

# Evaluating Audit Quality: Evidence from Audit offices' External Distractions

## Abstract

We exploit M&A events of other clients of an audit office as exogenous shocks that distract an audit office's attention from the focal firm. We use these shocks to evaluate audit quality of audit offices, using various input- and output-based audit quality measures. We find that distracted audit offices receive lower audit fees and are more likely to lose clients. Firms with distracted audit offices are more likely to have financial misstatements and be targeted by shareholder class action lawsuits due to misstatement or misrepresentation of material information. Finally, the market reacts negatively to auditor distractions, suggesting that investors pay attention to auditor-related information.

*Keywords:* Mergers and Acquisitions; Audit office; Audit Office; Audit Quality; Auditor Attention; Portfolio of Clients

*JEL Classification:* G34; M49

## **1. Introduction**

Auditor attention and their professional skepticism have received heightened demands from regulators in recent years (PCAOB, 2012; 2016; 2017). Academic research in this area has found poor audit quality when auditors are affected by distractions such as non-audit services (Beardsley, Imdieke, and Omer, 2021), client deadline concentrations (Czerney, Jang, and Omer, 2019), client busy seasons (Christensen, Newton, and Wilkins, 2021), and consulting acquisitions (Donelson, Ege, Imdieke, and Maksymov, 2020). While these findings are informative, they are mostly based on distraction events that may be expected by auditors and thus their client firms. On the other hand, whether there are auditor distraction risks that are outside a firm and its auditor's control and, if so, whether they represent a cost to the firm, are relatively less well known to the literature. This paper attempts to facilitate a better understanding on these issues.

The distraction events that we choose are mergers and acquisitions (hereafter M&As) announced by other firms that share the same audit office with the focal firm. We argue that the increase in workload triggered by other client firms' M&A events shifts an auditor's effort input in the audit process away from the focal client firm. According to Dounis (2008), the audit workload of an audit office significantly increases when its client announces an M&A. This includes but is not limited to preparing consolidated financial statements and ensuring consistency in accounting policies between the subsidiary (i.e., target) and the parent (i.e., acquirer). The limited capacity of an audit office implies that the audit office would pay less attention to its other clients. Distractions by other firms' M&As provide an ideal experimental setting to isolate the value of auditors for several

reasons. First, they are triggered by other client firms of the auditor, and are therefore exogenous to the focal firm. Second, M&As by themselves have no implications with respect to the audit quality of an auditor. This is an advantage over negative events such as misstatements which not only divert audit resources away from some clients but also imply poor audit quality and are thus endogenous.<sup>1</sup> The fact that corporate M&A decisions have no implication on auditors' quality helps to rule out alternative explanations, such as downgraded reputation (Chaney and Philipich, 2002) and contagion effects (Francis and Michas, 2013). Third, distractions driven by M&A events are temporary and repeatable. Finally, unlike failed auditors (e.g., the collapse of Arthur Andersen), distracted audit offices are usually not immediately replaced. All arrangements are likely to remain the same, except that the audit office exerts less effort to client firms when they are distracted.

To minimize endogeneity issues, we require that the acquiring firm has no major economic connection with the focal firm. M&As of different sizes conducted by different clients are unlikely to be equally distracting. To ensure that an audit office shifts attention away from the focal client, we require that a distracting M&A must satisfy one of the following: [1] the acquiring client is an important client of the audit office based on the audit fee (i.e., it pays an audit fee that is more than 5% of the total audit fee received by

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<sup>1</sup> In untabulated analysis, we also study shareholder class action lawsuits and financial restatements of other clients as alternative sources of auditor distractions. For class action lawsuits, we use class action periods starting and ending dates to identify periods of auditor distraction and use filing dates for market reactions. For financial restatements, we use the restated periods to identify periods of auditor distraction and use filing dates for market reactions. We find consistent effects on focal firms. The results for market reactions are especially stronger using these alternative distraction events. This suggests that investors pay more attention to auditors when firms experience negative events that may be attributed to auditors, and react negatively to other clients of the same auditors.

the audit office in the fiscal year) or [2] the M&A is an important deal for the acquiror by relative deal size (of at least 10%).

We hypothesize that an auditor exerts less audit efforts at the focal client when it is distracted by M&A activity of another client. Alternatively, the auditor may expand its capacity, thereby being able to provide the same level of quality assurance to the client in question. However, we believe this is unlikely because team expansion takes time and is costly. Due to the temporary nature of distraction, a team may not expand but instead remain restrained by the limited capacity. Thus, we expect focal firms to receive less audit input which will lead to poor audit quality.

Our initial sample consists of all firms over the 2000-2021 period. Audit Analytics is the main source of audit office information. We define an audit office as an audit office based on the combination of audit firm and city location and require that audit offices have at least five public audit clients to ensure a reasonable number of public clients in their portfolios (as in Beardsley, Imdieke, and Omer, 2021). About 28% of firm-years have audit offices that are distracted by extra audit work due to another firm's M&As, and a typical firm's audit office is distracted about once every 3.5 years. Thus, auditor distraction is a common economic phenomenon.

We next use various input- and output-based measures to infer audit quality from multiple dimensions. We use audit fees and the likelihood of departure to evaluate the input of audit efforts. We find that when an audit office is distracted, its audit fees are lower, and the audit office is more likely to leave the client. These findings confirm that

the M&As of other clients significantly reduce an audit office's commitments to the focal firm.

We further extend our analysis by examining output-based audit quality measures. Building on the idea that auditor distraction reduces the effectiveness of external monitoring on firms' financial reporting quality, we find that firms with distracted audit offices have a higher likelihood of having material misstatements and being targeted by shareholder class action lawsuits for issues related to financial reporting quality. These findings highlight the importance of auditor monitoring on financial reporting.

Finally, we find that the market perceives auditor distractions negatively, reflected by negative market reactions to the focal firm when other clients of the same audit office announce M&A deals. Some existing papers find that the market reaction to additional disclosures from auditors' lack significance (see e.g., Gutierrez, Minutti-Meza, Tatum, and Vulcheva, 2018; Doxey, Lawson, Lopez, and Swanquist, 2021; Burke, Hoitash, Hoitash, and Xiao, 2023). However, Lennox, Schmidt, and Thompson (2023) show that this lack of market reaction is because the additional disclosures do not carry incremental information to investors. That is, investors care about auditor-related information and acquire it by themselves before the auditors disclose it in expanded reports. Our finding of negative market reactions to auditor distraction is consistent with this notion. This finding is also consistent with Chaney and Philipich (2002), which find that other clients of Arthur Andersen experienced statistically negative market reactions following Andersen's admission to shredding a significant amount of documents upon the Enron audit failure.

There are two important things to note for this test of market reactions. First, this test uses an event level sample where treatment and control firms share the same audit office with the acquiror. We then partition them into treatment and control groups based on fiscal year-ends which are pre-determined and yet affect whether a client firm is likely to experience stronger or weaker distraction effects. Having treatment and control firms that share the same audit offices makes sure that auditor-related characteristics are the same for both groups, which helps rule out alternative explanations (e.g., different auditor characteristics of treatment and control groups may drive the results). Second, the negative market reaction experienced by the focal firm is unlikely to be associated with the market's assessment of the M&A itself, because there is no systematic connection between the acquiring firm and the focal firm, other than having a common audit office. Taken together, these findings confirm that auditors' efforts play an important role in ensuring financial reporting accuracy and auditor distractions are perceived as negative events by the market.

We conduct several additional analyses and robustness checks. First, we test the effect of distracted engagement partners and find that the results are generally insignificant. This is consistent with the fact that audit work is conducted by the whole audit office rather than the engagement partner. Second, we address the possibility that another audit firm or audit office from the same audit firm shares the work with the signing office, and thereby diminishes the distraction effect. As the first step, we collect client firm-years that have more than one audit firm. We confirm that excluding these observations from the sample generates stronger results. In addition, we determine

whether a client's audit firm has an audit office located within the Metropolitan Statistics Area (hereafter MSA) of the client and is not the client's signing audit office. This is because although client firms do not disclose whether there is another office from the same audit firm that shares the audit work with the signing office, local offices within the same MSA of the client are more likely to play this role for efficiency reasons.<sup>2</sup> This means that a signing office is especially less likely to undertake all of the audit work for the client when the audit firm has another office located in the same city as the client. We indeed find stronger results when focusing on the subsample in which the audit firms do not have offices located in the MSA of the focal client.

Third, we address the issue that defining an audit office by audit firm and city could misclassify two offices of the same audit firm and city as a single office. Because those that have more than one office in one city are mostly large audit firms, we hand collect audit office information on Big 4 audit firms. We then form a subsample that is less prone to office misclassification by excluding an office if it is an office of a Big 4 audit firm and is located in a city in which the audit firm has at least two offices. The results are very strong in this subsample.

Fourth, we decompose the distraction variable to test the effects of being distracted by different M&As (defined by acquiror audit fee and relative deal size) separately. We find that the decomposed distraction variables generate qualitatively similar results. This confirms that all three types of M&As represent strong distraction. Finally, we analyze

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<sup>2</sup> We confirm that in our sample, 85.17% of client-years whose audit firms have an audit office located in the same MSA of the client indeed have audit offices that are located within their MSA.

the effect of distraction by all M&As without any filter. We find that although the sample size of distracted audit offices increases, the statistical significance of the coefficients of distraction variables decreases. This suggests that distraction effects are diluted when weaker distractions are included.

This paper contributes to four streams of literature. The first stream associates auditors' distractions with lower audit quality. The settings that have been explored by prior studies include industry shocks (Cassell, Hunt, Narayananamorthy, and Rowe, 2019; Chang, Li, and Luo, 2022), non-audit services (Beardsley, Imdieke, and Omer, 2021), client deadline concentrations (Czerney, Jang, and Omer, 2019), client busy seasons (Christensen, Newton, and Wilkins, 2021; Heo, Kwon, and Tan, 2021), and consulting services (Lisic, Myers, Pawlewicz, and Seidel, 2019; Donelson, Ege, Imdieke, and Maksymov, 2020). Our paper extends this literature by identifying a new source of auditor distraction, which is acquisition decisions of a major client. This source of distraction is unlikely to affect a focal firm's audit quality through channels other than auditors and its timing is largely unpredictable *ex ante*. Apart from making use of an arguably exogenous setting, we also contribute to the literature by providing direct evidence on audit offices' attention shifting from the focal client. This is an important step to validate distraction as the channel of the observed audit outcomes. These results also reflect audit quality based on audit input, which is an important addition to output-based audit quality measures when evaluating audit quality (DeFond and Zhang, 2014).

Our paper is also related to the literature that links auditors with M&As. Prior literature tends to focus on M&As in which the target and its acquirer share a common

auditor and study outcomes of these deals (see e.g., Cai, Kim, Park, and White, 2016; Dhaliwal, Lamoreaux, Litov, and Neyland, 2016). Our paper contributes to this literature by showing that M&As even have impacts on firms not involved in the transaction. The focal firms and acquiring firms are only connected by common auditors. To the best of our knowledge, this externality of M&As have not been studied by prior literature.

The third stream of literature focuses on audit offices. Chaney and Philipich (2002) demonstrate auditor reputation effects by showing that other clients of Arthur Andersen (especially its Houston office) experienced statistically negative market reactions following Andersen's admission to shredding a significant amount of documents upon the Enron audit failure. More recently, Francis and Michas (2013) find that the low audit quality of an audit office for one client can be "contagious" to other clients. Our results differ from both the reputation effects and the contagion effects captured by previous literature. This is because a firm's acquisition decision does not reflect the audit quality of its audit office. The focus of our paper is not on the commonality among clients of the same audit office.<sup>3</sup> Instead, we recognize that different clients of the same audit office may suffer differently when the audit office has a distraction.<sup>4</sup>

Finally, our study is related to the stream of literature attempts to establish causality between external auditors and firm outcomes using natural experiments.

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<sup>3</sup> Focusing on the commonality of clients of an audit office, Francis and Yu (2009) and Francis, Michas, and Yu (2013) find that large (small) offices of Big 4 auditors offer high (low) audit quality. Relatedly, Cameran, Campa, and Francis (2022) find significant differences in audit outcomes with audit firm differences, interoffice differences within audit firms, and inter-partner differences within offices (after controlling for client firm variables).

<sup>4</sup> For example, Table 7 analyzes market reactions to auditor distraction in which all clients in the sample share audit teams with acquiring firms. We find that clients whose fiscal year end is imminent would suffer more.

