

Don't make me look bad: How the audit market penalizes auditors for doing their job.

ABSTRACT: We examine whether the audit market penalizes auditors for reporting information that is critical of management directly to investors through the issuance of an internal control material weakness (ICMW) audit opinion. We document an overall decrease in future client and fee growth from clients receiving a clean internal control opinion when offices issue ICMWs. We also find that the decrease is stronger when the ICMW is associated with a more visible client and when the ICMW is more severe. In supplemental analysis we find evidence consistent with clients at greater risk of ICMW avoiding auditors with a reputation for issuing ICMWs and selecting an office that issues less ICMWs. Our results indicate that, on average, the market for audit services penalizes auditors for disclosing information critical of management in their audit opinions, which undermines the value of direct-to-investor auditor communications and provides insight into the longer-term implications of the recently enacted expanded auditor's report.

Keywords: Audit market competition; auditor reputation; internal control weakness

I. INTRODUCTION

The Sarbanes Oxley Act (SOX) of 2002 required auditors to pull back the curtain on management's accounting practices through direct disclosure to investors of internal control material weaknesses (ICMWs). Since the implementation of SOX, the demand for information directly from auditors has only increased and resulted in the recent expansion of the auditor's report. Although prior studies have shown that information provided directly by auditors regarding ICMWs is valued by investors (e.g., Ashbaugh-Skaife, Collins, Kinney, and LaFond 2009; Dhaliwal, Hogan, Trezevant, and Wilkins 2009; Hammersley, Myers, and Shakespeare 2008; Kim, Song, and Zhang 2011), management actively avoids such disclosures by engaging in internal control opinion shopping (Ettredge, Heintz, Li, and Scholz 2011; Newton, Persellin, Wang, and Wilkins 2016). While these studies provide insight into some of the client-specific ramifications of receiving ICMWs, little is known about how the demand for audit services changes in response to auditors issuing ICMWs. Specifically, the extent to which auditors' direct-to-investor communications affect auditors' ability to attract and retain clients is unknown. If the market for audit services penalizes auditors for providing value-relevant information that is critical of management to the public (i.e., ICMWs), then the market actively undermines the potential value of auditors' direct-to-investor communications. By examining the audit market response to auditors issuing ICMWs, we provide insight into a potential indirect long-term cost associated with SOX that could also have implications for ongoing efforts to increase auditors' direct-to-investor communications.

Many of the requirements introduced as part of SOX, particularly those included in Section 404 (SOX 404), required an increase in the amount of information disclosed by the auditor and were expected to increase financial reporting transparency and thereby bolster

investor confidence in financial statements (PCAOB 2004). However, as noted by board member of the PCAOB, Daniel Goelzer, in a speech detailing the costs and benefits of SOX 404, many contend that SOX 404 has resulted in unintended consequences and erected a “wall between auditors and clients” (Goelzer 2005). Clients that receive ICMWs in compliance with the reporting requirements of SOX 404 are subject to many economic costs, including negative stakeholder reactions (e.g., De Franco, Guan, and Lu 2005; Impink, Lubberink, Van Praag, and Veeman 2012) and increased costs of both debt (e.g., Dhaliwal et al. 2009; Kim et al. 2011) and equity (Ashbaugh-Skaife et al. 2009). Thus, the economic costs associated with receiving ICWMs could motivate clients to avoid receiving ICMWs enough to discourage clients from retaining/selecting auditors with a reputation for issuing ICMWs.

Companies’ auditor selection and retention decisions are largely influenced by auditors’ reputations. Extant literature documents significant reputational effects associated with publicly observable audit inputs (e.g., auditor size, industry specialization) and outcomes (e.g., restatements). For instance, studies examining auditor changes reveal market-based incentives that reward clients for selecting auditors with better reputations, such as a Big N and/or industry specialist auditors (e.g., Eichenseher, Hagigi, and Shields 1989; Knechel, Naiker, and Pacheco 2007; Teoh and Wong 1993). Other studies highlight restatements as a publicly observable audit outcome that impairs company, audit firm and engagement partner reputations (e.g., Aobdia and Petacchi 2017; Hennes, Leone, and Miller 2014; Liu, Raghunandan, and Rama 2009; Newton, Wang, and Wilkins 2013; Palmrose, Richardson, and Scholz 2004; Srinivasan 2005; Swanquist and Whited 2015) and reduces the auditor’s ability to attract and retain audit clients (Aobdia and Petacchi 2017; Swanquist and Whited 2015).

Research has also found that ICMWs are a publicly observable audit outcome that damages *client* reputations (e.g., Ashbaugh-Skaife et al. 2009; De Franco et al. 2005; Kim et al. 2011). However, little is known about the reputational impact of ICMWs on the issuing *auditor*. Examining the reputational impact on auditors issuing ICMWs is important because the identification and reporting of ICMWs by an auditor reveals that the auditor conducted the audit sufficiently well to identify a weakness and then communicated that valuable information to the public. Thus, to the extent that clients value providing useful information to users of financial statements, the issuance of an ICMW should neither impair the issuing auditor's reputation, nor deter clients from selecting auditors with a history of issuing ICMWs. However, in many situations the reputational implications of ICMWs for the auditor and client diverge (bad for clients and neutral or positive for auditors). This is in contrast to other auditor inputs or outputs that have been used to study auditor reputation and have similar reputational implications for both the auditor and the client (e.g., auditor size, specialization, and restatements). As such, it is not fully clear from prior research what the reputational implications of issuing an ICMW are for auditors.

We investigate the audit market implications for auditors that issue ICMWs by examining growth in audit-office clients and fees. To capture the economic costs associated with communicating information that makes clients look bad, we explore the relationship between the issuance of an ICMW and growth in number of clients and amount of audit fees within an audit office. Since prior literature shows that clients who receive ICMWs are more likely to dismiss their auditors and seek replacements (i.e., engage in internal control opinion shopping) (Ettredge et al. 2011; Newton et al. 2016), we remove from our office growth measures clients that receive an ICMW and subsequently leave that office.

We find that, on average, for every additional ICMW issued, an audit office experiences 2.2 percent lower client growth and 6.1 percent lower fee growth over the next year. This finding suggests that auditors who issue an ICMW are perceived as less attractive in the audit market and indicates that the issuance of an ICMW affects auditor selection and retention decisions even among clients that do not receive an ICMW.

In additional analyses, we investigate various characteristics associated with ICMWs and the clients that receive them. Consistent with larger companies being more visible in the audit market, we document stronger results when audit offices issue ICMWs to larger clients, as measured by client market capitalization. Similarly, we find that audit market consequences are greater when auditors issue more severe ICMWs, as measured by the number of issues in the ICMW and filing delay. Together, these results support the notion that the audit market disincentivizes auditors from disclosing internal control information that makes their clients look bad.

We also perform a series of supplemental and robustness tests. In supplemental tests, we find that (1) clients leaving an office with high ICMWs are more likely to switch to an office with low ICMWs, (2) the audit risk profile of offices with high ICMWs improves (based on F-Risk and misstatements), and (3) the lower office growth following the issuance of ICMWs persists for 2 years.¹ Our results are robust to the use of changes in market share in place of office growth as the dependent variable as well as numerous other variations in our study design and variable measurement.

This study makes several contributions to the accounting literature and should be of interest to audit committees and regulators. Furthermore, while existing research on the

¹ Throughout the paper we define high (low) ICMWs as an office's proportion of ICMWs to clients where high (low) ICMWs represents offices with higher (lower) proportions of ICMWs.

implications of SOX has made several important contributions, it has predominantly focused on the years immediately following the implementation of SOX and thus does not capture the long-term effects of SOX (DeFond and Zhang 2014). Additionally, to the extent that an ICMW reflects an auditor's willingness and ability to provide valuable information to investors, our findings suggest that clients (on average) avoid these auditors during their auditor selection and retention process. Our findings should inform regulators about additional indirect costs associated with SOX 404 provisions and speak to some potential implications of the requirements of the newly enacted expanded auditor's report. Much of the anticipated impact of the PCAOB's expanded auditor's report lies in the disclosure of critical audit matters (CAMs) wherein auditors will be required to divulge information that may be critical of management's accounting choices (PCAOB 2016; SEC 2017). While this requirement should, in theory, enhance the informativeness of the audit report, our findings pertaining to ICMWs suggest that market-based incentives will discourage auditors from disclosing important direct-to-investor communications that might make their clients look bad, and instead encourage auditors to withhold such information.

The remainder of this paper is organized as follows. Section II provides background and hypothesis development. Section III describes the research methodology and sample composition. Section IV discusses our main results. Section V includes additional analyses and robustness tests. Section VI concludes.

II. BACKGROUND AND HYPOTHESIS DEVELOPMENT

SOX 404 and Internal Control Audits

SOX introduced numerous reforms designed to heighten investor protection by increasing financial reporting transparency. Notably, SOX 404 introduced mandated internal

control audits that were expected to provide value-relevant information and inform investors about weaknesses in a company's internal controls over financial reporting (ICFR) that could increase the possibility of errors in the financial statements. Prior to SOX 404, auditors were allowed to perform additional substantive testing as compensating support for poorly designed or functioning internal controls. However, following SOX 404, auditors must first test controls, and then opine on management's assessment of the Company's ICFR and publicly disclose ICMWs as part of their internal control audit opinions.² In compliance with SOX 404, auditors are required to issue ICMWs when they identify "a deficiency, or combination of deficiencies, in [ICFR], such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis" (PCAOB 2004).

One key feature of SOX 404 is the difference in the responsibility assigned to management under SOX 404(a) and that to the auditor under SOX 404(b). While the auditor must attest to, and report on, the ICFR assessment made by management, SOX 404(a) provides that management is solely responsible for establishing and maintaining adequate internal control structure and procedures for financial reporting. Management must also provide its own independent assessment of the effectiveness of its control structure and procedures for financial reporting (PCAOB 2004). The requirements of SOX 404 thus oblige management to evaluate internal controls on an ongoing basis and implement necessary procedures throughout the year to identify deficiencies in ICFR and correct any related errors in the financial reporting process before year-end. In accordance with the prescribed rules of SOX 404, auditors should only issue

² As of the 2010 Dodd-Frank Act, non-accelerated filers (companies with less than \$75 million in public float) are permanently exempt from SOX 404(b) requirements (SEC 2010).

an ICMW when the auditor identifies an error that management failed to detect and/or correct through its own testing of ICFR.

While the requirements of SOX 404 were intended to increase both auditor-supplied and client-demanded audit quality (DeFond and Zhang 2014), there has been significant criticism from investors and corporate officers regarding SOX 404 and its implementation (Coates and Srinivasan 2014). Though many have argued that the internal control audit required by SOX 404 has increased overall financial reporting quality (e.g., DeFond and Lennox 2011), there has nonetheless been much contention over the various costs imposed by the requirements of SOX 404 (Coates and Srinivasan 2014; Goelzer 2005). One such cost that has received little attention is the reputational cost to the auditor of disclosing information directly to investors that could be perceived as critical of management.

