coefficients are reported in parentheses. The two mediated paths are expected auditor litigation risk, as proxied by annual decile rank of Shu's (2000) score; and expected misstatement risk, as proxied by the average annual decile rank of Dechow et al.'s (2011) F-score, Beneish's (1999) M-score, and Dechow and Dichev's (2002) accrual quality. See Price et al. (2011, 760-762) for detailed definitions of the misstatement risk proxies. We estimate the following model:

$DepVar_t = \beta_0 + \beta_1 CONSV_{t-1} + \beta_2 ShuScore_t + \beta_3 Misstate\_Risk_t + Controls + e_t$
$ShuScore_t = \alpha_0 + \alpha_1 CONSV_{t-1} + e_t$
$Misstate\_Risk_t = \delta_0 + \delta_1 CONSV_{t-1} + e_t$

The dependent variable (*DepVar*) is the auditor-client contracting outcome variable measured by audit fees, GCOs, or resignations in Panels A, B, and C respectively. The path coefficient β_1 is the magnitude of the direct path from conservatism to the dependent variable. The path coefficient $\alpha_1 * \beta_2$ ($\delta_1 * \beta_3$) is the magnitude of the indirect path from conservatism to the dependent variable mediated through auditor litigation risk (misstatement risk). The significance of the indirect effect is estimated using the Sobel (1982) test statistics. The table reports the path coefficients of interest. '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 6: Effect of Conservatism on Auditor Litigation and Restatement

Panel A: Logistic Regression of Auditor Litigation Model

$$LITIG = \alpha_0 + \alpha_1 CONSV + \alpha_2 Assets + \alpha_3 Inventory + \alpha_4 Receivable + \alpha_5 ROA + \alpha_6 Current + \alpha_7 LEV + \alpha_8 Sales\_Growth + \alpha_9 Return + \alpha_{10} Volatility + \alpha_{11} Beta + \alpha_{12} Turnover + \alpha_{13} Delist + \alpha_{14} Tech\_Dummy + \alpha_{15} GCO + \alpha_{16} BM + \alpha_{17} Signed\_DA + Year\ Dummies + e$$

Variable	Predicted Sign	*CONSV = CON_KW* Coef.	Wald statistic	*CONSV = CON_NOPA* Coef	Wald statistic
CONSV	-	-1.510	8.21***	-0.862	12.13***
Assets	+	0.393	17.70***	0.210	21.95***
Inventory	+	-0.094	0.01	-0.045	0.01
Receivable	+	1.852	7.30***	1.012	1.47
ROA	-	-0.736	2.68*	-0.838	3.76**
Current	-	-0.238	5.28**	-0.046	1.61
LEV	+	1.950	5.87**	0.316	15.64***
Sales_Growth	+	0.150	0.20	0.044	0.06
Return	-	-0.293	0.73	-0.156	0.80
Volatility	+	4.548	0.93	2.591	4.52**
Beta	+	0.145	0.21	0.229	1.95
Turnover	+	2.336	6.92***	2.834	29.49***
Delist	+	0.434	0.10	-0.850	0.63
Tech_Dummy	+	0.558	3.06*	0.196	0.92
GCO	+	0.591	0.59	0.238	0.15
BM	?	-1.008	4.36**	-0.177	0.61
Signed_DA	+	3.175	7.23***	1.257	2.38
Intercept	?	-7.320	59.14***	-7.541	197.29***
Year Dummies		YES		YES	
n		23,907		27,570	
Wald-statistic		165.37		193.06	
Pseudo R^2 (%)		14.97		12.04	
Percent Concordant		75.4		79.2	

The variables used in the regression model are as defined in Appendix 1. We run the logistic regression clustered by firm. For each variable, we report the regression coefficient, followed by the robust Wald statistic. '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 6 (continued)

Panel B: Logistic Regression of Restatement Model

$RESTATE = a_0 + a_1\ CONSV + a_2\ MV + a_3\ Volatility + a_4\ BM + a_5\ LEV + a_6\ ROA + a_7\ LOSS + a_8\ BigN + a_9\ MERGER + a_{10}\ FINANCE + a_{11}\ NSEG + a_{12}\ FOPS + a_{13}\ Inv\_Rec + a_{14}\ Return + Year\ Dummies + e$

