Mandatory Audit Partner Rotation in Non-Big 4 Audit Firms

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This dissertation examines the impact of mandatory audit partner rotation on audit quality and audit firm dismissals for clients of non-Big 4 audit firms. Prior literature suggests that audit firms lose significant client-specific knowledge following partner rotation, and non-Big 4 audit firms may lack the resources to effectively mitigate this loss. I find that mandatory rotation is negatively associated with audit quality and positively associated with audit firm dismissals for clients of non-Big 4 audit firms. These results are concentrated in larger and more complex clients where the loss of client-specific knowledge is likely greatest. I find no association between mandatory rotation and audit quality or dismissals in a sample of Big 4 clients, suggesting that mandatory audit partner rotation may disproportionately negatively affect smaller audit firms. Finally, I find some evidence that audit partners' prior public client experience and audit partner capacity within the audit office mitigates the negative audit quality outcomes associated with mandatory rotation. My findings should be of interest to researchers and regulators concerned with audit quality and audit market concentration.

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Preface

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1.0 Introduction

This study investigates the impact of mandatory audit partner rotation on the audit quality and client retention of smaller audit firms (i.e., "non-Big 4" firms) in the United States (U.S.). Mandatory audit partner rotation rules in the U.S. require engagement partners serving public clients to be rotated every five years per Section 203 of the Sarbanes-Oxley Act of 2002 (SOX).[1] The goal of requiring mandatory audit partner rotation is to limit the risk of independence violations that can occur if an audit partner becomes too close to a client (U.S. House of Representatives 2002; Bamber and Iyer 2007). Beyond promoting audit partner-client independence, partner rotation may also improve audit quality by providing a "fresh look" at both the client's financial reporting policies and potentially stale audit programs (SEC 2003). However, a significant amount of client-specific knowledge can be lost when an audit partner rotates off the client, which may harm audit quality (Daugherty, Dickins, Hatfield, and Higgs 2012). Thus, it is unclear ex ante whether mandatory rotation will have an overall positive or negative effect on audit quality.

I focus on the effects of mandatory audit partner rotation for non-Big 4 audit firms for three important and interconnected reasons. First, the setting of non-Big 4 audit clients provides the opportunity to examine the effects of mandatory audit partner rotation more precisely than previous studies that primarily examine clients of Big 4 firms. Prior literature demonstrates that

[1] I use the terms "mandatory audit partner rotation," "mandatory partner rotation," and "mandatory rotation" interchangeably within the paper to represent mandatory audit partner rotation after five years on an engagement of a public client. I use "small audit firms" and "non-Big 4 audit firms" interchangeably.

the Big 4 audit firms expend significant resources to facilitate audit partner rotation and mitigate loss of client-specific knowledge, including employing strategies like partner shadowing, in which the incoming partner joins the engagement as an "other partner" prior to their officially rotating on as the lead engagement partner (Dodgson, Agoglia, Bennett, and Cohen 2020). However, these facilitation strategies are costly, and smaller audit firms' relative lack of resources may make it difficult to implement them to the same extent (Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury [ACAP] 2008; Daugherty et al. 2012; Litt, Sharma, Simpson, and Tanyi 2014). By examining mandatory audit partner rotation in the non-Big 4 setting, I can more directly examine the tradeoffs between the loss of client-specific knowledge and fresh look without the moderating effect of partner facilitation strategies.

The second reason I focus on mandatory rotation for non-Big 4 audit firms is because non-Big 4 audit firms are understudied compared to their Big 4 counterparts, despite the fact that they make up an important part of the public company audit market. For example, non-Big 4 auditors audit over 50 percent of all public registrants (McKeon and Plante 2020). While clients of non-Big 4 audit firms tend to be smaller than those of Big 4 firms, ensuring high financial reporting quality for these clients is an important policy objective for regulators (Bills, Cunningham, and Myers 2016a). Research examining non-Big 4 audit firms has increased in recent years and has generally found these firms have taken steps to improve their ability to provide high quality audits, such as joining accounting associations (Bills et al. 2016a; Bills, Hayne, and Stein 2018). Nonetheless, practitioners and researchers have expressed concerns that mandatory audit partner rotation may disproportionately negatively affect non-Big 4 firms' ability to provide high audit quality (ACAP 2008; Daugherty et al. 2012; Litt et al. 2014). Therefore, mandatory partner rotation may harm audit quality for non-Big 4 firms, despite recent research that finds either no

effect or a slight positive effect of mandatory partner rotation for large audit firms in the U.S. (Gipper, Hail, and Leuz 2021a; Laurion, Lawrence, and Ryans 2017).

Third, regulators have expressed concern about high levels of concentration within the U.S. audit market and the dominance of the Big 4 audit firms (ACAP 2008; Harris 2017). Accordingly, regulators have stressed the need to promote the growth of small firms to increase future audit market competition (ACAP 2008). If mandatory rotation leads to lower audit quality, it may also lead to audit firm dismissals, as clients are much more likely to dismiss their auditors following an audit failure (Hennes, Leone, and Miller 2014; Swanquist and Whited 2015). Further, mandatory rotation may result in a poorer working relationship between the client and the incoming partner, which prior literature identifies as an essential component of developing client-specific knowledge (Daugherty et al. 2012). Therefore, mandatory audit partner rotation may lead clients to dismiss their audit firms, either because of a decline in audit quality or a change in the partner-client relationship. This unintended consequence of mandatory rotation could make it more difficult for non-Big 4 audit firms to retain their clients, effectively limiting the firms' ability to eventually grow large enough to compete with the Big 4 firms for clients.[2] Studying the effect of mandatory audit partner rotation on client retention provides important evidence to regulators and researchers interested in factors affecting audit market concentration.

[2] Alternatively, regulators may not want these small audit firms competing for larger and more complex clients if these firms lack the resources to mitigate the loss of client-specific knowledge following mandatory audit partner rotation. For instance, DeFond and Lennox (2011) provide evidence that lower quality audit firms exited the market following the increased audit requirements of SOX. It is possible that mandatory audit partner rotation performs a similar function to prevent lower quality firms from growing too large.

To investigate these issues, I construct a dataset of mandatory audit partner rotations on audit clients of non-Big 4 firms using the Public Company Accounting Oversight Board's (PCAOB) Form AP, Compustat, and Audit Analytics. I calculate mandatory audit partner rotations from disclosures on Form AP. I first identify all audit partner changes on Form APs filed by non-Big 4 auditors for which the audit firm does not change. I remove any partner changes that cannot be mandatory (e.g., those rotations where audit firm tenure is less than five years or where there is more than one rotation within a five-year period disclosed on Form AP), resulting in a set of mandatory audit partner rotations. Using this approach, I capture mandatory partner rotations for the audits of 1,997 companies engaging non-Big 4 firms from 2017 to 2018. In this sample, 15.6 percent of observations represent the first year of a new audit partner's tenure after a mandatory rotation. Following prior literature (DeFond and Zhang 2014), I infer audit quality from the likelihood the client company misstates its annual financial statements.

My results indicate that clients of non-Big 4 auditors are 3.0 percent more likely to misstate their financial statements in the year following mandatory audit partner rotation compared to clients in non-rotation years, which is large compared to the sample misstatement rate of 5.6 percent. These results are consistent with non-Big 4 auditors lacking the resources to overcome the loss of client-specific knowledge associated with audit partner rotation.

Next, I examine the role that client size and complexity plays in audit partner rotation. Engagements with larger or more complex clients require partners to have more client-specific knowledge and likely necessitate more time for new partners to fully understand the client's accounting systems (ACAP 2008; Dodgson et al. 2020; Gipper et al. 2021a). I measure client size with total assets and client complexity with accounting reporting complexity (Hoitash and Hoitash 2018). I split my sample into large (complex) clients based on the median size (complexity) within

each audit firm. Using both measures, I find the positive association between mandatory audit partner rotation and misstatements is concentrated in larger and more complex audit clients of non-Big 4 audit firms. This result is particularly interesting in light of concerns about audit market concentration. If non-Big 4 auditors are less able to maintain high audit quality on their largest and most complex clients because of mandatory rotation, this will hinder their ability to compete for and retain these important client engagements, limiting their ability to grow.

