

The Costs of Waiving Audit Adjustments

Preeti Choudhary*
University of Arizona

Kenneth Merkley
Indiana University

Katherine Schipper
Duke University

First Version: October 2017

This Version: March 2022

Abstract: We analyze the disposition of auditor-proposed adjustments to financial statements. Our analysis addresses concerns, expressed by regulators and others, that auditors and their clients fixate on quantitative thresholds and overlook qualitative factors in assessing the materiality of discovered misstatements. Using a large sample of PCAOB-inspected audits, we examine the frequency with which management records vs. waives auditor-proposed adjustments and whether waiving proposed adjustments has consequences for reporting reliability and the audit process. We find waived adjustments are linked to lower financial reporting quality measured by material misstatements, to incentives to meet/beat earnings targets and to the audit process, as measured by higher next-period audit effort and fees and higher next-period proposed adjustments. These effects on the audit process are consistent with auditors responding to the increased risk associated with waived adjustments. In an exploratory analysis we find that controlling for the amount of proposed adjustments, auditor resignations are negatively associated with waived adjustments.

Keywords: Financial reporting reliability, Audit adjustments, Restatements, Audit fees, Audit effort, Recorded adjustments, Waived adjustments

JEL Classification: M-40, M-41, M-42, M-43, M-49

* Corresponding author. This paper was written while Preeti Choudhary was a Senior Economic Research Fellow at the PCAOB. The PCAOB as a matter of policy disclaims responsibility for any private publication or statement by any of its Economic Research Fellows, consultants and employees. The views expressed in this paper are the views of the authors and do not necessarily reflect the views of the PCAOB Board, individual Board members or PCAOB staff. We thank Michael Gurbutt, Patricia Ledesma, Melissa Lewis-Western, Jacob Jaggi, Steven Kachelmeier, Christian Leuz, Paul Michas, Conrad Naegle, Shiva Rajgopal, Roy Schmardebeck, Jaimie Schmidt, Joseph Schroeder, Luigi Zingales, PCAOB staff and seminar participants at the PCAOB, University of Arizona, University of Iowa, University of Melbourne, University of Minnesota, Brigham Young University, Stanford University, University of Texas, Dallas and participants at the 2018 Accounting Research Conference at the University of Illinois at Chicago, the PCAOB-*Journal of Accounting Research* Conference and the 2019 FARS Conference for helpful discussions. We thank Eric He for his excellent research assistance. This paper was formerly titled “The Last Chance to Improve Financial Reporting Reliability: Evidence from Recorded and Waived Audit Adjustments.”

1. Introduction

This paper provides large-sample archival evidence on decisions to record versus waive auditor-proposed adjustments to a client's financial statements and related financial reporting and auditing outcomes.¹ The disposition of audit adjustments is a crucial step in the financial reporting process that is poorly documented in archival accounting research largely because disposition decisions and the process leading to them are typically not visible to researchers. After auditors conduct tests, gather audit evidence and present client management with proposed adjustments, auditors and management discuss the basis for and materiality of those adjustments. Subject to audit committee/board oversight and auditor consultation, management evaluates the proposed adjustments and decides to record or waive them. Recorded adjustments change pre-audit financial statement values to those proposed by the auditor and constitute auditor-manager agreements. Waived (unrecorded) adjustments result in no change and constitute auditor-manager disagreements that do not rise to the level of a modified audit opinion.

Disposition decisions have been subjected to scrutiny, criticism and multiple changes in authoritative guidance, based mostly on anecdotal evidence as opposed to a substantial body of empirical findings. For example, based on anecdotal evidence and the suspicion that auditors were mechanically applying quantitative materiality thresholds to evaluate adjustments, the staff of the Securities and Exchange Commission (SEC) issued SAB 99 in 1999. SAB 99 clarifies that quantitatively small amounts can be material and provides qualitative factors to be considered in

¹In this paper, we refer to auditor-proposed adjustments to the financial statements as either "misstatements" or "audit adjustments." These terms refer to "a proposed correction of the financial statements that, in the auditor's judgment, may not have been detected except through the auditing procedures performed" (para .09, AU 380, *Communication with Audit Committees*, superseded by AS 16, codified as AS 1301, *Communications with Audit Committees*). As discussed in Section 2, our reading of the authoritative guidance suggests the PCAOB has replaced "audit adjustments" with "misstatements," retaining the idea that client management may or may not record the correction (adjustment) proposed by the auditor.

making materiality judgments. In 2006, the SEC staff issued SAB 108 to address diversity in practice with regard to how to consider the cumulative effect of prior-period uncorrected immaterial errors in evaluating current-period misstatements.² In 2010, the Public Company Accounting Oversight Board (PCAOB) issued AS 2810 to clarify how the auditor evaluates misstatement risk from audit adjustments. In 2012, the PCAOB issued AS 1301 to formalize the audit committee's oversight of disposition decisions. These changes suggest ongoing concerns about the disposition process. We aim to provide recent, large sample evidence as to whether these concerns are warranted in the current auditing and reporting environment.

We analyze adjustments from 3,144 audit-year observations (1,681 distinct clients) chosen for inspection by the PCAOB during 2005-2014. We provide evidence on disposition decisions and their associations with: (1) financial statement reliability and (2) the audit process, including next-period audit effort, audit fees and proposed adjustments. We complement the analysis of financial statement reliability with an exploratory analysis of earnings management incentives for waiving adjustments. We complement the analysis of the next-period audit process which presumes a continuing auditor-client relationship with an exploratory analysis of auditor turnover, representing a termination of that relationship.

We believe our analyses represent a significant advance with respect to providing archival evidence on dispositions of audit adjustments, especially waive decisions and their consequences, subject to certain limitations. First, audits selected for PCAOB inspection are not a random sample of audits of U.S. SEC registrants. Section 4.5 reports analyses to address and

² SAB 108 states, in part, that it is intended "to address diversity in practice in quantifying financial statement misstatements and the potential ... for the buildup of improper amounts on the balance sheet." Bryan, Carmichael and Lilien (2007) describe anecdotal evidence supporting SAB 108 issuance, specifically, Arthur Andersen's materiality assessment of reporting errors related to restructuring and other reserves at Sunbeam Corporation.

mitigate selection bias concerns.³ Second, PCAOB inspection documents are an incomplete record of adjustments in two ways. First, the documents provide *unsigned* magnitudes of *net* adjustments to seven financial statement categories (revenue, operating income, pretax income, net income, assets, working capital and equity). Second, the data do not include adjustments to disclosures or cash flows and combine known and projected misstatements (AU 312; AU 9312). The cross-sectional nature of the data precludes analyses to support causal inferences.

Relative to previous research on adjustments and disposition decisions, our data offer several advantages. First, our data include both recorded and waived adjustments, allowing us to provide new, large sample evidence on the pervasiveness of waived adjustments and their implications. This distinction is an important contribution relative to China-based research (e.g., Lennox et al. 2014, 2016; Chen et al. 2015; Lennox et al. 2018; Lennox et al. 2020) that provides large sample evidence on recorded but not waived adjustments. The latter constitute disagreements between auditors and managers and may or may not represent reporting errors.

Second, the data cover the eight largest audit firms in the U.S. and span more than a decade following significant regulatory changes such as the Sarbanes Oxley Act of 2002 (SOX). In comparison, prior U.S.-based research predates important changes in auditing standards and is limited to data from a single audit firm and/or a few years (e.g., Houghton and Fogarty 1991; Icerman and Hillison 1991; Bell and Knechel 1994; Wright and Wright 1997; Joe et al. 2011). Third, we combine proprietary PCAOB data with public databases, allowing us to analyze consequences of waiving such as restatements, audit hours and fees and determinants such as earnings management incentives and characteristics of firms, managers and governing boards.

³ To our knowledge, all U.S. academic research that analyzes audit adjustments is subject to selection issues of varying severity. Our sample is broader (more clients and more years) and deeper (the largest eight audit firms) than samples used in prior U.S. research, and robust to several analyses of potential selection-bias effects.

These data advantages help us provide new evidence on audit adjustments that may assist regulators and professionals in considering whether additional guidance for disposition decisions is needed. First, our large sample evidence on the magnitudes and frequencies of adjustments and disposition decisions made under the current U.S. regulatory regime shows that proposed adjustments are pervasive and management's disposition decisions show substantial variation. Approximately 81% of our sample engagements receive at least one proposed adjustment, suggesting most clients' pre-audited financial statements contain misstatements. In audits with proposed adjustments, 50.5% waive all adjustments, 11.6% record all adjustments and the rest (37.9%) combine recording and waiving (selective recording). In other words, there is disagreement in about 88% of our sample audits with proposed adjustments. After taking into account tolerable error, proposed adjustment magnitudes indicates that, auditors propose material adjustments to net income in 6.2% of audits and to one of the seven individual line-items in at least 30.9% of audits.

Second, we provide evidence on the consequences associated with disposition decisions. Recorded adjustments, represent outcomes for which the auditor and management agree that a proposed adjustment reflects an error. If such agreements accurately reflect error-corrections on average, recording adjustments should be associated with improved financial reporting. Lennox et al. (2016) find that recording adjustments is associated with improved earnings attributes such as persistence, smoothness and accruals quality. We show that recording adjustments is negatively associated with material error corrections (restatements), an indicator of unreliability.

In contrast to recorded adjustments, waived adjustments could indicate either (1) the auditor correctly identifies an error that management refuses to correct or (2) the auditor proposes an adjustment that management does not correct on the basis that the adjustment does

not represent an error or is inconsequential. Scenario 1 has negative implications for reporting reliability, while scenario 2 has no, or perhaps positive, implications for reporting reliability.

After controlling for pre-audit financial statement quality and audit effectiveness, we find that waiving adjustments is associated with reduced financial statement reliability. Waiving large adjustments (above the sample median) is associated with a 1.57 to 2.24 percentage point larger restatement risk, a 39.25% to 56% higher likelihood of restatement relative to the unconditional sample mean of 4.0%. Waiving net income adjustments exceeding materiality is associated with an 11.83 percentage point larger restatement risk, nearly 300% greater than the unconditional sample mean. While we infer that waived adjustments are associated with increased restatement incidence, we are unable to provide direct evidence on the channel through it operates. Given that most waived adjustments are quantitatively immaterial, the association between waived adjustments and restatements is likely linked to the presence of undetected misstatements. That is, the *combined* effects of detected-and-waived misstatements and undetected misstatements lead to restatements. Consistent with this reasoning, we find substantial overlap between the financial statement categories of waived adjustments and the subsequently restated categories.

Third, given the potential costs of waived adjustments, we consider a potential benefit, namely, the possible use of disposition decisions to aid in meeting earnings-based benchmarks. Controlling for auditor, board, management and client characteristics, we find indirect evidence that waive decisions are positively linked to incentives to meet or exceed common earnings benchmarks. The evidence is indirect and exploratory, because we cannot observe the signs of the adjustments and therefore cannot compute pre-audit earnings. Subject to this limitation, this analysis supports suspicions that disposition decisions can be an earnings-management tool, consistent with Nelson et al.'s (2002) survey evidence from auditors.

We extend our analyses in two ways. First, for continuing auditor-client relationships, we consider the association between waive decisions, and aspects of next-period audits. After controlling for other factors associated with audit hours and fees, we find that large waived net income adjustments (above the sample median) correspond with a 5.9% [6%] increase in next-period audit hours [fees], and current-period waived adjustments are positively associated with next-period proposed adjustments. Because future audit planning and execution depend partly on current disposition decisions, we interpret this as auditors in continuing client relationships accepting the increased risk from waived adjustments and adapting the next audit to manage this risk. Second, we provide an exploratory analysis of the association between waive decisions and auditor turnover (resignation or dismissal).⁴ Controlling for proposed adjustments, we find a reliably negative association between waive decisions and both turnover and resignations but not dismissals. One interpretation is that a resigning auditor perceives a reputation cost and no benefit to acquiescing to management's waive decisions.

Viewed as a whole, our findings make several contributions. We provide a detailed descriptive analysis of disposition decisions, an essential, close-to-final and hard-to-observe step in the financial reporting and assurance process. We also shed light on the associations between disposition decisions and both financial reporting and audit outcomes. Audit regulators, auditors and audit committees should be interested in these findings (e.g., Goelzer 2020).

We contribute to the audit literature by providing new insights into adjustment dispositions and related financial reporting and auditing outcomes. This research has been hampered by a lack of access to detailed data, especially in the post-SOX U.S. setting and with

⁴ Antle and Nalebuff (1991) model modified audit opinion and resignation as an (ultimate) auditor response to management intransigence with respect to disposition decisions. Turnover incidence in our sample is low (99 auditor changes, coded by Audit Analytics as 14 resignations and 85 dismissals). Auditor turnover can occur for reasons that are either unrelated to the audit *per se*, for example, a merger of audit firms or not observable to outsiders or both.

respect to waive decisions. We contribute by analyzing waived adjustments, which differ conceptually from recorded adjustments in that they represent auditor-manager disagreements. We show that waiving adjustments is associated with both increases in restatement risk and auditor responses, including next-period hours and fees.

We add to research at the intersection of auditing and financial reporting that analyzes how misstatements might find their way into financial reports, for example, poor audit execution (e.g., Aobdia 2019), poor risk identification (e.g., Aobdia, Choudhary and Sadka 2020) and loose materiality judgments (e.g., Choudhary, Merkley and Schipper 2019). This research considers earlier decisions in the financial reporting/assurance process. We control for, the outcomes of previous decisions, because we analyze key decisions that follow. Our analysis provides evidence aligned with intuition (e.g., DeFond and Zhang 2014) that financial reporting reliability, which is inextricably linked to auditing, varies in the absence of restatements, an indicator of poor reporting reliability, and that a decision not to correct detected errors, even those below quantitative materiality thresholds, can nonetheless be linked to adverse outcomes.

2. Background: academic research on audit adjustments

We discuss research that views the waive vs record decision as the outcome of a negotiation (Section 2.1) and archival research on the adjustments themselves (Section 2.2).

2.1 Auditor-client negotiations. Researchers have analytically modeled management-auditor assessments of proposed adjustments as a negotiation (e.g., Antle and Nalebuff 1991), in which the auditor can threaten to qualify the audit opinion or resign if he/she disagrees with management's disposition decisions. Brown and Wright (2008) and Salterio (2012) review the literature on auditor-client negotiations from differing perspectives. They note the nature of these negotiations would be expected to change depending on qualitative factors including the context

in which the audit occurs and authoritative reporting and auditing guidance (e.g., SOX 2002; SAB 99; SAS 89/AU 333; AS 1301; and AS 2810). Because there are no public records of auditor-client negotiations, much of the related empirical research uses surveys (e.g., Gibbins, Salterio and Webb 2001) or experiments.⁵ For example, using experimental methods, Sanchez, Agloglia and Hatfield (2007) analyze client (CFO/controller) negotiations using email exchanges with a hypothetical auditor, played by researchers and Hatfield, Agloglia and Sanchez (2008) analyze auditor negotiations with a computer-simulated hypothetical client.