Reputational Effects of Audit Inputs and Outputs

Extant research shows that auditors have strong incentives to maintain their reputation capital because auditor selection and retention decisions are largely influenced by auditor reputations (DeAngelo 1981). Presumably, audits that provide useful information to users of financial statements should serve to increase the credibility of financial statements, and thereby increase auditor reputation for providing a valuable audit.

Many streams of literature document significant reputational effects for both auditors and clients associated with publicly observable audit inputs and outcomes. Teoh and Wong (1993) document larger earnings response coefficients for clients of Big N auditors compared to those of non-Big N auditors, even among clients that switched between Big N and non-Big N auditors. Eichenseher et al. (1989) find that the market reacts positively to client switches from non-Big N to Big N auditors and negatively to changes from Big N to non-Big N auditors. Research on

auditor switches from non-specialist to industry specialist auditors suggests similar rewards for companies that switch to auditors with a specialist reputation. Specifically, Knechel et al. (2007) find evidence that the market reacts most positively when firms switch from a non-Big 4 auditor to a specialist Big 4 auditor and most negatively when firms switch from a specialist Big 4 auditor to a non-Big 4 auditor.

Additional research documents significant reputational penalties for both clients and their auditors using restatements as an observable signal of a bad audit outcome. Palmrose et al. (2004) document substantial negative abnormal returns for restating companies and Hribar and Jenkins (2004) document a decrease in expected earnings and increase in cost of equity for restating companies. Several other studies provide evidence that clients and stakeholders hold both audit firms and individual engagement partners accountable for bad audit outcomes that are revealed through restatements. Among restating companies, auditors are more likely to be dismissed (Hennes et al. 2014; Mande and Son 2013), shareholders are more likely to vote against auditor ratification (Liu et al. 2009) and engagement partners are more likely to be dismissed (Aobdia and Petacchi 2017). Furthermore, audit offices that announce a restatement experience a subsequent decline in local office market share (Swanquist and Whited 2015). These results reveal that, in general, observable audit inputs and outcomes have a parallel effect on auditor and client reputations. For instance, large auditors and those with specialization are rewarded in the market as are the clients that are audited by them. Similarly, auditors associated with restatements and clients that have restatements are both penalized in the market. The parallel reputational impact of these measures makes it difficult to determine whether the market for audit services rewards, or penalizes, auditors based on the auditor's reputation or based on the client's reputation. Thus, it is unclear what the audit market implications are when financial

reporting causes the auditor's reputation and the client's reputation to diverge, such as when the auditor issues an ICMW.

ICMWs are a publicly observable audit outcome that have been shown to impose significant costs on companies and damage client reputations (e.g., Ashbaugh-Skaife et al. 2009; De Franco et al. 2005; Hammersley et al. 2008; Impink et al. 2012; Kim et al. 2011). Hammersley et al. (2008) show that ICMWs provide value-relevant information to investors and that the information content of disclosures increases with the severity of the control weakness. Additional literature reveals evidence of negative stock market reactions (e.g., De Franco et al. 2005; Gupta and Nayar 2007; Impink et al. 2012) and increased costs of both debt (e.g., Dhaliwal et al. 2009; Kim et al. 2011) and equity (Ashbaugh-Skaife et al. 2009) for companies that disclose ICMWs. Other research has shown that the economic costs associated with receiving an ICMW are large enough to motivate clients to dismiss their auditors after receiving an ICMW (Ettredge et al. 2011; Newton et al. 2016) and not report ICMWs when they exist (Rice and Weber 2012; Rice, Weber, and Wu 2015).

In contrast to the client (whose reputation is generally negatively impacted by an ICMW), the auditor's issuance of an ICMW should not negatively affect the auditor's reputation for audit quality. The identification and reporting of ICMWs by an auditor reveals that the auditor conducted the audit sufficiently well to identify a weakness and then communicated that valuable information to the public. Therefore, to the extent that clients value providing useful information to users of financial statements, the issuance of an ICMW should neither impair the issuing auditor's reputation, nor deter clients from selecting auditors with a history of issuing ICMWs. However, the reputational damage and economic costs associated with receiving ICMWs suggest that clients have substantial incentives to avoid receiving ICMWs.

Following the discussion above, we expect that the economic costs associated with receiving ICMWs could diminish auditor desirability and lead clients to avoid selecting and retaining auditors that have a reputation for issuing ICMWs to their clients. Because we are focused on auditor reputation, we exclude clients that leave the auditor following an ICMW as it is not clear whether such switches were driven by the auditor's reputation or the client's ICMW experience.³ We predict that audit offices that issue an ICMW experience lower growth than offices that do not issue ICMWs.

In addition to the issuance of an ICMW having an overall negative effect on office growth, we also predict that different characteristics of the client receiving the ICMW, or the ICMW itself, could intensify this effect. Consistent with the notion that larger clients are more visible in the market and thus could have more influence on an auditor's reputation, we posit that ICMWs issued to more visible clients have a stronger negative effect on the issuing auditor's office growth. Additionally, we predict that more severe ICMWs reflect more poorly on management and thus will have a stronger negative effect on office growth. In summary, we predict that audit offices experience lower subsequent growth following the issuance of an ICMW that is (1) issued to a more visible client or (2) more severe.

III. RESEARCH METHODOLOGY AND SAMPLE SELECTION

We examine the implications of issuing ICMWs on subsequent audit office growth using the following ordinary least squares regression model:

³ Additionally, prior research finds that clients are more likely to seek replacement auditors and engage in internal control opinion shopping after receiving ICMWs (Ettredge et al. 2011; Newton et al. 2016).

$$\begin{aligned}
GROWTH_{it,t+1} = & \beta_0 + \beta_1 ICMW(COUNT)_{it} + \beta_2 NUM_CLIENTS_{it} + \\
& \beta_3 NUM_IC_AUDITS_{it} + \beta_4 BIG4_{it} + \beta_5 LITIGATION_{it} + \\
& \beta_6 NUM_MISSTATE_{it} + \beta_7 NUM_RESANN_{it} + \beta_8 NUM_GCO_{it} \\
& \beta_9 \Delta NUM_404AWEAK_{it} + \beta_{10} \Delta AT_GROWTH_{it,t+1} + \\
& \beta_{11} \Delta CLIENTSIZE_{it,t+1} + \beta_{12} \Delta ARINV_{it,t+1} + \beta_{13} \Delta ACQ_{it,t+1} + \\
& \beta_{14} \Delta ACC_{it,t+1} + \beta_{15} \Delta LOSS_{it,t+1} + \beta_{16} \Delta LEVERAGE_{it,t+1} + \\
& \beta_{17} \Delta CASH_{it,t+1} + \beta_{18} \Delta ROA_{it,t+1} + \beta_{19} \Delta ABFEES_{it,t+1} + \\
& \beta_{20} \Delta EXPERT_{it,t+1} + \beta_{21} \Delta TENURE_{it,t+1} + Year\ FE + MSA\ FE + \varepsilon_{it}.
\end{aligned} \tag{1}$$

The dependent variable in Equation (1) is *GROWTH*, which represents one-year percent of *CLIENT_GROWTH* or *FEE_GROWTH* and is specified based on the following equation:

$$GROWTH_{it,t+1} = \frac{\sum c_{it+1} - \sum (c_{it} - z_{it})}{\sum (c_{it} - z_{it})} \tag{2}$$

where:

i = office identifier;

t = time period (year);

c = number of clients, or amount of fees; and

z = number of clients, or amount or amount of fees from clients, that receive an ICMW in time *t* and switch auditors during the subsequent year (i.e., between year *t* and year *t*+1).

We exclude from our growth calculation clients that switch audit offices after receiving an ICMW, and their corresponding fees, to ensure that we capture client and fee losses due to reputational impairment, rather than client and fee losses from clients seeking replacement auditors after receiving ICMWs (Ettredge et al. 2011; Newton et al. 2016). Our primary variables of interest are, *ICMW*, which is an indicator variable equal to one if an audit office issues an ICMW in year *t*, zero otherwise, and *ICMW_COUNT*, which is equal to the number of clients within an audit office that receive an ICMW in year *t*. Consistent with our earlier prediction, if the economic consequences of receiving ICMWs are large enough to discourage clients from selecting and retaining auditors with a history of issuing ICMWs to their clients, we would expect to observe negative coefficients on both of our variables of interest, *ICMW* and *ICMW_COUNT*.

Control Variables

Similar to office-level models in prior literature (Francis and Michas 2013; Swanquist and Whited 2015), we control for office and client specific variables that likely affect audit office growth. Our controls include both levels and changes variables that help adjust for differences in client portfolios across audit offices, which we believe could influence audit office growth. Consistent with other studies that examine office-level client outcomes (e.g., Francis and Michas 2013; Swanquist and Whited 2015), we calculate office-level variables by taking the mean value across all clients within an audit office-year. We include change variables in our model that correspond to our dependent variables and denote the change in an office's mean client value from year t to year $t+1$ by the prefix “ Δ .”

For control variables we include *NUM_CLIENTS* equal to the number of clients engaged by an audit office in year t to control for the differential growth at large offices.

NUM_IC_AUDITS is equal to the number of internal control audits performed by an audit office in year t and is included as a control for the number of an office's clients that have the potential to receive an ICMW. *BIG4* is an indicator variable equal to one if the audit office is part of PwC, Deloitte, KPMG or Ernst & Young, and zero otherwise and is included to control for the expected differences in growth among Big 4 auditors and mid- and lower- tier audit firms. We include *LITIGATION* equal to one if the audit firm is subject to pending litigation.

NUM_RESANN is equal to the number of restatement announcements at an office, which we expect to be negatively related to office growth. *NUM_MISSTATE* is equal to the number of misstatements at an office and is included to control for underlying audit quality within an audit office. *NUM_GCO* is equal to the number of clients within an office that receive a going concern opinion. We also control for *NUM_404AWEAK*, equal to the number of clients at an office

whose management reports a SOX 404(a) internal control weakness when the company is not subject to reporting requirements of SOX 404(b). Controlling for the number of clients that self-report internal control weaknesses independent of their auditor allows us to disentangle the effect of auditor-reported direct-to-investor communications from self-reported management disclosures.