Therefore, my next tests investigate whether mandatory audit partner rotation is associated with audit firm dismissals at clients of non-Big 4 audit firms. In a sample of 3,168 observations from 2017 to 2019, I find clients of non-Big 4 firms are 3.6 percent more likely to dismiss their auditor during the early tenure of a new audit partner following recent mandatory rotation, relative to clients of non-Big 4 firms with audit partners later in their tenure. This is economically significant compared to the mean dismissal rate of 5.6 percent. Further, I find the higher likelihood of audit firm dismissal is concentrated in relatively large and complex clients, consistent with the audit quality results. Combined, these results indicate that mandatory partner rotation harms both small audit firms' audit quality and their ability to retain larger and more complex clients. Again, this has important implications for smaller audit firms' ability to grow and reduce audit market concentration.

In additional analyses, I examine factors that may allow non-Big 4 firms to mitigate the negative outcomes associated with mandatory audit partner rotation. Specifically, I examine whether audit partner industry experience, audit partner recent experience with public clients, and partner capacity within the audit office can help auditors mitigate the loss of client-specific knowledge following mandatory audit partner rotation. I find evidence that each of these factors help mitigate the negative audit quality outcomes following mandatory rotation, and I find some

evidence that auditor dismissals are concentrated in new audit partners that lack industry experience and audit offices with relatively low partner capacity. Finally, I find no evidence mandatory audit partner rotation is associated with audit quality or dismissals for clients of Big 4 auditors, consistent with Big 4 auditors' having the necessary resources to overcome the loss of client-specific knowledge following mandatory rotation (Laurion et al. 2017; Gipper et al. 2021a).

I subject my analyses to a series of controls and robustness tests to rule out potential alternative explanations. To rule out the possibility that my variable for mandatory rotation captures nonlinearities between audit firm tenure and audit quality (e.g., Johnson, Khurana and Reynolds 2002), I follow Gipper et al. (2021a) and include audit firm tenure fixed effects (i.e., indicator variables for each year of audit firm tenure) in my main results. As an additional robustness test, I re-perform my analyses in the sample of observations where audit firm tenure is greater than five years (the number of years I require to rule out non-mandatory rotations). My results are consistent in this subsample. A second possible alternative explanation is that my results are explained by differences among non-Big 4 audit firms that are also correlated with mandatory audit partner rotations. Therefore, I include audit firm fixed effects in my analyses. Including these fixed effects also helps rule out the possibility that the results are driven by accounting association membership, which prior literature finds significantly improves audit quality for smaller audit firms (Bills et al. 2016a; Bills et al. 2018; Ai, Cunningham, Li, and Myers 2021). Finally, my audit quality results are robust in both propensity score-matched and entropy-balanced samples, suggesting that my results are not due to functional form misspecification or selection on observable characteristics (Hainmueller 2012; Shipman, Swanquist, and Whited 2017; McMullin and Schonberger 2022).

My findings contribute to several streams of literature and should be of interest to regulators, researchers, practitioners, and audit committees. First, I contribute to the literature on audit partner rotation by examining the relationship between mandatory audit partner rotation and audit quality for small audit firms. Existing research using U.S. data finds limited evidence of an association between partner rotation and audit quality (Gipper et al. 2021a; Laurion et al. 2017; Kuang, Li, Sherwood, and Whited 2020). Importantly, this research focuses primarily on Big 4 audit firms. Existing research also finds that large audit firms use their more extensive resources to facilitate partner rotations and mitigate the loss of client-specific knowledge (Dodgson et al. 2020; Gipper et al. 2021a). My study provides evidence that mandatory audit partner rotation is negatively associated with audit quality for non-Big 4 audit firms, which may lack the resources of the Big 4 firms to effectively facilitate mandatory partner rotation. Accordingly, my results add credence to regulators' and researchers' concerns that smaller audit firms are disproportionately affected by mandatory audit partner rotation compared to larger firms due to their lack of resources (ACAP 2008; Daugherty et al. 2012; Litt et al. 2014). Second, I contribute to the literature examining the audit capabilities of small audit firms and their ability to compete for clients (e.g., Bills et al. 2016a). In response to concerns regarding the high concentration of the U.S. audit market, regulators have stressed the need to promote the growth of small firms to increase audit market competition in the future (ACAP 2008; PCAOB 2011). My findings highlight how mandatory audit partner rotation, combined with small audit firms' relative lack of resources, affect audit market concentration through small firms' inability to retain larger and more complex clients. Finally, I contribute to the literature examining the determinants of audit firm changes (e.g., Hennes et al. 2014) by providing evidence that mandatory audit partner rotation is positively associated with dismissals of small audit firms.

2.0 Literature Review

As a result of financial scandals at the turn of the century, the U.S. Congress passed the Sarbanes-Oxley Act of 2002 (SOX). Among other rule changes, SOX restricts audit partners to serving a U.S. public client for a maximum of five years, after which they must rotate off the client (SOX Section 203, U.S. House of Representatives 2002). This mandatory audit partner rotation may improve audit quality by promoting auditor independence and providing a fresh look at client financial reporting. In contrast, the loss of client-specific knowledge held by the outgoing partner may lead to lower audit quality following mandatory rotation (Daugherty et al. 2012). Therefore, mandatory rotation's effect on audit quality is ultimately an empirical question.

Many existing studies of partner tenure and partner rotation make use of data from other countries, primarily Australia, Taiwan, and China. Existing studies using data from these jurisdictions find mixed results, with some finding that partner rotation is negatively associated with audit quality (e.g., Chi, Huang, Liao, and Xie 2009; Azizkhani, Monroe and Shailer 2012), and some finding partner rotation is positively associated with audit quality (e.g., Fargher, Lee, and Mande 2008; Lennox, Wu, and Zhang 2014). Studies also provide mixed evidence of the relationship between audit partner tenure and audit quality (e.g., Carey and Simnett 2006; Chen, Lin, and Lin 2008). These studies provide important information regarding the effect of audit partner rotation and tenure, but their results may not extend to the U.S. setting. Audit firms in the U.S. operate in a more litigious environment, which may disincentivize independence violations. In contrast, clients of U.S. auditors tend to be larger and greater in number than clients in other countries (Kuang et al. 2020), which may exacerbate the effects of losing client-specific knowledge after mandatory audit partner rotation.

Three recent archival studies using U.S. audit partner data are the most closely related to my study.[3] First, Laurion et al. (2017) generate a sample of audit partner rotations by identifying audit partners copied on SEC comment letters and determining audit partner rotations as occurring in those years for which the comment letter copies a new audit partner. The study provides some evidence favoring the "fresh look" hypothesis, finding misstatement discoveries and restatement announcements are positively associated with audit partner rotation.

Second, Gipper et al. (2021a) use proprietary data obtained from the PCAOB to examine the relationship between audit partner tenure (and rotation) and audit fees, audit hours, and partner hours. They also examine audit quality using absolute accruals, misstatements, announced restatements, and internal control material weaknesses. With respect to audit quality, the authors generally fail to find significant tenure effects. However, they do find that restatement announcements are positively associated with mandatory audit partner rotation, favoring the fresh-look hypothesis, consistent with Laurion et al. (2017). Finally, Kuang et al. (2020) use SEC filings to identify voluntarily disclosed mandatory audit partner rotations and fail to find evidence of a

[3] There are several additional archival studies examining audit partner rotation using U.S. data in different settings and generally find mixed results. Manry, Mock, and Turner (2008) use a hand-collected sample of 90 firms and find discretionary accruals decline with partner tenure, suggesting a negative association between partner rotation and audit quality. Downes, Draeger, and Sadler (2022) find audit partner rotation is positively associated with audit quality when the audit committee is actively involved in the rotation process in a sample composed of primarily Big 4 clients. In a sample of not-for-profit clients, Fitzgerald, Omer, and Thompson (2018) find a negative association between audit partner tenure and internal control quality, but fail to find an association between audit partner rotation and internal control quality. My study differs from these prior studies because I use a relatively large dataset to examine public clients of non-Big 4 audit firms. In addition to extant archival research, experimental research generally finds mandatory audit firm or audit partner rotation improve auditor independence and effort (e.g., Dopuch, King, and Schwartz 2001; Wang and Tuttle 2009; Bowlin, Hobson, and Piercey 2015; Winn 2021).