Hatfield et al. (2008) posits that an auditor faced with either or both a contentious (competitive) client or high client retention risk will pursue a reciprocity-based negotiation strategy. In this strategy, an auditor proposes both inconsequential⁶ adjustments and significant adjustments, with the intent of acquiescing to decisions to waive the former so as to increase the likelihood the client will record the latter. The paper reports (p. 1204) that the interaction of the contentious-client and high-retention risk conditions is associated with a reciprocity-based negotiation and “the end result...is similar regardless of client characteristics (p. 1196).” A second experiment finds that the reciprocity strategy is associated with auditor expectations of/demands for larger adjustments. In our setting, Hatfield et al.’s experimental findings suggest that some proposed audit adjustments could be inconsequential, as part of an overall negotiation strategy with the intent of acquiescing to a disposition to waive the adjustments.⁷

2.2 Archival research on audit adjustments. Much prior literature analyzes the determinants of audit adjustments, rather than outcomes of disposition decisions. For example,

⁵ We evaluate the determinants of disposition decisions, an analysis consistent with negotiation, in Section 4.3.

⁶ Hatfield et al.’s footnote 1 cites BDO Seidman LLP et al. (2004) defining an “inconsequential” item as less than 20% of the overall financial statement materiality amount, assuming no material qualitative factors.

⁷ This interpretation applies if both auditor and client wish to continue the relationship. In section 4.4, we provide an exploratory analysis of auditor turnover for our sample.

Ruhnke and Schmidt's (2014) analysis of 1,148 proposed adjustments from 255 clients of a large German audit firm in 2007 finds that the number and magnitude of adjustments vary predictably with client factors such as auditor-assessed management quality, inherent risk measured by the client's economic position and auditor-assessed control risk measured by the presence of an internal audit function and an audit committee. Chen et al. (2015) study determinants of pre-versus post-audit earnings data in China⁸ (i.e., recorded adjustments) including auditor attributes such as industry specialization, client attributes such as profitability and qualitative factors such as proximity to a profitability threshold to qualify for stock listing or stock offering. Lennox, Wu and Zhang (2014) show that mandatory auditor rotation is associated with more recorded adjustments in both the final year of a departing partner's tenure and the first year of the incoming partner's tenure. Lennox et al. (2018) find that firms record downward adjustments in connection with incentives to overstate earnings prior to stock-financed acquisitions.

Our focus centers more on outcomes associated with disposition decisions, similar to Lennox et al.'s (2016) analysis of Chinese data⁹ which finds evidence that recording adjustments improves post-audit earnings attributes such as persistence, smoothness, accruals quality, close-to-zero earnings and signed/absolute accruals. Recorded adjustments capture manager-auditor

⁸ Licensed Chinese audit firms are required to provide certain pre-and post-audit balance amounts to the Chinese Institute of Certified Public Accountants (starting 2001, per Chen et al. 2009). Starting 2006, the reporting is under the Ministry of Finance, which requires the reporting of pre- and post-audit earnings and total assets (e.g., Lennox et al. 2014, 2016). Some academic researchers have applied for and obtained permission to access these data for research purposes. The data include changes in the balances between pre- and post-audit financial data, combining the effects of management-initiated and auditor-initiated changes. The data do not include management decisions to waive a proposed adjustment.

⁹ Lennox et al. (2006, section 3.1) and Chen, Hu, Wu and Zhao (2020) describe differences between the Chinese and U.S. assurance environments. Particularly pertinent to our study is the way securities regulators treat audit opinions modified for a GAAP violation; these modified opinions are permitted in China (Chen et al. p. 264, 269) but not by the U.S. SEC. Chen et al.'s table 1 reports 1469 qualified audit opinions during 1995-2011, about 7.25% of their sample. The implication is that relative to a U.S. auditor, a Chinese auditor would be less concerned the client will be delisted if the auditor qualifies the opinion because client management waived (refused to record) an adjustment, with a potential effect on management's disposition decisions.

agreement that a misstatement is corrected, inducing post-audit improvements in the client's earnings attributes. Due to data limitations, Lennox et al. (2016) do not consider outcomes associated with waived adjustments. Our data permit us to analyze these outcomes and thereby extend the literature on management's disposition decisions.

3. Hypothesis Development

Figure 2 is a stylized depiction of the audit with a focus on audit adjustments, the component that matters most for our paper. First, the auditor sets quantitative materiality for the engagement and plans the audit accordingly. After the client provides pre-audited financial statements, the auditor collects audit evidence and identifies misstatements (adjustments).¹⁰ If the auditor proposes no adjustments, the client files its financial statements unchanged with an unqualified audit opinion. Otherwise, following AS 2810, *Evaluating Audit Results*, effective December 15, 2010, the auditor accumulates misstatements other than those that are "clearly trivial" (typically 3-5% of materiality).¹¹ The misstatements should include a "best estimate of the total misstatement" in tested accounts and disclosures, or specifically identified (known) misstatements as well as "projected misstatements from substantive procedures that involve audit sampling" (para 12). As discussed next, the evaluation of proposed adjustments is subject to authoritative guidance and audit committee/board oversight and is complex, requiring expert manager and auditor assessments that may involve negotiation.

SAB 99, effective 1999, requires consideration of both quantitative and qualitative factors in determining materiality. SAB 108, effective 2006, requires management and the

¹⁰ To adjust for exposure to unknown misstatements, auditors reduce quantitative materiality by tolerable error (typically by 25%). The application of the tolerable error allows for undetected errors to exist and possibly be detected later, without reaching exceeding materiality and triggering a restatement. Our analysis corresponds to adjustments that *result from* this process. We do not have access to archival data that *describe* this process.

¹¹ Appendix A2 of AS 2810 defines and discusses "misstatement" and clarifies that a misstatement can arise from (unintentional) error or from fraud and can relate to reported amounts, classification, presentation or disclosure.

auditor to evaluate whether a misstatement is quantitatively material using both the rollover and the iron curtain method. Previously, either approach was acceptable. The rollover method quantifies a misstatement based on its effect to current period income without consideration of the accumulated balance sheet effects. The iron curtain method quantifies a misstatement based on the cumulated amount on balance sheet date, regardless of when the misstatement originated.

Recording an adjustment indicates management, the auditor and the audit committee agree the pre-audited financial statements were misstated. Accordingly, and consistent with Lennox et al. (2016), we expect recorded adjustments to be associated with better financial reporting reliability, as recording represents jointly recognized improvements to the financial statements. Conditional on appropriate risk assessments and audit execution, recording *all* proposed adjustments implies the reliability of clients with recorded adjustments should be similar to that of clients with no adjustments. Alternatively, recording inconsequential proposed adjustments, possibly proposed as part of a reciprocity-based negotiating strategy, would have no discernible effect on reporting reliability. We state the hypothesis in null form as follows:

H1: Recording adjustments is not associated with financial reporting reliability.

The alternative hypothesis is one-sided; recording adjustments improves reporting reliability.

The alternative decision to record is to waive proposed adjustments. AS 1301, *Communications with Audit Committees*, effective December 15, 2012¹² instructs the audit committee to review the schedule of uncorrected misstatements (as depicted in Figure 2),

¹² The guidance in AS 1301 is broadly similar to that in SAS 89, *Audit Adjustments*, issued December 1999 and codified as AU Section 333. SAS 89 is viewed by some, e.g., Ratcliffe (2000), as a response to SAB 99, issued August 1999. SAB 99, which provides guidance for preparers of financial statements, states, in part, that SEC registrants and by implication their auditors should not use quantitative thresholds *alone* to judge materiality and provides a list of qualitative factors, such as nearness to earnings targets, that should be considered. Our reading of SAS 89 and AS 1301 suggests that the latter substitutes the term “misstatement” for the term “audit adjustment,” and distinguishes uncorrected misstatements from corrected misstatements.

including the basis for determining materiality (para 18).¹³ If the audit committee/board agrees with management's waive decisions, the auditor should consider relevant quantitative and qualitative factors in evaluating whether uncorrected misstatements are material, either individually or in combination, and with respect to specific accounts or the financial statements as a whole (para 17). We reason that a rational auditor may accept management's waive decision as a calculated business risk, similar in some ways to accepting a higher risk client.¹⁴

Waived adjustments represent disagreements between the auditor and management. If waived adjustments capture (uncorrected) errors, they could be associated with lower financial reporting reliability in at least two non-mutually exclusive ways. First, following the iron-curtain-method requirements of SAB 108, current-period waived adjustments increase the cumulative amount of uncorrected misstatements making it more likely that a future discovery of a misstatement triggers a restatement. Second, under the assumption that auditors cannot be expected to detect all material errors in the pre-audit financial statements, waived adjustments could indicate the existence of other reporting errors. An uncorrected error could be a signal of increased control risk or inherent risk, and therefore possibly linked to other, undetected errors. In other words, the auditor's proposed adjustments might represent just the tip of the iceberg and significant problems may surface in future periods leading to restatements.

Alternatively, waiving adjustments may be unrelated to financial reporting reliability, if the proposed adjustments are inconsequential or if the auditor incorrectly identifies a reporting error. Sanchez et al. (2007) and Hatfield et al. (2008) suggest auditors propose inconsequential

¹³ AS 2810 and AS 1301 affirm the auditor's responsibility for detecting misstatements and reporting them to management, while management, overseen by the audit committee, is responsible for the disposition of those errors.

¹⁴ Restatement risk is one type of business risk for an audit engagement, as an auditor does not know, *ex ante*, which engagements will result in a restatement. As with any decision to accept an economically significant business risk, sometimes the outcome will be adverse (for example, a restatement). Price protection is intended to compensate auditors for risk as opposed to eliminate adverse outcomes, and increased effort might not reduce risk sufficiently.

adjustments as part of a reciprocity-based negotiating strategy, intending to acquiesce to management's waive decisions in order to increase the likelihood management will record other, consequential adjustments. Alternatively, a diligent auditor could present a comprehensive list including consequential and inconsequential adjustments, non-strategically, in the interests of completeness and in accordance with auditing standards. In either case, waiving inconsequential adjustments would not be expected to affect reporting reliability. Errors in proposed adjustments can arise from disagreements about complex and subjective judgments and estimates and/or deficiencies in applying accounting guidance in the context of the client's business.¹⁵ In light of these alternatives, we state the hypothesis in null form:

H2: Waiving adjustments is not associated with financial reporting reliability.

The alternative hypothesis is one-sided; waiving adjustments reduces reporting reliability.

Hypotheses H1 and H2 consider whether disposition decisions have implications for reporting reliability, but do not provide testable predictions about reasons for waiving. While managers may be reluctant to record adjustments because of any combination of effort aversion, time pressure or legitimate disagreements with the auditor, one motivation that has received significant attention from regulators (e.g., SAB 99; AU 9312) and that is of considerable interest to investors is whether waiving adjustments facilitates earnings management (e.g., Becker et al. 1998; Nelson et al. 2002; Lennox et al. 2018). As previously discussed, much research on factors related to management's disposition decisions predates regulatory changes that would be expected to affect those decisions (e.g., Brown and Wright 2008; Salterio 2012). One particularly important change is guidance to preparers (SAB 99) and auditors (AU 9312) to consider

¹⁵ We note that the ability of auditors to make mistakes is an important condition in the adjustment disposition process. If auditors never make mistakes, adjustments should always be recorded as there would be no basis for a disagreement.

qualitative factors, including factors related to earnings benchmarks. Based on the reasoning in SAB 99, we provide an exploratory analysis of the association between waived adjustments and meeting earnings benchmarks. The sign of the association would depend on the relative strength of management's benchmark-meeting incentives vs the counteracting effects of authoritative guidance requiring consideration of qualitative factors in judging the materiality of quantitatively small amounts. There would be no association if the two effects cancel each other.

4. Data and Analysis

4.1 Data description. We obtained adjustment and other data from the PCAOB, collected as part of the inspection process. To access these data, we submitted a proposal describing the nature, research question and expected contribution of our study and the data we wanted to access. As a condition of data access, the PCAOB reviews our analysis and approves the release of any nonpublic information. Following PCAOB approval, we collected data from inspection documents provided by the eight largest U.S. audit firms¹⁶ for inspections between 2005-2014, a total of 2,522 observations. Prior to inspections, the engagement team of an audit selected for inspection provides information to the PCAOB, including audit evidence gathered at the time the auditor signed the audit opinion. This information is not affected by the inspection process.

We gather data on audit adjustments reported as net (unsigned) magnitudes that exceed a *de minimus* threshold (typically 3-5% of materiality) and classified into seven financial statement categories commonly used in ratio analysis: revenue, operating income, pretax income, net income, working capital, assets and equity. We use unsigned values because the signs of audit adjustments are not systematically interpretable in the inspection documents; this is a limitation

¹⁶ The eight firms are Deloitte & Touche (Deloitte); Ernst & Young (EY); Pricewaterhouse Coopers (PwC); KPMG; BDO; Grant Thornton; Crowe and RSM (formerly McGladrey).

of our data.¹⁷ Individual adjustments are likely more frequent and larger in magnitude than our data indicate because our data show the *net* magnitudes of adjustments to each financial statement category, not the summed magnitudes of each adjustment (i.e., sum of all debits and sum of all credits separately). Our data do not include adjustments related to (1) reclassification within a category, (2) disclosures or (3) cash flows, and do not distinguish between known and likely misstatements (e.g., judgmental errors or sampling projections per AU 312; AU 9312).

We combine PCAOB adjustment data with auditor materiality data (Choudhary et al. 2019) and with public databases such as Compustat and Audit Analytics. When inspection documents include prior-year summary adjustment data, we use the year prior to inspection as a separate client-year observation. Each observation in our data corresponds to a single client-year, not an individual adjustment. Table 1, Panel A displays how our sample is affected by data sources and requirements. The final sample contains 3,144 client-year observations from 1,681 distinct audit clients. Table 1, Panel B reports the number of sample observations by each audit firm.¹⁸ Larger firms such as PWC, Deloitte and KPMG comprise about 20% of the sample apiece, followed by Grant Thornton (13.84%), EY (8.72%), BDO (7.38%), RSM (5.22%) and Crowe (3.78%). About 70% of sample observations are from the four largest firms; for comparison, 62% of observations in the Audit Analytics database for our sample period are from these firms. Because our sample is skewed towards large audit firms, our analysis may not

¹⁷ To illustrate: in completing the inspection documents one auditor uses “+” to indicate a proposed adjustment to increase the pre-audit amount by the amount of the adjustment, while another auditor uses “-” to indicate the pre-audit amount is overstated and should be reduced by the amount of the adjustment. In the former case, the “+” indicates the action to take—increase the pre-audit amount—and in the latter case, the “-” indicates the direction of the misstatement the auditor proposes to correct. While PCAOB inspectors have access to underlying documentation to interpret the signs through the engagement team’s supporting work papers provided during the inspection, as researchers we do not have access to historical supporting documentation that may aid in sign interpretation.