Exogenous shocks that have been used by prior studies include the collapse of Arthur Anderson (Jayaraman and Milbourn, 2014; Koh and Reeb, 2015) and the passage of the Sarbanes-Oxley Act (SOX) Section 404 (Iliev, 2010; Lee, Strong, and Zhu, 2014).<sup>5</sup> Compared with those shocks, distractions have the advantage of being temporary and repeatable. To the extent that they could occur to any auditor at any time for any number of times, attention shocks driven by distractions are less vulnerable to other concurrent events.<sup>6</sup>

## 2. Auditor Distraction Event

We consider M&A events of other clients of an audit office as the distraction event for the focal client. In particular, we define an M&A to be distracting if it satisfies one of the following: [1] the acquiring client pays an audit fee that is more than 5% of the total audit fee received by the audit office in the fiscal year or [2] the value of transaction is at least 10% relative to the acquiring client's market value of equity. Condition [1] ensures that the acquiror is an important client to the audit office. The rationale is that an audit office is more likely to become more committed to an important client relative to an unimportant client. Condition [2] ensures that the M&A is significant and entails a significant amount of work, because such deals are more likely to trigger auditors' attention shifting. Condition [3] is motivated by the fact that auditors' physical visits to

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<sup>5</sup> Iliev (2010) uses the shock of SOX 404 with a combined regression discontinuity (RD) and instrumental variable (IV) design. The RD design exploits the discontinuity at \$75 million that determines whether a firm needs to comply with SOX 404. The IV is whether a firm had a float of more than \$75 million in 2002.

<sup>6</sup> Relatedly, by studying external distractions to independent directors, Masulis and Zhang (2019) and Elkinawy, Spizman, and Tran (2021) find that a firm's accounting quality especially suffers when its audit committee members are distracted.

clients are crucial to audit quality. Francis, Golshan, and Hallman (2022) find that audit quality decreases when partners reside farther from their clients. An audit office will not be able to visit the focal client while visiting the acquiring client if the two are in different MSAs. This renders the focal client more likely to be neglected. All three conditions may potentially motivate an audit office to shift attention from the focal client when another client's M&A is announced.

We focus on M&As for several reasons. First, the occurrence of an acquisition typically has no implication on audit quality of an auditor. This aids in ruling out alternative explanations, such as downgraded reputation by the auditor (Chaney and Philipich, 2002) and contagion effects (Francis and Michas, 2013). Second, the workload of an acquiror's auditor typically increases dramatically because of the transaction (Dounis, 2008). An acquiror auditor needs to produce additional disclosure documents for the acquiror, evaluate consolidated statements, and ensure consistency in accounting policies between the subsidiary (i.e., target) and the parent in the consolidated reports.<sup>7</sup> This usually also involves identifying assets and liabilities that are not on the target's books pre-M&A (e.g., uncapitalized intangible assets). Due to limited capacity, therefore, an audit office is likely to pay less attention to its non-acquiring clients.

More importantly, M&As of other clients are largely exogenous to the focal client. To minimize potential endogeneity issues, we require that the acquiring firm has no major economic connection with the focal firm. In particular, we exclude distractions

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<sup>7</sup> A firm must provide consolidated financial statements if it owns at least 50% of another firm's stock (see <https://asc.fasb.org/imageRoot/92/63493892.pdf>). Since all of the acquirors in the sample control more than 50% of the targets' stock post-transaction, they all need to provide consolidated financial statements post-transaction.

where the acquiring firm and the focal firm are rivals. We use the baseline TNIC database downloaded from the Hoberg-Phillips Data Library to identify rival firms. Following the literature (Hoberg and Phillips, 2010; 2016), we identify a firm's rivals as the top 10 firms most similar to it. We also exclude distractions that occur at major customer or supplier firms, since they could significantly affect the focal firm through their business relationships. We obtain major customer/supplier relationship information from Compustat Customer Segment data, which report public customers that account for at least 10% of a public firm's sales. We find that eliminating distractions due to major rival/customer/supplier firms only reduces the proportion of firm-years with distracted audit offices by 1%. Lastly, distractions triggered by M&As are temporary and repeatable, and distracted audit offices are typically not immediately replaced. All of these features are helpful in mitigating experimental pitfalls.

We use the M&A announcement date as the distraction event date. Also, we consider an audit office to be distracted for a client firm-year as long as the distraction event date is within the current fiscal year of the client in question. When there is more than one distraction event date within the client firm's fiscal year, we count them as the number of times an audit office is distracted from the client firm within that year.

### **3. Data, Sample, Regression Specification, and Summary Statistics**

#### *3.1. Data and Sample*

Our sample period is from 2000-2021. We construct the sample by first collecting auditor information for all SEC registrants from Audit Analytics. We define an audit

office by the combination of audit firm and city location, following prior literature (e.g., Francis and Yu, 2009; Francis, Michas, and Yu, 2013). We then draw accounting and financial data from Compustat and match it to Audit Analytics, first on CIK and fiscal year end and then on CIK and fiscal year.<sup>8</sup> This results in 163,790 firm-year observations.

Next, we collect distraction events, M&As, from the Securities Data Corporation (SDC). For an acquisition to be included in the analysis, [1] the value of the transaction must be more than \$1m and account for at least 1% of the acquiror's market value of equity, measured on the 11th trading day prior to the announcement date; [2] the acquiror must control less than 50% of the target's shares prior to the transaction and more than 50% after the transaction; [3] the deal must have been completed; and [4] the acquiror and the target must be public firms. These filters are added because a distracting M&A has to be important to the acquiror. We match acquirors of M&As to the matched sample of Audit Analytics and Compustat by CUSIP. This results in 2,434 M&A transactions, which then become distraction events for other clients for which acquirors' audit offices concurrently audit.

### 3.2. Regression Specification

Our key explanatory variables are based on whether an audit office is distracted from a firm. These shock-based key explanatory variables ensure that the regressions are largely free of endogeneity concerns (Atanasov and Black, 2016). Since the impact of a

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<sup>8</sup> When one firm-year in Audit Analytics is matched with multiple firm-years in Compustat, we compare sales reported by the two databases and select the observation with the smallest difference in sales.

distraction is often immediate and can often be quickly reversed once the distraction ends, we do not lag these key explanatory variables.

We include various fixed effects. We include MSA fixed effects to control for geographic effects.<sup>9</sup> We also include either industry by year fixed effects (to control for unobservables specific to an industry-year combination) or audit office and year fixed effects (to control for team-specific time-invariant unobservables and year-specific team-invariant unobservables), in which an industry is defined by its Fama-French 48 industries classification. For regressions where the outcome variables are binary, we employ a linear probability model in addition to a logit model. This is because a nonlinear logit specification and a large number of fixed effects together may create an incidental parameters problem, which can bias the parameter estimates and standard errors (Greene, 2004). As Angrist (2001) and Angrist and Pischke (2008) point out, while nonlinear models may provide a better fit, the marginal effects and *t*-statistics calculated using ordinary least squares (OLS) are generally sufficiently accurate. We follow Gormley and Matsa (2014) and do not demean continuous dependent variables with respect to any group, since fixed effects are already in place to control for unobserved group heterogeneity.

We follow the literature on audit quality and audit office and control for client firm characteristics (*Ln(Assets)*, *Growth(Assets)*, *ROA*, *OCF*, *Cash*, *Importance* which is a firm's audit fees relative to the total fees received by the audit office, *Non-Audit Fee*, *IC Weak<sub>t-1</sub>*

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<sup>9</sup> Beck, Francis, and Gunn (2018) find that city-specific labor characteristics affect audit offices, audit quality, and the ability of non-Big 4 auditors to compete with Big 4 auditors in the audits of public companies.

which is a dummy variable of one if the firm has an internal control weakness); audit office characteristics ( $\ln(\# \text{ Clients})$ , *Audit Competition*, *Expert* which is a dummy variable of one if the audit office receives more than 30% of all audit fees for the local MSA); and audit firm characteristics (*Big 4*). We lag all control variables to avoid introducing bias in the regression estimates (Angrist and Pischke, 2008). This leads to a final sample of 81,172 (16,217) client firm-year (audit office-year) observations from 10,632 (2,199) unique client firms (audit offices).<sup>10</sup>

### 3.3. Summary Statistics

Table 1 provides the summary statistics for distracting M&As. Panel A presents the correlation of a firm having an audit office being distracted by M&As where [1] the firm undertaking M&As is an important client to the audit office by audit fee or [2] the M&A is an important deal to the acquirer by relative deal size. The correlations are strongly statistically significant, but the magnitudes are substantially less than 1. Thus, we combine all of these distraction events in our analysis. Panel B summarizes the frequency with which a firm's audit office that is being distracted by other firms' M&As satisfy specific criteria (i.e., [1]-[3] individually) and M&As that satisfy any of the criteria (i.e., [1]-[3] combined). Of all events, distraction by other firms' M&As in which the relative deal size is at least 10% is most prevalent and occurs once every 5 (=1/0.195)

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<sup>10</sup> In untabulated analysis, we exclude client firms whose audit teams are never distracted or distracted in every fiscal year in our sample. We confirm that our results are robust to this subsample and our conclusion remains the same.

years. When distraction by M&As that satisfy different criteria are combined, an audit office is likely to be distracted from a particular client about once every 4 ( $=1/0.238$ ) years.

Table 2 provides summary statistics for key variables. Panel A presents variables at the audit office level. The sample contains 16,217 audit office-year observations. About 42.1% of the audit offices in the sample belong to a Big 4 audit firm. On average, an audit office concurrently has 8 clients. About 18% of audit offices are experts in their local MSAs in terms of audit fees. Panel B summarizes variables at distraction event level. On average, the market reacts negatively (with a mean of -0.059% and a median of -0.130%) when a firm's audit office has another client that announces an M&A. Conditional on one client firm announcing an M&A, there is an 84.8% chance for this event to be defined as distracting (by acquirer audit fee and relative deal size as detailed in Section 2) to other client firms of the same audit office. The degree of distraction a client firm suffers can also depend on its distance to fiscal year end. We find that there is an equal distribution between firms with an upcoming fiscal year end within 30 calendar days and firms that just began their current fiscal years less than 30 days ago. Panel C summarizes client firm-level variables. About 23.8% of client firm-years have audit offices that are significantly distracted. On average, a client firm pays an audit (non-audit) fee of \$1.703 million (\$0.515 million) every year. The value of the total assets controlled by sample clients are highly skewed, with an average of \$4,082.464 million and a median of \$302.473 million. We therefore use the log transformation of total assets in the regression analysis. About one-third of client firms' audit offices have a tenure of no more than 3 years with the firm.

#### **4. Input-based Audit Quality Measures: Do Distracted Auditors Exert Less Efforts?**

To validate the relevance of our exogenous shocks, we start our analysis by assessing whether an audit office behaves differently when distracted. When an audit office is distracted and need to exert more efforts elsewhere, it is likely to allocate less time and resources to the client in question. On the other hand, a team may expand its capacity, thereby being able to provide the same level of quality assurance to the client in question. However, we believe this is unlikely because team expansion takes time and is costly. Due to the temporary nature of distraction, a team may not expand but instead remain restrained by the limited capacity. Thus, the client in question may receive less audit input.

Analyzing input-based audit quality measures is an important part in assessing the role of audit offices on audit quality because the amount of assurance auditors provide is not directly observable (DeFond and Zhang, 2014). Although output-based proxies for audit quality (such as financial reporting quality) are useful, they can be affected by components other than audit quality. For example, high quality of pre-audited financial statements may naturally lead to high quality post-audited financial statements even if the audit process fails (DeFond and Zhang, 2014). Thus, we use both input-based and output-based proxies for audit quality, with the latter being examined in Section 5.

We use the sample at the client firm-year level (summarized in Table 2 Panel C) to test this hypothesis. We have two key independent variables: a dummy variable of whether the audit office experiences a distraction and the number of times an audit office

is distracted in a client firm-year. The tabulated models include either industry-by-year fixed effects or audit office-and-year fixed effects, along with MSA fixed effects.