"fresh look" provided by the incoming audit partner. However, the authors find some evidence that mandatory rotation is positively associated with financial statement misstatements. These results are generally inconsistent with those of Laurion et al. (2017) and Gipper et al. (2021a).

My study differs from the three recent studies using U.S. data (Gipper et al. 2021a, Kuang et al. 2020, Laurion et al. 2017) because all three studies rely primarily on data from large audit firms (Big 4 or Big 6).[4] It is unclear how results from samples primarily composed of clients of large audit firms will extend to clients audited by smaller firms. My study builds on this literature by examining the relationship between mandatory audit partner rotation and audit quality for non-Big 4 audit firms, which have fewer resources available to facilitate mandatory audit partner rotation. Big 4 firms expend significant resources to mitigate the loss of client-specific knowledge following mandatory audit partner rotation (Dodgson et al. 2020; Gipper et al. 2021a), which may explain the mixed findings of prior studies examining primarily Big 4 clients. Because non-Big 4 firms cannot expend similar levels of resources (Daugherty et al. 2012), restricting my analyses to clients of non-Big 4 audit firms provides a cleaner setting in which to examine the relationship between mandatory audit partner rotation and audit quality. In other words, I examine the effects of mandatory rotation without the potential confounding influence of partner rotation resources expended by Big 4 firms.

Additionally, prior studies examining audit partner rotation in the U.S. do so prior to the mandatory disclosure of partner identities. While there is limited evidence that partner name

[4] Over 90 percent of audit partner rotation observations identified by Laurion et al. (2017) are audited by Big 4 auditors. The sample in Gipper et al. (2021a) is composed entirely of clients audited by Big 6 auditors, and the study does not separately examine Big 4 and non-Big 4 auditors. Kuang et al. (2020) acknowledge that issuers that voluntarily disclose audit partner rotations are more likely to be large issuers audited by a Big 4 auditor.

disclosures affect audit quality (e.g., Carcello and Li 2013; Cunningham, Li, Stein, and Wright 2019; Burke, Hoitash, and Hoitash 2019), it is unclear whether the relationship between partner rotation and audit quality will change when all partner identities are publicly known. For instance, now that their identity is public knowledge, audit partner behavior surrounding rotations may be influenced by reputation effects (Gipper et al. 2021a).

I also contribute to the literature examining small audit firms' ability to provide high audit quality. Recent studies provide evidence that investors' perceptions of small audit firm quality have improved since the fall of Arthur Andersen and beginning of SOX (Cassell, Giroux, Myers, and Omer 2013; Chang, Cheng, and Reichelt 2010). Further, Bills et al. (2016a) find small audit firms that belong to accounting associations provide higher audit quality than those that do not and provide quality on par with that provided by the Big 4 accounting firms. I contribute to this literature by examining how mandatory audit partner rotation, a factor outside the control of audit firms, affects non-Big 4 firms' ability to provide high quality audits. Despite the positive trends in audit quality for non-Big 4 audit firms, mandatory audit partner rotation may hinder their continued growth and ability to provide high audit quality.

Litt et al. (2014), along with a follow-up study Sharma, Tanyi, and Litt (2017), is the only other study of which I am aware that uses a dataset of U.S. issuers and examines the effects of audit partner rotation for small audit firms. My study makes several contributions relative to Litt et al. (2014). First, I investigate the audit market consequences of mandatory audit partner rotation, providing evidence on the relationship between mandatory audit partner rotation and audit firm dismissals. Second, I examine a different setting, in which audit partner identities are public knowledge. Third, use of the PCAOB Form AP data allows me to measure audit partner rotations

more precisely.[5] Fourth, my study uses a more direct measure of audit quality, financial statement misstatements (Bamber and Bamber 2009, DeFond and Zhang 2014). Given the inconsistent results from more recent studies that use misstatements as the dependent variable and more precisely identify audit partner rotation (Laurion et al. 2017; Gipper et al. 2021a; Kuang et al. 2020), it is unclear whether the results in Litt et al. (2014) will extend to my setting.

[5] Gipper et al. (2021a) document that approximately 38 percent of audit partner rotations in their sample occur prior to the five-year mandatory threshold. Therefore, it is unlikely that Litt et al. (2014) precisely measure audit partner rotations. Further, it is possible that the empirical results in Litt et al. (2014) are influenced by the nonlinear relationship between audit firm tenure and audit quality (e.g., Johnson et al. 2002).

3.0 Hypothesis Development

3.1 Mandatory Audit Partner Rotation and Audit Quality for Clients of Non-Big 4 Audit Firms

Mandatory audit partner rotation could result in two factors that affect audit quality differently: the loss of client-specific knowledge of the outgoing partner may impair audit quality, while the fresh perspective of the incoming audit partner may improve audit quality (Daugherty et al. 2012). To mitigate the loss of client-specific knowledge, Big 4 audit firms spend significant resources to facilitate rotation, through strategies such as partner shadowing, in which the incoming audit partner joins the engagement as an additional partner prior to beginning their tenure as lead engagement partner; partner auditioning, in which the audit firm introduces two or more potential partners to clients to determine which match will lead to the best working relationship; and employing relationship partners, in which a senior partner at the audit firm serves as a client liaison in a non-audit capacity to ensure a smooth transition (Dodgson et al. 2020).

These partner rotation strategies are costly, however. Small audit firms likely have fewer resources available to larger firms to facilitate the rotation process, and they may be unable to mitigate the loss of client-specific knowledge stemming from mandatory rotation. Non-Big 4 audit firms lack the national networks available to Big 4 auditors, have less staffing availability, serve fewer public clients, and have fewer partners available for strategies like shadowing (Bills,

Swanquist, and Whited 2016b; Beck, Francis, and Gunn 2018).[6] Discussions with practitioners suggest that non-Big 4 audit firms can face significant audit partner capacity constraints when planning the partner rotation process. Often, firms find only one partner with sufficient capacity and expertise to rotate onto a given public client, precluding the firm from engaging in partner auditioning and likely restricting the partner's ability to shadow the outgoing partner.[7] Therefore, these firms are more likely to lose significant client-specific knowledge following mandatory rotation, which leads to lower audit quality.

Alternatively, it is possible that the fresh look benefit of mandatory audit partner rotation will outweigh the loss of client-specific knowledge, consistent with the intent of regulators (SEC 2003; PCAOB 2011). Recent evidence indicates that audit partner rotation in the U.S. may not affect or may even slightly improve audit quality for large audit firms (Laurion et al. 2017; Gipper et al. 2021a). If these prior results are unrelated to partner facilitation strategies employed by large audit firms, I may find no effect or even a slight positive effect of mandatory audit partner rotation on audit quality at non-Big 4 firms. Finally, even when audit partners rotate off their clients, the majority of the audit team remains unchanged (Dodgson et al. 2020). If the audit team retains

[6] These constraints may also force non-Big 4 firms to assign partners with no or less public client experience. In these cases, the loss of client-specific knowledge may be compounded by the partners' unfamiliarity with the requirements of public audits. I find some evidence to this effect in an additional analysis discussed in Section 6.2.

[7] To supplement evidence obtained from prior literature, I held discussions with five audit partners and one senior manager from six different non-Big 4 firms. I received confirmation from my university's Institutional Review Board (IRB) that no formal IRB approval was required for these discussions.

sufficient client-specific knowledge, then there may be no effect of audit partner rotation on audit quality.[8]

That said, the interviews by Dodgson et al. (2020) and Daugherty et al. (2012), as well as my own discussions with practitioners, suggest that the loss of client-specific knowledge is of greater concern to practicing audit partners than the potential benefits of a fresh look. This concern is further evidenced by the numerous and costly tactics large firms employ to mitigate this loss of information (Dodgson et al. 2020; Gipper et al. 2021a). Because non-Big 4 audit firms lack the resources to employ these tactics to the same extent as Big 4 firms, I expect the loss of client-specific knowledge to outweigh the fresh look benefits of mandatory audit partner rotations.[9] I state the following hypothesis in alternative form:

Hypothesis 1: *There is a negative association between mandatory audit partner rotation and audit quality on clients of non-Big 4 audit firms.*

[8] In contrast, Gipper et al. (2021a) provide evidence that new senior managers are significantly more likely to begin with new audit partners following partner rotation. Therefore, mandatory audit partner rotation often entails the loss of more than one audit team member.