¹⁸ We extract data from PCAOB inspection documents completed by audit firms. The frequency of observations for an audit firm does not reflect the frequency of inspections for that firm due to data limitations, for example, information missing in external databases (e.g., Compustat) and information missing in inspection documents and provided to inspectors in other ways.

generalize to all auditors of SEC registrants. Panel C of Table 1 shows that both early years and the last year of the sample contain relatively fewer observations, with 151, 213 and 248 observations from 2005, 2006 and 2007, respectively (cumulatively, about 19.5% of the sample) and 232 observations from 2014 (about 7.4% of the sample).

Table 2 reports descriptive statistics for the adjustment variables. This information provides the first look at a large sample of U.S. audit adjustments in the current (post-SOX) regime. Panel A reports the frequency of engagements with proposed, recorded and waived adjustments overall and the frequency of adjustments classified into seven financial statement categories. Because clients can selectively record (i.e., record some adjustments and waive others within a category), recorded and waived frequencies do not sum to proposed-adjustment frequencies. The auditor proposes income statement adjustments for about 74% of our sample observations, comparable to Kinney and Martin (1994) who report that between 60% and 90% of audits have proposed adjustments. We use observations with no proposed audit adjustments as a benchmark in some analyses.¹⁹ In 30% [66%] of sample engagements management records [waives] some or all of the proposed income statement adjustments. The relative frequencies of these adjustments are similar for income statement and balance sheet items overall, with variation across financial statement categories.²⁰ While Kinney and Martin (1994) find that revenue is among the accounts most commonly affected by adjustments during 1975-1988, we find the least-frequent proposed and recorded adjustment is to revenue, 32% and 9%, respectively. The infrequency of revenue adjustments corresponds with a decline in revenue

¹⁹ Untabulated analyses indicate that clients with no proposed adjustments have lower earnings management incentives, shorter auditor tenure, better financial reporting system quality and better performance.

²⁰ The number of non-missing adjustment values for the operating income and working capital categories is smaller as compared to the other categories because not all audit clients calculate these subtotals (e.g., non-classified balance sheets do not show a subtotal for current assets or current liabilities). If the client does not report these subtotals on financial statements, auditors tend to leave the adjustment amounts as missing.

restatements over most of our sample period (Scholz 2014). For all financial statement categories, management disposition decisions result in less frequent recording relative to waiving. As shown in Figure 1, in approximately 50.5% of our sample audits management waived all the proposed audit adjustments.²¹

Panels B, C and D describe the magnitudes of net adjustments for the seven financial statement categories. Similar to prior research, and following the reasoning in authoritative guidance that requires auditors to use a quantitative materiality assessment, we scale adjustments by the dollar amount of the auditor's engagement-specific materiality judgment to adjust for variation in audit-client sizes.²² Scaling the adjustment by materiality allows us to quantify the *relative* magnitude of a misstatement, yielding a client-specific measure that mitigates heteroscedasticity. In assessing materiality, the auditor will also consider qualitative factors that by definition do not vary by client size. We consider these factors in our exploratory analysis of earnings management incentives for waive decisions.

The sample mean (median) materiality is about \$28 (\$5) million (Table 3), comparable to values in Choudhary et al. (2019). Our primary measure of adjustments is the magnitude of net income adjustments (*NIAdj*). Panel B reports the distribution of materiality-scaled proposed audit adjustments across the categories. The mean (median) of net income proposed adjustments is 0.32 (0.08). For 3.8% (24.5%) of observations, the auditor proposed net income (one of the seven line-item) adjustments exceeding quantitative materiality (untabulated). These percentages

²¹ The figure is similar if we include only audits with a ratio of proposed adjustments to materiality exceeding 50%.

²² Our reasoning is based on Choudhary et al. (2019) who show that much of the variation in auditor quantitative materiality judgments is explained by three size-related financial statement amounts in combination (assets, pretax income and sales), but is not explained by any one of the amounts alone. Scaling adjustments by materiality is consistent with Wright and Wright (1997), Kinney and Martin (1994), and Icerman and Hillison (1991). Kinney and Martin (1994) estimate materiality as 5% of net income, 0.5% of revenue and 0.5% of assets because they do not have access to auditor materiality judgments.

are higher (6.2% and 30.9%, respectively) when we include auditors' consideration of tolerable error (typically 75% of materiality). Accordingly, we believe that for most sample adjustments, the auditor considers qualitative factors in evaluating management's disposition decisions.

Panels C and D report the distributions of the magnitudes of recorded and waived adjustments, respectively. Panel E reports the ratio of waived adjustments to proposed adjustments. Consistent with Wright and Wright (1997) and Icerman and Hillison (1991) who report 65% and nearly 50% of audit adjustments are waived, respectively,²³ we find that on average 72% of proposed audit net income adjustments, are waived with a standard deviation of 0.38. Income statement adjustments are more likely to be waived (73%) relative to balance sheet adjustments (65%; $p < 0.001$; untabulated). The most frequently waived financial statement category is revenue where the mean and first quartile are both 79%; the least frequently waived category is working capital (mean 65%). These descriptive statistics indicate substantial variation in management's disposition of proposed audit adjustments. In particular, the medians in Table 2, Panel E show that about half the time, management waives all the proposed adjustments. In untabulated analyses, we find that during our sample period, overall the amounts of proposed and recorded adjustments have declined, consistent with an improvement in internal controls, while the amount of waived adjustments has remained relatively constant.

4.2 Implications of Management's Disposition Decisions for Financial Reporting

Reliability. We test hypotheses H1 and H2 by estimating the following logistic regression model that examines the relation between recorded or waived adjustments in year t and subsequent restatements of year t financial statements:

$$\text{Restated}_{i,t} = \alpha_0 + \alpha_1 \text{Recorded Adj}_{i,t} \text{ or } \text{Waived Adj}_{i,t} + \alpha_2 \text{Proposed Adj}_{i,t} \quad (1)$$

²³ Joe et al. (2011) report that 24.2% of adjustments are waived. Their sample period (2002) follows some prominent financial reporting scandals, perhaps contributing to more conservative disposition decisions.

$$+ \sum \alpha_m \text{Controls}_{i,t} + \alpha_3 \text{Ln} (\# \text{ Part 1 Findings})_{i,t} + \sum \alpha_i \text{Year} + \sum \alpha_j \text{Audit Firm} \\ + \sum \alpha_k \text{Industry} + e_{i,t}$$

The dependent variable, *Restated*, is an indicator equal to one if there is a subsequent 8-K Item 4.02 statement of non-reliance issued for that period's financial statements. The test variables are *Recorded Adj* and *Waived Adj*, with adjustments defined as net unsigned net income adjustments (*NI Adjust*), scaled by materiality (in dollars).²⁴ If there are no recorded adjustments, these variables are set to zero. We also evaluate results based on two other adjustment measures. First, *Sum Adjust* is the sum of adjustments across the individual line-item categories separately reported in Table 2. This measure captures the pervasiveness of audit adjustments across line-items and including both balance sheet and income statement adjustments. It is subject to possible double counting because a single adjustment can affect more than one financial statement category.²⁵ Second, *Max Adj*, captures the maximum magnitude of a net adjustments across the seven financial statement categories and eliminates double counting but does not capture pervasiveness. The unit of observation is the engagement-year (the summed or maximum or net income audit adjustments for that engagement-year). Results from all subsequent analyses are similar using either *Sum* or *Max Adj*.

²⁴ As shown in Table 1, requiring materiality data results in the loss of 1048 observations, potentially reducing the power of our tests. However, we believe scaling adjustments measures by materiality is conceptually appropriate, because both managers and auditors evaluate whether detected misstatements, that is, adjustments, are large or small with respect to materiality. Scaling by size-based measures such as absolute pretax income, assets or revenues introduces measurement error to the extent these measures are noisy proxies for quantitative materiality. As indicated in Choudhary et al. (2019) footnote 4, scaling dollar amounts of materiality by assets or revenues produces measures correlated approximately 24%. To the extent we find significant results using the sample with materiality data, we conclude there would be no expected benefit from increasing sample size by using an alternative scalar because doing so would introduce measurement error.

²⁵ For example, an adjustment that affects revenue and net income will be included twice, at different amounts because of tax effects; an adjustment that affects assets and income will also be included twice. Double counting arises from adjustments affecting more than one of the seven summary line items in our data. An engagement with multiple adjustments does not create multiple observations, as the unit of observation is an engagement-year.

We include the amount of proposed adjustments (*Proposed Adj*) to control for client differences in pre-audit reporting reliability and for the possibility that proposed adjustments are asymmetric (e.g., more income decreasing adjustments than income increasing adjustments). Controlling for proposed adjustments, a negative (positive) α_1 coefficient on *Recorded Adj* (*Waived Adj*) indicates recording (waiving) is associated with better (worse) reporting reliability, relative to clients with no proposed adjustments, captured by the intercept.²⁶ We control for client characteristics that prior research finds are associated with restatement incidence, including \ln (assets), sales growth, ROA, capital raising, intangibles, capital expenditures, loss, book-to-market, segments, restructure, merger and multinational. We control for pre-audit financial reporting system reliability using an indicator for material weakness (*Material Weakness*). Following Aobdia (2019), we control for audit quality using the log of the number of Part 1 findings (*Ln #Part 1 Findings*).²⁷ If an auditor detects some but not all misstatements in the pre-audit financial statements and the client records all proposed adjustments, the client's financial reports could continue to contain undetected misstatements. All variables are defined in Appendix A. Table 3 reports descriptive statistics for these variables. We include auditor, industry and year fixed effects.

Table 4, Panel A reports the results of estimating equation (1) using logistic regression and including all observations – engagement-years with waived, recorded and no adjustments.²⁸

²⁶ Management cannot waive or record an adjustment until the auditor proposes it. Given this relation, we calculated (untabulated) variance inflation factors (VIFs) for the independent variables in Table 4 and found no evidence of multicollinearity between proposed and waived adjustments (columns 2 and 4 of Table 4; VIFs < 1.80) and some evidence of multicollinearity between proposed and recorded adjustments (columns 1 and 3 of Table 4; VIFs between 5 and 6). We re-estimated the results for recorded and waived adjustments in Table 4 excluding proposed adjustments and found (untabulated) results consistent with those reported in the table.

²⁷ According to the PCAOB, Part 1 findings “describe audit deficiencies where inspection staff found that the auditor failed to gather sufficient audit evidence to support an audit opinion” (PCAOB Release No 2012-003).

²⁸ Because we include industry fixed effects, when there is no variation in restatements for particular industries, we drop these observations from the logistic regression. Therefore, the number of observations is less than the full

The intercept captures restatement propensity of the no-adjustments subsample. Results for the control variables based on firm characteristics (not tabulated) are similar to those of prior studies. Consistent with Lobo and Zhao (2013), size ($\ln(\text{Assets})$) is negatively associated with restatements ($p < 0.01$). Consistent with Aobdia (2019), audit deficiencies are positively associated with restatements ($\ln(\text{\# Part 1 Findings})$, $p < 0.01$). Clients reporting material weaknesses (*Material Weakness*) are more likely to restate ($p < 0.01$).

Results in Columns 1, 3, and 5 report a positive coefficient on *Proposed Adjustments* ($p < 0.05$ or better), suggesting clients with more proposed adjustments, an indication of poor pre-audit financial reporting quality, are more likely to restate. The negative coefficient on *Recorded Adjustments* in Columns 1 and 3 ($p < 0.10$) suggests recording adjustments offsets the positive association of restatements with poor pre-audit financial reporting. The coefficient on *Recorded Adjustments* in Column 5, using *Max Adjust*, is not reliably negative ($p = 0.19$).

We use an F-test to evaluate whether recording adjustments entirely offsets the increased likelihood of restating from proposed adjustments ($\alpha_1 + \alpha_2 = 0$), where α_1 and α_2 capture the incremental likelihoods of restating as compared with observations with no adjustments. The sum of the coefficients on recorded and proposed adjustments is not reliably different from zero ($p = 0.24$ for Column 1 which reports results for *NI Adjust*; results are similar for *Sum* and *Max Adj*). One implication is that clients that record all adjustments have reporting reliability similar to clients without adjustments, consistent with H1. Another implication is that selective recording (disposition decisions that combine waiving with recording) is associated with better

sample. This issue is not present in OLS estimations, and we find inferences are unchanged if we estimate a linear probability regression model.

financial reporting reliability relative to not recording any adjustments, but less so than recording all adjustments or having no proposed adjustments.

To test H2 we examine the association between waived adjustments and restatements. We report results in Columns 2, 4 and 6 of Table 4, Panel A. After controlling for proposed adjustments, audit execution, pre-audit reporting reliability and other factors related to restatements, the positive coefficient on *Waived Adj* ($p < 0.01$) in all three columns indicates waived adjustments are associated with higher restatement incidence, or poorer financial statement reliability. To evaluate whether this association is driven by larger waived adjustments and to assess economic magnitudes, we re-estimate equation (1), replacing waived adjustments with *Large Waived Adjustment*, an indicator equal to one if the magnitude of *Waived Adjustments* is above the sample median value and zero otherwise in all columns of Table 4 Panel B. We add a measure to capture the 22 quantitatively material waived adjustment observations, *Waived NI GTM*, an indicator equal to one if waived net income adjustments exceed quantitative materiality and zero otherwise in Column 2.²⁹ The coefficients on *Large Waived Adj* in all columns are reliably positive ($p < 0.10$ or better).³⁰

Estimating the average marginal effects suggests large, waived adjustments are associated with a 1.57 to 2.24 percentage point increase in restatement probability ($p < 0.06$ or better), representing a 39.25% to 56% higher likelihood of restatement relative to the unconditional sample mean of 4.0%. We also find a positive coefficient for waived net income adjustments that exceed materiality (*Waived NI GTM*; $p < 0.01$) in Column 2. The marginal effect implies the frequency of restatements increases 11.83%, an increase of nearly 300%

²⁹ We focus net income as opposed to summed and max because it has a cleaner comparison with overall quantitative materiality and captures a single summary of the entire income statement.

³⁰ Results are similar if we define *Large Waived Adjust* as an indicator equal to 1 when the adjustment magnitude exceeds the third quartile (untabulated).

relative to the unconditional sample mean of 4.0%. The low sample frequency of *Waived NIGTM* (0.7% of the sample) suggests these results should be interpreted with caution.

The results in Table 4 are consistent with management decisions to waive large adjustments having adverse implications for financial reporting reliability, relative to clients with no proposed audit adjustments. These results also suggest waiving large adjustments is associated with increased audit risk. We explore this idea further in Section 4.4.1, where we analyze the association between disposition decisions and next-year audit hours and audit fees.

We use two approaches to analyze the overlap between financial statement categories of waived adjustments and restated items for the 125 restatements in the Table 4 sample. The first approach uses expert judgments of PCAOB inspectors. We analyze 43 observations obtained from the PCAOB's *ex post* analyses of engagements subject to both inspection and restatement. PCAOB inspector notes detail the major accounts restated and are made after both the inspection and the restatement. We use these notes to evaluate the overlap between accounts that drove the restatement and accounts with a waived adjustment.³¹ We find an overlap for 63% of the 43 observations with any waived adjustments and 84% of the 25 (out of 43) observations with summed adjustments exceeding the sample median.