Variable	Predicted Sign	*CONSV = CON_KW*		*CONSV = CON_NOPA*	
		Coef.	Wald statistic	Coef	Wald statistic
CONSV	-	-0.535	10.30***	-0.291	7.73***
MV	?	0.074	5.53**	0.109	35.36***
Volatility	+	3.133	6.20***	-2.766	1.65
BM	?	0.196	5.47**	0.048	3.45*
LEV	+	0.021	1.30	0.000	0.41
ROA	-	-0.011	0.00	0.170	1.93
Loss	+	-0.055	0.42	-0.001	0.00
BigN	-	0.130	1.55	0.202	4.80**
Merger	+	0.059	0.58	0.086	1.30
Finance	+	0.140	4.41**	0.081	1.61
NSEG	+	0.000	0.00	0.006	1.04
FOPS	+	-0.086	1.28	-0.105	2.10
Inv_Rec	+	0.225	1.31	0.160	0.76
Return	-	0.084	1.65	0.021	0.24
Intercept	?	-4.503	225.47***	-0.291	7.73***
Year Dummies		YES		YES	
n		23,897		28,854	
Wald-statistic		386.11		509.26	
Pseudo R^2 (%)		5.59		6.27	
Percent Concordant		66.5		68.0	

The variables used in the regression model are as defined in Appendix 1. We run the logistic regression clustered by firm. For each variable, we report the regression coefficient, followed by the robust Wald statistic. To conserve space, we do not report the coefficient estimates for the year dummies. '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 7: Sensitivity Tests[24]

Panel A: Tests with Adjusted Conservatism

	Fee test	Going concern opinion test	Resignation test
ADJ_CONKW	-0.107***	-0.187**	-0.527**
	(-5.53)	(4.28)	(3.94)
Controls	YES	YES	YES
n	20,549	6,338	1,713
R-square (%)	80.52	20.33	19.30

This panel reports our primary regression results with adjusted conservatism (*ADJ_CONKW*) as defined in the Appendix 3.

Panel B: Joint Estimation of Auditor Decisions

	Fee test	Going concern opinion test	Resignation test
CON_KW	-0.848***	-0.009**	-0.006*
	(-21.07)	(-1.98)	(-1.64)
Controls	YES	YES	YES
n	17,010	17,010	17,010
R-square (%)	65.84	4.52	29.20

This panel reports our primary results by estimating the audit fees, going concern opinion, and resignation decisions in a system of equations. We perform this test with all observations (n=17,010) without restrictions for distress or auditor switches.

Panel C: Controlling for Corporate Governance

	Fee test	Going concern opinion test	Resignation test
CON_KW	-0.247***	-0.927**	-1.530***
	(-6.30)	(4.92)	(27.57)
Gindex	0.015**	0.087	-0.036
	(2.38)	(0.41)	(0.39)
Duality	0.055**	1.388***	0.221
	(2.47)	(11.10)	(0.60)
Executive	-0.254***	1.018	0.154
	(-3.08)	(0.35)	(0.03)
Meeting	-1.178***	-16.019***	-7.440**
	(-4.39)	(6.51)	(5.93)
Controls	YES	YES	YES
n	27,748	9,284	2,404
R-square (%)	79.36	22.03	19.90

This panel reports our primary regression results after controlling for the four corporate governance variables in Lara et al. (2009). *Gindex* is the antitakeover protection index constructed by Gompers et al. (2003). *Duality* is an indicator variable, equals 1 if the CEO is also the chair of the board and 0 otherwise. *Executive* is the proportion of executives on the board of directors. *Meeting* is the annual number of meetings of the board of directors.

[24] To conserve space, we report the coefficient estimates and significances for the variables of interests only. The robust t-statistic (Wald statistic) is reported in the parenthesis below the coefficient estimate for the audit fee test (going concern opinion and resignation tests). '*', '**', and '***' denote significance at 10%, 5%, and 1% levels (two-tailed), respectively.

Table 7 (continued)

Panel D: Controlling for Discretionary Accruals

	Fee test		Going concern opinion test		Resignation test	
CON_KW	-0.293***	-0.297***	-0.810*	-0.817*	-1.393***	-1.434***
	(-7.37)	(-7.50)	(3.44)	(3.49)	(23.12)	(24.35)
Signed_DA	0.036***		0.120		0.972**	
	(3.44)		(0.55)		(5.27)	
Abs_DA		0.052***		-0.028		1.089
		(3.72)		(0.02)		(2.58)
Controls	YES	YES	YES	YES	YES	YES
n	27,068	27,068	9,065	9,065	2,404	2,404
R-square (%)	79.20	79.21	20.76	20.72	18.65	18.65

This panel reports our primary regression results after controlling for signed discretionary accruals (*Signed_DA*) and the absolute values of discretionary accruals (*Abs_DA*). Performance-adjusted signed discretionary accruals (*Signed_DA*) are obtained by subtracting from each firm's abnormal accrual the median abnormal accrual from the corresponding ROA-industry decile to which the firm belongs. *Abs_DA* is the absolute value of *Signed_DA*.