The remaining controls are measured as changes in average office values from time t to $t+1$. *AT_GROWTH* is calculated as the change in year over year growth in reported total assets and is included to control for differential changes in client growth. *CLIENTSIZE* is measured as the natural logarithm of total client assets and is used to control for changes in client size. We control for client complexity using *ARINV*, measured by changes in accounts receivable and inventory scaled by total assets and *ACQ*, which is equal to one if a client reports acquisition or merger activity in the current year, and zero otherwise. We include *ACC*, *LOSS*, *LEVERAGE* and *CASH* to control for client riskiness where *ACC* is calculated as abnormal accruals, *LOSS* is an indicator variable equal to one if the company has a current net loss, zero otherwise, *LEVERAGE* is calculated as total liabilities divided by total assets, and *CASH* is calculated as cash and short-term investments divided by total assets. We include *ROA*, calculated as the return on average total assets, to control for client performance. We also include additional controls for changes in average abnormal fees charged by an office, *ABFEES*, average expertise, *EXPERT*, and auditor engagement tenure, *TENURE*. Detailed variable definitions are provided in the Appendix.

The variables described above capture client-specific characteristics as well as auditor-specific characteristics that we believe influence a client's decision to retain or dismiss its auditor. Additionally, we include year and MSA fixed effects in each of our regression models to rule out any overall time and location effects. We cluster robust standard errors by audit offices

and winsorize all continuous variables at the 1 percent and 99 percent levels to reduce the effect of outliers.⁴

Sample Selection

We form a pooled cross-sectional sample using a combination of datasets from Compustat and Audit Analytics. Our sample consists of audit offices and their clients from 2004-2015. Our sample begins in 2004 because this is the first year in which information from internal control opinions became available following the implementation of SOX 404. We compute our client count for each office-year using the Audit Analytics full population of clients, after removing companies identified as asset backed securities, funds or trusts, non-tickered subsidiaries, offices of bank or other holding companies and real estate investment trusts because these companies are typically associated with one parent company and we are interested in capturing growth in the number of unique auditor-client relationships within an audit office. Consistent with prior literature, we also delete observations for auditors located outside of the United States. We then aggregate individual client-year observations into office-year observations based on the fiscal year for which the audit opinion is dated. For our office-level variable calculations, we require client-year observations to have financial reporting data available in Compustat, auditor data available in the Audit Analytics Audit Opinions dataset and audit fee data available in the Audit Analytics Audit Fees dataset. We limit our final analysis to office-year observations with more than three clients to ensure that our results are not driven by small offices where gaining or losing a single client would lead to large fluctuations in growth.⁵ Our final sample consists of 4,996 office-year observations.

⁴ Results are similar and significant at conventional levels if unwinsorized variables are used.

⁵ 3,242 auditor office years have 3 or fewer clients. Our inferences are similar when we run our analyses including offices with 3 or fewer clients.

IV. RESULTS

Summary Statistics

Table 1 reports the descriptive statistics for the variables that are used in our final sample of pooled office-level observations. Variable descriptions and statistics are largely consistent with other office-level studies (Swanquist and Whited 2015). Approximately 25.1 percent of audit offices issue an ICMW during our sample period. The average one-year client growth for an audit office is negative 4.6 percent and the average one-year fee growth for an audit office is 5.4 percent. Nearly half of our sample (46 percent) is made up of Big 4 audit offices. The mean (median) number of clients engaged by an office is about 13 (9). The average office-year in our sample provides internal control audits to about 7 clients, or roughly half of its client portfolio.

<Insert Table 1 Here>

Primary Analysis

We test our first prediction by examining whether declines in audit office growth follow the issuance of an ICMW. Table 2 reports the results of our estimation of Equation (1). We present results for *CLIENT_GROWTH*, measured by the percentage growth in number of clients engaged by an audit office, in Columns (1) and (2), and *FEE_GROWTH*, measured by the percentage growth in amount of fees earned by an audit office, in Columns (3) and (4).

Results presented in Table 2 indicate that, on average, the audit market penalizes auditors for issuing an ICMW, as evidenced by decreases in client and fee growth in the year following the issuance of an ICMW. Our main variables of interest, *ICMW*, and *ICMW_COUNT*, are negatively related to our office growth measures and statistically significant at traditional levels (two-tailed) in all specifications of Equation (1). Our results indicate that when an office issues

an ICMW to at least one of its clients it experiences 2.5 (8.0) percent lower client (fee) growth when compared to an office that issues no ICMWs. More notably, for each ICMW issued (*ICMW_COUNT*), we find that the audit office experiences 2.2 percent lower growth in clients and 6.1 percent lower growth in fees.⁶ Notably, our findings indicate that declines in office growth following the issuance of an ICMW can be attributed to lost business from clients that received clean internal control opinions but avoid association with auditors that have a history of revealing ICMW information that makes their clients look bad. Coefficient estimates on our control variables are also generally consistent with our expectations.

<Insert Table 2 Here>

V. ADDITIONAL ANALYSES AND ROBUSTNESS TESTS

Client Visibility and Office Growth

We expect reputational consequences to be greater when auditors issue ICMWs to their more visible clients since these firms typically receive more scrutiny from analysts and greater coverage by the press. To test the effect of issuing ICMWs to more visible clients we re-estimate Equation (1) with alternative variables of interest. Our variables of interest are *ICMW_LARGE* (*SMALL*), equal to one if the audit office issues an ICMW in year t to a client whose market value of equity (MVE) is above (below) the median of clients within the audit office, and zero otherwise. These classifications are mutually exclusive such that if an audit office issues an ICMW to both a large and small client, we code the office as *ICMW_LARGE*. Consistent with our model specifications in Table 2, we also estimate Equation (1) using continuous measures for our variables of interest, where *ICMW_LARGE(SMALL)_COUNT* is calculated as the number of

⁶ When considering the mean audit office growth (client growth = -4.6%, fee growth = 5.4%), these coefficients represent substantially lower growth in client and fees, for each ICMW issued.

clients that receive an ICMW in year t whose MVE is above (below) the median of clients within that audit office.⁷

Table 3 reports results from this specification and provides initial support for our prediction with negative and significant coefficient estimates on our variables of interest for offices that issued ICMWs to larger clients. To fully test our prediction, we perform a test of the difference between coefficients for offices that issued ICMWs to large versus small clients. In Table 3, Columns (1) and (3), we test for differences in the coefficients on *ICMW_LARGE* (*SMALL*) and in Columns (2) and (4), we test for differences in the coefficients on *ICMW_LARGE(SMALL)_COUNT*. Results of the tests between coefficients are reported at the bottom of Table 3 and show that growth in clients and fees is significantly lower when the office issues ICMWs to larger clients compared to smaller clients. This result supports the notion that ICMWs issued to more visible clients are more detrimental to office growth than those issued to less visible clients.

<Insert Table 3 Here>

ICMW Severity and Office Growth

We predict that the effect of issuing ICMWs on office growth will be greater if the ICMW is more severe. We examine this prediction using two measures of ICMW severity, the number of accounting issues reported in the ICMW (Doyle, Ge, and McVay 2007), and the delay in issuing the ICMW audit opinion (Impink et al. 2012).

Most ICMWs within our sample relate to multiple accounting issues (i.e., over 97% of ICMWs reported relate to 2 or more issues). Since more severe ICMWs are typically worse for

⁷ In our robustness tests, we perform similar analysis but categorize clients as large (small) based on the median MVE of all clients within an MSA.

clients (Doyle et al. 2007), we expect audit market consequences will also be greater when auditors issue more severe ICMWs. We identify clients that disclosed at least one ICMW from 2004 through 2015 and calculate *LN_ISSUES*, which is equal to the natural logarithm of one plus the maximum number of accounting issues identified per ICMW (i.e., the most severe ICMW) issued by an audit office.

Further, since research has also found that ICMWs associated with longer audit opinion delays elicit more negative market reactions (Impink et al. 2012), we predict that these ICMWs are more detrimental to office reputations. Therefore, we calculate *LN_DELAY*, which is equal to the natural logarithm of one plus the maximum change in audit opinion delay among clients that receive a new ICMW in year *t*. To test the effect of the severity of an ICMW on audit office growth, we re-estimate Equation (1) using *LN_ISSUES*, and *LN_DELAY*, as our variables of interest.

Table 4 reports results from our severity tests. As reported in Columns (1) and (3) we find a negative and statistically significant effect of *LN_ISSUES* on client growth and fee growth. As reported in Columns (2) and (4) we also find a negative and statistically significant effect of *LN_DELAY* on both client growth and fee growth. Together, results from our severity analysis indicate that ICMWs are more detrimental to office growth when client implications are more severe.

<Insert Table 4 Here>

Client Switching and its Effect on Portfolio Audit Risk

Our primary tests focus on the extent to which ICMWs influence subsequent office growth. In this section, we investigate (1) client level switching behavior and (2) the impact of this behavior on the risk profile of an audit office's client portfolio. First, we expect that clients

that receive a clean internal control opinion and leave a high ICMW audit office will be more likely to switch to a low ICMW audit office. Second, we expect such switching will be more likely for clients at greater risk of receiving an ICMW and thus expect the risk composition of the high ICMW office to improve (i.e., client portfolio will become less risky).

We first perform a client-level switching analysis by examining auditor-client realignments among clients that receive a clean internal control opinion and switch away from audit offices that issue one or more ICMWs to their other clients. Table 5 reports results from this analysis; we find that, within our sample of switching clients, the proportion of ICMWs issued by the new auditor office is 7.6 percent lower than the proportion of ICMWs issued by the old auditor office ($p < 0.05$).⁸ This finding supports the notion that our previously documented decline in future audit office growth following the issuance of an ICMW is a product of the auditor's diminished ability to attract and retain clients.

<Insert Table 5 Here>

We expect that clients with lower financial reporting quality are more likely to switch auditors, whereas those with higher quality financial reporting are less deterred from selecting and retaining auditors with a history of issuing ICMWs. To examine this, we perform an office-level analysis of client portfolio characteristics and replace our dependent variables from Equation (1) with a measure that captures the one-year change in the average F-Risk ($\Delta F-RISK$) and the one-year change in the average misstatements ($\Delta MISSTATE$) of an audit office's client portfolio.⁹ $\Delta F-RISK$ is the one-year change in the audit office average number of clients with an

⁸ We measure ICMWs as a proportion of total clients at time t for both the old office and new office as this information would be known to the client at the time the switching decision is made.

⁹ We drop $NUM_MISSTATE$ and NUM_RESANN from our models in this section to allow for sufficient variation in our portfolio risk measures.

F-Score greater than 1.0, where F-Score is calculated following Dechow, Ge, Larson and Sloan (2011).¹⁰

We present results for $\Delta F-RISK$ in Table 6, Columns (1) and (2) and for $\Delta MISSTATE$, Columns (3) and (4). Consistent with the notion that issuing ICMWs deters riskier clients, or clients with lower quality financial reporting, we document a negative relationship between ICMWs and $\Delta F-RISK$ and $\Delta MISSTATE$. Specifically, an audit office's percentage of F-Risk clients decreases 1.1 percent for every additional ICMW issued ($p < 0.01$), and an audit office's percentage of misstating clients decreases 7 percent for each ICMW issued ($p < 0.01$).¹¹ Taken together, the observed decreases in client portfolio risk indicate that the loss of clients and fees for audit offices that issue ICMWs is driven by higher risk clients and that clients with higher quality financial reporting are less deterred from selecting and retaining auditors with a history of issuing ICMWs.