The second approach uses direct inspection of restated financial reports, allowing us to analyze more observations. We investigate whether any of the seven financial statement categories with waived adjustments overlap with restated line items, defined as a numerical change between the original filing and the most recent data on Compustat's Point-In-Time (PIT) database. For 63 restatements for which PIT data do not indicate a change in any line items we

³¹ We remove two observations for which the overlap cannot be evaluated (e.g., the restatement relates to the statement of cash flows, for which we have no adjustment data).

hand-collect restatement filings and manually evaluate whether restated line items overlap with any of the adjustment categories. For a sample of 110 observations, we find (1) 68% have a waived adjustment in a restated category, (2) 50% have a waived adjustment in the largest line item restated among the seven adjustment categories, (3) within the subsample of observations with above median summed waived adjustments, 94% have overlap between any waived adjustment and a restated category and 69% have overlap between the largest of seven line-items restated and a waived adjustment.

We interpret this evidence of substantial overlap between waived adjustment categories and subsequently-restated categories as indicating additional misstatements were detected post-audit-opinion in areas with waived adjustments. The inference is that the waive decision may signal increased inherent or control risk and is therefore associated with additional undetected errors. In other words, the waived adjustments represent the tip of a misstatement-iceberg.

We believe the weight of the evidence supports the view that waived adjustments are an indicator of (currently) undetected misstatements. The increased likelihood of restatements could result from the combination of current-period waived adjustments and misstatements discovered in the future. The governance implication is that audit committees, charged with oversight of the financial reporting process, should review management's disposition of audit adjustments carefully, specifically the potential restatement implications of waiving adjustments and the potential for currently-undetected financial reporting problems.

4.3 Earnings Benchmarks and Audit Adjustment Disposition Decisions. We perform exploratory analysis to shed light on why managers waive adjustments. Based on SAB 99 which directs auditors to consider qualitative factors in reaching materiality judgments, we expect earnings benchmarks will be positively related to management's incentives to waive and

negatively related to the auditor’s resistance to waive. If opposing management and auditor incentives cancel each other, there would be no association of disposition decisions with qualitative factors.

We create an indicator (*Near Positive Earn Bench*) equal to one when the magnitude of a waived net income adjustment is substantive with respect to helping the client meet at least one of three earnings benchmarks, and zero otherwise. We define a waived adjustment as substantive if its magnitude is at least 50% of the amount by which the client’s reported earnings exceeds the benchmark. Untabulated results using magnitudes that exceed earnings benchmarks by 100%, 75% or 25% are qualitatively similar. We consider three benchmarks: income exceeding zero,³² income exceeding prior year’s income and income exceeding the analyst consensus forecast. The underlying frequency for each benchmark using the observations included in Table 5, Column 1 is 0.51%, 2.7% and 20.2%, respectively. Definitions are in Appendix A.

To test the association between the qualitative earnings-management factor *Near Positive Earn Bench* and waived adjustments we estimate the following regression:

$$\begin{aligned} \text{Waived Adjustments}_{i,t} = & \alpha_0 + \alpha_1 \text{Near Positive Earn Bench}_{i,t} + \alpha_2 \text{Proposed Adjustments}_{i,t} \quad (2) \\ & + \alpha_3 (\text{Proposed Adjustments}_{i,t})^2 + \alpha_4 \text{Auditor Characteristics}_{i,t} + \alpha_5 \text{Board} \\ & \text{Characteristics}_{i,t} + \alpha_6 \text{Management Characteristics}_{i,t} + \alpha_7 \text{Client Characteristics}_{i,t} + \sum \alpha_t \\ & \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_{i,t} \end{aligned}$$

where the dependent variable is the magnitude of waived net income adjustments scaled by quantitative materiality. We estimate equation (2) using the subsample of observations with proposed adjustments, as managers of clients without proposed adjustments cannot waive.

Consistent with Icerman and Hillison 1991; Wright and Wright 1997; Joe et al. 2011, we control for proposed adjustments. We include squared proposed adjustments to allow for a decline in the

³² We include the zero-income benchmark based on prior research, for example, Burgstahler and Dichev (1997) and discussions in SAB 99 that point to the importance of this benchmark.

likelihood of waiving as adjustments become relatively more quantitatively material. Including both terms could bias against finding results as proposed adjustments might be driven by earnings management incentives or other factors we control for including auditor, board/audit committee, management and client characteristics. Consistent with this notion, untabulated analyses indicate results are similar, with larger and statistically stronger coefficients, when we exclude either proposed adjustments or both proposed and squared proposed adjustments.³³

We control for auditor characteristics related to incentives, ability and audit execution. Better quality auditors may be less likely to accept waiving, proxied by *Auditor Expert* and *Audit Office Size*, where larger values indicate better quality. Auditors bonded to their clients (proxied by *Client Importance* and *Non-Audit Fees*) may be more likely to permit waiving; alternatively, auditors might be more concerned about reputation risk for misstatements associated with more important clients. Auditors of new clients (*New Client*) may be less likely to permit waiving as the auditor may be more conservative when it has less knowledge about the client and likely believes the client is unlikely to switch. We control for auditor tenure ($\ln(\text{Auditor Tenure})$) as longer auditor-client relationships may result in auditors accepting more waiving due to compromised independence or greater understanding of the client's risk characteristics (Joe et al. 2011). We control for audit execution using $\ln(\# \text{ Part 1 Findings})$.

We control for audit committee characteristics following Badolato et al. (2014): Busy AC and audit committee expertise: AC Acctg Expert, AC Finance Expert, AC Supervisory Expert,³⁴ and AC Industry Expert. Brown-Liburd and Wright (2011) hypothesize and find in an

³³ To assess multicollinearity induced by including proposed adjustments and squared proposed adjustments, we calculated variance inflation factors (VIFs). Including both terms results in a VIF ranging from 5.96 to 7.60. Excluding the squared term results in a low VIF and inferences are unchanged (results not tabulated).

³⁴ As explained in Badaloto et al.'s Appendix A, Boardex defines expertise based on prior employment or professional certification. Accounting experts have accounting experience as evidenced by a job title, or auditing

experiment involving 63 auditors that stronger audit committees (independent, diligent and knowledgeable) better monitor management, presumably affecting disposition decisions. We predict stronger audit committees, with more expertise and more attention, will be negatively related to waived adjustments. We control for client characteristics [material weakness, audit timeliness, earnings announcement timeliness, ln (assets), earnings volatility, intangibles, segments, restructure, merger, accruals, sales growth, and ROA] and CEO characteristics [ln (CEO Age), ln (CEO tenure) and CEO Chair]. The latter two CEO characteristics could indicate less independent oversight. Variables are defined in Appendix A.

Table 5 reports the results of estimating equation (2). The dependent variable in Column 1 (2) is *Waived NI Adjustments (Large Waived NI Adjustments)* and the model is estimated using OLS (logistic regression). The coefficient on *Near Positive Earnings Bench* is positive in both columns ($p < 0.10$ or better), suggesting management is more likely to waive an adjustment whose magnitude is at least 50% of an earnings benchmark. Untabulated analyses show results are mostly driven by the earnings surprise benchmark, possibly because of higher power from greater frequency or because incentives are stronger (Brown and Caylor 2005).

Our results provide indirect evidence that waiving is more frequent when the magnitude is substantive and earnings are near a benchmark, but are not conclusive as to whether these disposition decisions represent successful attempts to manage earnings because of data limitations on the sign of the adjustments.³⁵ To provide a sense of the upper-bound possibility of

experience at a designated list of firms or professional certification; finance experts have work experience using financial reports; supervisory finance experts have work experience supervising individuals involved in financial reporting, for example, a CEO or president.

³⁵ Direct evidence would be based on a comparison of observations that just-meet vs near-miss the benchmark, which requires signed adjustments. Specifically, not all proposed adjustments to income would reduce income and some would not affect income at all. Previous research (Choudhary et al. 2021) reports that about 22% (36%) [42%] of immaterial corrections have income increasing (decreasing) [no] effects; analogous percentages for material error corrections are 21% (60%) [19%], respectively.

SAB 99 failures, we find that the magnitude of the waived adjustment would be sufficient to allow the client to achieve at least one of the three earnings benchmarks for 177 of the 2,746 sample observations (about 6.5%) for which we have data on all three earnings related benchmarks. There are at least two reasons why 6.5% points to the upper-bound possibility of a SAB 99 failure. First, our data include unsigned magnitudes of adjustments, while a SAB 99 failure would be relevant only for overstated earnings. Second, SAB 99 requires the auditor to exercise professional judgment to determine which qualitative factors are applicable, while we assume all three earnings benchmarks are applicable to each observation.

Consistent with Hatfield et al. (2008), we do not find evidence of strong and consistent explanatory power in the auditor, board and management characteristics included in Table 5. Consistent with practitioner claims, we find some evidence of more waiving when audits are completed earlier (*Audit Timeliness*; $p < 0.05$) and earnings are announced sooner (*Earnings Announcement Timeliness*; $p < 0.05$).

4.4 Additional Analyses of Disposition Decisions: Audit Effort, Audit Cost, Future Audit Adjustments and Auditor Turnover. We next analyze the implications of waived adjustments for the audit in the context of an ongoing auditor-client relationship, specifically, next-year effort (audit hours), costs passed on to the client (audit fees) and next-year proposed adjustments. We conclude this subsection with an exploratory analysis of associations between waived adjustments and terminations of the auditor-client relationship (turnover).

4.4.1 Analysis of next-period audit hours and audit fees. A rational auditor would be aware of increased misstatement risk from a client's waive decisions and would respond to this business risk by increasing audit effort and/or increasing fees. To provide more insight into the costs of waiving adjustments, we investigate whether auditors respond to waived adjustments as

if they represent an audit risk factor and the magnitude of such a response.³⁶ After controlling for factors linked to audit effort via the audit risk model, a positive coefficient on waived adjustments in explaining next-period audit effort (more hours) or fees (compensation for more work or price protection), is consistent with auditors responding to increased client risk from waiving.³⁷ Alternatively, truly inconsequential waived adjustments would not require additional work or higher audit fees.

To investigate these possibilities, we replace the dependent variable in equation (1) with next-year audit hours or fees and estimate the following regression:

$$\text{Audit Hours}_{i,t+1} \text{ or } \text{Audit Fees}_{i,t+1} = \alpha_0 + \alpha_1 \text{Waived Adjustment}_{i,t} + \alpha_2 \text{Proposed Adjustment}_{i,t} + \sum \alpha_m \text{Controls}_{i,t} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + \epsilon_{i,t} \quad (3)$$

where waived and proposed adjustments are defined previously. *Audit Hours* (*Audit Fees*) is the natural log of audit hours (audit fees) in period t+1, obtained from PCAOB proprietary data (Audit Analytics). Controls include factors linked in previous research to audit effort and/or audit quality (e.g., Palmrose 1989; Caramanis and Lennox 2008; Knechel et al. 2009; Causholli et al. 2010; Choudhary et al. 2019), including Ln (# of Part 1 Findings), Ln (assets), audit market share, audit office size, client importance, litigation industry, sales growth, ROA, loss, book to market, segments, restructure, merger, multinational and new client. We include an indicator for material

³⁶ Prior research suggests audit fees and audit procedures vary with client risk characteristics (e.g., Hay, Knechel and Wong 2006; Causholli et al. 2010 review this literature). For example, Lyon and Maher (2005) provide evidence that client misconduct is associated with higher audit fees and Bell, Landsman and Shackelford (2001) provide evidence that auditors increase audit hours and fees for firms with higher perceived business risk.

³⁷ We expect a rational auditor to increase effort and fees in both the current and future period in response to increased misstatement risk. While we analyze current period fees and effort and find similar results (untabulated), it is difficult to attribute current period increased effort to address risk. For example, greater current-period effort could lead to more current-period proposed adjustments, which the client could then waive. The Table 4 analysis suggests that on average any additional current-period audit effort in response to increased misstatement risk from waiving is not on average sufficient to eliminate the increased misstatement risk.

weakness as a control for pre-audit reporting reliability. Variable definitions are in Appendix A. We include industry, year and audit-firm fixed effects and cluster standard errors by client.³⁸

Table 6, Panels A and B report results using next-period audit hours and fees, respectively, as dependent variables. In both panels, results in Column 1 use a continuous measure of waived net income adjustments and results in Columns 2 (3) use dichotomous indicators for large, exceeding the sample median, (exceeding materiality) waived adjustments with *Large Waived Adjustments (Waive NI GTM)*.³⁹ In Panel A, the coefficients on proposed adjustments are positive and not reliably different from zero ($p > 0.10$). The coefficient on the continuous waived-adjustments measure is positive ($p < 0.10$), while the coefficients on *Large Waived Adjustment* (Columns 2 and 3) suggest they are associated with a 5.7% to 5.9% increase in next-period audit hours ($p < 0.05$).⁴⁰ We do not find evidence of increased next-period audit hours when clients waive current-period net income adjustments exceeding materiality.

In Panel B, analyses of audit fees, the coefficients on the continuous net income proposed adjustment variable are positive and not reliably different from zero ($p > 0.10$). The coefficient on the continuous waived-adjustments variable is reliably positive ($p < 0.10$ level) and the indicators for large waived adjustments and waived net income adjustments exceeding materiality are reliably positive ($p < 0.05$). Thus, in continuing auditor-client relationships, waived adjustments generally and large waived adjustments in particular are associated with higher audit fees. In terms of economic effects, the coefficients on *Large Waived Adjustment* in Columns 2 and 3

³⁸ We eliminate 99 observations that changed auditors in period t . Untabulated results support similar inferences when we include these observations.

³⁹ The variance inflation factor (VIF) for the waived adjustment variable is approximately 2 (untabulated) suggesting multicollinearity is not a concern. We also estimated equation (3) separately for waived and proposed adjustments and found similar results (not tabulated).

⁴⁰ In this test and subsequent tests, we estimate these percentages by taking the exponential of the coefficient and subtracting one because our dependent variable is logged.

indicate a 6% higher next-period audit fees, suggesting the cost of next-period's additional work associated with current-period large-waived adjustments is passed on to the client. Waived net income adjustments exceeding materiality are associated with about a 20% higher next-period audit fee. Larger next-period fees suggest the possibility of price protection, a rational auditor response to accepting greater misstatement risk which arises from current-period waived adjustments themselves, undetected misstatements or some combination of the two.⁴¹ In untabulated analyses we do not find an association between recorded adjustments and future audit hours or fees over and above proposed adjustments.

We interpret results in Table 6 as indicating that when management waives large adjustments, an auditor in a continuing relationship accepts the increased risk and responds with a combination of doing more work and charging more fees, both of which point to meaningful costs of waiving adjustments. The results also suggest audit fees reflect both increased effort and compensation for bearing the (calculated) risk of future misstatements.