[9] These concerns do not necessarily extend to non-mandatory partner rotations, because non-mandatory rotations are more endogenous than mandatory rotations. For instance, a firm may voluntarily rotate an audit partner to please a client or be forced to rotate early due to resignation, retirement, or death. These types of non-mandatory rotation imply a negative effect on audit quality. In contrast, firms may voluntarily rotate partners to replace a poorly performing partner with a better one, which implies a positive effect on audit quality. For instance, Gipper, Hail, and Leuz (2021b) find that audit partners are more likely to rotate early following severe audit quality issues, such as restatements or PCAOB inspection findings, suggesting that non-mandatory rotation may be employed in an effort to improve audit quality.

3.2 Mandatory Audit Partner Rotation and Client Size and Complexity

I expect there to be a negative association between mandatory audit partner rotation and audit quality due to the loss of the outgoing partner's client-specific knowledge. The loss of client-specific knowledge is likely greater for audit firms' larger and relatively more complex clients for two related reasons. First, new audit partners exert significant effort in the early years following mandatory rotation to obtain client-specific knowledge (Gipper et al. 2021a), with descriptive evidence suggesting it can take two years to get "up to speed" on a new client (Daugherty et al. 2012). This effort is even higher for relatively large audit clients (Gipper et al. 2021a). Second, clients with more complex accounting require greater expertise to mitigate the risk of low financial reporting quality (Chychyla, Leone, and Minutti-Meza 2019). Auditors respond to this complexity by increasing audit effort and charging higher risk premiums (Bedard and Johnstone 2004; Hoitash and Hoitash 2018). I expect the negative audit quality outcomes will be concentrated in these clients for whom the loss of client-specific knowledge following mandatory rotation is likely greatest.[10] Therefore, I predict the following:

> Hypothesis 2: *There is a negative association between mandatory audit partner rotation and audit quality for relatively large and complex clients of non-Big 4 audit firms.*

[10] In contrast, if non-Big 4 firms do have the resources to employ widespread partner facilitation strategies, they most likely will employ these strategies on their largest and most complex clients to mitigate the loss of client-specific knowledge. Thus, I may fail to find a negative association between mandatory rotation and audit quality for larger and more complex clients.

3.3 Mandatory Audit Partner Rotation and Audit Firm Dismissals

Clients decide to change audit firms when the perceived benefits of a new auditor outweigh the costs of switching (Brown and Knechel 2016). A significant cost to changing audit firms is the potential loss of client knowledge held by the incumbent audit firm (Commission on Auditors' Responsibilities 1978; Kanodia and Mukherji 1994). However, client-specific knowledge is also lost as a result of mandatory audit partner rotation, which may lower clients' switching costs. Holding all else equal, clients may perceive the benefits of switching firms to outweigh the costs after observing the loss of client-specific knowledge resulting from mandatory rotation. There are two related outcomes of mandatory audit partner rotation that can further influence clients' desire to switch audit firms. First, clients may perceive lower audit quality following mandatory rotation. Second, mandatory rotation may result in a worse working relationship, or "chemistry," between the client and the incoming audit partner (Dodgson et al. 2020). This could be especially true for clients of non-Big 4 firms that have few potential partners to match with their clients (ACAP 2008; Daugherty et al. 2012).[11] The lack of partner-client chemistry may also significantly lower switching costs for audit clients that are not well-matched to their current audit firm. For instance,

[11] Partners interviewed by Dodgson et al. (2020) stress the importance of ensuring good chemistry between incoming partners and clients. This includes ensuring that partner style and personal characteristics align well with client management, even going so far as to consider the political leanings of the client and partner. Further, discussions with practitioners suggest that the client often has little say in audit partner rotation, being introduced to the incoming audit partner after the decision has been made, in contrast to larger audit firms that may allow clients to meet multiple potential partners in advance of rotation (Dodgson et al. 2020). This implies limited potential for non-Big 4 firms to ensure good chemistry between the incoming partner and the client. In this case, the client may choose to dismiss their audit firm in order to work with a more desirable partner, regardless of the level of audit quality provided by the new partner.

a relatively large client of a non-Big 4 audit firm may feel they would get better service from a larger audit firm, but retain their smaller firm because of the chemistry they have with their audit partner. Following mandatory audit partner rotation, if the incoming audit partner is unable to maintain that same positive chemistry, the large client may choose to hire a larger audit firm that better matches their size and needs. Whether from audit quality or partner-client chemistry, firms may perceive a benefit to dismissing their audit firm following mandatory rotation, either to restore the client's reputation for financial reporting quality (Hennes et al. 2014) or to work with a more desirable audit partner at a different audit firm.

In contrast, the entire audit team changes if the client switches audit firms, resulting in even greater loss of client-specific knowledge compared to mandatory rotation alone (Dodgson et al. 2020). Further, the client may perceive the loss of client-specific knowledge and audit quality outcomes of mandatory audit partner rotation to be temporary and refrain from making a change to allow the incoming partner enough time to build their client-specific knowledge and develop chemistry with the client. Despite the arguments in favor of finding the null, I expect clients of non-Big 4 firms to be more likely to dismiss their auditors following mandatory audit partner rotation. Therefore, I state the following hypothesis:

Hypothesis 3: *There is a positive association between mandatory audit partner rotation and subsequent audit firm dismissals for clients of non-Big 4 auditors.*

4.0 Sample Construction and Research Design

4.1 Sample Construction

I begin my sample with client-year observations available on each of Compustat, Audit Analytics, and Form AP. Table 1 summarizes the sample construction process for the audit quality sample. I identify 16,575 observations with data on Compustat, Audit Analytics, and Form AP filings with fiscal years ending between 2017 and 2019, inclusive. I exclude 3,391 observations that are non-U.S. clients or clients served by non-U.S. auditors or with missing audit firm location data. I exclude 450 observations with assets less than $1 million and exclude 792 observations in the first year following an audit firm change or audit firm merger during my sample period. To identify audit partner changes, I require at least two years of Form AP data. Therefore, I exclude 1,323 additional observations missing at least two sequential years of Form AP data (i.e., observations in the first year Form AP was required to be filed). I also exclude 339 observations audited by audit firms with five or fewer public clients, as these firms are not subject to the same mandatory audit partner rotation rules (SEC 2003).[12] I next exclude 6,898 client-year observations audited by one of the Big 4 auditors. This results in an initial sample of 3,382 U.S. client-years audited by non-Big 4 U.S. auditors with available partner rotation data. In order to allow sufficient time for financial statement misstatements to be identified and announced, I exclude 1,210 observations with fiscal years ending after December 31, 2018. After dropping observations

[12] The exemption also requires audit firms to have fewer than 10 partners. Because Form AP may not include every partner (e.g., those that serve only private clients), I assume all audit firms with fewer than five public clients also have fewer than 10 partners.

missing data for available control variables, my final Audit Quality Sample consists of 1,997 observations. For my analyses of subsequent audit firm dismissals, I begin with the 3,382 observations with fiscal years ending between 2017 and 2019, inclusive, discussed above. After dropping observations missing data necessary to calculate control variables, my Dismissals Sample consists of 3,168 observations.