#### *4.1. Audit Fees*

We first use audit fees to infer an audit office's dedication to a client firm and its audit quality. Audit fees reflect the amount of audit workload undertaken by an auditor (see, e.g., Johnson, Davies, and Freeman, 2002; Lopez and Peters, 2012). Low audit fees may be an indication of an auditor conducting insufficient work, which has been noted by both the PCAOB and the SEC (Knechel, Krishnan, Pevzner, Shefchik, and Velury, 2013).<sup>11</sup> Table 3 presents OLS regressions of the audit fees paid by a client firm in a year. Examining the two distraction variables, we find that they both have significant negative coefficients in all regressions. Significantly lower audit fees are consistent with distracted audit offices being less dedicated to the audit work at the client firm. In examining control variables, we find that firms that are larger or have more cash or more business segments pay more audit fees; audit offices that have more clients, are from the Big 4, or are audit experts in their local MSAs receive higher audit fees.

#### *4.2. Auditor Turnover*

Another indication of an auditor's efforts devoted to a client is its decision to leave the company. In Table 4, we indeed find that a firm is more likely to switch to a new audit

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<sup>11</sup> Consistent with this notion, Ettredge, Fuerherm, and Li (2014) and Krishnan and Zhang (2012) find that accounting quality drops after audit fees decline during the global financial crisis

office (see Panel A) or a new audit firm (see Panel B) when its audit office is distracted. For example, Model 7 of Panels A and B presents logit estimation results, where  $\#Distraction$  has a coefficient of 0.040 and 0.043, respectively. Converting these coefficients into odds ratios suggests that one distraction event at an audit office makes its clients firms about 4% more likely to subsequently switch to another audit office (audit firm). These results are consistent with Chen, Francis, and Hou (2019), who find that firms may switch to a new same-firm audit office to improve audit quality.

Taken together, the results from both audit fees and auditor turnover are consistent with the notion that distracted audit offices input less audit efforts. This, in turn, confirms that the distracted audit offices we identify are indeed distracted and validates the relevance of our exogenous attention shocks.

## 5. Output-based Audit Quality Measures

The results in the prior section confirm that external distractions tangibly reduce an audit office's effort level for the client firm in question. We next examine whether having distracted auditors leads to negative audit outcomes. Output-based measures are useful because they attempt to capture the level of audit quality actually delivered (DeFond and Zhang, 2014) and thereby revealing the roles of auditors. Since we have already found in Section 4 that audit offices exert less audit efforts when they are distracted, we expect that client firms experience more negative audit-related outcomes when their audit offices are distracted. This prediction is also supported by theories that argue auditors serve an

important role as information intermediaries (Wallace, 2004) and insurance providers (DeAngelo, 1981; Watts and Zimmerman, 1981).

As in Section 4, the sample is at the client firm level. There are two key independent variables: a dummy variable of whether the audit office experiences a distraction and the number of times an audit office is distracted in a client firm year.<sup>12</sup>

### *5.1. Material Misstatements*

The most direct and egregious output-based audit quality measure is material misstatements, and one common misstatement measure is Accounting and Auditing Enforcement Releases (AAERs) (DeFond and Zhang, 2014). AAERs are enforcement actions issued by the SEC. They are more suitable than other databases for identifying financial misstatements because the SEC, due to its limited budget, only selects a firm for enforcement action when there is strong evidence of manipulation. Thus, the Type I error rate is low in this sample (Dechow, Ge, Larson, and Sloan, 2011).<sup>13</sup> The AAERs identified in our sample are all misstatement of certain accounting variables (namely, revenue, other expense / shareholder equity account, capitalized costs as assets, misstated accounts receivable, misstated inventory, misstated cost of goods sold, misstated reserve

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<sup>12</sup> The effect of distraction is temporary and unlikely to hold for more than one year, although a distracting M&A may take years to complete after it is announced. This is because audit teams may obtain new audit personnel and resources to increase total capacity in the long run. Thus, this study does not investigate extended periods of firm-level impacts.

<sup>13</sup> Other ways to identify manipulation include samples of shareholder litigation, SOX internal control violations, financial restatements, and measures for discretionary accruals. All of these are subject to selection bias (Dechow, Ge, Larson, and Sloan, 2011). In Table OA.7.1 of the Online Appendix, we consider a firm's likelihood of having a Big R misstatement. The results exhibit a consistent pattern that distractions of the audit team result in a reduced level of accounting quality.

account, misstated liabilities, misstated marketable securities, misstated allowance for bad debt, misstated payables), and thus can all be attributed to auditors.

Table 5 reports the results. The models examine the likelihood of the SEC's issuing an AAER for alleged financial misstatements in the firm's annual financial statements for the fiscal year. The key independent variables are all positive and statistically significant, which suggests that auditor distraction significantly increases the likelihood of material accounting misstatements.<sup>14</sup> Overall, the results show that audit offices play an important role in preventing accounting manipulation by client firms.

### *5.2. Auditor Litigation*

Another potential adverse outcome indicating poor audit quality is litigation against an auditor. We test the possibility of litigation that may be related to audit failure by collecting shareholder class action lawsuits that are associated with violation of Securities Exchange Act 1934 Section 11. Section 11 states that issuers, underwriters, officers and directors of the issuer, and any other expert who helped prepare the registration statement (e.g. accountants, lawyers) are strictly liable for any misrepresentation or omission of material information, i.e. securities fraud, in their registration statement.<sup>15</sup> We consider a firm-year to be targeted in a lawsuit if the overlap between the firm's fiscal year and shareholder class action lawsuit periods is at least one

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<sup>14</sup> In untabulated analysis, we also examine the likelihood of the SEC's issuing an AAER for alleged financial misstatements in one of the firm's quarterly financial statements for the fiscal year. The results remain significantly but slightly weaker than the tabulated results. This is consistent with the fact that annual statements are more complicated and time-consuming to audit. Thus, their quality suffers more when auditors are distracted.

<sup>15</sup> One data limitation is that we have not been able to make sure all lawsuits cases in our sample to be against auditors. However, this would bias against us in finding any significant results.

quarter. Table 6 presents the results. Key independent variables are positive and statistically significant at either the 1% level or the 5% level. The results confirm that auditor distraction significantly increases the likelihood of shareholder class action lawsuits. For example, firm-years with a distracted audit office have a 14.6% higher probability of overlapping with a shareholder class action period (see Model 6), while one additional distraction event to an audit office increases the probability of its client firm being targeted in a class action period by 8.9% (see Model 8). These effects are economically significant, given that lawsuits only affect 3% of all firm-years.

## 6. Market Reactions to Auditor Distractions

In this section, we examine market reactions which are also an output-based audit quality measure (DeFond and Zhang, 2014). The market is likely to react negatively to auditor distractions if it appreciates the value of auditors and observes distractions to auditors. The latter is possible because the auditor distraction events that we focus on are publicly observable. All public firms disclose information of their audit offices in the financial statements. When an M&A is announced, investors can learn about the audit office of the acquiror firm as well as other clients that the audit office provide audit services for concurrently.

Compared to other output-based audit quality measures (such as material misstatements), this perception-based measure has several unique advantages (DeFond and Zhang, 2014). First, it is a comprehensive measure that reflects the net effect of

multiple dimensions of audit quality. Second, it is continuous, and thus captures both egregious failures as well as more subtle variations in audit quality.

We measure the immediate market reactions to auditor distractions as cumulative abnormal returns (CAR) of the client in question around M&A announcements by other clients with an event window of [-5, 5]. Table 7 tabulates the results. The data are structured by client-firm and date observations, where client-firms are clients that share the same audit office as the acquirer and dates are acquisition announcement dates. We consider two key independent variables to capture the effect of auditor distraction. First, we define *Distracted* as a dummy variable of one if the M&A announced by another firm that shares the same audit office with the focal firm is indeed distracting. A distracting M&A is defined based on audit fee and relative deal size, as detailed in Section 2. We also make use of the fact that auditor distraction is likely to be more consequential for clients that are about to release annual reports. Auditor distraction closer to the next upcoming fiscal year end leaves less time for the auditor to reallocate its resources in response to the distraction.<sup>16</sup> Thus, we define *FYEnd Upcoming* as a dummy variable of one if there are no more than 30 days till the firm's fiscal year end when another firm (that shares the same audit office) announces an acquisition, and zero if it has been no more than 30 days since the firm began the current fiscal year when another firm announces an acquisition. This variable is largely free from endogeneity issues because fiscal year-ends are typically determined when a firm is incorporated and are not likely to be correlated with other

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<sup>16</sup> Auditors are especially in demand when auditing annual reports. A quarterly audit is only a review to provide negative assurance and, as such, does not require as much auditor attention. This warrants the focus on annual report dates (i.e., fiscal year-ends).

firm characteristics. When auditor distraction occurs, it is unlikely that clients that just passed balance dates and clients that are close to balance dates would differ systematically.<sup>17</sup> It is important to note that the treatment and control firms in this sample share the same audit offices.<sup>18</sup> That is, when an M&A occurs, some of the other clients (i.e., treatment group) experience more distraction effects than others (i.e., control group). This feature ensures that auditor-related characteristics are the same for both groups, which helps rule out alternative explanations. Also, we add a control for stock run-up in these regressions.

The coefficients of both key distraction variables are negative and statistically significant at the 1% to 5% level. For example, when audit offices are distracted, % CAR decreases by 0.555 (see Model 2). When a client firm's fiscal year end is upcoming within 30 days, % CAR decreases by 1.597 (see Model 4). These impacts are economically significant, relative to the average % CAR of -0.059. It is unlikely that this negative market reactions reflects a negative market evaluation of the M&A itself, because the acquiring firm and the focal firm are different firms that merely hire the same external auditor.<sup>19</sup> Thus, the market values the roles of external auditors and reacts negatively when they are distracted.

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<sup>17</sup> Admittedly, most U.S. firms have fiscal year-ends in December, and those that do not can differ systematically. We therefore exclude client-date observations in which the year-end dates are in November, December, or January and repeat Models 3 and 4 in untabulated analysis. We confirm that the results are qualitatively unchanged.

<sup>18</sup> Treatments are observations in which the key independent variables equal one, and controls are observations in which the key independent variables equal zero.

<sup>19</sup> In a subsample analysis only focusing on M&As that experience positive acquiror returns upon announcement, we also find market reactions to the focal firm (which is not the acquiror) to be more negative when the key distraction variables take the value of one.

At a glance, this result seems to contradict with the literature that finds insignificant market reactions to additional disclosures from auditors (see e.g., Gutierrez, Minutti-Meza, Tatum, and Vulcheva, 2018; Doxey, Lawson, Lopez, and Swanquist, 2021; Burke, Hoitash, Hoitash, and Xiao, 2023). However, Lennox, Schmidt, and Thompson (2023) show that this lack of market reaction is not because investors do not care about auditor-related information. Rather, investors pay attention to auditor-related information and they already acquire such information even before auditors disclosing them in mandatory reports. This finding is also consistent with Chaney and Philipich (2002), which find that other clients of Arthur Andersen experienced negative market reactions following the audit failure of Enron.

## 7. Additional Analysis and Robustness Checks

### 7.1. Engagement Partners

Admittedly, an engagement partner assumes the most accountability in a team when she signs the audit report. However, we focus on audit office distraction in the main analysis because M&A distraction occurs based on the premise of audit workload, and audit workload is shared among the team.<sup>20</sup> In addition to the partner in charge, an audit office usually includes a review partner, managers, seniors, and other staff. A partner who supervises the team may not visit a client's premises often, whereas

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<sup>20</sup> Distraction from non-professional activities such as sickness would not affect audit workload and are thus more suitable for studying engagement partners. Unfortunately, sickness and accidents of engagement partners are generally not disclosed.

managers generally have day-to-day involvement with their clients.<sup>21</sup> Because of their different roles, therefore, an engagement partner may not experience the same level of increased workload as other members of the team when there is additional audit work.