4.4.2 *Analysis of next-period proposed adjustments.* We evaluate the association between current-period waived adjustments and next-period proposed adjustments (detected errors), controlling for current-period proposed adjustments. Such an association is consistent with the tip-of-the-iceberg explanation (H2) for the association between current-period waived adjustments and restatements and also with the auditor's decision to do additional work (resulting in more detected errors) to manage increased restatement risk. We estimate the following regression using the sample of audits with both prior year audit adjustment data and continuing auditor-client relationships (n=1531):

$$\text{Proposed Adjustments}_{i,t+1} = \alpha_0 + \alpha_1 \text{Waived Adjustment}_{i,t} + \alpha_2 \text{Proposed Adjustment}_{i,t} \quad (4)$$

⁴¹ Waiving proposed adjustments is limited. The auditor will insist that sufficiently large accumulated adjustments must be recorded unless they are eliminated by accruals reversals.

$$+ \sum \alpha_m \text{Controls}_{i,t} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_{i,t}$$

Controls is a vector of factors capturing pre-audit reporting reliability, reporting complexity, accounting performance and auditor and the same client characteristics included in Table 5.

These variables are defined in Appendix A.

Table 7 reports the results of estimating model (4) using both the continuous measure of waived net income adjustments and an indicator for large waived adjustments.⁴² The positive coefficients on both proposed and waived adjustments ($p < 0.10$) indicate that after controlling for current-year proposed adjustments and client characteristics, current-year waived adjustments are incrementally associated with next-year proposed adjustments. This result helps explain our previous finding that current-period waived adjustments are associated with greater fees and hours next-period, after controlling for pre-audit reporting quality, audit execution and client characteristics: the auditor anticipates more next-period detected misstatements, meaning the auditor assesses pre-audit reliability as lower and requires more audit effort.⁴³

Viewed as a whole, the results in Tables 6 and 7 provide evidence consistent with the view that waived adjustments are costly, in that they are associated with next-period increases in audit effort, audit fees and audit findings (proposed adjustments). In addition, while it is possible that the associations between waived adjustments and restatements documented in Table 4 relate to incorrect assessments (mistaken judgments) by auditors, the results from Tables 6 and 7

⁴² The coefficient on *Waive NI GTM*_{t-1} is insignificant at conventional levels. We did not tabulate these results because the small subsample size (17 observations) means there is not sufficient power to draw conclusions.

⁴³ Another reason for an association between current-period waived adjustments and next-period proposed adjustments is that the auditor proposes the waived adjustments again (that is, the waived adjustments carry over). In untabulated results, we find reliably positive ($p < 0.10$ or better) associations between current-period waived adjustments and both next-period recorded adjustments and next-period waived adjustments, with estimated coefficients about 0.19 for recorded adjustments and 0.34 for waived adjustments. The analysis is performed where the unit of observation as an adjustment to a line-item such that there are 7 observations per client-year.

support the view that auditors rationally assess the risks associated with waived adjustments, respond by adjusting the next-period audit, and are compensated for taking on the additional risk.

4.4.3. *Analysis of auditor turnover.* We obtain auditor turnover data from Audit Analytics. Turnover in our sample is low, with 99 (3.1%) total auditor changes, including 14 (0.4%) and 85 (2.7%) coded by Audit Analytics as resignations and dismissals, respectively.⁴⁴ Given these small sample sizes, and anecdotal evidence that auditor turnover occurs for reasons that are neither observable to outsiders nor related to disposition decisions, we regard this analysis as exploratory. We estimate the following logistic regression, separately for total auditor turnover, dismissals and resignations:

$$\text{Auditor Turnover}_{i,t} = \alpha_0 + \alpha_1 \text{Waived Adjustment}_{i,t} + \alpha_2 \text{Proposed Adjustment}_{i,t} + \sum \alpha_m \text{Controls}_{i,t} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_{i,t} \quad (5)$$

We control for Ln (# Part 1 Findings), Ln (assets) and material weakness, as well as year, audit firm, and industry-fixed effects and the same client characteristic variables included in Table 5.

Results, presented in Table 8, indicate a positive association between proposed adjustments and turnover, including both dismissals and resignations ($p < 0.05$).⁴⁵ To the extent more proposed adjustments indicate riskier clients, this finding suggests a positive link between client risk and turnover. Controlling for proposed adjustments, we find a negative association between waived adjustments and turnover ($p < 0.05$, 0.11 and 0.10 for turnover, dismissals and resignations, respectively). Because we cannot observe the timing of the turnover decision in

⁴⁴ In our sample period, 2005-2014, for our eight sample audit firms, Audit Analytics reports turnover, resignation and dismissal rates of 4.95%, 0.70% and 4.24%, respectively. Bryan and Mason (2020) report 888 resignations and 2,442 dismissals for a sample “at the intersection of Audit Analytics, CRSP and Compustat during 2005-2014.” These data include audit firms not in our sample, foreign firms and firms with assets less than \$1 million.

⁴⁵ Given the low incidence of resignations (14 observations), the logistic regression approach drops observations due to limited variation for certain fixed effects and other controls. In untabulated analyses using OLS, we obtain similar results without the loss of observations, and similar result using OLS in the overall turnover and dismissal analyses.

comparison to the disposition decision, we caution that our analysis does not provide evidence that waived adjustments induce turnover.

These exploratory results are based on small samples and are do not condition on auditor attitudes toward their clients. For example, auditors with good client relationships may be more amenable to waiving, which suggests a negative association between turnover and waiving, while auditors entering negotiations about the disposition of audit adjustments with knowledge of the impending turnover may both perceive more reputation risk from waiving and expect no benefits from acquiescing to waiving.⁴⁶

4.5 Selection Bias. Academic research on audit adjustments typically uses non-U.S. data or small proprietary samples which are by construction the result of selection. While our sample of audit engagements the PCAOB selected for inspection is also subject to selection bias concerns, prior research using these data (e.g., Aobdia 2018, Aobdia 2019, Aobdia et al. 2020; Choudhary et al. 2019) has not found evidence that selection bias overturns results or changes inferences. In the context of our study, the PCAOB's selection of engagements to inspect typically occurs within six months after financial statements are released. This timing precludes engagement-selection on the basis of audit adjustments or reporting reliability because auditors provide adjustment information *after* their audits are selected for inspection and most restatements are announced more than six months after financial statements are released.

We conduct two untabulated analyses of potential selection bias. First, following Frank (2000) and Larcker and Rusticus (2010), we evaluate how much an omitted variable must be correlated with both waived adjustments and reporting reliability, fees and hours to overturn our

⁴⁶ In untabulated analyses, and conditional on proposed adjustments, we find (1) a positive association between recorded adjustments and resignations and (2) no statistically reliable associations between either waived or recorded adjustments and dismissals. As previously noted in footnote 4, auditor turnover can occur for reasons unrelated to the audit *per se*, for example, audit firm mergers.

results. Using a 0.10 significance level, we estimate that an omitted variable must have a positive correlation of 10.2% with waived net income adjustments and restatements in the Table 4 Panel A analysis, controlling for other factors. Given the difficulties of predicting restatements and because most known predictors do not correlate at these levels, we conclude it is implausible that selection bias can overturn our findings on the associations between waived net income adjustments and restatements. With regard to the analysis of the waive decision in Table 5 Column 1, after controlling for other factors, an omitted variable would have to be correlated with *Near Positive Earn Bench* at 13.9%. With regard to future hours (fees), an omitted variable would have to be 11.6% (14.3%) correlated with both large waived net income adjustments and future hours (fees). The explanatory power of these models ranges from 77% to 84%, making it unlikely an omitted variable could have such high explanatory power for fees and hours. Finally, to overturn our future detected adjustments results an omitted variable would have to be correlated with large waived net income adjustments and future detected adjustments by 16.4%.

Second, we follow procedures described in Altonji et al. (2005) and applied by Aobdia (2019) in which the researcher sets the level of selection bias (ρ in a Heckman-type model) and tests whether this amount of bias affects the outcome. This procedure relaxes the Heckman model requirement of a valid exclusion restriction. Setting ρ to 0.50 (substantial selection bias), we continue to find large waived adjustments are positively associated with restatements, current fees and next-period proposed adjustments ($p < 0.10$). Our results analyzing next-period audit fees are not robust to high levels of sample selection bias correction and the estimation did not converge in our analyses of current and next-period audit hours.

5. Conclusion

We analyze a close-to-final step in the financial reporting and assurance process by investigating management's disposition decisions with respect to proposed audit adjustments. In our sample, at least 80% of pre-audited financial reports contain auditor-detected misstatements. Perhaps surprisingly, management corrects all misstatements only about 12% of the time and waives all proposed adjustments about 50% of the time. Measuring reporting (un)reliability as restatement risk, we find that recording (waiving) audit adjustments is associated with better (poorer) financial reporting reliability. Our analyses also show that auditors in ongoing relationships respond to the increased restatement risk associated with management decisions to waive large current-period adjustments by increasing next-period audit hours and fees and by proposing more next-year audit adjustments. Subject to the limitation that we cannot observe the signs of adjustments, we provide an exploratory analysis linking waived adjustments with earnings benchmarks. Finally, in an exploratory analysis of 99 instances of auditor turnover we find a negative relation between waive decisions and auditor resignations but not auditor dismissals.

Evidence on the costs of waiving should be of interest to practitioners, especially audit committees who have oversight of management's disposition decisions (e.g., Goelzer 2020). We believe our evidence suggests that both proposed audit adjustments and management's disposition decisions are informative about financial reporting reliability. Taking these results at face value, a possible policy implication is that investors should be provided with this information. That said, we believe intuition and previous research about the effects of changes in disclosure requirements suggest auditor/manager decisions and behaviors might change, in unpredictable ways, in a regime of mandatory disclosure of proposed adjustments and disposition decisions; we are therefore cautious about this implication.

Our analysis and conclusions are subject to three limitations. First, we document certain costs associated with waiving large audit adjustments and leave largely explored management's reasons for declining to correct auditor-detected misstatements; a more complete analysis of these decisions would require signed adjustments, which we do not have. Second, our data are based on audits by the eight largest audit firms, selected for PCAOB inspection. We conduct tests to investigate sample selection bias but cannot entirely rule out this possibility. Third, the cross-sectional nature of the adjustment data precludes an analysis to support causal inferences. Subject to these limitations, we believe we provide important new evidence on the costs of waiving proposed audit adjustments that should be of interest to academics, investors, regulators, the auditing profession and audit committees.

References

- Altonji, J., T. Elder and C. Taber. 2005. Selection on observed and unobserved variables: assessing the effectiveness of Catholic schools. *Journal of Political Economy* 113:1, 151-184.
- Antle, R. and B. Nalebuff. 1991. Conservatism and auditor-client negotiations. *Journal of Accounting Research* 29: supplement, 31-54.
- Aobdia, D. 2018. The impact of the PCAOB inspection process—preliminary evidence. *The Accounting Review* 93:4, 53-80
- Aobdia, D. 2019. Do practitioner assessments agree with academic proxies for audit quality? Evidence from PCAOB and internal inspections. *Journal of Accounting and Economics* 67: 144-174
- Aobdia, D., P. Choudhary and G. Sadka. 2020. Why do auditors fail to report material weaknesses in internal controls? Evidence from PCAOB data. Working paper, University of Arizona, Northwestern University and University of Texas at Dallas.
- Badolato, P., D. Donelson and M. Ege. 2014. Audit committee financial expertise and earnings management: the role of status. *Journal of Accounting and Economics* 58 (2-3): 208-230.
- Becker, C., M. DeFond, J. Jiambalvo and K.R. Subramanyam. 1998. The effect of audit quality on earnings management. *Contemporary Accounting Research* 15:1, 1-24.
- Bell, T. and R. Knechel. 1994. Empirical analyses of errors discovered in audits of property and casualty insurers. *Auditing: A Journal of Practice and Theory* 13 (1): 84-100.
- Bell, T., W. Landsman and D. Shackelford. 2001. Auditors' perceived business risk and audit fees: Analysis and evidence. *Journal of Accounting Research* 39:1, 35-43.
- Brown, L. D. and M. L. Caylor. 2005. A temporal analysis of quarterly earnings thresholds: Propensities and valuation consequences. *The Accounting Review* 80:2, 423-440.
- Brown, H. and A. Wright. 2008. Negotiation research in auditing. *Accounting Horizons* 22:1, 91-109.
- Brown-Liburd, H. and A. Wright. 2011. The effect of past client relationship and strength of audit committee on auditor negotiations. *Auditing: A Journal of Practice and Theory* 30(4): 51-69.
- Bryan, S., D. Carmichael and S. Lilien. 2007. Sunbeam and the 'iron curtain': why a dual test for materiality assessment was necessary. *The CPA Journal* accessed at: <http://archives.cpajournal.com/2007/807/infocus/p18.htm>

Bryan, D. and T. W. Mason. 2020. Earnings volatility and auditor risk assessments: evidence from auditor resignations. *The Accounting Review* 34(4): 33-56.

Burgstahler, D. and I. Dichev. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24(1): 99-126.

Caramanis, C. and C. Lennox. 2008. Audit effort and earnings management. *Journal of Accounting and Economics* 45: 116-138.

Causholli, M., M. De Martinis, D. Hay and W. R. Knechel. 2010. Audit markets, fees and production: towards an integrated view of empirical audit research. *Journal of Accounting Literature* 29: 167-215.

Chen, C.J.P, X. Liu, X. Su and X. Wu. 2009. Auditor-client interdependence and audit quality: partner-level evidence. Working paper, China Europe International Business School, University of Hong Kong, City University of Hong Kong and Central University of Finance and Economics, China.

Chen, S., G. Krishnan, W. Li and Y. Zhang. 2015. What client and auditor attributes are associated with auditors' decision to require adjustments to pre-audit financial statements? Working paper, Beijing Institute of Technology and American University.

Chen, S., B. Hu, D. Wu and Z. Zhao. 2020. When auditors say 'no,' does the market listen? *European Accounting Review* 29:2, 263-305.

Choudhary, P., K. Merkley and K. Schipper. 2019. Auditors' quantitative materiality judgments: Properties and implications for financial reporting reliability. *Journal of Accounting Research* 57:5, 1303-1351.

Choudhary, P., K. Merkley and K. Schipper. 2021. Immaterial error corrections and financial reporting reliability. *Contemporary Accounting Research*. 38:4, 2423-2460.

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

Frank, K. 2000. Impact of a confounding variable on a regression coefficient. *Sociological Methods and Research* 29: 147-194.

Gibbins, M., S. Salterio and A. Webb. 2001. Evidence about auditor-client management negotiation concerning client's financial reporting. *Journal of Accounting Research* 39:3, 535-563.

Goelzer, D. L. "Listen to your auditor or pay the price later," The Audit Blog. October 5, 2020. Available at: <https://medium.com/the-audit-blog/listen-to-your-auditor-or-pay-the-price-later-77e238354815>.