[insert Table 1 here]

4.2 Identifying Mandatory Audit Partner Rotations

Form AP requires audit firms to disclose the name and location of the engagement partner for all audits of public issuers with audit report dates on or after January 31, 2017 (PCAOB 2015). I identify audit partner rotations as those audit engagements for which the audit partner disclosed on Form AP differs from the partner disclosed for the previous year's audit. Gipper et al. (2021a) provide evidence that a significant number of audit partner rotations occur prior to the five-year mandatory rotation requirement. Therefore, I use two criteria to separate mandatory audit partner rotations from non-mandatory ("voluntary") rotations. First, I identify audit partner rotations where the audit *firm's* tenure is less than five years as of the outgoing partner's final year on the engagement.[13] Second, I identify audit partner rotations where there is more than one rotation

[13] I follow several steps to calculate audit firm tenure. First, I calculate tenure as the number of consecutive years that the same auditor is disclosed on Audit Analytics for a given client. However, there are many mergers and name changes among non-Big 4 audit firms, resulting in a different audit firm identifier in Audit Analytics (even though the underlying firm remains the same). I manually inspect all audit firms in my sample for firms that became inactive during my sample period, either due to audit firm mergers or name changes. I then manually correct audit firm tenure for these firms. Next, I compare my calculation of audit firm

within a five-year period on Form AP. Since mandatory rotation occurs after five years of an audit partner's tenure, any rotations that meet either of these two criteria must be voluntary rotations. I assume that all remaining audit partner rotations are mandatory. This approach results in 312 mandatory partner rotations and 131 voluntary partner rotations in my audit quality sample, and 464 mandatory partner rotations and 222 voluntary partner rotations in my audit firm dismissals sample.[14] I define my main variable of interest, *Mandatory Rotation*, as an indicator variable equal to one for the first year of the new audit partner's tenure following each mandatory audit partner rotation identified using these two criteria.

tenure to an alternate definition calculated using the *Auditor Since Year* variable in the Audit Analytics Engagements database. This variable includes corrections for name changes and mergers that occurred prior to my sample period. I vouch a sample of observations to their respective 10-K disclosures to verify the accuracy of the measure. I keep the larger of these two calculated tenure variables. I further manually validate audit firm tenure for observations immediately surrounding the mandatory audit partner rotation threshold.

[14] Because Form AP is only required for audit report dates issued on or after January 31, 2017, I cannot identify mandatory audit partner rotation with certainty, which would require at least six years of Form AP filings for each client firm. However, my process results in voluntary partner rotations representing approximately 30 percent of all partner rotations in my sample. This is comparable to Gipper et al.'s (2021) rate of non-mandatory rotations of approximately 38 percent. Therefore, my sample of mandatory rotations, while not perfectly precise, is likely measured with little noise. In Tables 3 and 4, discussed below, I fail to find an association between *Voluntary Rotation* and audit quality on average. This is consistent with voluntary rotations not having a significant impact on audit quality and suggests that any misclassification of mandatory vs. voluntary rotations likely only biases against my finding the predicted results, because the relationship between voluntary rotation and audit quality is noisier than that between mandatory rotation and audit quality.

4.3 Research Design

4.3.1 Mandatory Audit Partner Rotation and Audit Quality

I examine the relationship between mandatory audit partner rotation and audit quality (Hypotheses 1 and 2) using the following linear probability model:[15]

$$Audit\ Quality_{it} = \alpha + \beta(Mandatory\ Rotation)_{it} + \gamma(Controls)_{it} + FE + \varepsilon_{it} \quad (1)$$

My variable of interest is *Mandatory Rotation*, as defined above. I infer audit quality from financial statement misstatements. *Misstatement* is an indicator variable equal to 1 if client *i* subsequently restates its financial statements from year *t*, and 0 otherwise.[16] Financial statement misstatements are a direct indicator of audit failure (DeFond and Zhang 2014).[17] A positive

[15] I use linear probability models in order to include a greater number of fixed effects, as the consistency of estimators from logistic regression may decrease as the number of fixed effects increases and the number of time periods remains fixed (Chamberlain 1984). My results are robust to using logistic regression.

[16] I include all misstatements of annual financial statements as my dependent variable. In untabulated analyses, I instead use material misstatements as the dependent variable (those restatements disclosed through an 8-K filing). I find a positive but not statistically significant association between mandatory rotation and material misstatements in the full sample (p=0.27), but I do find a significant and positive association between mandatory rotation and material misstatements in both the *Large Clients* and *High ARC* samples (p<0.5 and p<0.10, respectively). My failure to find results in the full sample may be due to lack of power, as material misstatements represent only 1.8 percent of observations in my sample (compared to 5.6 percent of observations for all misstatements).

[17] Another reason to use misstatements is that prior studies using US data generally fail to find results using measures other than misstatements or restatement announcements (e.g., Laurion et la. 2017; Kuang et al. 2020; Gipper et al. 2021a). Additionally, Bamber and Bamber (2009) have criticized audit partner tenure papers for using discretionary accruals and earnings response coefficients, which are subject to measurement error and construct validity issues.

association between *Mandatory Rotation* and *Misstatement* indicates that mandatory audit partner rotation is associated with lower audit quality, as predicted by Hypothesis 1. A negative association would be consistent with a new audit partner providing a fresh look and improving audit quality (Gipper et al. 2021a, Laurion et al. 2017).

I include a number of control variables to account for client and audit firm characteristics. I control for client accounting reporting complexity with *ARC*, the natural logarithm of total unique XBRL tags per financial statement disclosure in the 10-K filings, which prior literature finds is positively associated with misstatements (Hoitash and Hoitash 2018). I include additional control variables used in Laurion et al. (2017), based on Dechow, Ge, Larson, and Sloan (2011).[18] These controls include *Total Accruals*; *Receivables Change*; *Inventory Change;* non-cash, non-PPE assets as percentage of total assets (*Soft Assets*); *Leverage*, an indicator variable for stock or debt issuance *(Issuance*); return on assets (*ROA*); *ROA Change;* the natural log of the number of years a client is on Compustat (*ln(Client Age)*); *Book-to-Market*; and the natural log of the client's market value (*ln(Market Value)*). I also include an indicator variable equal to one if the client is an accelerated filer, and zero otherwise (*Accelerated*). I include characteristics of the audit firm office, including the natural logarithm of the total assets audited by the firm office (*ln(Office Size)*) and the annual percentage growth in total office audit fees (*Office Growth*). Finally, I control for voluntary audit partner rotation years with *Voluntary Rotation*. See the Appendix for a full list of variables and their definitions. I winsorize all continuous variables at the top and bottom one

[18] Following Laurion et al. (2017), I use lagged control variables my tests. Results are robust to using control variables measured during the concurrent period.

percent to mitigate the influence of outliers and calculate robust standard errors clustered by each unique client company (Petersen 2009).

In addition to the controls described above, I control for a series of fixed effects. I include year fixed effects to absorb temporal variation that affects all client observations, and I include industry fixed effects based on SIC 2-digit industry codes. *Mandatory Rotation* can only occur when audit firm tenure is five years or greater. To rule out the possibility that audit firm tenure explains my results, I follow Gipper et al. (2021a) and include audit firm tenure fixed effects (i.e., indicator variables for each year of audit firm tenure). Finally, because non-Big 4 audit firms vary in size and capability, I include audit firm fixed effects to control for time-invariant differences among non-Big 4 audit firms.

For tests of Hypothesis 2, I split the sample based on client size (measured by client total assets) and client complexity (measured by *ARC*). Larger clients tend to demand more firm resources to facilitate audit partner rotation. For example, Gipper et al. (2021a) find Big 6 auditors employ partner shadowing on their larger clients. *ARC* is a measure of client accounting complexity that captures the total number of unique monetary XBRL tags in a client's 10-K filing (Hoitash and Hoitash 2018). I use this measure as an approximation of the level of client-specific knowledge lost as a result of mandatory audit partner rotation. I split the sample based on the median of each measure, calculated within each audit firm-year. The *Large Clients* sample (*High ARC* sample) consists of all observations for which the client's total assets (*ARC*) is greater than the audit firm-year median, and the *Small Clients* sample (*Low ARC* sample) consists of all observations for which the client's total assets (*ARC*) is less than or equal to the audit firm-year

median.[19] By calculating my size and complexity samples within each audit firm, I am able to identify the clients that are relatively more complex for each set of audit decision-makers (i.e., I am not simply comparing clients of larger audit firms to clients of smaller audit firms).

I predict that large and complex clients likely experience the greatest loss of client-specific knowledge from mandatory audit partner rotations. I expect to find that mandatory audit partner rotation's effect on audit quality is concentrated in the audit firm's larger and more complex clients, evidenced by a positive and significant association between *Mandatory Rotation* and *Misstatement* in each of the *Large Clients* and *High ARC* subsamples.