Nevertheless, we collect engagement partner data from the Public Company Accounting Oversight Board (PCAOB), which requires all PCAOB-registered accounting firms to disclose engagement partner information on Form AP effective January 31, 2017.<sup>22</sup> We follow the same procedures described in Sections 2 and 3 in constructing distraction variables and forming samples. The only difference is that we check whether the acquiring firm and the focal firm have a common engagement partner (instead of audit office) during the same period. At client firm-year level, the sample contains 17,761 observations over fiscal years 2016 to 2021. Only 1.20% (213 observations) of sample firm years have distracted engagement partners. Within the subsample of firm-years with distracted engagement partners, the average number of times an engagement partner is distracted in a year is 1.12. We repeat all regression analyses to examine the effects of distracted engagement partners and find that the results are generally statistically insignificant (see OA.Table 1.1 of the Online Appendix). Importantly, we find that an engagement partner on average only work for two clients (as an engagement partner) at the same time. This makes distraction incidents by other clients' M&As rare by construction. We thus define an engagement partner as distracted as long as another of

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<sup>21</sup> PCAOB (2016, December 31). Auditing Standards (AS 1201.03). Retrieved from <https://pcaobus.org/Standards/Auditing/Pages/ReorgStandards.aspx>

<sup>22</sup> SOX requires public accounting firms to register with the PCAOB in order to prepare or issue an audit report for a U.S. public company or a broker-dealer, or to play a substantial role in those audits.

her clients announces an M&A (that is, we do not impose requirements on audit fee or relative deal size) in Table OA.1.2 of the Online Appendix. The proportion of firm-years that have a distracted engagement partner only increases from 1.20% to 1.27% of sample firm years, and the results remain largely insignificant. We thus conclude that other clients' M&A activities do not constitute a strong distraction for engagement partners, perhaps because the extra audit workload from M&As is shared among the whole team rather than by the engagement partner alone.

## *7.2. Sharing Audit Work with Another Audit Firm or Audit Office*

It is possible that a signing audit office shares the audit workload with another audit firm or audit office. To the extent that this complementary effect would weaken the effect of distraction, our tabulated results are conservative. Further, since we still find that client firms suffer when audit offices are distracted, this auditor complementary effect is clearly not a first-order effect. This makes sense, given that the complementing auditors are likely to be less familiar with the client in question compared with the complemented audit office.

We also experiment with subsamples that are more or less prone to this problem. The PCAOB collects information on sharing audit work with other accounting firms from Form AP. We define a client firm-year as having audit work that was performed by more than one audit firm if another accounting firm either participated in the signing audit firm's audit without sharing audit responsibility or shared audit responsibility with the

signing audit firm.<sup>23</sup> Over fiscal years 2016 to 2021 when PCAOB data are available, 3,714 out of 17,761 client firm-years have audit firms that share the client's audit work with another accounting firm. We confirm that this subsample has weaker distraction effects (see Table OA.2.1 of the Online Appendix). By excluding these firms from the regression analysis while restricting the sample period to 2016-2021, we find the results to be stronger (see Table OA.2.2 of the Online Appendix).<sup>24</sup> When we combine this subsample with the pre-2016 sample period, the results are statistically significant and much stronger.

Apart from sharing audit work with another audit firm, an audit office may also share audit work with another audit office within the same audit firm. Unfortunately, the data do not allow us to observe whether another audit office from the same audit firm shares the audit work with the signing audit office. However, we attempt to infer the relative level of responsibility of the signing office through the presence of other audit offices of the audit firm that are located in the client's MSA. The intuition is that for efficiency reasons, an audit office located in the same MSA as the client is more likely to share the workload when needed (if it is not already the signing audit office).<sup>25</sup> Thus, a signing office is less likely to undertake all of the audit work for a client when the audit

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<sup>23</sup> The signing audit firm is responsible for audits performed by other accounting firms if other accounting firms only participate in the audit but do not take responsibility. Alternatively, the signing audit firm may divide responsibility for the audit with other accounting firms that share the audit workload.

<sup>24</sup> We also regress the dummy variable of sharing audit hours with another accounting firm on distraction variables and find the coefficients of distraction variables to be insignificant. Thus we do not find distracted audit teams to be more likely to share audit hours with another accounting firm. This is consistent with our finding that on average, audit team distractions lead to strong negative consequences for a client firm.

<sup>25</sup> We indeed find that clients are more likely to use local audit teams (when one is available). In our sample of 72,873 client firm-year observations, 61,562 client-years have audit firms that have an audit team in the client MSA. Of these 61,562 client-years, 85.17% indeed have audit teams that are located within their MSA. That is, only 14.83% of clients use audit teams outside their MSA when their audit firm has an office within their MSA.

firm has another office located in the same MSA as the client. Tables OA.2.3-OA.2.4 of the Online Appendix make use of this feature and partition the sample based on whether the audit firm has another audit office in the MSA of the client in question. We find significant results in the subsample in which there is no other office (i.e., audit workload sharing is less likely; see Table OA.2.4 of the Online Appendix), and largely insignificant results in the subsample in which there are other offices (i.e., audit workload sharing is more likely; see Table OA.2.3 of the Online Appendix). These results confirm that distraction effects are stronger (weaker) when more (less) of a client's audit work is performed by the signing audit office.

### *7.3. Misclassification of Audit Offices*

We define an audit office by audit firm and city location, which is consistent with the literature (e.g., Francis and Yu, 2009; Francis, Michas, and Yu, 2013). However, an audit firm could have more than one office in a city. Misclassifying different offices as a single office is problematic, since a distracted audit office could in fact be undistracted (i.e., the acquiring firm and the focal firm have different audit offices that are located in the same city and belong to the same audit firm).

Importantly, having more than one office in one city is typically likely for large audit firms and highly unlikely for small audit firms. We thus search the websites of Big 4 audit firms and hand collect cases in which a Big 4 firm has more than one audit office located in the same city (see Appendix B). Identification of such offices is especially subject to misclassification issues. We find that restricting our analysis to observations

with those offices generates weaker results, and excluding observations with those offices provides stronger results (see Tables OA.3.1-OA.3.2 of the Online Appendix).<sup>26</sup> Stronger results associated with better identification of distracted offices further highlight the important values of audit offices for their client firms.

#### *7.4. Decomposition of Distraction Variables*

Our main analysis considers an M&A to be distracting if it satisfies any one of the three requirements based on audit fee or relative deal size, as detailed in Section 2. In this section, we separately test distractions from M&As that satisfy the requirements for audit fee and relative deal size, respectively. We find that the impacts of these types of distractions are qualitatively similar to their combined impacts, as tabulated in the main analysis (see Tables OA.4.1-OA.4.2 of the Online Appendix). This confirms that both types of M&As trigger strong distraction, which supports our decision to group them together in identifying distraction.

#### *7.5. Distraction Strength and M&A Selection*

The impacts of auditor distraction are likely to vary with the strength of distraction. We test this by making use of the fact that not all other firms' M&As are equally distracting. In particular, we include weak distractions in the analysis by assuming that

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<sup>26</sup> In untabulated analysis, we also find strong results in the subsample of observations for audit offices from Big 4 firms that are located in cities in which the audit firm does not have a second office.

all M&As of other firms are distracting.<sup>27</sup> This means that a total of 45.9% client firm-year observations would have distracted audit offices during the sample period. We then repeat the regression analysis and find that the coefficients of distraction variables are slightly less significant statistically (see Table OA.5.1 of the Online Appendix). This confirms that less distracting M&As shift less auditor effort from the client in question and lead to less negative firm outcomes.

### *7.6. Disentangling variations in client firms, audit firms, and audit offices*

The outcome variables that we study are likely to vary between audit offices and across client firms. To the extent that auditor distractions are arguably exogenous, our results are unlikely to be driven by variations in audit offices. This is especially the case for the analysis of market reactions, where treatment and control client firms share the same audit offices. We also adopt audit office fixed effects to control for differences across audit offices. In this section, we address the issue more directly using hierarchical linear modelling. In particular, for each regression, we fit regressors at the client-firm level first, and then add regressors at the audit firm level, and finally add regressors at the regressors at the audit office level. We tabulate the changes in the explanatory powers in Table OA.6.1 of the Online Appendix. For all regressions, the incremental explanatory power of regressors at the audit firm level and regressors at the audit office level are

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<sup>27</sup> That is, we relax the filters for audit fee and relative deal size. However, we still keep the filters in Section 3.1 (namely, the value of the transaction is more than \$1m and is at least 1% of the acquirer's market value of equity measured on the 11th trading day prior to the announcement date; the acquirer controls less than 50% of the target's shares prior to the transaction and more than 50% after the transaction; the deal has been completed; and the acquirer and the target are public firms) we apply in forming the M&A sample.

insignificant. This suggests that our results are unlikely to be driven by variations in audit firm and audit office characteristics.

## 8. Conclusion

To conclude, we use auditor distraction to evaluate the roles of auditors. Distraction shifts audit offices' commitments elsewhere and, as a result, reveals the consequences when audit offices do not function properly. Distractions by other clients' M&As are exogenous, temporary, repeatable, and nonnegative, and thereby have no implications for audit quality or auditor reputation. We also take into account the relative importance and location of the acquiring client as well as the size of the M&A, because all of these are likely to affect the degree of distraction.

We use various input-and output-based audit quality measures to evaluate the role of audit offices on audit quality. We find that client firms with distracted audit offices pay lower audit fees and their audit offices (which are distracted) are more likely to resign. They are also more likely to have financial misstatements and be targeted by shareholder class action lawsuits. Finally, the market reacts negatively to audit distractions. Taken together, these findings confirm that audit offices play a crucial role in enhancing shareholder value and investors value auditor-related information. In contrast, distracted engagement partners provide weaker results, which suggests that the audit workload is shared among the whole team and the engagement partner only undertakes a small portion of the work (even though the signing engagement partner assumes most of the accountability).

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**Table 1 Distracting M&As**

This table analyzes the correlation and frequency of an audit office's being distracted by auditing another firm that announced an M&A in the same fiscal year, where distraction is defined by [1] audit fee or [2] relative deal size, as detailed in Section 2. The data include firm-year observations for fiscal years 2000 to 2021. Panel A reports the correlation of being distracted by M&As under different definitions. Panel B summarizes the frequency of a firm's having a distracted audit office in a fiscal year. Distraction variables are dummy variables that equal one if a firm's audit office is distracted in a fiscal year, following definitions [1] to [3]. Row [4] considers an M&A to be distracting if any of [1] to [3] holds.

Panel A: Correlation of distracting M&amp;As

	[1]	[2]	[3]
	Distraction (Fee)	Distraction (Rel Deal Size)	Distraction (Combined)
[1] Distraction (Fee)	1		
[2] Distraction (Rel Deal Size)	0.497***	1	
[3] Distraction (Combined)	0.667***	0.882***	1

Panel B: Frequency of a firm's having a distracted audit office in a year

	[1]	[2]	[3]
	N	SD	Mean
[1] Distraction (Fee)	87,172	0.327	0.122
[2] Distraction (Rel Deal Size)	87,172	0.396	0.195
[3] Distraction (Combined)	87,172	0.426	0.238

**Table 2 Summary Statistics**

This table provides summary statistics of the main variables for fiscal years 2000 to 2021. Panel A is at the audit office level, where data are by audit office and fiscal year. Panel B is at distraction event level, where data are by client firm and M&A date of other clients. Panel C is at firm level, where data are by firm and fiscal year. All variable definitions are reported in Appendix A.