< Insert Table 6 Here >

ICMWs and Year Over Year Office Growth

In this section, we examine year over year office growth in each of the three years subsequent to the issuance of an ICMW in time t .¹² Results from this analysis are presented in Table 6, Panels (A) and (B). Coefficient estimates on our variables of interest are negative and statistically significant on client growth in time $t+1$ (-0.022, $p < 0.01$) and time $t+2$ (-0.008, $p < 0.10$) and on fee growth in time $t+1$ (-0.061, $p < 0.01$) and time $t+2$ (-0.029, $p < 0.01$), but are

¹⁰ Dechow et al. 2011 classify an F-Score greater than 1.0 as “above normal risk.” and an F-Score greater than 2.45 as “high risk.” In untabulated results, we also run our analysis using a cutoff of 2.45 and find similar results.

¹¹ This represents a substantial decrease given that the mean value of client portfolio F-Risk (misstating clients) for audit office-years in our sample is 0.25 (0.041).

¹² We use all control variables from Equation (1) and add additional controls for prior period ICMWs in model specifications using time $t+2$ and $t+3$.

not significant on either growth measure in time $t+3$. These findings reveal that the reputational impact of issuing an ICMW is decreasing over time and indistinguishable after two years.

<Insert Table 6 Here>

ICMWs and Percent Change in Market Share

We also measure the effect of ICMWs on office growth using the percent change in market share from t to $t+1$ as our dependent variable.¹³ Table 7, Columns (1) through (4), reports results from this analysis; coefficient estimates on our variables of interest in Columns (1) through (4) are negative and statistically significant, providing additional support for our prediction that audit offices experience decreased future growth following the issuance of an ICMW. Economically, we estimate that, on average, for every additional ICMW issued, an audit office experiences a negative 1.7 percent change in client market share and a negative 5.5 percent change in fee market share relative to offices that do not issue any ICMWs.

<Insert Table 7 Here>

Robustness and Sensitivity Analysis

Untabulated analyses provide additional support for our findings related to client visibility. Results of our client visibility analysis are robust to splitting large and small ICMWs based on median MSA MVE as opposed to audit office MVE. In addition to our office-level ICMW visibility test, we also examine firm-level industry growth following the issuance of an ICMW to a national industry leading client, as measured by MVE. Consistent with the idea that nationwide attention accompanying ICMWs received by the largest companies in an industry has

¹³ Percent change in market share from t to $t+1$ is calculated following Swanquist and Whited (2015) with an adjustment to remove clients, and corresponding fees of clients, that receive an ICMW and subsequently switch auditors from an office's percent market share in time t .

nationwide implications for auditor growth within that industry, we find that client and fee growth within an industry is significantly lower when auditors issue an ICMW to the largest companies within their national industry compared to smaller companies in the industry.

Together, results of our client visibility robustness tests support the notion that issuing ICMWs to more visible clients is more detrimental to office growth than issuing ICMWs to less visible clients.

We also perform a series of additional robustness tests. We compute our growth measure from Equation (2) restricting our population to clients that receive internal control audits and thus likely have stronger incentives to avoid selecting/retaining auditors with a reputation for issuing ICMWs; our main effect for *CLIENT_GROWTH* is stronger under this specification. We also remove clients and fees related to auditor resignations (as indicated in Audit Analytics) from our growth measures to mitigate concerns that our estimated effects are auditor-driven and find similar results. We perform our analysis separately on Big 4 and non-Big 4 audit offices and draw similar conclusions, although our results are somewhat attenuated for Big 4 audit offices. As an additional test, we re-estimate Equation (1) using audit-firm fixed effects to control for potential omitted correlated variables with respect to audit firm characteristics and continue to observe similar results from this specification.

We perform numerous sensitivity analyses to help rule out measurement error related to our office-year variables of interest. We calculate ICMWs as the number of ICMWs in an office-year scaled by the number of clients in an office-year, instead of incorporating the number of ICMWs and the number of clients as two separate independent variables in our model.¹⁴ This

¹⁴ Our decision to run our main test using *ICMW_COUNT* instead of the proportion of ICMWs is to ensure that our result is not driven by the number of clients in the office (i.e., the denominator in the proportion), which has a significant impact on office growth. See Kromnal (1993) and Firebaugh and Gibbs (1985).

variable thus reflects the proportion of clients that receive an ICMW in an audit office-year. We also measure ICMWs as the number of material weaknesses listed in the auditor's internal control audit report. Our results are robust to each of these alternative variable calculations.

VI. CONCLUSION

Extant literature documents significant reputational effects associated with publicly observable audit inputs (e.g., auditor size, industry specialization) and outcomes (e.g., restatements) for clients and their auditors. While these findings demonstrate situations in which auditors are incentivized to maintain their reputation for quality in order to attract and retain future business, we posit that this may not always be the case. Our study provides empirical support suggesting that the market for audit services penalizes auditors when they do their job but communicate information to the public that is critical of management (i.e., issue ICMWs). Our findings show that, on average, audit offices experience a decline in future growth following the issuance of an ICMW, which implies that clients avoid auditors that have a history of disclosing items that make their clients look bad in the market. We provide evidence which suggests that the decline in future audit office growth is a product of the auditor's diminished ability to attract and retain clients. Our findings indicate that this effect is not driven by clients who leave offices because they received an ICMW, but by clients that appear to avoid association with auditors that have a history of being critical of their other clients. Furthermore, we provide evidence of a more pronounced decline in future office growth when auditors issue ICMWs to their more visible clients or issue more severe ICMWs. Results from our portfolio composition analysis also indicate that a subset of clients with higher quality financial reporting are not deterred from selecting and retaining auditors that have a reputation for issuing ICMWs.

Overall, our findings contribute to the existing literature on the effect of observable audit outcomes on auditor reputation, and the effect of audit office reputations on auditor selection and retention decisions. Notably, our findings contribute to the literature on auditor reputation by documenting evidence that association with items that make clients look bad may result in significant economic consequences for auditors. Our study is also informative to practitioners and regulators as they seek to address market incentives that may have a detrimental effect on overall audit quality or constrain information available to investors.

Furthermore, our study speaks to the potential implications of the auditor's decision to disclose or withhold information from the auditor's discussion of CAMs as part of the expanded auditor's report. Beginning with the implementation of SOX in 2002 and continuing through the recently enacted expanded auditor's report, there has been a trend toward increased direct-to-investor communications from the auditor. In the first major change to the auditor's report since the implementation of SOX, the PCAOB recently adopted a new auditor reporting standard that requires auditors to communicate additional information about the audit to investors and other users of the financial statements and is expected to produce benefits akin to those anticipated from the implementation of SOX (PCAOB 2004; PCAOB 2017). As part of the expanded auditor's report, auditors must provide a description of CAMs, or a discussion of audit-specific information that was communicated to the audit committee and involved especially challenging, subjective, or complex auditor judgment.

Comment letters received from the public reveal that much of the anticipated impact of the expanded auditor's report lies in CAMs that divulge information that users of the financial

statements could view as critical of management’s accounting choices.¹⁵ There has been significant debate about the potential implications of the expanded auditor’s report, particularly regarding how the increased direct-to-investor communication will impact the dialogue between auditors, audit committees and management (PCAOB 2016; SEC 2017). While the requirements of the expanded auditor’s report could allow auditors to “engage in more robust conversations in areas arising from the most complex, subjective or challenging issues,” it is equally likely that any inconsistent or competing information between auditors and their clients that is disclosed as part of the CAMs could serve as a source of tension or disagreement between management, audit committees and their auditors, potentially leading to “unintended consequences such as hindering the frequency, nature or candor in communication between audit committees and auditors” (EY 2017).

Further, our study highlights the need for future research on the impact of audit committees and overall corporate governance that permits or encourages companies to avoid associating with auditors that might report information that could negatively impact the company. Future research could also examine engagement partner specific reputational consequences of issuing ICMWs.

¹⁵ Comment letters received in response to the proposed standard for the expanded auditor’s report are available at: <https://pcaobus.org/Rulemaking/Pages/Docket034Comments.aspx> and <https://www.sec.gov/comments/pcaob-2017-01/pcaob201701.htm> (PCAOB 2016; SEC 2017).

References

- Aobdia, D., and R. Petacchi. 2017. Consequences of low-quality audits for engagement partners. Working Paper. Available at: <https://ssrn.com/abstract=2983900>
- Ashbaugh-Skaife, H., D. W. Collins, W. R. Kinney, and R. LaFond. 2009. The effect of SOX internal control deficiencies on firm risk and cost of equity. *Journal of Accounting Research* 47 (1): 1–43.
- Coates, J., and S. Srinivasan. 2014. SOX after ten years: A multidisciplinary review. *Accounting Horizons* 28 (3): 627–671.
- DeAngelo, L. E. 1981. Auditor size and audit quality. *Journal of Accounting and Economics* 3 (3): 183–199.
- Dechow, P. M., R. G. Sloan, and A. P. Sweeney. 1995. Detecting earnings management. *The Accounting Review* 70 (2): 193-225.
- Dechow, P. M., W. Ge, C. R. Larson, and R. G. Sloan. 2011. Predicting material accounting misstatements. *Contemporary Accounting Research* 28 (1): 17-82.
- DeFond, M. L., and C. S. Lennox. 2011. The effect of SOX on small auditor exits and audit quality. *Journal of Accounting and Economics* 52 (1): 21–40.
- DeFond, M. L., and J. Zhang. 2014. A review of archival auditing research. *Journal of Accounting and Economics* 58 (2-3): 275-326.
- De Franco G., Y. Guan, and H. Lu. 2005. *The wealth change and redistribution effects of Sarbanes-Oxley internal control disclosures*. Working paper, University of Toronto. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=706701
- Dhaliwal, D., C. Hogan, R. Trezevant, and M. Wilkins. 2011. Internal control disclosures, monitoring, and the cost of debt. *The Accounting Review* 86 (4): 1131-1156.
- Doyle, J. T., W. Ge, and S. McVay. 2007. Accruals quality and internal control over financial reporting. *The Accounting Review* 82 (5): 1141-1170.
- Eichenseher, J., M. Hagigi, and D. Shields. 1989. Market reaction to auditor changes by OTC companies. *Auditing: A Journal of Practice and Theory* 9 (1): 29-40.
- Ernst & Young (EY). 2017. *RE: Release No. 34-81187; File No. PCAOB-2017-001, The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion*. Available at: <https://www.sec.gov/comments/pcaob-2017-01/pcaob201701-2228755-160815.pdf>