4.3.2 Mandatory Audit Partner Rotation and Auditor Dismissals

I test the relationship between mandatory audit partner rotation and auditor dismissals (Hypothesis 3) using the following linear probability model:

$$Dismissal_{it+1} = \alpha + \beta(Mandatory\ Rotation)_{it} + \gamma(Controls)_{it} + FE + \varepsilon_{it} \quad (2)$$

The dependent variable, *Dismissal*, is an indicator variable equal to one if the client dismisses its audit firm during year *t+1*, and zero otherwise. The independent variable is

[19] I calculate my measure at the audit firm level because Dodgson et al. (2020) find that higher levels of leadership (e.g., the firm's national office) may also be engaged to help facilitate audit partner rotation on larger or more complex clients, which is consistent with my own discussion with clients. Additionally, Francis, Golshan, and Hallman (2022) documents that a significant portion of public clients are audited by non-local audit partners. Alternatively, decision making typically occurs at the audit office level (Francis, Stokes, and Anderson 1999; Francis and Yu 2009), and incoming audit partners are typically chosen from within the same audit office as the outgoing partner (Dodgson et al. 2020). My results are robust to instead measuring large and complex clients within each audit firm-office-year.

Mandatory Rotation, defined above. A positive coefficient on *Mandatory Rotation* would indicate that clients are significantly more likely to dismiss their audit firms following mandatory audit partner rotation, consistent with my prediction. Additional control variables include those used in the audit quality analyses, including year, industry, audit firm, and auditor tenure fixed effects. I also include indicator variables for material weakness disclosures (*MW*), announced financial statement restatements *(Announced Restatement*), and adverse going concern opinions (*Going Concern*), as these measures have been found to be associated with auditor changes (Lennox 2000; Hennes et al. 2014; Newton, Persellin, Dechun, and Wilkins 2016).

5.0 Main Results

5.1 Mandatory Audit Partner Rotation and Audit Quality

5.1.1 Descriptive Statistics

I present descriptive statistics for the audit quality sample in Table 2. Panel A presents characteristics of the audit firms in the sample, including the number of observations per firm in the Audit Quality Sample and Dismissals Sample and the total number of audit offices and total number of unique audit partners in the Dismissals Sample. The Audit Quality sample includes observations audited by 71 different audit firms, and the Dismissals Sample includes observations audited by 78 different firms.[20] Approximately 55% of observations are audited by one of eight firms annually inspected by the PCAOB during my sample period, and 93% of observations are audited by member firms of accounting associations. The sample includes 917 unique partners.

Panel B presents statistics for the Audit Quality Sample. 15.6 percent of the observations in the sample occur during the first year of a new partner's tenure following mandatory audit partner rotation (*Mandatory Rotation*). I identify *Voluntary Rotation* in 6.6 percent of observations. This is consistent with Gipper et al. (2021a), who document that a significant portion of audit partner rotations occur before the mandatory requirement. Clients subsequently restate their annual

[20] Each firm is identified by the name under which it operated at the time of each observation in my sample. A number of firms have since experienced mergers or name changes. To the extent these changes affect observations within my sample period, I manually correct my measure of audit firm tenure.

financial statements in 5.6 percent of observations (*Misstatement*). This misstatement rate is lower than found in some extant research (e.g., Lennox and Li 2014). This is because my sample is focused on relatively recent years, and the annual misstatement rate has decreased since 2014 (Coleman, Tanona, and Whalen 2020). Clients subsequently dismiss their auditors in 5.6 percent of observations (*Auditor Dismissal*$_{(t+1)}$).

Panel C presents descriptive statistics separately for mandatory rotation observations and all observations in non-rotation years (i.e., where *Mandatory Rotation* and *Voluntary Rotation* both equal zero). The mean of *Misstatement* is greater in in the mandatory rotation subsample, but the difference is not statistically significant at conventional levels (p=0.132).[21] As noted above, there is a positive association between *ln(Audit Firm Tenure)* and mandatory audit partner rotation. This is because mandatory rotations can only occur when audit firm tenure is five years or greater. I use audit firm tenure fixed effects to control for this difference.

[insert Table 2 here]

5.1.2 Tests of Mandatory Audit Partner Rotation and Audit Quality

I present the test of Hypothesis 1, that mandatory audit partner rotation is associated with lower audit quality, in Table 3. I regress *Misstatement* on *Mandatory Rotation* and control variables, including industry, year, audit firm, and auditor tenure fixed effects. The coefficient on *Mandatory Rotation* is positive and significant (p<0.05). These results suggest mandatory audit partner rotation is associated with lower audit quality for clients of non-Big 4 audit firms,

[21] All p-values are two-tailed, unless otherwise specified.

consistent with losing significant client-specific knowledge from the outgoing partner. The coefficient is also economically significant, suggesting that clients are 3.0 percent more likely to misstate their annual financial statements in the first year following mandatory audit partner rotation, compared to an unconditional mean of 5.6 percent.[22]

[insert Table 3 here]

Hypothesis 2 predicts the negative audit quality outcomes of mandatory audit partner rotations will be concentrated in larger and more complex audit clients, where the loss of client-specific knowledge is likely greater. Table 4 presents tests of this hypothesis. Panel A presents results in the *Large Clients* and *Small Clients* subsamples.[23] For these tests, I separate the main sample into relatively large clients and small clients within each audit firm-year. Column (1) presents results in the *Large Clients* subsample, and column (2) presents results in the *Small Clients* subsample. The coefficient on *Mandatory Rotation* is positive and significant in column (1) ($p<0.01$) but not statistically significant in column (2), consistent with H2.

Panel B presents results in the *High Complexity* and *Low Complexity* subsamples. Column (1) presents results in the *High Complexity* subsample, and column (2) presents results in the *Low Complexity* subsample. The coefficient on *Mandatory Rotation* is positive and significant in column (1) ($p<0.10$) but not statistically significant in column (2). The results presented in Table

[22] The coefficient on *Voluntary Rotation* is not statistically significant. This is consistent voluntary rotation leading to better or worse audit quality, depending on the reason for the rotation (Gipper et al. 2021b). See related discussion in Section 3.1.

[23] The sample sizes in my subsample analyses are not equal to each other because I measure relatively large (complex) clients based on firms' full portfolio of clients, prior to restricting the sample as described in Section 4.1 and Table 1. I find similar results if I instead measure relatively large and complex clients within the final sample, with the exception that results are somewhat weaker in the *High ARC* subsamples ($p<0.10$, one-tailed, in both the audit quality and auditor dismissals analyses).

4 provide evidence that relatively large and complex audit clients of non-Big 4 audit firm offices suffer lower audit quality in the first year following mandatory audit partner rotation (H2).

[insert Table 4 here]

These results may have implications for smaller firms' growth and overall market composition. If small firms suffer lower audit quality on their larger and more complex audit clients following mandatory rotation, it may be more difficult for them to retain these clients, ultimately restricting their ability to grow. My tests of audit firm dismissal, discussed next, provide additional analysis of this issue.

5.2 Mandatory Audit Partner Rotation and Audit Firm Dismissal

Table 5 presents the results of my tests of Hypothesis 3, predicting a positive association between mandatory audit partner rotation and the likelihood of audit firm dismissal. Panel A presents analyses in the full sample. The dependent variable, *Auditor Dismissal*$_{(t+1)}$, is an indicator variable equal to one if the client dismisses its audit firm in year *t+1*, and zero otherwise. The coefficient on *Mandatory Rotation* is not statistically significant, inconsistent with my prediction. There are two possible reasons that I fail to find significant results. First, there may be no effect of mandatory audit partner rotation on audit firm dismissal. Second, it is not clear when an audit firm change will occur relative to the partner rotation. For example, some clients may choose to switch immediately, without giving the new partner an opportunity to continue the client engagement. In contrast, some clients may adopt a "wait and see" approach and observe the new partner's performance before deciding to make a change. Therefore, if mandatory audit partner rotation is associated with auditor dismissals, it may not occur during the new partner's first year.