Panel A. Audit office level

	N	SD	Mean	Median	p25	p75
BigFour	16,217	0.494	0.421	0	0	1
# Clients	16,217	14.77	8.368	4	2	9
Audit Competition	16,217	1.027	4.292	5	4	5
Expert	16,217	0.384	0.180	0	0	0

Panel B. Distraction event level

	N	SD	Mean	Median	p25	p75
% CAR [-5,+5]	67,198	11.605	-0.059	-0.130	-3.746	3.286
Distracted	67,221	0.359	0.848	1	1	1
FYEnd Upcoming	11,265	0.500	0.504	1	0	1
Stock Runup	67,218	563.567	-3.318	-1.396	-15.161	12.578

Panel C. Firm level

	N	SD	Mean	Median	p25	p75
Ind Distraction	87,172	0.426	0.238	0	0	0
# Distraction	87,172	0.834	0.378	0	0	0
Audit Fee \$ mil	87,172	3.588	1.703	0.611	0.178	1.7
New Aud Office	87,169	0.326	0.121	0	0	0
New Aud Firm	87,169	0.283	0.088	0	0	0
AAER	76,392	0.085	0.007	0	0	0
Lawsuit	87,172	0.167	0.029	0	0	0
Assets (\$ mil)	87,162	17449.76	4082.464	302.473	44.171	1764.939
Growth(Assets)	87,162	91.839	1.938	0.042	-0.066	0.189
ROA	87,076	55.006	-1.834	0.088	-0.063	0.158
OCF	86,989	39276.36	125.742	0.018	-0.138	0.072
Cash	86,850	0.213	0.174	0.094	0.029	0.231
Importance	87,172	0.208	0.125	0.041	0.013	0.128
Non-Audit Fee \$ mil	87,172	1.918	0.515	0.073	0.009	0.332
Short Firm Tenure	87,172	0.482	0.365	0	0	1
# Bus Seg	87,172	1.761	2.146	1	1	3
IC Weak	87,172	0.185	0.036	0	0	0

**Table 3 Audit Fees**

This table reports results from a multivariate regression analysis of audit fees for fiscal years 2000 to 2021. The panel data include firm-year observations.  $\ln(\text{Audit Fee})$  is the natural log of a firm's audit fees.  $\text{Ind Distraction}$  is a dummy variable of one if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year.  $\# \text{Distraction}$  is the number of distracting M&A events announced by other firms that share the same audit office with the focal firm in a fiscal year. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with  $p$ -values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

Dep Var: $\ln(\text{Audit Fee})$	(1)	(2)	(3)	(4)
Ind Distraction	-0.047*** (0.000)	-0.016*** (0.009)		
# Distraction			-0.036*** (0.000)	-0.021*** (0.000)
$\ln(\text{Assets})_{t-1}$	0.393*** (0.000)	0.301*** (0.000)	0.393*** (0.000)	0.301*** (0.000)
Growth( $\text{Assets}$ ) $_{t-1}$	-0.000*** (0.001)	-0.000 (0.137)	-0.000*** (0.001)	-0.000 (0.137)
ROA $_{t-1}$	0.000 (0.707)	-0.000 (0.754)	0.000 (0.708)	-0.000 (0.753)
OCF $_{t-1}$	0.000 (0.625)	0.000 (0.786)	0.000 (0.638)	0.000 (0.786)
Cash $_{t-1}$	0.130*** (0.000)	0.017 (0.373)	0.132*** (0.000)	0.018 (0.369)
$\ln(\# \text{ Clients})_{t-1}$	0.154*** (0.000)	0.261*** (0.000)	0.160*** (0.000)	0.263*** (0.000)
Big 4 $_{t-1}$	0.524*** (0.000)		0.524*** (0.000)	
Importance $_{t-1}$	0.777*** (0.000)	1.919*** (0.000)	0.792*** (0.000)	1.922*** (0.000)
Non-Audit Fee $_{t-1}$	0.065*** (0.000)	0.074*** (0.000)	0.065*** (0.000)	0.074*** (0.000)
Audit Competition $_{t-1}$	0.043*** (0.000)	-0.006 (0.565)	0.042*** (0.000)	-0.007 (0.492)
Expert $_{t-1}$	0.035*** (0.001)	0.095*** (0.000)	0.035*** (0.001)	0.091*** (0.000)
Short Firm Tenure $_{t-1}$	-0.003 (0.698)	0.024*** (0.000)	-0.003 (0.638)	0.023*** (0.000)
# Bus Seg $_{t-1}$	0.049*** (0.000)	0.054*** (0.000)	0.049*** (0.000)	0.054*** (0.000)
IC Weak $_{t-1}$	0.393*** (0.000)	0.314*** (0.000)	0.392*** (0.000)	0.314*** (0.000)
Observations	87,141	87,141	87,141	87,141
Industry*Year FE	Y		Y	
Audit office & Year FE		Y		Y
MSA FE	Y	Y	Y	Y
Adjusted R-squared	0.863	0.890	0.863	0.890

**Table 4 Auditor Turnover**

This table reports results from regression analysis of the likelihood of a firm to change its auditor for fiscal years 2000 to 2021. The panel data include firm-year observations. Models 1-4 tabulate OLS regressions and Models 5-8 tabulate Logit regressions. *New Aud Office* is a dummy variable of one if a firm changes its audit office. *New Aud Firm* is a dummy variable of one if a firm changes its audit firm. *Ind Distraction* is a dummy variable of one if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office with the focal firm in a fiscal year. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A: New Audit Office**

Dep Var: New Aud Office	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Models:	OLS				Logit			
Ind Distraction	0.007*** (0.005)	0.007*** (0.003)			0.103*** (0.007)	0.061 (0.137)		
# Distraction			0.003** (0.020)	0.003** (0.022)			0.040** (0.034)	0.041* (0.064)
Ln(Assets) <sub>t-1</sub>	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.024*** (0.001)	-0.010 (0.301)	-0.023*** (0.001)	-0.010 (0.300)
Growth(Assets) <sub>t-1</sub>	-0.000*** (0.000)	-0.000*** (0.001)	-0.000*** (0.000)	-0.000*** (0.001)	-0.000 (0.265)	-0.000 (0.348)	-0.000 (0.264)	-0.000 (0.349)
ROA <sub>t-1</sub>	-0.000 (0.422)	-0.000 (0.385)	-0.000 (0.424)	-0.000 (0.388)	-0.000 (0.631)	-0.000* (0.057)	-0.000 (0.636)	-0.000* (0.058)
OCF <sub>t-1</sub>	-0.000 (0.168)	-0.000 (0.113)	-0.000 (0.168)	-0.000 (0.114)	-0.000 (0.163)	-0.000** (0.027)	-0.000 (0.163)	-0.000** (0.027)
Cash <sub>t-1</sub>	-0.018*** (0.003)	-0.016*** (0.008)	-0.018*** (0.003)	-0.016*** (0.008)	-0.180*** (0.005)	-0.110* (0.097)	-0.179*** (0.005)	-0.109* (0.099)
Ln(# Clients) <sub>t-1</sub>	-0.017*** (0.000)	-0.017*** (0.000)	-0.017*** (0.000)	-0.017*** (0.000)	-0.230*** (0.000)	-0.236*** (0.000)	-0.227*** (0.000)	-0.240*** (0.000)
Big 4 <sub>t-1</sub>	-0.042*** (0.042)	-0.042*** (0.042)	-0.041*** (0.041)	-0.041*** (0.041)	-0.388*** (0.388)		-0.382*** (0.382)	

	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Importance <sub>t-1</sub>	0.018** (0.039)	0.018** (0.039)	0.018** (0.041)	0.018** (0.039)	0.213 (0.261)	-0.097 (0.682)	0.201 (0.291)	-0.100 (0.674)
Non-Audit Fee <sub>t-1</sub>	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.064*** (0.000)	-0.068*** (0.001)	-0.064*** (0.000)	-0.068*** (0.001)
Audit Competition <sub>t-1</sub>	0.007*** (0.000)	0.007*** (0.000)	0.007*** (0.000)	0.007*** (0.000)	0.093*** (0.003)	0.037 (0.615)	0.094*** (0.003)	0.039 (0.598)
Expert <sub>t-1</sub>	-0.005** (0.031)	-0.005** (0.018)	-0.005** (0.032)	-0.005** (0.019)	-0.133*** (0.000)	0.078 (0.245)	-0.133*** (0.000)	0.083 (0.215)
Short Firm Tenure <sub>t-1</sub>	0.243*** (0.000)	0.244*** (0.000)	0.243*** (0.000)	0.244*** (0.000)	2.287*** (0.000)	2.221*** (0.000)	2.286*** (0.000)	2.222*** (0.000)
# Bus Seg <sub>t-1</sub>	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.029*** (0.000)	0.030*** (0.000)	0.030*** (0.000)	0.030*** (0.000)
IC Weak <sub>t-1</sub>	0.068*** (0.000)	0.069*** (0.000)	0.068*** (0.000)	0.069*** (0.000)	0.738*** (0.000)	0.782*** (0.000)	0.738*** (0.000)	0.781*** (0.000)
Observations	87,169	87,169	87,169	87,169	85,931	84,779	85,931	84,779
Industry*Year FE	Y		Y		Y		Y	
Audit office & Year FE		Y		Y		Y		Y
MSA FE	Y	Y	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.158	0.195	0.158	0.195				
Pseudo R-squared					0.220	0.221	0.220	0.221

**Panel B: New Audit Firm**

Dep Var: New Aud Firm Models:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS				Logit			
Ind Distraction	0.005** (0.013)	0.005** (0.012)			0.065 (0.181)	0.077 (0.140)		
# Distraction			0.003*** (0.004)	0.002*** (0.010)			0.043* (0.079)	0.056** (0.036)
Ln(Assets) <sub>t-1</sub>	-0.002*** (0.000)	-0.002*** (0.001)	-0.002*** (0.000)	-0.002*** (0.001)	-0.015* (0.054)	0.024** (0.027)	-0.015* (0.057)	0.022** (0.033)
Growth(Assets) <sub>t-1</sub>	-0.000*** (0.000)	-0.000*** (0.002)	-0.000*** (0.000)	-0.000*** (0.002)	-0.000 (0.345)	-0.000 (0.580)	-0.000 (0.345)	-0.000 (0.544)
ROA <sub>t-1</sub>	-0.000 (0.208)	-0.000 (0.175)	-0.000 (0.209)	-0.000 (0.176)	-0.000 (0.346)	-0.000* (0.074)	-0.000 (0.347)	-0.000* (0.042)
OCF <sub>t-1</sub>	-0.000 (0.153)	-0.000 (0.108)	-0.000 (0.154)	-0.000 (0.109)	-0.000 (0.189)	-0.000* (0.088)	-0.000 (0.190)	-0.000* (0.045)
Cash <sub>t-1</sub>	-0.021*** (0.000)	-0.019*** (0.000)	-0.021*** (0.000)	-0.019*** (0.000)	-0.161** (0.028)	-0.159** (0.035)	-0.161** (0.028)	-0.166** (0.028)
Ln(# Clients) <sub>t-1</sub>	-0.007*** (0.000)	-0.007*** (0.000)	-0.007*** (0.000)	-0.007*** (0.000)	-0.135*** (0.000)	-0.203*** (0.005)	-0.140*** (0.000)	-0.214*** (0.002)
Big 4 <sub>t-1</sub>	-0.051*** (0.000)	-0.052*** (0.000)	-0.051*** (0.000)	-0.051*** (0.000)	-0.749*** (0.000)		-0.748*** (0.000)	
Importance <sub>t-1</sub>	0.017** (0.013)	0.017** (0.015)	0.017** (0.018)	0.017** (0.018)	0.024 (0.913)	-0.593** (0.040)	0.011 (0.960)	-0.590** (0.036)
Non-Audit Fee <sub>t-1</sub>	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.152*** (0.000)	-0.137*** (0.000)	-0.151*** (0.000)	-0.112*** (0.000)
Audit Competition <sub>t-1</sub>	0.003* (0.059)	0.003* (0.055)	0.003* (0.054)	0.003* (0.051)	0.047 (0.174)	-0.149 (0.108)	0.048 (0.165)	-0.137 (0.121)
Expert <sub>t-1</sub>	-0.002 (0.281)	-0.002 (0.217)	-0.002 (0.285)	-0.002 (0.219)	-0.084** (0.050)	0.128 (0.121)	-0.085** (0.048)	0.129* (0.098)
Short Firm Tenure <sub>t-1</sub>	0.250*** (0.250***)	0.252*** (0.252***)	0.250*** (0.250***)	0.251*** (0.251***)	5.128*** (5.128***)	4.250*** (4.250***)	5.124*** (5.124***)	3.778*** (3.778***)

	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
# Bus Seg <sub>t-1</sub>	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.042*** (0.000)	0.040*** (0.000)	0.042*** (0.000)	0.037*** (0.000)
IC Weak <sub>t-1</sub>	0.055*** (0.000)	0.057*** (0.000)	0.055*** (0.000)	0.057*** (0.000)	0.868*** (0.000)	0.926*** (0.000)	0.867*** (0.000)	0.886*** (0.000)
Observations	87,169	87,169	87,169	87,169	84,290	82,905	84,290	82,905
Industry*Year FE	Y		Y		Y		Y	
Audit office & Year FE		Y		Y		Y		Y
MSA FE	Y	Y	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.210	0.236	0.210	0.236		0.371	0.204	0.371
Pseudo R-squared								0.197

**Table 5 Accounting and Auditing Enforcement Releases (AAERs)**

This table reports results from a multivariate regression analysis of AAERs with alleged financial misstatements for fiscal years 2000 to 2018. The panel data include firm-year observations. Models 1-4 tabulate OLS regressions and Models 5-6 tabulate Logit regressions. AAER is a dummy variable of one if the SEC issued an AAER for alleged financial misstatements in the firm's annual financial statements for the fiscal year. *Ind Distraction* is a dummy variable of one if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. # *Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