- Ettredge, M., J. Heintz, C. Li, and S. Scholz. 2011. Auditor realignments accompanying implementation of SOX 404 ICFR reporting requirements. *Accounting Horizons* 25 (1): 17–39.
- Firebaugh, G., and J. Gibbs. 1985. User's guide to ratio variables. *American Sociological Review* 50 (5): 713-722.
- Francis, J. R., and P. N. Michas. 2013. The contagion effect of low-quality audits. *The Accounting Review* 88 (2): 521-552.
- Gupta, P. P., and N. Nayar. 2007. Information content of control deficiency disclosures under the Sarbanes-Oxley Act: An empirical investigation. *International Journal of Disclosure and Governance* 4 (1): 3-23.
- Goelzer, D. 2005. *The Costs and Benefits of Sarbanes-Oxley Section 404*. National Association for Business Economics' 21st Annual Washington Economic Policy Conference, Washington, D.C.: PCAOB. Available at: https://pcaobus.org/News/Speech/Pages/03212005_GoelzerCostsBenefitsofSOX404.aspx
- Hammersley, J., L. Myers, and C. Shakespeare. 2008. Market reactions to the disclosure of internal control weaknesses and to the characteristics of those weaknesses under Section 302 of the Sarbanes Oxley Act of 2002. *Review of Accounting Studies* 13 (1): 141–65.
- Hennes, K. M., A. J. Leone, and B. P. Miller. 2014. Determinants and market consequences of auditor dismissals after accounting restatements. *The Accounting Review* 89 (3): 1051-1082.
- Hribar, P., and N. Jenkins. 2004. The effect of accounting restatements on earnings revisions and estimated cost of capital. *Review of Accounting Studies* 9 (2-3): 337-356.
- Impink, J., M. Lubberink, B. Van Praag, and D. Veenman. 2012. Did accelerated filing requirements and SOX Section 404 affect the timeliness of 10-K filings? *Review of Accounting Studies* 17 (2): 227-253.
- Kim, J. B., B. Y. Song, and L. Zhang. 2011. Internal control weakness and bank loan contracting: Evidence from SOX Section 404 disclosure. *The Accounting Review* 86 (4): 1157–1188.
- Knechel, W. R., V. Naiker, and G. Pacheco. 2007. Does auditor industry specialization matter? Evidence from market reaction to auditor switches. *Auditing: A Journal of Practice & Theory* 26 (1): 19-45.
- Kronmal, R. 1993. Spurious correlation and the fallacy of the ratio standard revisited. *Journal of the Royal Statistical Society* 156 (3): 379-392.

- Liu, L., K. Raghunandan, and D. Rama. 2009. Financial restatements and shareholder ratifications of the auditor. *Auditing: A Journal of Practice & Theory* 28 (1): 225-240.
- Mande, V., and M. Son. 2013. Do financial restatements lead to auditor changes? *Auditing: A Journal of Practice & Theory* 32 (2): 119-145.
- Newton, N. J., D. Wang, and M. S. Wilkins. 2013. Does a lack of choice lead to lower quality? Evidence from auditor competition and client restatements. *Auditing: A Journal of Practice & Theory* 32 (3): 31-67.
- Newton, N. J., J. S. Persellin, D. Wang, and M. S. Wilkins. 2016. Internal control opinion shopping and audit market competition. *The Accounting Review* 91 (2): 603-623.
- Palmrose, Z., V. Richardson, and S. Scholz. 2004. Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics* 37 (1): 59-89.
- Public Company Accounting Oversight Board (PCAOB). 2004. *An Audit of Internal Control over Financial Reporting Performed in Conjunction with an Audit of Financial Statements*. Auditing Standard No. 2. Washington, D.C.: PCAOB.
- Public Company Accounting Oversight Board (PCAOB). 2016. *Comment Letters for Docket 034*. <https://pcaobus.org/Rulemaking/Pages/Docket034Comments.aspx>
- Public Company Accounting Oversight Board (PCAOB). 2017. *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion and Related Amendments to PCAOB Standards*. Release No. 2017-001; June 1. Washington, D.C.: PCAOB.
- Rice, S. C., and D. P. Weber. 2012. How effective is internal control reporting under SOX 404? Determinants of the (non-)disclosure of existing material weaknesses. *Journal of Accounting Research* 50 (3): 811-843.
- Rice, S. C., D. P. Weber, and B. Wu. 2015. Does SOX 404 have teeth? Consequences of the failure to report existing internal control weaknesses. *The Accounting Review* 90 (3): 1169-1200.
- Securities and Exchange Commission (SEC). 2010. *Study Required by Section 989G(b) of the Dodd-Frank Act Regarding Compliance with Section 404(b) of the Sarbanes-Oxley Act*. Release No. 34-63108; October 14. Washington, D.C: SEC. Available at: <http://www.sec.gov/rules/other/2010/34-63108.pdf>
- Securities and Exchange Commission (SEC). 2017. *Comments on PCAOB Rulemaking: File No. PCAOB-2017-01*. Available at: <https://www.sec.gov/comments/pcaob-2017-01/pcaob201701.htm>

Srinivasan, S. 2005. Consequences of financial reporting failure for outside directors: evidence from accounting restatements and audit committee members. *Journal of Accounting Research* 43 (2): 291-334.

Swanquist, Q. T., and R. L. Whited. 2015. Do clients avoid “contaminated” offices? The economic consequences of low-quality audits. *The Accounting Review* 90 (6): 2537-2570.

Teoh, S., and T. Wong. 1993. Perceived auditor quality and the earnings response coefficient. *The Accounting Review* 68 (2): 346-366.

Appendix: Variable Definitions

| Variable | Definition |
|-------------------------------------|--|
| <i>Dependent Variables</i> | |
| <i>CLIENT_GROWTH</i> | Audit-office client growth. See Equation (2). |
| <i>FEE_GROWTH</i> | Audit-office fee growth. See Equation (2). |
| <i>ΔF_RISK</i> | The one-year change in the audit office average number of clients with an F-Score greater than 1.0, where F-Score is calculated following Dechow et al. (2011). Average F-Risk takes a value between zero and one for all offices. |
| <i>ΔMISSTATE</i> | The one-year change in the average number of clients that have a misstatement in their financial statements. Average misstating clients takes a value between zero and one for all offices. |
| <i>ICMW_PROP_NEW</i> | The proportion of ICMW opinions to total clients within the client's new audit office, measured prior to the client's switch, in year <i>t</i> . |
| <i>ΔCLIENT_MARKETSHARE</i> | Percent change in client market share from <i>t</i> to <i>t+1</i> calculated following Swanquist and Whited (2015). |
| <i>ΔFEE_MARKETSHARE</i> | Percent change in fee market share from <i>t</i> to <i>t+1</i> calculated following Swanquist and Whited (2015). |
| <i>Variables of Interest</i> | |
| <i>ICMW</i> | Indicator variable equal to one if an audit office issues an ICMW in year <i>t</i> , zero otherwise. |
| <i>ICMW_COUNT</i> | Equal to the number of clients within an audit office that receive an ICMW in year <i>t</i> . |
| <i>ICMW_LARGE</i> | Indicator variable equal to one if the audit office issues an ICMW in year <i>t</i> to a client whose MVE is above the median of clients within an audit office, zero otherwise. |
| <i>ICMW_LARGE_COUNT</i> | Equal to the number of clients whose MVE is above the median of clients within an audit office and receive an ICMW in year <i>t</i> . |
| <i>ICMW_SMALL</i> | Indicator variable equal to one if the audit office only issues ICMWs in year <i>t</i> to clients whose MVE is below the median of clients within an audit office, zero otherwise. |
| <i>ICMW_SMALL_COUNT</i> | Equal to the number of clients whose MVE is below the median of clients within an audit office and receive an ICMW in year <i>t</i> . |
| <i>LN_ISSUES</i> | Equal to the natural logarithm of one plus the maximum number of accounting issues identified per ICMW issued by an audit office. |
| <i>LN_DELAY</i> | Equal to the natural logarithm of one plus the maximum change in audit opinion delay among office clients that receive an ICMW in year <i>t</i> , where audit opinion delay is calculated as the number of days from a client's fiscal year end to the signature |

| | |
|--------------------------------|--|
| | date of the client's audit opinion and is restricted to clients that receive a new ICMW. |
| <i>ICMW_PROP_OLD</i> | The proportion of ICMW opinions to total clients within the client's old audit office, measured prior to the client's switch, in year <i>t</i> . |
| Control Variables | |
| Auditor-Level Variables | |
| <i>BIG4</i> | Indicator variable equal to one if the audit office is part of PwC, Deloitte, KPMG or Ernst & Young. |
| <i>LITIGATION</i> | Equal to one if the audit firm is subject to pending litigation. |
| <i>NUM_CLIENTS</i> | Equal to the number of clients engaged by an audit office in year <i>t</i> . |
| <i>NUM_GCO</i> | Equal to the number of clients that receive a going concern opinion. |
| <i>NUM_IC_AUDITS</i> | Equal to the number of internal control audits performed by an audit office in year <i>t</i> . |
| <i>NUM_MISSTATE</i> | Equal to the number of misstatements at an office. |
| <i>NUM_RESANN</i> | Equal to the number of restatement announcements at an office. |
| <i>NUM_404AWEAK</i> | Equal to the number of clients whose management reports a 404(a) weakness when the company is not subject to reporting requirements of 404(b). |
| Client-Level Variables | |
| <i>ABFEES</i> | The residual from the following model: $\ln(\text{Fees}) = B_1\text{SIZE} + B_2\text{GROWTH} + B_3\text{ROA} + B_4\text{LOSS} + B_5\text{LEVERAGE} + B_6\text{NEWAUDITOR} + B_7\text{MSAOFFICES} + B_8\text{WEAKNESS} + B_9\text{IC_AUDIT} + B_{10}\text{BIG4} + \text{Year_FE} + \text{Ind_FE} + e$. Note: Fees = total audit fees; and NEWAUDITOR is an indicator variable equal to one if the client selected a new auditor during year <i>t</i> , and zero otherwise. |
| <i>ACC</i> | Calculated as abnormal accruals according to the Modified Jones Model (Dechow, Sloan, and Sweeney 1995). |
| <i>ACQ</i> | Equal to one if a client reports acquisition or merger activity in the current year, and zero otherwise. |
| <i>ARINV</i> | Changes in accounts receivable and inventory scaled by total assets. |
| <i>AT_GROWTH</i> | Calculated as the change in year over year growth in reported total assets. $(\text{Total assets}_t - \text{total assets}_{t-1}) / \text{total assets}_{t-1}$ |
| <i>CASH</i> | Cash and short term investments divided by total assets. |
| <i>CLIENTSIZE</i> | Natural logarithm of total client assets. |
| <i>EXPERT</i> | Indicator variable equal to one if the company's auditor is both the local and national leader (most audit fees) in the client's industry, and zero otherwise. |

| | |
|-----------------|---|
| <i>LEVERAGE</i> | Total liabilities divided by total assets. |
| <i>LOSS</i> | Indicator variable equal to one if the company has a current net loss, zero otherwise. |
| <i>ROA</i> | Return on average total assets equal to net income divided by average total assets. |
| <i>TENURE</i> | Indicator variable equal to one if the company engages an auditor with tenure of more than three years, and zero otherwise. |