- Hatfield, R., C. Agoglia and M. Sanchez. 2008. Client characteristics and the negotiation tactics of auditors: implications for financial reporting. *Journal of Accounting Research* 46:5, 1183-1206.
- Hay, D., W. R. Knechel, and N. Wong. 2006. Audit fees: A meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research* 23:1, 141-191.
- Houghton, C. and J. Fogarty. 1991. Inherent risk. *Auditing: A Journal of Practice and Theory*, Spring, 1-21.
- Icerman, R. and W. Hillison. 1991. Disposition of audit-detected errors: Some evidence on evaluative materiality. *Auditing: A Journal of Practice and Theory*, 10:1, 22-34.
- Joe, J., A. Wright and S. Wright. 2011. The impact of client and misstatement characteristics on the disposition of proposed audit adjustments. *Auditing: A Journal of Practice and Theory* 30:2, 102-124.
- Knechel, W. R., P. Rouse, and C. Schelleman. 2009. A modified audit production framework: evaluating the relative efficiency of audit engagements. *The Accounting Review* 84 (5):1607-1638.
- Knechel, W.R., G. Krishana, M. Pevzner, L. Shefchik and U. Velury. 2013. Audit quality: insights from the academic literature. *Auditing: A Journal of Practice & Theory*. 32:1, 385-421.
- Kinney, W. and R. Martin. 1994. Does auditing reduce bias in financial reporting? A review of audit-related adjustment studies. *Auditing: A Journal of Practice and Theory* 13:1, 149-156.
- Larcker, D. and T. Rusticus. 2010. On the use of instrumental variables in accounting research. *Journal of Accounting and Economics* 49:3, 186-205.
- Lennox, C., X. Wu and T. Zhang. 2014. Does mandatory rotation of audit partners improve audit quality? *The Accounting Review* 89:5, 1775-1803.
- Lennox, C., X. Wu and T. Zhang. 2016. The effect of audit adjustments on earnings quality: Evidence from China. *Journal of Accounting and Economics* 61:2-3, 545-562.
- Lennox, C., Z. Wang and X. Wu. 2018. Earnings management, audit adjustments, and the financing of corporate acquisitions: evidence from China. *Journal of Accounting and Economics* 65, 21-40.
- Lennox, C., C. Wang, and X. Wu. 2020. Opening up the black box” of audit firms: the effects of audit partner ownership on audit adjustments. *Journal of Accounting Research* 58:5, 1299-1341.
- Lobo, G. and Y. Zhao. 2013. Relation between audit effort and financial report misstatements: evidence from quarterly and annual restatements. *The Accounting Review* 88:4, 1385-1412.

Lyon, J. and M. Maher. 2005. The importance of business risk in setting audit fees: Evidence from cases of client misconduct. *Journal of Accounting Research* 43:1, 133-151.

McGuire, S., T. Omer and D. Wang. 2012. Tax avoidance: does tax-specific industry expertise make a difference? *The Accounting Review* 87(3): 975-1003.

Nelson, M., J. A. Elliott and R. L. Tarpley. 2002. Evidence from auditors about managers' and auditors' earnings management decisions. *The Accounting Review Supplement* 77:1, 175-202.

Palmrose, Z. 1989. The relation of audit contract type to audit fees and hours. *The Accounting Review* LXIV:3, 488- 499.

Ratcliffe, T. 2000. Understanding audit adjustments. *The CPA Journal* April, 34-39.

Ruhnke, K. and M. Schmidt. 2014. Misstatements in financial statements: The relationship between inherent and control risk factors and audit adjustments. *Auditing: A Journal of Practice and Theory* 33:4, 247-269.

Sanchez, M., C. Agoglia and R. Hatfield. 2007. The effect of auditor's use of a reciprocity-based strategy on auditor-client negotiations. *The Accounting Review* 82:1, 241-263.

Salterio, S. 2012. Fifteen years in the trenches: Auditor-client negotiations exposed and explored. *Accounting and Finance* 52: Suppl, 233-286.

Scholz, S. 2014. Financial restatement trends in the United States: 2003 – 2012. Center for Audit Quality. Available at: [financial-restatement-trends-in-the-united-states-2003-2012.pdf](http://www.thecaq.org/files/financial-restatement-trends-in-the-united-states-2003-2012.pdf) ([thecaq.org](http://www.thecaq.org)).

Wright, A. and S. Wright. 1997. An examination of factors affecting the decision to waive audit adjustments. *Journal of Accounting, Auditing and Finance* 12:1, 15-36.

Appendix A: Variable Definitions and Data Sources

Variable	Source	Definition
AC Acctg Expert	Boardex	An indicator set to 1 if a client's audit committee in year t has an accounting expert defined following Badolato, Donelson, and Ege (2014)
AC Finance Expert	Boardex	An indicator set to 1 if a client's audit committee in year t has a finance expert defined following Badolato, Donelson, and Ege (2014)
AC Industry Expert	Boardex	An indicator set to 1 if a client's audit committee in year t has an industry expert defined following Badolato, Donelson, and Ege (2014)
AC Supervisory Expert	Boardex	An indicator set to 1 if a client's audit committee in year t has a supervisory financial expert defined following Badolato, Donelson, and Ege (2014)
Accruals	Compustat	Earnings before extraordinary items (ib) less operating cash flows (oancf) divided by total assets (at).
Assets	Compustat	Total assets (at)
Audit Fees	Audit Analytics	The amount of audit fees paid by the client to the auditor (AA 'MATCHFY_SUM_AUDFEES't)
Audit Hours	PCAOB	The number of total audit hours incurred by the auditor
Audit Market Share	Audit Analytics	The ratio of an audit firm's total audit fees in an MSA to the total audit fee received by all clients in an MSA.
Audit Office Size	Audit Analytics	Natural log of the sum of audit fees collected by audit firm k from all clients in the same MSA by year.
Audit Timeliness	Audit Analytics	The difference (in days) between the 10-K filing statutory due date and the date the audit opinion was signed by the audit firm (SIG_DATE_OF_OP_S); higher values indicate earlier filings
Auditor Expert	Audit Analytics	Indicator set to 1 if a company's auditor has a market share greater than 30% of the total audit fees (AA 'MATCHFY_SUM_AUDFEES't) paid in the company's two-digit SIC and Metropolitan Statistical Area (MSA) for year t, and set equal to zero otherwise (following McGuire et al. (2012)).
Book to Market	Compustat	The ratio of the book value of common equity (ceq) to the market value of equity (prcc_f * csho).
Busy AC	Boardex	Indicator set to 1 if 50% or more of audit committee members serve on three or more boards simultaneously
Capital Expenditures	Compustat	Ratio of capital expenditures (capx) to total assets (at)

Capital Raising	Compustat	An indicator set to 1 if debt and equity issues (dltix + sstk) exceed 20% of assets (at)
CEO Age	Boardex	The CEO's age, calculated as the year of the annual report (annualreportdate) minus the year of the CEO's birth (dob)
CEO Chair	Boardex	An indicator set to 1 if the CEO is also chairman of the board of directors, i.e., if the role (rolename) includes both "CEO" and "Chairman"; zero otherwise
CEO Tenure	Boardex	The CEO's tenure, calculated as the year of the annual report (annualreportdate) minus the year of the CEO's start date (datestartrole)
Client Importance	Audit Analytics	Audit client company j's total assets (AA 'MATCHFY_BALSH_ASSETS') divided by total assets of all companies audited by audit firm k in the same MSA code by year.
Dismissal	Audit Analytics	An indicator set to 1 if the firm dismisses its auditor during the next fiscal year, zero otherwise.
Earnings Announce Timeliness	Compustat and Audit Analytics	The difference (in days) between the audit signature date ((SIG_DATE_OF_OP_S from Audit Analytics) and the earnings announcement date (rdq from Compustat); higher values indicate earlier announcements.
Earnings Volatility	Compustat	The standard deviation of income before extraordinary items (ib) for the current year and the last three fiscal years
Going Concern	Compustat	An indicator set to 1 if the audit opinion includes a going concern modification
Intangibles	Compustat	The sum of R&D (xrd) and advertising (xad) expense scaled by assets (at)
Large Recorded NI (Sum) [Max] Adjustment	PCAOB	An indicator set to 1 if the amount of NI (Sum) [Max] recorded adjustments scaled by quantitative materiality exceeds the sample median
Large Waived NI (Sum) [Max] Adjustment	PCAOB	An indicator set to 1 if the amount of NI (Sum) [Max] waived adjustments scaled by quantitative materiality exceeds the sample median
Litigation Industry	Compustat	An indicator set to 1 if the SIC code is any of the following: 2833-2836, 8731-8734, 3570 – 3577, 7370-7374, 3600-3674, or 5200-5961
Ln (Auditor Tenure)	Compustat	Natural logarithm of 1 plus the number of years the client has used this auditor.

Ln (# Part 1 Findings)	PCAOB	Natural log of 1 plus the number of Part 1 PCAOB inspection findings from PCAOB proprietary inspection documents
Loss	Compustat	An indicator set to 1 if income before extraordinary items (ib) is less than zero
Material Weakness	Compustat	An indicator set to 1 if the company reported a material weakness (IC_IS_EFFECTIVE) and zero otherwise
Materiality	PCAOB	The dollar amount of quantitative materiality the auditor used for this client
Merger	Compustat	An indicator set to 1 if the company had an acquisition that contributed to sales (aqs) and zero otherwise
Multinational	Compustat	An indicator set to 1 if a client reports non-zero foreign income taxes (txfo)
Near Positive Change in NI	Compustat/ PCAOB	An indicator set to 1 if the dollar amount of proposed NI adjustments divided by the absolute dollar amount of the change in net income (ibt - ibt-1) exceeds 0.5 and the change in net income is positive
Near Positive Earnings Surprise	IBES/ PCAOB	An indicator set to 1 if the dollar amount of proposed NI adjustment divided by the dollar amount of the absolute earnings surprise (actual – meanest) exceeds 0.5 and the earnings surprise is positive.
Near Positive Earn Bench	Compustat/ PCAOB	An indicator set to 1 if any of the following indicators equals 1: <i>Near Positive Change in NI</i> , <i>Near Positive Earnings Surprise</i> or <i>Near Positive NI</i> .
Near Positive NI	Compustat/ PCAOB	An indicator set to 1 if the dollar amount of proposed NI adjustment divided by the absolute dollar amount of net income (ib) is greater than 0.5 and net income (ib) is positive
New Client	Compustat	An indicator set to 1 if the current auditor was not the auditor in the previous year.
Non-Audit Fees	Audit Analytics	Non-audit fees divided by audit fees
Proposed NI (Sum) Adjustments	PCAOB	The sum of Recorded NI (Summed) Adjustments and Waived NI (Summed) Adjustments
Recorded NI (Sum) [Max] Adjustments	PCAOB	The absolute dollar amount of net income (summed) [maximum] audit adjustments recorded by the client across financial statement categories, i.e., revenue, operating income, pretax income, net income, assets, equity, working capital, scaled by quantitative materiality

Resignation	Audit Analytics	An indicator set to 1 if the firm's auditor resigns during the next fiscal year, zero otherwise.
Restated	Audit Analytics	An indicator set to 1 if the firm restated current year financial statements in a subsequent year with an Item 4.02 in an 8-K
Restructure	Compustat	Ratio of restructuring costs after-tax (rca) to lagged total assets (at)
ROA	Compustat	Ratio of income before extraordinary items (ib) to total assets (at)
Sales Growth	Compustat	Percentage change in sales $((rev_t - rev_{t-1})/rev_{t-1})$
Segments	Compustat	Natural logarithm of the sum of the number of geographic and business segments
Turnover	Audit Analytics	An indicator set to 1 if the firm changes its auditor during the next fiscal year, zero otherwise.
Waived NI (Sum) [Max] Adjustments	PCAOB	The absolute dollar amount of net income (summed) [maximum] audit adjustments waived by the client across financial statement categories, i.e., revenue, operating income, pretax income, net income, assets, equity, working capital, scaled by quantitative materiality
Waived NI GTM	PCAOB	An indicator set to 1 if waived net income adjustments exceed the auditor's quantitative materiality

Figure 1. Frequency Distribution of the Ratio of Waived Audit Adjustments to Proposed Audit Adjustments

The figure shows the frequency distribution of the ratio of the total magnitude of waived audit adjustments to the magnitude of proposed adjustments for our sample observations. The sample contains 2,551 audits that have a proposed adjustment by the eight largest accounting firms, chosen for inspection by the PCAOB during 2005-2014. The frequency of 100% waived adjustments is 50.5% and the frequency of 0% waived adjustments is 11.6%.