Dep Var: AAER Models:	(1)	(2)	(3) OLS	(4)	(5)	(6)	(7)	(8)
Ind Distraction	0.002*	0.002**			0.239*	0.206*		
	(0.062)	(0.032)			(0.055)	(0.073)		
# Distraction			0.002**	0.001***			0.142***	0.091**
			(0.011)	(0.008)			(0.001)	(0.038)
Ln(Assets) <sub>t-1</sub>	0.001***	0.001***	0.001***	0.001***	0.233***	0.199***	0.237***	0.198***
	(0.001)	(0.004)	(0.001)	(0.003)	(0.000)	(0.000)	(0.000)	(0.000)
Growth(Assets) <sub>t-1</sub>	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000	0.000
	(0.381)	(0.385)	(0.385)	(0.381)	(0.214)	(0.768)	(0.226)	(0.778)
ROA <sub>t-1</sub>	0.000	0.000	0.000	0.000	0.001	0.004	0.001	0.004
	(0.417)	(0.518)	(0.417)	(0.515)	(0.357)	(0.140)	(0.365)	(0.145)
OCF <sub>t-1</sub>	0.000	0.000	0.000	0.000	-0.000	0.000***	-0.000	0.000***
	(0.783)	(0.422)	(0.753)	(0.428)	(0.858)	(0.004)	(0.869)	(0.005)
Cash <sub>t-1</sub>	-0.001	0.001	-0.001	0.001	-0.276	0.061	-0.285	0.058
	(0.778)	(0.534)	(0.755)	(0.532)	(0.528)	(0.878)	(0.515)	(0.884)
Big 4 <sub>t-1</sub>	-0.004**		-0.004**		-0.557**		-0.557**	
	(0.024)		(0.023)		(0.018)		(0.019)	
Ln(# Clients) <sub>t-1</sub>	-0.000	0.004**	-0.000	0.004**	-0.032	0.509*	-0.064	0.511*
	(0.982)	(0.011)	(0.747)	(0.014)	(0.819)	(0.066)	(0.655)	(0.066)

Importance <sub>t-1</sub>	-0.001 (0.767)	0.004 (0.291)	-0.002 (0.578)	0.004 (0.312)	-0.035 (0.946)	0.939 (0.240)	-0.140 (0.789)	0.919 (0.253)
Non-Audit Fee <sub>t-1</sub>	0.002*** (0.005)	0.002** (0.019)	0.002*** (0.006)	0.002** (0.019)	0.023* (0.063)	0.015 (0.214)	0.022* (0.075)	0.014 (0.225)
Audit Competition <sub>t-1</sub>	0.000 (0.933)	-0.001 (0.687)	0.000 (0.891)	-0.001 (0.715)	0.065 (0.689)	-0.277 (0.338)	0.073 (0.653)	-0.267 (0.357)
Expert <sub>t-1</sub>	0.001 (0.348)	0.002 (0.407)	0.001 (0.349)	0.002 (0.340)	0.265 (0.145)	0.228 (0.270)	0.263 (0.146)	0.253 (0.229)
Short Firm Tenure <sub>t-1</sub>	0.001 (0.268)	0.000 (0.987)	0.001 (0.255)	0.000 (0.962)	0.155 (0.285)	0.001 (0.995)	0.154 (0.288)	-0.001 (0.997)
# Bus Seg <sub>t-1</sub>	0.001 (0.101)	0.001 (0.108)	0.001* (0.100)	0.001 (0.107)	0.064* (0.073)	0.074* (0.058)	0.065* (0.069)	0.076* (0.051)
IC Weak <sub>t-1</sub>	0.004* (0.073)	0.004* (0.084)	0.004* (0.072)	0.004* (0.084)	0.517** (0.035)	0.410* (0.098)	0.517** (0.035)	0.414* (0.093)
Observations	76,392	76,392	76,392	76,392	32,976	30,424	32,976	30,424
Industry*Year FE	Y		Y		Y		Y	
Audit office & Year FE		Y		Y		Y		Y
MSA FE	Y	Y	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.018	0.038	0.018	0.038				
Pseudo R-squared					0.114	0.133	0.115	0.133

**Table 6 Shareholder Class Action Lawsuits**

This table reports results from a multivariate regression analysis of class action lawsuits for fiscal years 2000 to 2021. The panel data include firm-year observations. The dependent variable is a dummy variable of one if the overlap between the firm's fiscal year and shareholder class action lawsuit periods (defined by class action lawsuit start dates and end dates) is at least one quarter. *Ind Distraction* is a dummy variable of one if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

Dep Var: Lawsuit Models:	(1)	(2)	(3) OLS	(4)	(5)	(6)	(7)	(8)
Ind Distraction	0.005** (0.010)	0.005*** (0.008)			0.120** (0.036)	0.136** (0.011)		
# Distraction			0.003*** (0.003)	0.004*** (0.003)			0.076*** (0.005)	0.085*** (0.001)
Ln(Assets) <sub>t-1</sub>	0.007*** (0.000)	0.006*** (0.000)	0.007*** (0.000)	0.006*** (0.000)	0.331*** (0.000)	0.264*** (0.000)	0.341*** (0.000)	0.264*** (0.000)
Growth(Assets) <sub>t-1</sub>	-0.000 (0.123)	-0.000 (0.160)	-0.000 (0.126)	-0.000 (0.160)	-0.000* (0.087)	-0.000 (0.182)	-0.000* (0.089)	-0.000 (0.179)
ROA <sub>t-1</sub>	0.000 (0.655)	-0.000 (0.906)	0.000 (0.647)	-0.000 (0.910)	0.000 (0.161)	0.000 (0.362)	0.000 (0.173)	0.000 (0.358)
OCF <sub>t-1</sub>	0.000 (0.921)	0.000 (0.921)	0.000 (0.898)	0.000 (0.922)	-0.000 (0.761)	-0.000 (0.851)	-0.000 (0.766)	-0.000 (0.848)
Cash <sub>t-1</sub>	0.023*** (0.000)	0.041*** (0.000)	0.023*** (0.000)	0.041*** (0.000)	1.133*** (0.000)	1.589*** (0.000)	1.128*** (0.000)	1.590*** (0.000)
Big 4 <sub>t-1</sub>	-0.005** (0.042)		-0.005** (0.043)		-0.145 (0.180)		-0.147 (0.177)	
Ln(# Clients) <sub>t-1</sub>	0.004*** (0.003)	0.004 (0.188)	0.003*** (0.010)	0.004 (0.221)	0.153*** (0.003)	0.200* (0.058)	0.138*** (0.009)	0.188* (0.074)

Importance <sub>t-1</sub>	0.026*** (0.000)	0.031*** (0.000)	0.025*** (0.000)	0.030*** (0.000)	0.979*** (0.000)	1.481*** (0.000)	0.941*** (0.000)	1.458*** (0.000)
Non-Audit Fee <sub>t-1</sub>	0.004*** (0.000)	0.004*** (0.000)	0.004*** (0.000)	0.004*** (0.000)	0.026*** (0.001)	0.013 (0.217)	0.013 (0.135)	0.013 (0.221)
Audit Competition <sub>t-1</sub>	0.002 (0.153)	0.001 (0.717)	0.002 (0.135)	0.001 (0.675)	0.112 (0.125)	0.007 (0.947)	0.118 (0.111)	0.015 (0.894)
Expert <sub>t-1</sub>	0.001 (0.823)	0.006* (0.081)	0.001 (0.829)	0.007* (0.056)	-0.000 (0.995)	0.159 (0.112)	-0.002 (0.976)	0.181* (0.070)
Short Firm Tenure <sub>t-1</sub>	0.004** (0.013)	0.004** (0.022)	0.004** (0.012)	0.004** (0.020)	0.187*** (0.003)	0.138** (0.023)	0.187*** (0.004)	0.139** (0.022)
# Bus Seg <sub>t-1</sub>	-0.000 (0.576)	-0.001* (0.064)	-0.000 (0.582)	-0.001* (0.065)	-0.003 (0.883)	-0.030 (0.114)	-0.004 (0.853)	-0.030 (0.117)
IC Weak <sub>t-1</sub>	0.024*** (0.000)	0.023*** (0.000)	0.024*** (0.000)	0.023*** (0.000)	0.741*** (0.000)	0.586*** (0.000)	0.740*** (0.000)	0.586*** (0.000)
Observations	87,172	87,172	87,172	87,172	68,291	62,115	68,291	62,115
Industry*Year FE	Y		Y		Y		Y	
Audit office & Year FE		Y		Y		Y		Y
MSA FE	Y	Y	Y	Y	Y	Y	Y	Y
Adjusted R-squared	0.030	0.028	0.030	0.028				
Pseudo R-squared					0.112	0.0572	0.117	0.0578

**Table 7 Market Reaction to Auditor Distraction**

This table reports results from a multivariate regression analysis of market reaction to auditor distraction for fiscal years 2000-2021. Data are structured by firm and date observations, where firms are firms that use the same audit office as an acquiring firm, and dates are acquisition announcement dates. % CAR [-5,+5] is the cumulative abnormal return (%) for an event window of (-5, 5) around the announcement date of an M&A for another client of the same audit office. *Distracted* is a dummy variable of one if the M&A announced by another firm that shares the same audit office with the focal firm is indeed distracting. *FYEnd Upcoming* is a dummy variable of one if there are no more than 30 days before the upcoming fiscal year end of the firm when another firm (that shares the same audit office) announces an acquisition, and zero if it is within 30 days after the firm has passed a fiscal year end when another firm announces an acquisition. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

Dep Var: % CAR [-5,+5]	(1)	(2)	(3)	(4)
Distracted	-0.591** (0.013)	-0.555** (0.018)		
FYEnd Upcoming			-1.650*** (0.000)	-1.597*** (0.000)
Ln(Assets) <sub>t-1</sub>	-0.140** (0.018)	-0.101* (0.084)	-0.272 (0.117)	-0.151 (0.361)
Growth(Assets) <sub>t-1</sub>	0.003 (0.445)	0.001 (0.793)	-0.067 (0.619)	-0.029 (0.310)
ROA <sub>t-1</sub>	-0.019 (0.797)	-0.008 (0.910)	-0.141 (0.728)	0.012 (0.972)
OCF <sub>t-1</sub>	0.009 (0.142)	0.009 (0.154)	-0.197 (0.518)	-0.148 (0.593)
Cash <sub>t-1</sub>	-1.768*** (0.002)	-1.881*** (0.001)	-3.595** (0.021)	-3.609** (0.015)
# Bus Seg <sub>t-1</sub>	0.027 (0.409)	0.034 (0.275)	0.064 (0.506)	0.064 (0.432)
Stock Runup <sub>t-1</sub>	-0.039*** (0.000)	-0.038*** (0.000)	-0.050*** (0.000)	-0.049*** (0.000)
Big 4 <sub>t-1</sub>	0.500 (0.188)		-0.543 (0.666)	
Ln(# Clients) <sub>t-1</sub>	0.207 (0.175)	-0.308 (0.352)	1.103** (0.030)	2.374*** (0.009)
Importance <sub>t-1</sub>	3.358* (0.097)	2.191 (0.216)	11.264** (0.029)	11.503** (0.016)
Non-Audit Fees <sub>t-1</sub>	-0.030 (0.218)	-0.024 (0.322)	-0.001 (0.978)	-0.015 (0.758)
Audit Competition <sub>t-1</sub>	-0.183 (0.605)	0.693 (0.166)	-1.267 (0.337)	0.943 (0.363)

Expert <sub>t-1</sub>	-0.283*	-0.499**	-0.779	-1.363**
	(0.095)	(0.040)	(0.119)	(0.038)
Short Firm Tenure <sub>t-1</sub>	-0.457**	-0.358*	-0.999	-0.818
	(0.025)	(0.072)	(0.132)	(0.173)
IC Weak <sub>t-1</sub>	0.288	0.546*	0.985	0.820
	(0.365)	(0.081)	(0.216)	(0.295)
Observations	38,330	38,330	6,540	6,540
Industry*Year FE	Y		Y	
Audit office & Year FE		Y		Y
MSA FE	Y	Y	Y	Y
Adjusted R-squared	0.023	0.035	-0.018	0.064

## Appendix A. Variable Definitions

Variable	Definition
<i>Audit office Characteristics</i>	
# Clients	The number of clients audited by an audit office in a fiscal year. Source: Audit Analytics
Audit Competition	
	Audit competition in the audit office's MSA in year t, calculated as the inverse of the Herfindahl index following Newton, Wang, and Wilkins (2013). Source: Audit Analytics
Expert	A dummy variable of one if the audit office receives more than 30% of all audit fees for the local MSA in a fiscal year. Source: Audit Analytics
<i>Audit Firm Characteristics</i>	
Big 4	A dummy variable of one if the audit firm is a Big 4 auditor. Source: Audit Analytics
<i>Distraction Event Characteristics</i>	
Distracted	A dummy variable of one if the M&A announced by another firm that shares the same audit office as the focal firm satisfies one of the following: [1] the acquiring client pays an audit fee that is more than 5% of the total audit fee received by the audit office in the fiscal year or [2] the relative deal size of the M&A is at least 10%.
% CAR [-5, +5]	Cumulative abnormal returns (%) for the event window of [-5, +5] of an event date calculated using the market model benchmark method. The event date is the announcement date of an M&A by another firm that shares the same audit office as the focal firm. Benchmark parameters are estimated using the value-weighted CRSP index as a proxy for market returns over days (-210,-11). Source: Compustat.
Stock Runup	Buy-and-hold return (%) of a client's stock from day -120 to -10 of an event date. The event date is the announcement date of an M&A by another firm that shares the same audit office as the focal firm. Source: CRSP.
<i>Firm Characteristics</i>	
Ind Distraction	A dummy variable of one if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2.
# Distraction	The number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2.