Table 1: Descriptive Statistics

Table 1 presents the descriptive statistics for the full sample of office-level observations. Variable definitions are provided in Appendix 1.

| VARIABLE NAMES | N | Mean | SD | p(25) | Median | p(75) |
|-------------------------------------|----------|-------------|-----------|--------------|---------------|--------------|
| <i>DEPENDENT VARIABLES</i> | | | | | | |
| CLIENT_GROWTH | 4,996 | -0.046 | 0.276 | -0.200 | 0.000 | 0.052 |
| FEE_GROWTH | 4,996 | 0.054 | 0.440 | -0.151 | 0.006 | 0.173 |
| Δ F_RISK | 4,996 | 0.012 | 0.238 | -0.078 | 0.000 | 0.092 |
| Δ MISSTATE | 4,996 | -0.083 | 0.865 | -0.002 | 0.000 | 0.000 |
| <i>VARIABLES OF INTEREST</i> | | | | | | |
| ICMW | 4,996 | 0.251 | 0.434 | 0.000 | 0.000 | 1.000 |
| ICMW_COUNT | 4,996 | 0.371 | 0.738 | 0.000 | 0.000 | 1.000 |
| ICMW_LARGE | 4,996 | 0.145 | 0.352 | 0.000 | 0.000 | 0.000 |
| ICMW_SMALL | 4,996 | 0.082 | 0.274 | 0.000 | 0.000 | 0.000 |
| ICMW_LARGE_COUNT | 4,996 | 0.185 | 0.507 | 0.000 | 0.000 | 0.000 |
| ICMW_SMALL_COUNT | 4,996 | 0.178 | 0.528 | 0.000 | 0.000 | 0.000 |
| LN_ISSUES | 4,996 | 0.363 | 0.690 | 0.000 | 0.000 | 0.000 |
| LN_DELAY | 4,996 | 2.410 | 1.463 | 1.610 | 2.565 | 3.332 |
| <i>CONTROL VARIABLES</i> | | | | | | |
| NUM_CLIENTS | 4,996 | 13.074 | 11.433 | 6.000 | 9.000 | 16.000 |
| NUM_IC_AUDITS | 4,996 | 6.788 | 9.307 | 1.000 | 4.000 | 8.000 |
| BIG4 | 4,996 | 0.460 | 0.498 | 0.000 | 0.000 | 1.000 |
| LITIGATION | 4,996 | 0.657 | 0.475 | 0.000 | 1.000 | 1.000 |
| NUM_MISSTATE | 4,996 | 0.522 | 0.894 | 0.000 | 0.000 | 1.000 |
| NUM_RESANN | 4,996 | 0.146 | 0.412 | 0.000 | 0.000 | 0.000 |
| NUM_GCO | 4,996 | 2.573 | 5.512 | 0.000 | 1.000 | 2.000 |
| NUM_404AWEAK | 4,996 | 0.539 | 0.372 | 0.167 | 0.625 | 0.875 |
| Δ AT_GROWTH | 4,996 | -0.025 | 0.737 | -0.154 | -0.012 | 0.119 |
| Δ CLIENTSIZE | 4,996 | 0.098 | 0.512 | -0.101 | 0.079 | 0.301 |
| Δ ARINV | 4,996 | -0.005 | 0.094 | -0.033 | -0.002 | 0.026 |
| Δ ACQ | 4,996 | 0.004 | 0.223 | -0.100 | 0.000 | 0.100 |
| Δ ACC | 4,996 | 0.012 | 1.223 | -0.287 | -0.003 | 0.249 |
| Δ LOSS | 4,996 | 0.003 | 0.222 | -0.096 | 0.000 | 0.100 |
| Δ LEVERAGE | 4,996 | -0.005 | 1.598 | -0.052 | 0.003 | 0.065 |
| Δ CASH | 4,996 | -0.002 | 0.107 | -0.032 | -0.001 | 0.030 |
| Δ ROA | 4,996 | 0.003 | 0.636 | -0.047 | 0.000 | 0.044 |
| Δ ABFEES | 4,996 | 0.002 | 0.251 | -0.109 | -0.001 | 0.111 |
| Δ EXPERT | 4,996 | 0.000 | 0.025 | 0.000 | 0.000 | 0.000 |
| Δ TENURE | 4,996 | 0.054 | 0.205 | -0.002 | 0.000 | 0.125 |

Table 2: Effect of ICMWs on Office Growth

Table 2 presents the results of our OLS regression analysis of Equation (1). The dependent variables are measures of one-year office growth as determined by number of clients engaged by an audit office or audit fees earned by an audit office. We exclude clients that receive an ICMW and subsequently switch auditors from our growth measures, as described in Equation (2). Our primary variables of interest are *ICMW*, which is an indicator variable equal to one if an audit office issues an ICMW in year *t*, zero otherwise, and *ICMW_COUNT*, which is equal to the number of clients within an audit office that receive an ICMW in year *t*. All variables are formally defined in the Appendix. *T*-statistics are presented in parentheses next to the corresponding coefficients. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on two-tailed tests). Robust standard errors are clustered by audit office.

| | CLIENT_GROWTH | | | | FEE_GROWTH | | | |
|-------------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
| | (1) | | (2) | | (3) | | (4) | |
| ICMW | -0.025 *** | (-2.86) | | | -0.080 *** | (-5.59) | | |
| ICMW_COUNT | | | -0.022 *** | (-4.66) | | | -0.061 *** | (-7.17) |
| NUM_CLIENTS | -0.004 *** | (-3.45) | -0.004 *** | (-3.33) | -0.005 *** | (-2.77) | -0.004 *** | (-2.64) |
| NUM_IC_AUDITS | 0.005 *** | (3.26) | 0.005 *** | (3.43) | 0.004 ** | (2.27) | 0.005 *** | (2.63) |
| BIGN | -0.013 | (-0.96) | -0.013 | (-0.99) | -0.038 ** | (-1.98) | -0.038 ** | (-1.99) |
| LITIGATION | -0.016 | (-1.17) | -0.016 | (-1.16) | -0.005 | (-0.29) | -0.006 | (-0.30) |
| NUM_MISSTATE | -0.007 | (-1.46) | -0.007 | (-1.46) | 0.002 | (0.30) | 0.002 | (0.31) |
| NUM_RES_ANN | -0.020 * | (-1.81) | -0.018 | (-1.61) | -0.042 ** | (-2.49) | -0.036 ** | (-2.16) |
| NUM_GCO | 0.004 ** | (2.26) | 0.004 ** | (2.19) | 0.004 * | (1.67) | 0.004 | (1.59) |
| NUM_404AWEAK | 0.030 | (1.12) | 0.030 | (1.12) | 0.007 | (0.20) | 0.003 | (0.09) |
| ΔAT_GROWTH | 0.011 | (1.02) | 0.011 | (1.02) | -0.049 *** | (-3.11) | -0.049 *** | (-3.12) |
| ΔCLIENTSIZE | -0.045 *** | (-3.14) | -0.045 *** | (-3.13) | 0.180 *** | (9.05) | 0.180 *** | (9.07) |
| ΔARINV | 0.069 | (0.92) | 0.069 | (0.91) | 0.003 | (0.03) | 0.001 | (0.01) |
| ΔACQ | -0.017 | (-0.78) | -0.018 | (-0.80) | 0.001 | (0.02) | 0.000 | (0.00) |
| ΔACC | -0.001 | (-0.18) | -0.001 | (-0.18) | 0.011 | (1.63) | 0.011 | (1.64) |
| ΔLOSS | 0.019 | (0.81) | 0.019 | (0.80) | 0.086 ** | (2.55) | 0.086 ** | (2.54) |
| ΔLEVERAGE | -0.003 | (-0.66) | -0.003 | (-0.66) | -0.003 | (-0.38) | -0.003 | (-0.39) |
| ΔCASH | -0.063 | (-0.85) | -0.063 | (-0.85) | 0.063 | (0.62) | 0.062 | (0.61) |
| ΔROA | -0.007 | (-0.60) | -0.007 | (-0.60) | -0.034 ** | (-1.99) | -0.034 ** | (-1.99) |
| ΔABFEES | -0.021 | (-0.76) | -0.020 | (-0.73) | 0.441 *** | (9.97) | 0.442 *** | (10.01) |
| ΔEXPERT | 0.059 | (0.80) | 0.064 | (0.86) | 0.240 * | (1.77) | 0.253 * | (1.88) |
| ΔTENURE | -0.172 *** | (-7.56) | -0.172 *** | (-7.55) | -0.264 *** | (-8.21) | -0.264 *** | (-8.20) |
| Constant | 0.092 *** | (4.13) | 0.094 *** | (4.21) | 0.395 *** | (9.92) | 0.398 *** | (10.00) |
| Year FE | Yes | | Yes | | Yes | | Yes | |
| MSA FE | Yes | | Yes | | Yes | | Yes | |
| Observations | 4,996 | | 4,996 | | 4,996 | | 4,996 | |
| R ² | 0.076 | | 0.077 | | 0.184 | | 0.186 | |

Table 3: ICMW Visibility Analysis

Table 3 presents the results of our OLS regression analysis of Equation (1). The dependent variables are measures of one-year office growth, as described in Equation (2). Our primary variables of interest are ICMW_LARGE(SMALL), which is an indicator variable equal to one if the audit office issues an ICMW in year t to a client whose market value of equity (MVE) is above (below) the median of clients within the audit office, and zero otherwise, and ICMW_LARGE (SMALL)_COUNT, which is equal to the number of clients that receive an ICMW in year t whose MVE is above (below) the median of clients within the audit office. All variables are formally defined in the Appendix. T -statistics are presented in parentheses next to the corresponding coefficients. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on two-tailed tests). Robust standard errors are clustered by audit office.