To test this, I define a new variable, *Early Tenure*, as an indicator variable equal to one if the observation is in the second or third years of a new audit partner's tenure following mandatory audit partner rotation.[24] I reperform the analyses in Table 5, Panel A, adding *Early Tenure* as a variable of interest. Results are presented in Table 5, Panel B. The coefficient on *Early Tenure* is positive and statistically significant ($p<0.05$), suggesting that audit firm dismissal is significantly more likely for audit engagements after the second or third year following mandatory audit partner rotation, prior to the next mandatory rotation deadline.[25] These results are also economically significant, as clients are 3.6 percent more likely to dismiss their audit firm following mandatory rotation, compared to the unconditional mean dismissal rate of 5.6 percent. As with the audit quality analyses, I do not find a significant association between voluntary rotation and the likelihood of audit firm dismissal. Overall, this pattern of results suggests that clients take a "wait and see" approach following mandatory partner rotation and are only more likely to dismiss the audit firm after observing the loss of client-specific knowledge associated with mandatory partner rotation.

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[24] Observations for which either of *Mandatory Rotation* or *Early Tenure* is equal to one comprise 25.8 percent of my sample. Because I can only identify audit partner rotations beginning in 2017, I set values for *Early Tenure* equal to zero if I do not observe a mandatory rotation within my dataset. For instance, if a mandatory rotation occurred for a client in 2016, I am unable to observe it on Form AP and therefore code *Early Tenure* as zero in both 2017 and 2018. As a result, *Early Tenure* is underestimated. I expect this to bias against finding my predicted results. In an untabulated robustness test, I reperform the analysis in Table 5, Panel B, in the sample of observations for which I have at least three years of audit partner rotation data and find consistent results ($p<0.10$, two-tailed). Because restricting the sample results in only 695 observations, I use 1-digit SIC industry fixed effects, control for audit firm tenure using the natural logarithm of tenure, and drop firm fixed effects in this untabulated test.

[25] In an untabulated analysis, I include *Early Tenure* in the audit quality model defined in Equation (1) and find a positive but not significant coefficient ($p=0.216$).

[insert Table 5 here]

I find that the negative audit quality outcomes of mandatory audit partner rotation are concentrated in small auditors' relatively large and more complex audit clients. Auditor changes resulting from mandatory audit partner rotation may be concentrated in these types of clients as well. For instance, the loss of client-specific knowledge may lead to a lower cost of switching auditors on larger or more complex clients, because there is relatively less client-specific knowledge left to lose compared to clients with partners in their fourth or fifth year of tenure. Further, large and complex clients may place a greater emphasis on partner-client chemistry and may be less willing to work with their second choice of audit partner.[26] In Table 6, Panels A and B, I generate similar analyses to those presented in Table 4 by separating the sample based on client size and complexity. The dismissal results are consistent with the audit quality results. In Panel A, Columns (1) and (2) present the results in the *Large Clients* and *Small Clients* subsamples, respectively. The coefficient on *Early Tenure* is positive and significant in column (1) ($p<0.05$) but not in column (2). In Panel B, Columns (1) and (2) present results in the *High ARC* and *Low ARC* subsamples, respectively. In these analyses, the coefficient on *Early Tenure* is positive and significant in column (1) ($p=0.063$) but not in column (2), consistent with the results in the *Large Clients* and *Small Clients* subsamples. Taken together, these results suggest mandatory audit partner rotation may create barriers to growth for non-Big 4 auditors by making it more difficult to retain their larger and more complex audit clients.

[insert Table 6 here]

[26] For instance, partners interviewed in Dodgson et al. (2020) assert that the larger, more significant clients often want to meet multiple partners and have input into the choice of incoming partner ahead of mandatory rotation. The partner capacity constraints at non-Big 4 firms may make it especially difficult to retain these larger clients if they cannot accommodate their preferences.

6.0 Additional Analyses and Robustness Tests

6.1 Whom Clients Hire After Dismissing Their Non-Big 4 Auditor

In this section, I examine whom clients hire after audit firm dismissal. Table 7, Panel A, presents the subsequent firms hired following auditor dismissal for the clients in my *Dismissals Sample*. 28.4% of clients that dismiss their auditor in my sample ultimately retain the services of a Big 4 auditor. 13.1% hire a Mid 2 auditor (BDO or Grant Thornton), 14.2% hire some other annually inspected firm, and 44.3% hire a triennially inspected firm.

Table 7, Panel B, presents descriptive statistics for subsequent audit firm choice between the *Large Clients* and *Small Clients* subsamples.[27] *To Big 4 Firm* is an indicator variable equal to one if the client subsequently hires a Big 4 audit firm. *Upgrade Firm* identifies clients who upgrade to a higher tier audit firm (i.e., switch to Big 4 or switch from a triennially inspected firm to an annually inspected firm). *Upgrade Office Fees* and *Upgrade Office Size* are indicator variables equal to one if the client subsequently moves to a larger audit office (measured by total audit fees or total assets audited, respectively). As shown in the table, large clients are significantly more likely to hire a Big 4 firm, upgrade to a higher tier firm, and upgrade to a relatively larger audit office than small clients.[28] Taken together, mandatory rotation lowers switching costs for larger

[27] Contingent on audit firm dismissal, I fail to find evidence that mandatory audit partner rotation affects the decision of which firm to hire (untabulated). Rather, clients tend to hire subsequent auditors based on their relative size and complexity within their current audit firm, as evidenced in Table 7, Panel B.

[28] Results are similar between the *High ARC* and *Low ARC* subsamples.

and more complex clients, which provides these clients the opportunity to dismiss their audit firms and hire new audit firms that better match their size and needs.

[insert Table 7 here]

6.2 Mitigating the Negative Outcomes of Mandatory Audit Partner Rotation

In this section, I examine whether characteristics of the audit partner or audit office help mitigate the negative effects of mandatory audit partner rotation. Specifically, I examine the incoming audit partner's industry experience, the partner's recent experience with public clients, and the audit office's capacity to employ partner rotation strategies through audit partner capacity.

Incoming partners' industry experience may help them mitigate the loss of client-specific knowledge following mandatory rotation. Their understanding of the operations and accounting of clients within the same industry may be sufficient to reduce significant auditing errors and maintain a positive working relationship with management at their new client. Consistent with this, partners interviewed by Daugherty et al. (2012) and Dodgson et al. (2020) stress the importance for partner industry experience in facilitating mandatory audit partner rotation. Partners' experience with public clients likely serves a similar role. An incoming partner who served as lead engagement partner for a client in the year prior to rotating onto a new client may be better able to gain client-specific knowledge without the additional burden of learning (or re-learning) the requirements of serving as the lead engagement partner on an SEC registrant.

The rotation strategies discussed in Dodgson et al. (2020) and evidenced in Gipper et al. (2021a), such as auditioning incoming partners or partner shadowing, require audit partner capacity in order to be implemented. Additionally, in my discussions with practitioners, one of the

chief concerns around mandatory audit partner rotation was managing partner workloads to ensure that there would be a partner available to rotate onto clients following mandatory rotation. Thus, partner capacity is likely a significant factor impacting firms' ability to facilitate audit partner rotation, possibly more so than absolute firm size. Audit offices with relatively high partner capacity may be able to mitigate the loss of client-specific knowledge and better ensure partner-client chemistry following mandatory audit partner rotation, as these offices are the most likely to have the partners available to implement rotation strategies like partner auditioning and partner shadowing.