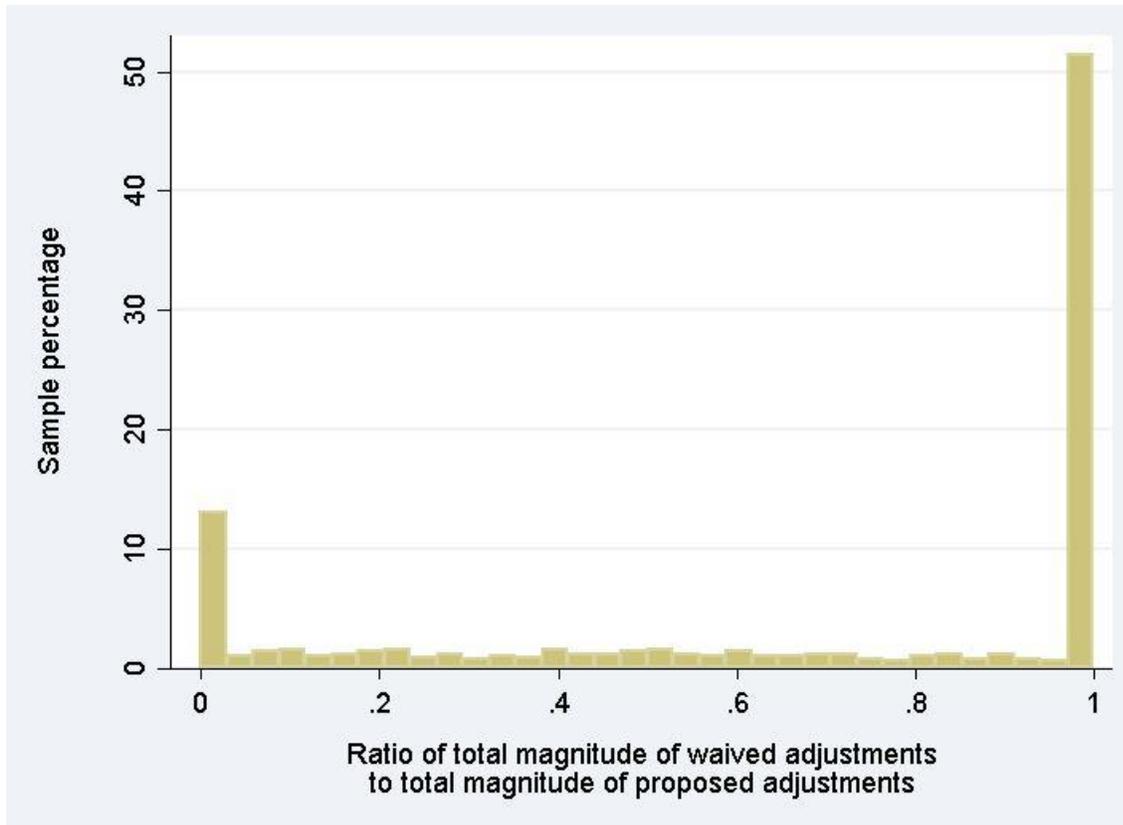


Figure 2: The Audit Adjustment Disposition Process

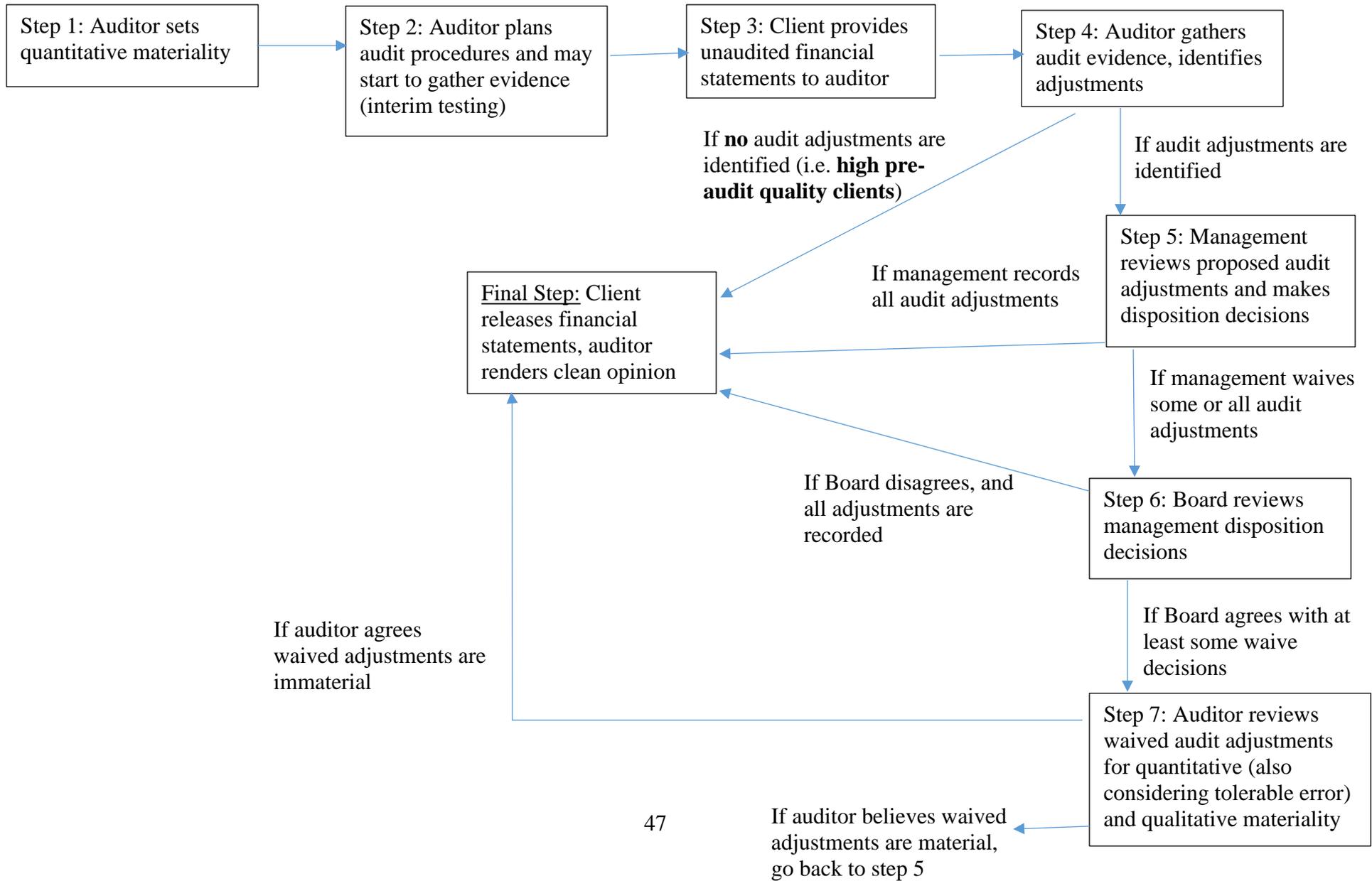


Table 1: Sample Information**Panel A. Sample Selection**

Observations with audit adjustments data from PCAOB inspection reports	2,522
Add: Observations with lagged audit adjustments data included in inspection reports	2,377
	4,899
Less: Observations without Compustat information	225
Less: Observations without materiality data from PCAOB inspection reports	1,048
	3,626
Less: Observations missing client characteristic variables	482
Total number of observations	3,144
Number of unique audit clients	1,681

Panel B. Observations by Audit Firm⁴⁷

Audit Firm	Frequency	Percentage
PWC	693	22.04%
Deloitte	630	20.04
KPMG	597	18.99
Grant Thornton	435	13.84
EY	274	8.72
BDO	232	7.38
RSM (McGladrey)	164	5.22
Crowe	119	3.78
Total	3,144	100.00%

Panel C. Observations by Inspection Year

Year	Frequency	Percentage
2005	151	4.80%
2006	213	6.77
2007	248	7.89
2008	348	11.07
2009	415	13.20
2010	404	12.85
2011	368	11.70
2012	369	11.74
2013	396	12.60
2014	232	7.38
Total	3,144	100%

⁴⁷ The frequency of observations for each audit firm does not reflect the frequency of inspection for that audit firm. Reasons include: audit firms sometimes provide information to the PCAOB via internet portals, which we cannot access, rather than inspection documents; some observations may be missing PCAOB materiality data and some audit clients may not have matching data available from external databases.

Table 2: Descriptive Statistics for Audit Adjustment Data**Panel A. Frequency of Audit Adjustments by Financial Statement Category and Disposition**

Variable	N	Frequency		
		Proposed	Recorded	Waived
Income Statement Adj	3,144	74%	30%	66%
Revenue Adj	3,144	32%	9%	28%
Operating Income Adj	3,075	60%	24%	53%
Pretax Income Adj	3,144	68%	26%	60%
Net Income Adj	3,144	72%	29%	63%
Balance Sheet Adj	3,144	75%	37%	64%
Working Capital Adj	2,512	61%	30%	49%
Assets Adj	3,144	61%	29%	49%
Equity Adj	3,144	58%	21%	49%

Panel B. Magnitude of Proposed Adjustments (scaled by materiality)

Variable	N	Mean	SD	Q1	Median	Q3
Income Statement Adj	3,144	1.49	14.49	0.00	0.32	0.98
Revenue Adj	3,144	0.26	2.22	0.00	0.00	0.08
Operating Income Adj	3,075	0.60	13.68	0.00	0.04	0.24
Pretax Income Adj	3,144	0.31	1.71	0.00	0.08	0.26
Net Income Adj	3,144	0.32	2.05	0.00	0.08	0.25
Balance Sheet Adj	3,144	1.51	7.18	0.00	0.36	1.19
Working Capital Adj	2,512	0.34	1.31	0.00	0.06	0.28
Assets Adj	3,144	0.82	3.79	0.00	0.11	0.51
Equity Adj	3,144	0.43	4.51	0.00	0.05	0.26

Panel C. Magnitude of Recorded Adjustments (scaled by materiality)

Variable	N	Mean	SD	Q1	Median	Q3
Income Statement Adj	3,144	0.70	5.79	0.00	0.00	0.13
Revenue Adj	3,144	0.12	2.09	0.00	0.00	0.00
Operating Income Adj	3,075	0.21	2.98	0.00	0.00	0.00
Pretax Income Adj	3,144	0.18	1.66	0.00	0.00	0.01
Net Income Adj	3,144	0.20	1.96	0.00	0.00	0.03
Balance Sheet Adj	3,144	0.87	6.49	0.00	0.00	0.31
Working Capital Adj	2,512	0.19	1.21	0.00	0.00	0.06
Assets Adj	3,144	0.47	3.40	0.00	0.00	0.06
Equity Adj	3,144	0.25	3.79	0.00	0.00	0.00

Panel D. Magnitude of Waived Adjustments (scaled by materiality)

Variable	N	Mean	SD	Q1	Median	Q3
Income Statement Adj	3,144	0.79	11.10	0.00	0.18	0.62
Revenue Adj	3,144	0.15	0.62	0.00	0.00	0.03
Operating Income Adj	3,075	0.40	11.17	0.00	0.01	0.14
Pretax Income Adj	3,144	0.13	0.30	0.00	0.03	0.17
Net Income Adj	3,144	0.12	0.26	0.00	0.04	0.15
Balance Sheet Adj	3,144	0.64	2.93	0.00	0.16	0.60
Working Capital Adj	2,512	0.14	0.46	0.00	0.00	0.13
Assets Adj	3,144	0.35	1.43	0.00	0.00	0.25
Equity Adj	3,144	0.18	2.44	0.00	0.00	0.14

Panel E. Magnitude of Waived Adjustments (scaled by magnitude of proposed adjustments)

Variable	N	Mean	SD	Q1	Median	Q3
Income Statement Adj	2,331	0.73	0.38	0.43	1.00	1.00
Revenue Adj	1,017	0.79	0.38	0.79	1.00	1.00
Operating Income Adj	1,847	0.72	0.39	0.40	1.00	1.00
Pretax Income Adj	2,129	0.74	0.39	0.44	1.00	1.00
Net Income Adj	2,263	0.72	0.39	0.38	1.00	1.00
Balance Sheet Adj	2,367	0.65	0.42	0.20	1.00	1.00
Working Capital Adj	1,526	0.63	0.42	0.15	1.00	1.00
Assets Adj	1,922	0.65	0.43	0.14	1.00	1.00
Equity Adj	1,820	0.72	0.41	0.34	1.00	1.00

Table 3: Descriptive Statistics on Size, Dependent Variables, and Control Variables

This table reports descriptive statistics for the sample of clients in the audit engagements summarized in Table 1. Variables are defined in Appendix A.

	Variables	N	Mean	St Dev	25th	Median	75th
Size Descriptives	Assets (\$M)	3,144	21,577	162,432	395	1,372	4,796
	Net Income (\$ M)	3,144	264	1,701	-3	30	131
	Revenue (\$ M)	3,144	5,202	16,446	224	738	2,770
	Materiality (\$ T)	3,144	28,300	79,200	1,672	5,000	16,000
Dependent Variables	Restated	3,144	0.04	0.20	0.00	0.00	0.00
	Ln Audit Hours	2,951	8.84	0.99	8.15	8.78	9.41
	Ln (Audit Fees)	3,144	14.18	1.14	13.38	14.08	14.83
	Turnover	3,144	0.031	0.175	0.00	0.00	0.00
	Dismissal	3,144	0.027	0.162	0.00	0.00	0.00
	Resignation	3,144	0.004	0.06	0.00	0.00	0.00
Compustat Controls	Accruals	3,144	-0.06	0.09	-0.08	-0.04	-0.01
	Audit Timeliness	3,144	6.43	9.04	1.00	4.00	11.00
	Book to Market	3,144	0.64	0.64	0.29	0.53	0.87
	Capital Expenditures	3,144	0.04	0.06	0.01	0.02	0.05
	Capital Raising	3,144	0.21	0.41	0.00	0.00	0.00
	Client Importance	3,082	0.14	0.24	0.01	0.03	0.14
	Earnings Announce Timeliness	3,144	16.55	14.53	2.00	15.00	27.00
	Earnings Volatility	3,144	0.05	0.08	0.01	0.03	0.06
	Intangibles	3,144	0.04	0.07	0.00	0.01	0.06
	Litigation Industry	3,144	0.28	0.45	0.00	0.00	1.00
	Ln (Auditor Tenure)	3,133	2.00	0.96	1.39	2.08	2.71
	Loss	3,144	0.27	0.44	0.00	0.00	1.00
	Material Weakness	3,144	0.05	0.22	0.00	0.00	0.00
	Merger	3,144	0.11	0.32	0.00	0.00	0.00
	Multinational	3,144	0.55	0.50	0.00	1.00	1.00
	Near Positive Earn Bench	2,746	0.16	0.37	0.00	0.00	0.00
	Waive NI GTM	3,144	0.01	0.08	0.00	0.00	0.00
	New Client	3,120	0.10	0.30	0.00	0.00	0.00
	Restructure	3,144	0.00	0.01	0.00	0.00	0.00
	ROA	3,144	0.01	0.12	0.00	0.03	0.07
Sales Growth	3,144	0.13	0.40	-0.03	0.07	0.18	
Segments	3,144	1.39	0.59	0.69	1.39	1.79	
PCAOB Controls	Ln (# Part 1 Findings)	3,144	0.44	0.72	0.00	0.00	0.69
Audit Analytics Controls	Audit Market Share	3,125	0.47	0.35	0.14	0.40	0.81
	Audit Office Size	3,126	17.11	1.65	15.89	17.32	18.33
	Auditor Expert	3,125	0.58	0.49	0.00	1.00	1.00
	Non-Audit Services	3,143	0.23	0.06	0.19	0.24	0.28

	Variables	N	Mean	St Dev	25th	Median	75th
Boardex	AC Acctg Expert	2,891	0.81	0.39	1.00	1.00	1.00
Controls	AC Finance Expert	2,891	0.22	0.41	0.00	0.00	0.00
	AC Industry Expert	2,891	0.54	0.50	0.00	1.00	1.00
	AC Supervisory Expert	2,891	0.92	0.27	1.00	1.00	1.00
	Busy AC	3,144	0.74	0.44	0.00	1.00	1.00
	CEO Chair	2,513	0.52	0.50	0.00	1.00	1.00
	Ln (CEO Age)	2,467	4.02	0.14	3.93	4.03	4.11
	Ln (CEO Tenure)	2,287	1.61	0.87	1.10	1.79	2.20

Table 4. Disposition Decisions and Restatements

This table reports results on the association between restatements and recorded or waived audit adjustments estimated in logit. *Restated* is an indicator variable equal to one if the audited financial statements are restated at a future date. *Recorded*, *Waived*, and *Proposed Adjustments* are calculated as the dollar amount of their respective adjustment types scaled by the auditor’s quantitative materiality amount. Untabulated controls include sales growth, ROA, capital raising, intangibles, capital expenditures, loss, book to market, segments, restructure, merger, and multinational. Variables are defined in Appendix A. Panel A reports results based on continuous measures of audit adjustments. Estimates reported in Columns 1 and 2 measure adjustments aggregated at net income, those in Columns 3 and 4 measure adjustments summed across line items, and those in Columns 5 and 6 are based on the maximum individual adjustment line item. Panel B reports results for *Large Waived Adjustments*, an indicator set to one if the amount of waived adjustments exceeds the sample median level of waived adjustments scaled by quantitative materiality. Panel B also includes *Waive NI GTM*, an indicator set to one when clients waive net income adjustments in excess of quantitative materiality. T-statistics, reported in parentheses, are based on robust standard errors that are clustered by audit client. Statistical significance (two-sided) is denoted by *** p<0.01, ** p<0.05, * p<0.1.