Panel E: Controlling for Income-Increasing Discretionary Accruals

	Fee test		Going concern opinion test		Resignation test	
CON_KW	-0.294***	-0.297***	-0.831*	-0.828*	-1.392***	-1.397***
	(-7.41)	(-7.49)	(3.61)	(3.60)	(23.23)	(23.29)
POS_DA	0.313***	0.020*	-0.027	-0.055	0.194	0.206
	(2.77)	(1.72)	(0.03)	(0.09)	(2.24)	(1.99)
*POS_DA*Signed_ DA*		0.056***		0.104		-0.192
		(3.62)		(0.21)		(0.04)
Controls	YES	YES	YES	YES	YES	YES
n	27,068	27,068	9,065	9,065	2,404	2,404
R-square (%)	79.19	79.21	20.46	20.47	18.61	18.62

This panel reports our primary regression results after controlling for income-increasing discretionary accruals. We include *POS_DA*, an indicator variable that equals one if signed discretionary accruals (*Signed_DA*) is positive and zero otherwise, and also include an interaction term, *POS_DA*Signed DA*.

Panel F: Separate Regressions for the Clients of Big N/Non-Big N firms

Big N firms only	Fee test	Going concern opinion test	Resignation test
CON_KW	-0.252***	-0.762*	-1.510***
	(-6.15)	(2.97)	(19.81)
Controls	YES	YES	YES
n	23,072	7,192	1,946
R-square (%)	78.59	19.80	15.41

Non-Big N firms only	Fee test	Going concern opinion test	Resignation test
CON_KW	-0.573***	-1.396**	-1.357**
	(-4.81)	(4.75)	(5.37)
Controls	YES	YES	YES
n	4,676	2,092	458
R-square (%)	65.83	23.50	11.42

This panel reports our primary regression results when the sample firms audited by Big N and non-Big N auditors are separately estimated.

Table 8: Tests with Unconditional Conservatism

Panel A: Effect on Audit Fees, Going Concern Opinions, and Auditor Resignations

	UNCONSV **= Penman and Zhang (2002) measure**			***UNCONSV*** **= Beaver and Ryan (2000) measure**		
	Fee test	Going concern opinion test	Resignation test	Fee test	Going concern opinion test	Resignation test
UNCONSV	-0.001 (-1.29)	-0.019 (0.65)	0.004 (1.13)	-0.588*** (-6.60)	-0.126 (2.45)	-0.252 (1.00)
Controls	YES	YES	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES	YES	YES
n	39,017	12,261	2,972	32,249	8,879	2,470
R-square (%)	74.99	31.69	15.55	78.79	29.17	16.73

Panel B: Effect on Auditor Litigation and Restatement

	UNCONSV **= Penman and Zhang (2002) measure**		***UNCONSV*** **= Beaver and Ryan (2000) measure**	
	Auditor Litigation	Restatement	Auditor Litigation	Restatement
UNCONSV	0.001 (0.01)	0.002 (0.19)	-0.348 (0.06)	-0.541 (1.24)
Controls	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES
n	19,134	26,001	14,546	18,769
R-square (%)	12.67	6.37	12.72	6.55

Panel A reports the association between the two proxies for unconditional conservatism and audit fees, going concern opinions, and auditor resignations. Our first proxy for unconditional conservatism is the Penman and Zhang's (2002) measure, which is constructed from unrecorded reserves from LIFO inventory method, R&D, and advertising. The second proxy is the Beaver and Ryan's (2000) measure, which regresses book-to-market ratio on current and lagged returns in the prior six years. The firm-specific coefficient estimate is then multiplied by negative one so that higher levels of conservatism have higher values. The two proxies are one-year lagged. Panel B reports the association between the two proxies for unconditional conservatism and auditor litigation and client restatements. To conserve space, we report the coefficient estimates and significances for the variables of interests only. The robust t-statistic (Wald statistic) is reported in the parenthesis below the coefficient estimate for the audit fee test (for the other tests).