FYEnd Upcoming	A dummy variable of one if there are no more than 30 days before the fiscal year end of the firm when another firm (that shares the same audit office) announces an acquisition, and zero if more than 30 days after the firm's fiscal year end when another firm's acquisition is announced. Source: Compustat
New Aud Office	A dummy variable of one if a firm changes its audit office. Source: Audit Analytics
New Aud Firm	A dummy variable of one if a firm changes its audit firm. Source: Audit Analytics
AAER	A dummy variable of one if the SEC issued an AAER for alleged financial misstatements in the firm's annual financial statements for the fiscal year. Source: Dechow, Ge, Larson, and Sloan (2011)
Big R Misstate	A dummy variable of one if the client has a Big R misstatement in a year subsequently identified through a restatement. Misstatements are classified as Big R misstatements if the firm files an Item 4.02 8-K filing related to the misstatement. Source: Audit Analytics
Lawsuit	A dummy variable of one if the overlap between the firm's fiscal year and shareholder class action lawsuit periods (defined by class action lawsuit start dates and end dates) is at least one quarter, where the lawsuit is associated with violation of Securities Exchange Act 1934 Section 11b. Source: Stanford Law School Securities Class Action Clearinghouse
Short Firm Tenure	A dummy variable of one if an audit firm's tenure is 3 years or less.
Audit Fee	A firm's audit fees in million dollars in a fiscal year. Source: Audit Analytics.
Non-Audit Fee	A firm's non-audit fees in million dollars in a fiscal year. Source: Audit Analytics.
Importance	The ratio of a firm's audit fees relative to the total fees received by the audit office in a fiscal year. Source: Audit Analytics.
IC Weak	A dummy variable of one if the firm has an internal control weakness in a year. Missing values are recoded as 0. Source: Audit Analytics.
Assets	A firm's total assets at the end of a fiscal year: item6. Source: Compustat.
Growth(Assets)	Growth rate in total assets from prior year to current year.
ROA	A firm's operating income before depreciation during a fiscal year, divided by beginning-year total assets: item13 / lag(item6). Source: Compustat.
OCF	A firm's annual cash flow from operations during a fiscal year, divided by beginning-year total assets: Item308 / lag(item6). Source: Compustat.

Cash	A firm's cash during a fiscal year divided by total assets: item162 / item6. Source: Compustat.
# Bus Seg	The number of business segments. Missing values are recoded as 1. Source: Compustat.

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## **Appendix B. Cases in Which a Big 4 Audit Firm Has More Than One Office in One City**

PWC (from <https://www.pwc.com/us/en/about-us/pwc-office-locations.html#/>)  
Los Angeles, California: 601 South Figueroa Street; 2141 Rosecrans Avenue  
Tampa, Florida: 4050 West Boy Scout Boulevard; 4040 West Boy Scout Boulevard --  
10th Floor; 4040 West Boy Scout Boulevard  
Chicago, Illinois: One North Wacker; 330 North Wabash Avenue

Ernst & Young (from [https://www.ey.com/en\\_au/locations/united-states](https://www.ey.com/en_au/locations/united-states))  
Los Angeles, California: 725 South Figueroa Street; 725 South Figueroa Street  
Palo Alto, California: 550 High Street; 260 Homer Street  
San Jose, California: 303 Almaden Boulevard; 303 S Almaden Blvd  
Washington, DC: 1101 New York Avenue; 4th Floor; 1101 New York Avenue  
Jacksonville, Florida: 12926 Gran Bay Parkway West; 12740 Gran Bay Parkway West  
Boston, Massachusetts: 200 Clarendon Street; 50 Rowes Wharf  
New York, NY: 395 9th Ave; 841 Broadway; 218 West 18th street  
Dallas, Texas: 401 Congress; 2323 Victory Avenue; 1201 Elm Street  
San Antonio, Texas: 111 W Houston Street; 12707 Silicon Drive

Deloitte (from <https://www2.deloitte.com/us/en/footerlinks/office-locator.html>)  
Denver, CO: 1455 16th Street; 1601 Wewatta Street  
Baltimore, MD: 500 East Pratt St.; 7111 Security Boulevard  
New York, NY: New York - National Office; 330 Hudson Street; 1221 Avenue of the Americas  
Austin, TX: 500 West 2nd Street; 7601 Southwest Parkway; 1009 South Congress Avenue  
San Antonio, TX: 14100 San Pedro Avenue; 310 S St.Mary's Street  
Dallas, TX: 717 N. Harwood Street; 2200 Ross Avenue  
Seattle, WA: 1015 2nd Ave; 821 Second Avenue; 1299 Pennsylvania Avenue

KPMG (from <https://kpmg.com/us/en/home/about/offices.html>)  
Atlanta, Georgia: 303 Peachtree Street, NE; 1201 West Peachtree Street; 3625  
Cumberland Blvd  
Denver, CO: 1225, 17th Street; 1001 17th Street  
Knoxville, TN: 2030 Falling Waters Rd; 800 South Gay Street  
New York, NY: 1350 Avenue of the Americas; 345 Park Avenue; 345 Park Avenue  
Orlando, FL: 420 South Orange Ave; 6820 Marwick Lane

## Online Appendix

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## Section OA.1 Engagement partners

**Table OA.1.1 Distraction of engagement partners**

This table presents OLS models that test the distraction of engagement partners. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2016 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same engagement partner as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.008 (0.763)		0.006 (0.333)		0.017* (0.097)	
# Distraction		0.016 (0.510)		-0.002 (0.441)		0.014* (0.081)
Observations	17,761	17,761	17,760	17,760	17,760	17,760
Adjusted R-squared	0.810	0.810	0.137	0.137	0.192	0.192

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.003* (0.064)		0.003 (0.424)	
# Distraction		0.003* (0.077)		0.011 (0.254)
Observations	8,895	8,895	17,761	17,761
Adjusted R-squared	0.078	0.078	0.041	0.041

**Panel C Market reaction**

	Model 1
Dependent variable:	% CAR [-5,+5]
Distracted	4.416 (0.303)
Observations	254
Adjusted R-squared	0.015

**Table OA.1.2 Distraction of engagement partners – all M&As**

This table presents OLS models that test the distraction of engagement partners. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B reports the firm-level consequences of having distracted engagement partners. Panel A and Panel B use the same sample, which includes firm-year observations. The sample includes firm-year observations from 2016 to 2021. *Ind Distraction* is an indicator equal to 1 if the engagement partner of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&As announced by other firms that share the same engagement partner as the focal firm in a fiscal year. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.012 (0.610)		0.009 (0.282)		0.025** (0.032)	
# Distraction		0.015 (0.541)		0.009 (0.231)		0.020** (0.028)
Observations	17,761	17,761	17,760	17,760	17,760	17,760
Adjusted R-squared	0.810	0.810	0.137	0.137	0.192	0.192

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.003* (0.054)		0.007 (0.321)	
# Distraction		0.003* (0.066)		0.013 (0.206)
Observations	8,895	8,895	17,761	17,761
Adjusted R-squared	0.078	0.078	0.041	0.041

## Section OA.2 Sharing audit work with another audit firm or audit office

**Table OA.2.1 Sharing audit work with another audit firm**

This table presents OLS models of distraction effects in a subsample in which there is another accounting firm that either participated in the signing audit firm's audit without sharing audit responsibility or shared audit responsibility with the signing audit firm. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B reports the firm-level consequences of having distracted audit offices. Panel A and Panel B use the same sample, which includes firm-year observations. The sample includes firm-year observations from 2016 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	0.011 (0.813)		0.007 (0.412)		0.020 (0.256)	
# Distraction		0.014 (0.749)		0.007 (0.412)		0.017 (0.276)
Observations	3,714	3,714	3,714	3,714	3,714	3,714
Adjusted R-squared	0.829	0.829	0.107	0.107	0.172	0.172

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.000 (0.486)		-0.022 (0.272)	
# Distraction		0.000 (0.486)		-0.021 (0.269)
Observations	1,477	1,477	3,714	3,714
Adjusted R-squared	0.002	0.002	0.041	0.041

**Table OA.2.2 Not sharing audit work with another audit firm**

This table presents OLS models of distraction effects that exclude observations in which another accounting firm either participated in the signing audit firm's audit without sharing audit responsibility or shared audit responsibility with the signing audit firm. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2016 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	0.012 (0.687)		-0.008 (0.205)		0.012 (0.136)	
# Distraction		0.036 (0.202)		-0.002 (0.292)		0.011 (0.111)
Observations	14,047	14,047	14,046	14,046	14,046	14,046
Adjusted R-squared	0.806	0.806	0.143	0.143	0.193	0.193

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.003* (0.084)		0.005 (0.261)	
# Distraction		0.003* (0.092)		0.013 (0.059)
Observations	7,418	7,418	14,047	14,047
Adjusted R-squared	0.080	0.080	0.046	0.046

**Panel C Market reaction**

	Model 1
Dependent variable:	% CAR [-5,+5]
Distracted	7.829 (0.174)
Observations	210
Adjusted R-squared	0.128

**Table OA.2.3 Another Office in the Client's MSA**

This table presents OLS models of distraction effects in a subsample in which the audit firm has another audit office (other than the signing office) located in the client firm's MSA. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2000 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office with the focal firm in a fiscal year. *Distracted* is an indicator equal to one if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. *FYEnd Upcoming* is an indicator equal to 1 if there are no more than 30 days before fiscal year end of the firm when another firm (that shares the same audit office) announces an acquisition, and 0 if the firm's fiscal year ended within 30 days after another firm's acquisition was announced. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.032*** (0.000)		0.021** (0.015)		0.003 (0.570)	
# Distraction		-0.018*** (0.000)		0.004 (0.159)		0.003 (0.249)
Observations	9,127	9,127	9,125	9,125	9,125	9,125
Adjusted R-squared	0.808	0.808	0.082	0.081	0.151	0.151

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.006* (0.067)		-0.007 (0.217)	
# Distraction		0.002 (0.173)		0.001 (0.818)
Observations	8,146	8,146	9,127	9,127
Adjusted R-squared	0.002	0.002	0.003	0.003

**Panel C Market reaction**

	Model 1
Dependent variable:	% CAR [-5,+5]
Distracted	-0.371 (0.849)
FYEnd Upcoming	
Observations	6,664
Adjusted R-squared	0.012

**Table OA.2.4 No Other Office in the Client's MSA**

This table presents OLS models of distraction effects in a subsample in which the audit firm does not have another audit office (other than the signing office) located in the client firm's MSA. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2000 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. *FYEnd Upcoming* is an indicator equal to 1 if there are no more than 30 days before the upcoming fiscal year end of the firm when another firm (that shares the same audit office) announces an acquisition, and 0 if the firm's fiscal year ended within 30 days after another firm's acquisition was announced. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.017*** (0.000)		0.007*** (0.010)		0.004** (0.048)	
# Distraction		-0.018*** (0.000)		0.004*** (0.010)		0.002** (0.028)
Observations	63,746	63,746	63,745	63,745	63,745	63,745
Adjusted R-squared	0.776	0.777	0.163	0.163	0.206	0.206