| | CLIENT_GROWTH | | | | FEE_GROWTH | | | |
|-------------------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
| | (1) | (2) | (3) | (4) | (1) | (2) | (3) | (4) |
| ICMW_LARGE | -0.033 *** | (-3.10) | | | -0.088 *** | (-5.03) | | |
| ICMW_SMALL | -0.014 | (-1.33) | | | -0.049 *** | (-2.93) | | |
| ICMW_LARGE_COUNT | | | -0.026 *** | (-3.86) | | | -0.060 *** | (-5.48) |
| ICMW_SMALL_COUNT | | | -0.010 * | (-1.91) | | | -0.036 *** | (-4.48) |
| NUM CLIENTS | -0.004 *** | (-3.38) | -0.004 *** | (-3.42) | -0.004 *** | (-2.68) | -0.005 *** | (-2.79) |
| NUM IC AUDITS | 0.005 *** | (3.18) | 0.005 *** | (3.43) | 0.004 ** | (2.10) | 0.005 *** | (2.60) |
| BIGN | -0.014 | (-1.08) | -0.015 | (-1.14) | -0.040 ** | (-2.13) | -0.040 ** | (-2.13) |
| LITIGATION | -0.016 | (-1.16) | -0.016 | (-1.14) | -0.006 | (-0.30) | -0.006 | (-0.31) |
| NUM MISSTATE | -0.006 | (-1.40) | -0.006 | (-1.41) | 0.003 | (0.38) | 0.002 | (0.34) |
| NUM RES ANN | -0.019 * | (-1.78) | -0.017 | (-1.51) | -0.041 ** | (-2.46) | -0.033 ** | (-1.97) |
| NUM_404WEAK | 0.031 | (1.15) | 0.029 | (1.08) | 0.007 | (0.20) | -0.001 | (-0.04) |
| NUM_GCO | 0.004 ** | (2.17) | 0.004 ** | (2.22) | 0.004 | (1.55) | 0.004 * | (1.66) |
| Δ AT_GROWTH | 0.011 | (1.02) | 0.011 | (1.01) | -0.049 *** | (-3.12) | -0.049 *** | (-3.12) |
| Δ CLIENTSIZE | -0.045 *** | (-3.16) | -0.045 *** | (-3.15) | 0.179 *** | (9.00) | 0.179 *** | (9.02) |
| Δ ARINV | 0.069 | (0.92) | 0.068 | (0.91) | 0.002 | (0.02) | 0.001 | (0.00) |
| Δ ACQ | -0.017 | (-0.78) | -0.017 | (-0.78) | 0.001 | (0.04) | 0.002 | (0.05) |
| Δ ACC | -0.001 | (-0.18) | -0.001 | (-0.17) | 0.011 | (1.64) | 0.012 * | (1.65) |
| Δ LOSS | 0.019 | (0.81) | 0.019 | (0.81) | 0.086 ** | (2.55) | 0.086 ** | (2.55) |
| Δ LEVERAGE | -0.003 | (-0.66) | -0.003 | (-0.67) | -0.003 | (-0.39) | -0.003 | (-0.40) |
| Δ CASH | -0.064 | (-0.85) | -0.064 | (-0.86) | 0.061 | (0.60) | 0.060 | (0.59) |
| Δ ROA | -0.007 | (-0.59) | -0.007 | (-0.59) | -0.034 ** | (-1.97) | -0.034 ** | (-1.98) |
| Δ ABFEES | -0.021 | (-0.77) | -0.020 | (-0.75) | 0.440 *** | (9.95) | 0.440 *** | (9.97) |
| Δ EXPERT | 0.063 | (0.84) | 0.064 | (0.85) | 0.249 * | (1.84) | 0.255 * | (1.91) |
| Δ TENURE | -0.172 *** | (-7.54) | -0.172 *** | (-7.55) | -0.264 *** | (-8.20) | -0.264 *** | (-8.20) |
| Constant | 0.093 *** | (4.14) | 0.095 *** | (4.25) | 0.395 *** | (9.90) | 0.400 *** | (10.03) |
| Year FE | Yes | | Yes | | Yes | | Yes | |
| MSA FE | Yes | | Yes | | Yes | | Yes | |
| LARGE- SMALL | -0.019 | (-1.55) | -0.016 * | (-1.73) | -0.039 ** | (-2.07) | -0.024 * | (-1.77) |
| Observations | 4,996 | | 4,996 | | 4,996 | | 4,996 | |
| R^2 | 0.076 | | 0.077 | | 0.184 | | 0.185 | |

Table 4: ICMW Severity Analysis

Table 4 presents the results of our OLS regression analysis of Equation (1). The dependent variables are measures of one-year office growth as described in Equation (2). Our variables of interest are LN_ISSUES , equal to the natural logarithm of one plus the maximum number of accounting issues identified per ICMW issued by an audit office and LN_DELAY , equal to the natural logarithm of one plus the maximum change in audit opinion delay among clients that receive an ICMW in year t . All variables are formally defined in the Appendix. T-statistics are presented in parentheses next to the corresponding coefficients. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on two-tailed tests). Robust standard errors are clustered by audit office.

| | CLIENT_GROWTH | | | | FEE_GROWTH | | | |
|---------------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|
| | (1) | | (2) | | (3) | | (4) | |
| LN_ISSUES | -0.017*** | (-3.34) | | | -0.046*** | (-5.15) | | |
| LN_DELAY | | | -0.013*** | (-3.62) | | | -0.024*** | (-4.52) |
| NUM CLIENTS | -0.004*** | (-3.42) | -0.004*** | (-3.01) | -0.005*** | (-2.79) | -0.004** | (-2.35) |
| NUM IC AUDITS | 0.005*** | (3.26) | 0.004*** | (2.92) | 0.004** | (2.24) | 0.003* | (1.68) |
| BIGN | -0.013 | (-0.99) | -0.013 | (-0.97) | -0.037** | (-1.97) | -0.036* | (-1.89) |
| LITIGATION | -0.016 | (-1.17) | -0.014 | (-0.98) | -0.006 | (-0.33) | -0.002 | (-0.13) |
| NUM MISSTATE | -0.007 | (-1.43) | -0.006 | (-1.37) | 0.002 | (0.35) | 0.003 | (0.40) |
| NUM RES ANN | -0.019* | (-1.73) | -0.018 | (-1.64) | -0.040** | (-2.38) | -0.040** | (-2.33) |
| NUM_GCO | 0.004** | (2.23) | 0.004** | (2.18) | 0.004* | (1.66) | 0.004* | (1.71) |
| NUM_404WEAK | 0.031 | (1.16) | 0.024 | (0.91) | 0.006 | (0.17) | -0.012 | (-0.34) |
| Δ AT_GROWTH | 0.011 | (1.02) | 0.010 | (0.99) | -0.049*** | (-3.11) | -0.049*** | (-3.18) |
| Δ CLIENTSIZE | -0.045*** | (-3.15) | -0.046*** | (-3.25) | 0.179*** | (9.01) | 0.176*** | (8.88) |
| Δ ARINV | 0.069 | (0.92) | 0.063 | (0.86) | 0.002 | (0.02) | -0.008 | (-0.07) |
| Δ ACQ | -0.017 | (-0.78) | -0.018 | (-0.82) | 0.001 | (0.04) | 0.001 | (0.02) |
| Δ ACC | -0.001 | (-0.17) | -0.001 | (-0.30) | 0.011 | (1.64) | 0.010 | (1.50) |
| Δ LOSS | 0.019 | (0.79) | 0.018 | (0.77) | 0.085** | (2.53) | 0.085** | (2.53) |
| Δ LEVERAGE | -0.003 | (-0.66) | -0.004 | (-0.76) | -0.003 | (-0.39) | -0.003 | (-0.53) |
| Δ CASH | -0.063 | (-0.85) | -0.062 | (-0.83) | 0.061 | (0.60) | 0.063 | (0.62) |
| Δ ROA | -0.007 | (-0.59) | -0.007 | (-0.59) | -0.034** | (-1.98) | -0.034** | (-1.99) |
| Δ ABFEES | -0.021 | (-0.77) | -0.024 | (-0.87) | 0.439*** | (9.94) | 0.432*** | (9.85) |
| Δ EXPERT | 0.066 | (0.91) | 0.055 | (0.76) | 0.258** | (1.98) | 0.231* | (1.84) |
| Δ TENURE | -0.171*** | (-7.53) | -0.171*** | (-7.56) | -0.263*** | (-8.18) | -0.264*** | (-8.26) |
| Constant | 0.093*** | (4.16) | 0.115*** | (4.81) | 0.395*** | (9.92) | 0.432*** | (10.80) |
| Year FE | Yes | | Yes | | Yes | | Yes | |
| MSA FE | Yes | | Yes | | Yes | | Yes | |
| Observations | 4,996 | | 4,996 | | 4,996 | | 4,996 | |
| R^2 | 0.076 | | 0.078 | | 0.183 | | 0.185 | |

Table 5: Client Switching Analysis

Table 5 presents the results of our OLS regression analysis among clients that do not receive an ICMW in year t but switch auditors in the subsequent year. The dependent variable is *ICMW_PROP_NEW*, which is the proportion of ICMW opinions to total clients within the client's new audit office, measured prior to the client's switch, in year t . Our primary variable of interest is *ICMW_PROP_OLD*, which is the proportion of ICMW opinions to total clients within the client's old audit office, measured prior to the client's switch, in year t . All variables are formally defined in the Appendix. T -statistics are presented in parentheses next to the corresponding coefficients. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on two-tailed tests). Robust standard errors are clustered by audit office.

| | ICMW_PROP_NEW | |
|----------------------|------------------|----------------|
| | (1) | |
| ICMW_PROP_OLD | -0.076 ** | (-2.15) |
| NUM IC AUDITS | -0.000 ** | (-2.47) |
| BIGN | -0.015 * | (-1.79) |
| LITIGATION | -0.011 | (-1.17) |
| NUM MISSTATE | 0.002 | (1.16) |
| NUM_RES_ANN | 0.004 | (1.24) |
| NUM_GCO | -0.000 | (-0.64) |
| NUM_404AWEAK | 0.052 *** | (2.86) |
| 1/NUMCLIENTS | -0.017 * | (-1.67) |
| Δ AT_GROWTH | -0.001 | (-0.15) |
| Δ CLIENTSIZE | 0.005 | (0.86) |
| Δ ARINV | 0.022 | (0.53) |
| Δ ACQ | -0.003 | (-0.17) |
| Δ ACC | 0.003 | (1.23) |
| Δ LOSS | -0.002 | (-0.11) |
| Δ LEVERAGE | -0.001 | (-0.48) |
| Δ CASH | 0.004 | (0.11) |
| Δ ROA | -0.013 | (-1.24) |
| Δ ABFEES | 0.004 | (0.31) |
| Δ EXPERT | -0.022 | (-1.26) |
| Δ TENURE | 0.006 | (0.50) |
| Constant | 0.053 *** | (3.44) |
| Year FE | Yes | |
| MSA FE | Yes | |
| Observations | 1,268 | |
| R^2 | 0.175 | |