Panel A. Recorded and Waived Adjustments and Restatements

$$\text{Restated}_{i,t} = \alpha_0 + \alpha_1 \text{Recorded Adj}_{i,t} \text{ or } \text{Waived Adj}_{i,t} + \alpha_2 \text{Proposed Adj } \$ + \alpha_3 \text{Controls}_{i,t} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_t$$

		NI Adjust		Sum Adjust		Max Adjust	
	Pred.	(1)	(2)	(3)	(4)	(5)	(6)
Recorded Adjustments	-	-1.2557*** (-2.75)		-0.0761* (-1.70)		-0.1039 (-1.31)	
Waived Adjustments	+		1.7641*** (2.95)		0.1662*** (2.64)		0.2061** (2.03)
Proposed Adjustments	+	1.4529*** (3.70)	0.3436** (2.44)	0.0974*** (2.84)	0.0042 (0.16)	0.1234** (2.46)	-0.0052 (-0.10)
Ln (# Part 1 Findings)		1.1537*** (6.89)	1.1333*** (6.72)	1.1210*** (6.56)	1.1219*** (6.58)	1.1168*** (6.52)	1.1177*** (6.55)
Ln (Assets)		-0.3450*** (-3.65)	-0.3385*** (-3.58)	-0.3489*** (-3.70)	-0.3434*** (-3.61)	-0.3555*** (-3.79)	-0.3560*** (-3.77)
Material Weakness		1.3698*** (4.02)	1.2743*** (3.72)	1.4123*** (4.07)	1.4453*** (4.17)	1.5204*** (4.59)	1.5272*** (4.58)
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Audit Firm Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Additional Controls		Yes	Yes	Yes	Yes	Yes	Yes
Observations		2,732	2,732	2,732	2,732	2,732	2,732
Pseudo R-square		0.243	0.243	0.233	0.237	0.229	0.231

Table 4 (Continued)**Panel B. Large Waived Adjustment and Restatements**

VARIABLES	Pred.	NI Adjust		Sum Adjust	Max Adjust
		(1)	(2)	(3)	(4)
Large Waived Adjustment	+	0.4174*	0.4383*	0.5973***	0.4849**
		(1.93)	(1.95)	(2.65)	(2.11)
Proposed Adjustment	+	0.5052***	0.1859	0.0344*	0.0447
		(3.57)	(1.08)	(1.82)	(1.39)
Waive NI GTM	+		3.2023***		
			(4.70)		
Ln (# Part 1 Findings)		1.1263***	1.1967***	1.1146***	1.1108***
		(6.67)	(6.96)	(6.54)	(6.49)
Ln (Assets)		-0.3484***	-0.3505***	-0.3447***	-0.3556***
		(-3.74)	(-3.65)	(-3.73)	(-3.80)
Material Weakness		1.2426***	1.4096***	1.3776***	1.4467***
		(3.54)	(4.03)	(3.99)	(4.38)
Year Fixed Effects		Yes	Yes	Yes	Yes
Audit Firm Fixed Effects		Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes
Additional Controls		Yes	Yes	Yes	Yes
Observations		2,732	2,732	2,732	2,732
Pseudo R-square		0.238	0.254	0.236	0.231

Table 5. Determinants of Decisions to Waive Adjustments

This table reports results on the association between waived adjustments and determinants of waving. *Waived Adjustments* are calculated as the dollar amount of net income adjustments scaled by the auditor’s quantitative materiality amount and are used as the dependent variable in Column 1, estimated using OLS. *Large Waived Adjustments* is an indicator set to one if the amount of waived adjustment exceeds the sample median level of waived adjustments scaled by quantitative materiality and is used as the dependent variable in Column 2, estimated using a logit model. Variables are defined in Appendix A. T-statistics, reported in parentheses, are based on robust standard errors that are clustered by audit client. Statistical significance (two-sided) is denoted by *** p<0.01, ** p<0.05, * p<0.1.

$$\text{Waived Adjustments}_{i,t} = \alpha_0 + \alpha_1 \text{Qualitative Factors} + \alpha_2 \text{Proposed Adjustments} + \alpha_3 \text{Proposed Adjustments}^2 + \alpha_4 \text{Auditor Characteristics} + \alpha_5 \text{Board Characteristics} + \alpha_6 \text{Management Characteristics} + \alpha_7 \text{Client Characteristics} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_t$$

			Waived NI Adjustments	Large Waived NI Adjustments
		Pred	(1)	(2)
Qualitative Factor	Near Positive Earn Bench	+	0.0194* (1.80)	0.7263*** (3.42)
	Proposed NI Adj	+	0.5276*** (14.00)	5.3931*** (6.31)
	Proposed NI Adj ²	-	-0.1215*** (-9.37)	-1.4271*** (-6.40)
Auditor Characteristics	Auditor Expert	-	-0.0032 (-0.38)	-0.0208 (-0.12)
	Audit Office Size	-	-0.0030 (-0.73)	-0.0243 (-0.29)
	New Client	+/-	0.0062 (0.42)	0.2755 (0.92)
	Ln(Auditor Tenure)	+	-0.0036 (-0.68)	-0.1151 (-1.07)
	Ln (# Part 1 Findings)	+	0.0100* (1.72)	0.0736 (0.70)
	Non-Audit Fees	+/-	-0.0057 (-0.03)	1.2503 (0.34)
	Client Importance	-	-0.0131 (-0.53)	-0.1618 (-0.37)
	Board Characteristics	Busy AC	-	0.0069 (0.76)
AC Acctg Expert		-	-0.0106 (-1.04)	-0.3638* (-1.79)
AC Finance Expert		-	0.0069 (0.79)	-0.2236 (-1.24)
AC Supervisory Expert		-	-0.0153 (-0.92)	-0.0484 (-0.15)
AC Industry Expert		-	0.0121	0.0999

		(1.49)	(0.62)
Management Characteristics	Ln (CEO Age)	-0.0305 (-0.98)	-0.1344 (-0.24)
	Ln (CEO Tenure)	+ -0.0036 (-0.80)	0.1382 (1.53)
	CEO Chair	+ 0.0100 (1.31)	-0.1734 (-1.11)
Client Characteristics	Material Weakness	-0.0461* (-1.93)	-0.2156 (-0.54)
	Audit Timeliness	0.0010** (2.29)	0.0061 (0.73)
	Earnings Announce Timeliness	0.0008** (2.25)	0.0026 (0.39)
	Ln (Assets)	0.0003 (0.09)	0.0425 (0.65)
	Earnings Volatility	0.0461 (0.65)	-1.0262 (-0.89)
	Intangibles	-0.1429* (-1.85)	-0.1084 (-0.08)
	Segments	-0.0086 (-1.01)	0.1408 (0.90)
	Restructure	-0.6506 (-0.74)	2.9246 (0.18)
	Merger	0.0088 (0.78)	0.0117 (0.05)
	Accruals	-0.0318 (-0.57)	-0.9290 (-0.85)
	Sales Growth	-0.0045 (-0.42)	0.0867 (0.48)
	ROA	0.0799* (1.88)	1.8375** (2.28)
	Year Fixed Effects	Yes	Yes
	Audit Firm Fixed Effects	Yes	Yes
	Industry Fixed Effects	Yes	Yes
	Observations	1,386	1,354
	R-square	0.521	
Pseudo R-square		0.198	

Table 6. Disposition Decisions and Future Audit Hours and Audit Fees

This table reports results on the association between waived adjustments and measures of future audit effort and cost. Panel A reports results for future audit hours and Panel B reports results for future audit fees. Audit hours is the number of hours spent by professionals conducting the audit. Audit fees is the amount charged to the client for the audit as reported in Audit Analytics. *Waived* and *Proposed Adjustments* are calculated as the dollar amount of net income adjustments scaled by the auditor’s quantitative materiality amount. *Large Waived Adjustments* is an indicator set to one if the amount of waived adjustments exceeds the sample median level of waived adjustments scaled by quantitative materiality. *Waive NI GTM* is an indicator set to one when clients waive net income adjustments in excess of quantitative materiality. We include the following control variables: ln (assets), ln (# Part 1 Findings), audit market share, audit office size, client importance, litigation industry, sales growth, ROA, loss, book to market, segments, restructure, merger, multinational, material weakness, and new client. Variables are defined in Appendix A. T-statistics, reported in parentheses, are based on robust standard errors that are clustered by audit client. Statistical significance (two-sided) is denoted by *** p<0.01, ** p<0.05, * p<0.1.

Panel A. Future Audit Hours

$$\ln(\text{Audit Hours}_{i,t+1}) = \alpha_0 + \alpha_1 \text{Waived Adjustment}_{i,t} + \alpha_2 \text{Proposed Adjustment}_{i,t} + \sum \alpha_m \text{Controls}_{i,t} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_{i,t}$$

VARIABLES	Pred	(1)	(2)	(3)
Waived Adjustments	+	0.1288 (1.36)		
Large Waived Adjustments	+		0.0595** (2.22)	0.0574** (2.12)
Waived NI GTM	+			-0.1137 (-0.41)
Proposed Adjustments		0.0301 (0.81)	0.0409 (1.05)	0.0562 (1.45)
Ln (# Part 1 Findings)		0.0359* (1.70)	0.0356* (1.69)	0.0354* (1.68)
Ln (Assets)		0.3751*** (28.99)	0.3752*** (29.08)	0.3752*** (29.08)
Material Weakness		0.3052*** (4.75)	0.3037*** (4.66)	0.2983*** (4.67)
Year Fixed Effects		Yes	Yes	Yes
Audit Firm Fixed Effects		Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes
Additional Control Variables		Yes	Yes	Yes
Observations		2,065	2,065	2,065
R-squared		0.769	0.770	0.770

Table 6 (Continued)**Panel B. Future Audit Fees**

$$\ln(\text{Audit Fees}_{i,t+1}) = \alpha_0 + \alpha_1 \text{Waived Adjustment}_{i,t} + \alpha_2 \text{Proposed Adjustment}_{i,t} + \sum \alpha_m \text{Controls}_{i,t} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_{i,t}$$

VARIABLES	Pred.	(1)	(2)	(3)
Waived Adjustments	+	0.1275* (1.83)		
Large Waived Adjustments	+		0.0588*** (2.69)	0.0605*** (2.77)
Waived NI GTM	+			0.1798** (2.00)
Proposed Adjustments		0.0243 (1.07)	0.0318 (1.52)	0.0168 (0.74)
Ln (# Part 1 Findings)		-0.0005 (-0.03)	-0.0009 (-0.05)	-0.0006 (-0.04)
Ln (Assets)		0.4474*** (38.89)	0.4477*** (38.97)	0.4476*** (38.95)
Material Weakness		0.3176*** (6.31)	0.3144*** (6.24)	0.3209*** (6.36)
Year Fixed Effects		Yes	Yes	Yes
Audit Firm Fixed Effects		Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes
Additional Control Variables		Yes	Yes	Yes
Observations		2,836	2,836	2,836
R-squared		0.843	0.843	0.843

Table 7. Disposition Decisions and Future Audit Adjustments

This table reports results on the association between waived adjustments and future proposed audit adjustments. *Waived* and *Proposed Adjustments* are calculated as the dollar amount of net income adjustments scaled by the auditor's quantitative materiality amount. *Large Waived Adjustments* is an indicator set to one if the amount of waived adjustments exceeds the sample median level of waived adjustments scaled by quantitative materiality. We include the following control variables: material weakness, audit timeliness, earnings announce timeliness, ln (assets), earnings volatility, intangibles, segments, restructure, merger, accruals, sales growth, ROA, auditor expert, audit office size, new client, ln (auditor tenure), ln (# part 1 findings), non-audit fees, and client importance. Variables are defined in Appendix A. T-statistics, reported in parentheses, are based on robust standard errors that are clustered by audit client. Statistical significance (two-sided) is denoted by *** p<0.01, ** p<0.05, * p<0.1.

$$\text{Proposed Adjustment}_{i,t+1} = \alpha_0 + \alpha_1 \text{Waived Adjustment}_{i,t} + \alpha_2 \text{Proposed Adjustment}_{i,t} + \sum \alpha_m \text{Controls}_{i,t} + \sum \alpha_t \text{Year}_t + \sum \alpha_j \text{Audit Firm}_t + \sum \alpha_k \text{Industry}_t + e_{i,t}$$

VARIABLES	(1)	(2)
Waived Adjustments _t	0.2003* (1.89)	
Large Waived Adjustments _t		0.0517** (1.98)
Proposed Adjustments _t	0.1359** (1.98)	0.1631*** (2.60)
Ln (# Part 1 Findings)	0.0349* (1.82)	0.0358* (1.86)
Ln (Assets) _t	-0.0089 (-0.87)	-0.0082 (-0.81)
Material Weakness _t	0.0844 (1.00)	0.0812 (0.96)
<i>Fixed Effects</i>		
Year	Yes	Yes
Audit Firm	Yes	Yes
Industry	Yes	Yes
Additional Controls	Yes	Yes
Observations	1,531	1,531
R-squared	0.196	0.195

Table 8. Disposition Decisions and Auditor Turnover

This table reports results on the association between auditor turnover and waived audit adjustments estimated in logit. *Turnover*, *Dismissal*, and *Resignation* are indicator variables equal to one if the auditor did not participate in future audit engagements with the client for any reason, a client dismissal, or an auditor resignation, respectively. *Waived* and *Proposed Adjustments* are calculated as the dollar amount of net income adjustments scaled by the auditor's quantitative materiality amount. Untabulated controls include sales growth, ROA, capital raising, intangibles, capital expenditures, loss, book to market, segments, restructure, merger, and multinational. Variables are defined in Appendix A. T-statistics, reported in parentheses, are based on robust standard errors that are clustered by audit client. Statistical significance (two-sided) is denoted by *** p<0.01, ** p<0.05, * p<0.1.

$$\text{Auditor Turnover Type}_{i,t} = \alpha_0 + \alpha_1 \text{Waived Adj}_{i,t} + \alpha_2 \text{Proposed Adj } \$ + \alpha_3 \text{Controls}_{i,t} + \sum \alpha_t \text{Year} + \sum \alpha_j \text{Audit Firm} + \sum \alpha_k \text{Industry} + e_t$$

	Turnover	Dismissal	Resignation
	(1)	(2)	(3)
Waived Adjustments	-1.9098** (-2.12)	-1.4656 (-1.59)	-9.7400* (-1.65)
Proposed Adjustments	0.5114*** (3.08)	0.4384** (2.36)	1.8763** (2.02)
Ln (# Part 1 Findings)	0.3202** (2.08)	0.2312 (1.41)	0.9889 (1.11)
Ln (Assets)	-0.2803** (-2.47)	-0.2956** (-2.53)	-0.0691 (-0.17)
Material Weakness	0.3691 (0.92)	0.4128 (0.99)	-2.3876* (-1.75)
Year Fixed Effects	Yes	Yes	Yes
Audit Firm Fixed Effects	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes
Additional Control Variables	Yes	Yes	Yes
Observations	2,532	2,395	401
Pseudo r-square	0.143	0.134	0.405