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.002 (0.166)		0.007*** (0.000)	
# Distraction		0.002** (0.017)		0.005*** (0.000)
Observations	55,861	55,861	63,746	63,746
Adjusted R-squared	0.019	0.019	0.032	0.032

**Panel C Market reaction**

	Model 1
Dependent variable:	% CAR [-5,+5]
Distracted	-0.610*** (0.009)
FYEnd Upcoming	
Observations	31,464
Adjusted R-squared	0.022

### Section OA.3 Misclassification of audit offices

**Table OA.3.1 Big 4 audit firms with more than one office in one city**

This table presents OLS models of distraction effects in a subsample of observations that have a Big 4 audit firm with more than one office in one city. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2000 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. *FYEnd Upcoming* is an indicator equal to 1 if there are no more than 30 days before the upcoming fiscal year end of the firm when another firm (that shares the same audit office) announces an acquisition, and 0 if the firm's fiscal year ended within 30 days after another firm's acquisition was announced. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.025** (0.020)		0.018*** (0.009)		0.015*** (0.003)	
# Distraction		-0.009** (0.047)		0.010*** (0.005)		0.007*** (0.004)
Observations	8,226	8,226	8,225	8,225	8,225	8,225
Adjusted R-squared	0.832	0.832	0.110	0.110	0.165	0.165

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.003* (0.097)		0.005 (0.300)	
# Distraction		0.002 (0.125)		0.002 (0.523)
Observations	7,225	7,225	8,226	8,226
Adjusted R-squared	0.004	0.004	0.034	0.034

**Panel C Market reaction**

	Model 1	Model 2
Dependent variable:	% CAR [-5,+5]	
Distracted	0.400 (0.432)	
FYEnd Upcoming		-1.212 (0.224)
Observations	8,736	1,444
Adjusted R-squared	0.028	0.040

**Table OA.3.2 Excluding Big 4 audit firms with more than one office in one city**

This table presents OLS models of distraction effects in a subsample that excludes observations that have a Big 4 audit firm with more than one office in one city. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2000 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. *FYEnd Upcoming* is an indicator equal to 1 if there are no more than 30 days before the upcoming fiscal year end of the firm when another firm (that shares the same audit office) announces an acquisition, and 0 if the firm's fiscal year ended within 30 days after another firm's acquisition was announced. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.021*** (0.000)		0.006** (0.025)		0.003* (0.055)	
# Distraction		-0.023*** (0.000)		0.002 (0.171)		0.002** (0.043)
Observations	64,647	64,647	64,645	64,645	64,645	64,645
Adjusted R-squared	0.776	0.776	0.155	0.155	0.203	0.203

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.002* (0.087)		0.006*** (0.004)	
# Distraction		0.002** (0.020)		0.005*** (0.001)
Observations	56,782	56,782	64,647	64,647
Adjusted R-squared	0.018	0.018	0.030	0.030

**Panel C Market reaction**

	Model 1	Model 2
Dependent variable:	% CAR [-5,+5]	
Distracted	-0.945*** (0.001)	
FYEnd Upcoming		-1.889*** (0.001)
Observations	29,392	5,055
Adjusted R-squared	0.019	0.021

## Section OA.4 Decomposition of distraction variables

### Table OA.4.1 Distracting M&A defined by audit fee

This table presents OLS models of the distraction effects of M&As in which the acquiring client pays an audit fee that is more than 5% of the total audit fee received by the audit office in the fiscal year. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2000 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&As announced by other firms that share the same audit office as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. An M&A is considered to be distracting if the acquiring client pays an audit fee that is more than 5% of the total audit fee received by the audit office in the fiscal year. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

### Panel A Distraction validation

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.012*** (0.001)		0.010*** (0.001)		0.005** (0.012)	
# Distraction		-0.012*** (0.000)		0.006*** (0.005)		0.003** (0.035)
Observations	72,873	72,873	72,870	72,870	72,870	72,870
Adjusted R-squared	0.777	0.777	0.150	0.150	0.201	0.201

### Panel B Firm-level consequences

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.000 (0.419)		0.006*** (0.006)	
# Distraction		0.001 (0.184)		0.005*** (0.004)
Observations	64,007	64,007	72,873	72,873
Adjusted R-squared	0.017	0.017	0.031	0.031

### Panel C Market reaction

	Model 1
Dependent variable:	% CAR [-5,+5]
Distracted	-0.069 (0.340)
Observations	38,128
Adjusted R-squared	0.023

**Table OA.4.2 Distracting M&A defined by relative deal size**

This table presents OLS models of the distraction effects of M&As with a relative deal size of at least 0.1. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B presents the firm-level consequences of having distracted engagement partners. Panel C reports market reaction to the distraction of engagement partners. The sample in Panel A and Panel B is structured by firm and year observations, where firms are other client firms of the audit office of an acquiring firm. Panel C uses the same sample, but is at the firm-date level, where date is the acquisition announcement dates. The samples are from 2000 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. *Distracted* is an indicator equal to 1 if the M&A announced by another firm that shares the same audit office as the focal firm is distracting. An M&A is considered to be distracting if the relative deal size of the M&A is at least 0.1. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.028*** (0.000)		0.007** (0.011)		0.006*** (0.007)	
# Distraction		-0.027*** (0.000)		0.003* (0.064)		0.003** (0.018)
Observations	72,873	72,873	72,870	72,870	72,870	72,870
Adjusted R-squared	0.777	0.777	0.150	0.150	0.201	0.201

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.002* (0.091)		0.005** (0.021)	
# Distraction		0.002** (0.011)		0.004** (0.015)
Observations	64,007	64,007	72,873	72,873
Adjusted R-squared	0.017	0.017	0.031	0.031

**Panel C Market reaction**

	Model 1
Dependent variable:	% CAR [-5,+5]
Distracted	-0.046 (0.379)
Observations	38,128
Adjusted R-squared	0.023

## Section OA.5 Distraction strength and M&A selection

**Table OA.5.1 All M&As considered to be distracting**

This table presents OLS models of the distraction effects of all M&As. Panel A reports the results of an analysis that attempts to validate distraction as an exogenous shock. Panel B reports the firm-level consequences of having distracted audit offices. Panel A and Panel B use the same sample, which includes firm-year observations. The sample is from 2000 to 2021. *Ind Distraction* is an indicator equal to 1 if the audit office of the focal firm audited another client that announced an M&A in the same fiscal year. *# Distraction* is the number of M&As announced by other firms that share the same audit office as the focal firm in a fiscal year. All models include control variables and interacted industry and year fixed effects. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

**Panel A Distraction validation**

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent variable:	Ln(1+Audit Fee)		New Aud Office		New Aud Firm	
Ind Distraction	-0.015*** (0.000)		0.009*** (0.001)		0.005*** (0.005)	
# Distraction		-0.018*** (0.000)		0.002* (0.067)		0.002** (0.022)
Observations	72,873	72,873	72,870	72,870	72,870	72,870
Adjusted R-squared	0.777	0.777	0.150	0.150	0.201	0.201

**Panel B Firm-level consequences**

	Model 1	Model 2	Model 3	Model 4
Dependent variable:	AAER		Lawsuit	
Ind Distraction	0.001 (0.239)		0.006*** (0.002)	
# Distraction		0.002*** (0.004)		0.004*** (0.001)
Observations	64,007	64,007	72,873	72,873
Adjusted R-squared	0.017	0.017	0.031	0.032

## Section OA.6 Disentangling variations in client firms, audit firms, and audit offices

### Table OA.6.1 Hierarchical models

This table presents changes in model explanatory powers when regressors at the client firm level, regressors at the audit firm level, and regressors at the audit office level are added sequentially. Model 1 includes regressors at the client firm level, which include distraction variables as well as controls at the client firm level (namely,  $\ln(\text{Assets})_{t-1}$ ,  $\text{Growth}(\text{Assets})_{t-1}$ ,  $\text{ROA}_{t-1}$ ,  $\text{OCF}_{t-1}$ ,  $\text{Cash}_{t-1}$ ,  $\text{IC Weak}_{t-1}$ , # Bus Seg, Non-Audit Fee, Importance, Short Firm Tenure; Panel A also includes Stock Runup). Model 2 includes regressors in Model 1 as well as regressors at the audit firm level (namely, Big 4). Model 3 includes regressors in Model 2 as well as regressors at the audit office level (namely, # Clients, Audit Competition, and Expert). Panels A, B, and C are based on models of % CAR [-5,+5],  $\ln(1+\text{Audit Fee})$ , and Lawsuit, respectively. The key independent variable of Panel A is *Distracted*, and the key independent variables of Panel B and Panel C are both *Ind Distraction*. Hierarchical models using alternative dependent and key independent variables produce similar results and are omitted for brevity. All variable definitions are reported in Appendix A.

Panel A Hierarchical models of % CAR [-5,+5] =  $f(\text{Distracted}, \text{other variables})$

Model	R <sup>2</sup>	F(df)	P-value	R <sup>2</sup> change	F(df) change
1	0.022	12.482(12,38419)	0		
2	0.022	11.637(13,38418)	0.000	0.000	1.308(1,38418)
3	0.022	9.586(16,38111)	0.000	0.000	-3.766(3,38111)

Panel B Hierarchical models of  $\ln(1+\text{Audit Fee}) = f(\text{Ind Distraction}, \text{other variables})$

Model	R <sup>2</sup>	F(df)	P-value	R <sup>2</sup> change	F(df) change
1	0.686	6831.179(11,77891)	0.000		
2	0.69	7390.571(12,77890)	0.000	0.004	966.958(1,77890)
3	0.706	6187.382(15,72857)	0.000	0.017	-2.1e+03(3,72857)

Panel C Hierarchical models of Lawsuit =  $f(\text{Ind Distraction}, \text{other variables})$

Model	R <sup>2</sup>	F(df)	P-value	R <sup>2</sup> change	F(df) change
1	0.016	85.741(11,77891)	0.000		
2	0.016	78.739(12,77890)	0.000	0.000	0.453(1,77890)
3	0.017	60.919(15,72857)	0.000	0.000	-22.941(3,72857)

## Section OA.7 Alternative accounting quality measure

**Table OA.7.1 Big R misstatements**

This table reports results from a logit regression analysis of Big R misstatements for fiscal years 2000 to 2018. The panel data include firm-year observations. *Big R Misstate* is a dummy variable of one if the client has a Big R misstatement in a year subsequently identified through a restatement. *Ind Distraction* is a dummy variable of one if the audit office of the focal firm audited another client that announced a distracting M&A in the same fiscal year. *# Distraction* is the number of distracting M&A events announced by other firms that share the same audit office as the focal firm in a fiscal year. A distracting M&A is defined by audit fee and relative deal size, as detailed in Section 2. All variable definitions are reported in Appendix A. Standard errors are robust to heteroskedasticity and clustered by firm with *p*-values in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% level, respectively.

Dep Var: Big R Misstate	(1)	(2)
Ind Distraction	0.069*	
	(0.080)	
# Distraction		0.033*
		(0.082)
Ln(Assets) <sub>t-1</sub>	0.012	0.012
	(0.482)	(0.476)
Growth(Assets) <sub>t-1</sub>	0.000	0.000
	(0.434)	(0.507)
ROA <sub>t-1</sub>	-0.000	-0.000
	(0.535)	(0.493)
OCF <sub>t-1</sub>	0.000	0.000
	(0.164)	(0.165)
Cash <sub>t-1</sub>	-0.297**	-0.296**
	(0.018)	(0.018)
Ln(# Clients)	0.321***	0.319***
	(0.001)	(0.001)
Importance	0.784**	0.779**
	(0.035)	(0.037)
Non-Audit Fee	-0.028	-0.028
	(0.105)	(0.104)
Audit Competition	-0.121	-0.119
	(0.213)	(0.218)
Expert	0.184**	0.191**
	(0.017)	(0.013)
Short Firm Tenure	0.002	0.001
	(0.974)	(0.978)
# Bus Seg	0.017	0.018
	(0.267)	(0.263)

IC Weak <sub>t-1</sub>	1.309*** (0.000)	1.309*** (0.000)
Observations	65,988	65,988
Audit office & Year FE	Y	Y
MSA FE	Y	Y
Pseudo R-squared	0.122	0.123

# Evaluating Audit Quality: Evidence from Audit Offices' External Distractions\*

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