Table 6: Change in Client Portfolio Characteristics

Table 6 presents the results of our OLS regression analysis of Equation (1). The dependent variables are measures that capture the one-year change in the average F-Risk of an audit office's client portfolio (*ΔF-RISK*) and the one-year change in the average misstatements (*ΔMISSTATE*). Our primary variables of interest are *ICMW*, which is an indicator variable equal to one if an audit office issues an ICMW in year *t*, zero otherwise, and *ICMW_COUNT*, which is equal to the number of clients within an audit office that receive an ICMW in year *t*. All variables are formally defined in the Appendix. *T*-statistics are presented in parentheses next to the corresponding coefficients. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on two-tailed tests). Robust standard errors are clustered by audit office.

| | Δ F_RISK | | | | Δ MISSTATE | | | |
|-------------------|---------------|----------------|-------------------|----------------|---------------|----------------|-------------------|----------------|
| | (1) | (2) | (3) | (4) | (1) | (2) | (3) | (4) |
| ICMW | -0.009 | (-1.22) | | | -0.042 | (-1.40) | | |
| ICMW_COUNT | | | -0.011 *** | (-2.71) | | | -0.070 *** | (-3.42) |
| NUM_CLIENTS | -0.001 * | (-1.71) | -0.001 | (-1.55) | -0.007 ** | (-2.28) | -0.007 ** | (-2.04) |
| NUM_IC_AUDITS | 0.002 ** | (2.30) | 0.002 ** | (2.49) | 0.002 | (0.55) | 0.003 | (0.79) |
| BIGN | -0.010 | (-1.04) | -0.010 | (-1.08) | -0.040 | (-1.60) | -0.043 * | (-1.75) |
| LITIGATION | -0.012 | (-1.14) | -0.012 | (-1.12) | -0.021 | (-0.98) | -0.019 | (-0.88) |
| NUM_GCO | 0.001 | (1.31) | 0.001 | (1.23) | 0.008 * | (1.85) | 0.007 * | (1.70) |
| NUM_404AWEAK | -0.010 | (-0.49) | -0.009 | (-0.47) | 0.068 * | (1.78) | 0.075 ** | (1.97) |
| ΔAT_GROWTH | -0.013 | (-1.60) | -0.013 | (-1.61) | 0.008 | (0.57) | 0.008 | (0.54) |
| ΔCLIENTSIZE | 0.046 *** | (3.71) | 0.046 *** | (3.73) | 0.018 | (0.76) | 0.019 | (0.81) |
| ΔARINV | 0.584 *** | (8.05) | 0.584 *** | (8.05) | -0.052 | (-0.53) | -0.052 | (-0.53) |
| ΔACQ | 0.063 *** | (2.85) | 0.063 *** | (2.83) | -0.008 | (-0.17) | -0.011 | (-0.24) |
| ΔACC | 0.002 | (0.30) | 0.002 | (0.30) | 0.007 | (0.94) | 0.007 | (0.96) |
| ΔLOSS | -0.004 | (-0.19) | -0.005 | (-0.20) | -0.008 | (-0.19) | -0.009 | (-0.20) |
| ΔLEVERAGE | -0.003 | (-0.73) | -0.003 | (-0.73) | -0.006 | (-1.07) | -0.006 | (-1.05) |
| ΔCASH | -0.071 | (-1.32) | -0.071 | (-1.31) | -0.035 | (-0.38) | -0.033 | (-0.36) |
| ΔROA | -0.015 | (-1.36) | -0.016 | (-1.36) | -0.013 | (-0.79) | -0.013 | (-0.80) |
| ΔABFEES | 0.020 | (0.87) | 0.021 | (0.91) | 0.021 | (0.53) | 0.029 | (0.74) |
| ΔEXPERT | -0.011 | (-0.19) | -0.008 | (-0.14) | 1.021 * | (1.87) | 1.039 * | (1.89) |
| ΔTENURE | 0.062 ** | (2.37) | 0.062 ** | (2.38) | -0.075 * | (-1.72) | -0.073 * | (-1.68) |
| Constant | 0.082 ** | (2.40) | 0.084 ** | (2.46) | -0.157 *** | (-3.31) | -0.145 *** | (-3.07) |
| Year FE | Yes | | Yes | | Yes | | Yes | |
| MSA FE | Yes | | Yes | | Yes | | Yes | |
| Observations | 4,996 | | 4,996 | | 4,996 | | 4,996 | |
| R ² | 0.134 | | 0.135 | | 0.036 | | 0.038 | |

Table 7: Effect of ICMWs on Year Over Year Office Growth

Table 7 presents the results of our OLS regression analysis of Equation (1). The dependent variables are measures of year over year office growth as determined by number of clients engaged by an audit office or audit fees earned by an audit office. Our primary variable of interest is *ICMW_COUNT*, which is equal to the number of clients within an audit office that receive an ICMW in year *t*. All variables are formally defined in the Appendix. T-statistics are presented in parentheses next to the corresponding coefficients. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on two-tailed tests). Robust standard errors are clustered by audit office.

Panel A: Year Over Year Client Growth

| | Year _{t+1} | | Year _{t+2} | | Year _{t+3} | |
|-------------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|
| | (1) | | (2) | | (3) | |
| ICMW_COUNT | -0.022 *** | (-4.66) | -0.008 * | (-1.70) | -0.005 | (-0.87) |
| Control Variables | Yes | | Yes | | Yes | |
| Year FE | Yes | | Yes | | Yes | |
| MSA FE | Yes | | Yes | | Yes | |
| Observations | 4,996 | | 4,324 | | 3,710 | |
| R ² | 0.077 | | 0.078 | | 0.091 | |

Panel B: Year Over Year Fee Growth

| | Year _{t+1} | | Year _{t+2} | | Year _{t+3} | |
|-------------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|
| | (1) | | (2) | | (3) | |
| ICMW_COUNT | -0.061 *** | (-7.17) | -0.029 *** | (-4.27) | -0.003 | (-0.76) |
| Control Variables | Yes | | Yes | | Yes | |
| Year FE | Yes | | Yes | | Yes | |
| MSA FE | Yes | | Yes | | Yes | |
| Observations | 4,996 | | 4,324 | | 3,710 | |
| R ² | 0.186 | | 0.164 | | 0.145 | |

Table 8: Effect of ICMWs on Market Share

Table 8 presents the results of our OLS regression analysis of Equation (1). The dependent variables are measures of one-year percent change in market share. Our primary variables of interest are *ICMW*, which is an indicator variable equal to one if an audit office issues an ICMW in year *t*, zero otherwise, and *ICMW_COUNT*, which is equal to the number of clients within an audit office that receive an ICMW in year *t*. All variables are formally defined in the Appendix. *T*-statistics are presented in parentheses next to the corresponding coefficients. *, **, and *** indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on two-tailed tests). Robust standard errors are clustered by audit office.

| | Δ CLIENT_MARKETSHARE | | | | Δ FEE_MARKETSHARE | | | |
|---------------------|-----------------------------|----------------|-------------------|----------------|--------------------------|----------------|-------------------|----------------|
| | (1) | | (2) | | (3) | | (4) | |
| ICMW | -0.020 ** | (-2.42) | | | -0.080 *** | (-6.61) | | |
| ICMW_COUNT | | | -0.017 *** | (-3.61) | | | -0.055 *** | (-7.80) |
| NUM CLIENTS | -0.003 ** | (-2.56) | -0.003 ** | (-2.47) | -0.002 | (-1.48) | -0.002 | (-1.38) |
| NUM IC AUDITS | 0.003 *** | (2.58) | 0.003 *** | (2.73) | 0.002 | (1.39) | 0.003 * | (1.76) |
| BIGN | -0.006 | (-0.45) | -0.006 | (-0.46) | -0.049 *** | (-2.91) | -0.049 *** | (-2.89) |
| LITIGATION | -0.011 | (-0.89) | -0.011 | (-0.89) | -0.011 | (-0.65) | -0.012 | (-0.69) |
| NUM MISSTATE | -0.008 * | (-1.82) | -0.008 * | (-1.82) | 0.001 | (0.23) | 0.001 | (0.23) |
| NUM RES ANN | -0.014 | (-1.34) | -0.013 | (-1.18) | -0.033 ** | (-2.24) | -0.028 * | (-1.90) |
| NUM_GCO | 0.002 | (1.49) | 0.002 | (1.44) | 0.002 | (0.84) | 0.002 | (0.78) |
| NUM_404AWEAK | 0.033 | (1.38) | 0.033 | (1.36) | 0.024 | (0.78) | 0.019 | (0.62) |
| Δ AT_GROWTH | 0.006 | (0.70) | 0.006 | (0.70) | -0.035 *** | (-2.63) | -0.034 *** | (-2.62) |
| Δ CLIENTSIZE | -0.038 *** | (-2.93) | -0.038 *** | (-2.92) | 0.161 *** | (8.97) | 0.161 *** | (8.98) |
| Δ ARINV | 0.078 | (1.17) | 0.077 | (1.16) | 0.026 | (0.27) | 0.024 | (0.25) |
| Δ ACQ | -0.011 | (-0.55) | -0.012 | (-0.57) | -0.019 | (-0.69) | -0.020 | (-0.69) |
| Δ ACC | -0.001 | (-0.23) | -0.001 | (-0.22) | 0.012 * | (1.86) | 0.012 * | (1.86) |
| Δ LOSS | 0.020 | (0.89) | 0.020 | (0.89) | 0.074 ** | (2.46) | 0.074 ** | (2.45) |
| Δ LEVERAGE | -0.002 | (-0.55) | -0.003 | (-0.55) | -0.001 | (-0.10) | -0.001 | (-0.10) |
| Δ CASH | -0.035 | (-0.60) | -0.035 | (-0.60) | 0.057 | (0.68) | 0.055 | (0.66) |
| Δ ROA | -0.005 | (-0.54) | -0.005 | (-0.54) | -0.026 * | (-1.73) | -0.026 * | (-1.73) |
| Δ ABFEES | -0.014 | (-0.61) | -0.013 | (-0.58) | 0.376 *** | (9.82) | 0.376 *** | (9.84) |
| Δ EXPERT | 0.083 | (0.88) | 0.087 | (0.92) | 0.187 * | (1.83) | 0.198 ** | (1.98) |
| Δ TENURE | -0.158 *** | (-7.22) | -0.158 *** | (-7.21) | -0.248 *** | (-8.79) | -0.248 *** | (-8.78) |
| Constant | 0.093 *** | (4.56) | 0.094 *** | (4.62) | 0.251 *** | (7.81) | 0.252 *** | (7.86) |
| Year FE | Yes | | Yes | | Yes | | Yes | |
| MSA FE | Yes | | Yes | | Yes | | Yes | |
| Observations | 4,996 | | 4,996 | | 4,996 | | 4,996 | |
| R^2 | 0.043 | | 0.044 | | 0.147 | | 0.148 | |