To test whether these characteristics help mitigate the negative consequences of mandatory audit partner rotation, I re-perform the analyses in Tables 3 and 5 using newly constructed variables. For the test of partner industry experience, I decompose *Mandatory Rotation* into those rotations in which the new partner has industry experience (*Industry Experience*) and rotations in which the new partner does not have industry experience (*No Industry Experience*). I consider a partner to have industry experience if the partner audits at least one other audit client within the same SIC 1-digit industry and year as the observation client. Using this definition, approximately 40 percent of incoming audit partner have industry experience (untabulated). To test audit partner experience with public clients, I decompose *Mandatory Rotation* into those rotations in which the incoming audit partner served as the lead engagement partner for another public client in the year immediately prior to rotation (*PY Public Client*), and those in which the incoming partner did not (*No PY Public Client*). *PY Public Client* represents approximately 63 percent of the mandatory rotations in my sample (untabulated). To test audit office partner capacity, I split *Mandatory Rotation* into those rotations in which the audit office had high audit partner capacity (*High Partner Capacity*) and those in which the audit office had low audit partner capacity (*Low Partner*

Capacity). I consider an audit office to have high audit partner capacity if the ratio of lead engagement partners to public clients is greater than the median ratio within the same core-based statistical area (CBSA), measured in the year immediately prior to the mandatory rotation. In other words, audit offices with high partner capacity have a greater number of audit partners available to serve public clients relative to other firms in the same city.[29] Approximately 26 percent of mandatory rotations occur in offices with high partner capacity. For my dismissals analyses, I decompose *Early Tenure* according to the same definitions discussed above, measured as of the rotation year. I reperform the audit quality and audit firm dismissals analyses with these newly constructed variables.

Table 8 presents the results of my tests of factors that may mitigate the loss of client-specific knowledge associated with mandatory audit partner rotation. Panel A presents the misstatements analysis. Column (1) presents the industry experience analysis, column (2) presents the public client experience analysis, and column (3) presents the audit office partner capacity analysis. The coefficient on each of *Industry Experience*, *PY Public Client*, and *High Partner Capacity* is not statistically significant, while the coefficient on each of *No Industry Experience*, *No PY Public Client* and *Low Partner Capacity* is positive and significant ($p=0.055$, $p<0.05$, and $p<0.05$, respectively). Further, the difference between each coefficient in columns (2) and (3) is

[29] Consistent with the Big 4 firms having greater capacity to employ audit partner rotation strategies, the majority of audit offices identified as "high partner capacity" are Big 4 audit offices, and over 46 percent of Big 4 observations being associated with high partner capacity offices, compared to less than 24 percent of non-Big 4 observations (untabulated).

statistically significant ($p<0.10$ and $p<0.05$, respectively).[30] Overall, these results suggest that partner industry and prior public company experience and audit office capacity can help mitigate the negative audit quality outcomes associated with mandatory rotation.

[insert Table 8 here]

The mitigating effect these partner and audit office characteristics is less clear for auditor dismissals. Panel B presents the dismissals analysis. Column (1) presents the industry experience analysis, column (2) presents the public client experience analysis, and column (3) presents the audit office partner capacity analysis. In columns (1) and (3), the coefficient on each of *No Industry Experience* and *Low Partner Capacity* is positive and statistically significant (both $p<0.05$), while the coefficients on *Industry Experience* and *High Partner Capacity* are not statistically significant. However, in column (2) the coefficient on *PY Public Client* is positive and statistically significant ($p<0.05$), which is inconsistent with partners' public client experience's reducing the likelihood of audit firm dismissal. It is possible that partners with prior public company experience have already developed their client-interaction style and may lack the flexibility to ensure good chemistry with the client. Therefore, even though these partners are not associated with a drop-off in audit quality, clients may nonetheless choose to dismiss their firm due to poor partner-client chemistry. That said, none of the differences between coefficients is statistically significant in any column. Therefore, while I cannot conclude that these factors significantly mitigate the risk of auditor dismissal, these results are generally consistent with auditor dismissals following mandatory audit

[30] The difference in coefficients in column (1) is not statistically significant. However, the coefficient on *Mandatory – No Industry Experience* is more than two times greater than that on *Mandatory – Industry Experience*. It is possible that this analysis lacks sufficient power to identify a significant difference in effect size

partner rotation being concentrated in observations for which the incoming audit partner lacks industry experience or the audit office lacked partner capacity prior to the rotation.

6.3 Additional Tests

I perform several additional analyses. First, I reperform my analyses in the sample of Big 4 audit clients. Results are presented in Table 9. I fail to find a significant association between mandatory audit partner rotation and audit quality or audit firm dismissals in the sample of Big 4 audit clients, consistent with Big 4 firms having the resources necessary to mitigate the loss of client-specific knowledge following mandatory audit partner rotation, and lending credence to researchers' and practitioners' concerns that mandatory rotation may disproportionately negatively affect non-Big 4 firms (ACAP 2008; Daugherty et al. 2012; Litt et al. 2014).

[insert Table 9 here]

Next, it is possible that absolute audit firm size *within* non-Big 4 firms moderates the relationship between mandatory audit partner rotation and audit quality or audit firm dismissals (as opposed to audit partner capacity, as tested above). I test this by interacting my mandatory rotation variables with *Annually Inspected* in the audit quality analysis and audit firm dismissals analysis. In both untabulated analyses, the coefficient on the interaction term is not statistically significant, suggesting that audit firm size within the non-Big 4 audit firms does not moderate the effect of mandatory audit partner rotation.[31]

[31] In an alternate specification, I interact the mandatory rotation variables with an indicator variable for the Mid 2 audit firms (BDO and Grant Thornton) instead of *Annually Inspected* and find similar results.

Finally, prior literature interprets a positive association between partner rotation and restatement announcements (Gipper et al. 2021a; Laurion et al. 2017) as evidence of a fresh look benefit because it indicates the new audit partner is identifying mistakes that originated before their tenure. I reperform my audit quality analyses, replacing the dependent variable with restatement announcements (untabulated). I fail to find evidence that mandatory audit partner rotation is positively associated with restatement announcements for small audit firms, consistent with small audit firms suffering more from the loss of client-specific knowledge than benefiting from the fresh look of a new partner.

6.4 Robustness Tests

I subject my results to the following robustness tests (untabulated). To further mitigate concern that my results are driven by audit firm tenure, I restrict the sample to only those observations for which audit firm tenure is at least five years prior to the partner rotation (my cutoff for defining *Mandatory Rotation*). My results are robust in this alternate sample. It is unlikely that functional form misspecification or selection on observable characteristics drive my results because audit partner rotation is a mandatory process affecting all public clients. Auditors cannot choose whether or not to rotate; they can only choose *when* to rotate (i.e., mandatory partner rotation vs. voluntary partner rotation). It is not clear ex ante whether or how client characteristics affect this choice. However, to rule out the possibility that my results are affected by functional form misspecification, I reperform my audit quality analyses in propensity score matched and entropy-balanced samples (Hainmueller 2012; Shipman et al. 2017; McMullin and Schonberger 2022) and find consistent results, suggesting that the association between mandatory audit partner

rotation and audit quality is not driven by functional form misspecification or selection on observable characteristics.[32] This does not rule out the possibility that unobservable client characteristics affect the decision when to rotate audit partners. Clients for whom firms voluntarily rotate audit partners early may differ from those that experience mandatory audit partner rotation. As a final robustness test, I drop all observations for clients that have at least one voluntary partner rotation at any point in my sample period. My results are robust in this "non-voluntary" sample.

[32] In both cases, I match on all control variables. I match on all three moments (mean, variance, and skewness) in the entropy balanced sample and use radius matching with a caliper of 0.01 for my PSM sample.

7.0 Conclusion

I study the effect of mandatory audit partner rotation on audit quality and the likelihood of audit firm dismissal for clients of non-Big 4 audit firms. I find evidence that mandatory audit partner rotation is associated with lower audit quality for clients of non-Big 4 audit firms, and that clients of non-Big 4 audit firms are more likely to dismiss their audit firm in the second or third years following a mandatory audit partner rotation. I further find that these outcomes are concentrated in larger and more complex clients of audit offices. Combined, these findings suggest that mandatory audit partner rotation hinders small firms' ability to provide high audit quality and retain their largest and most complex audit clients. These results should be of interest to researchers and regulators concerned with factors that affect auditors' ability to provide high audit quality as well as factors that affect auditors' ability to retain clients and their implications for audit market concentration.

My study is subject to limitations. First, partner identification on Form AP has been required for a relatively brief period of time. Therefore, I cannot identify mandatory audit partner rotation events with complete accuracy. That said, the rate of voluntary rotations identified in this study is similar to that identified in prior literature (Gipper et al. 2021a), so it is unlikely that this limitation significantly impacts my findings. Second, this study relies on inferences drawn from observable information. Because financial statement misstatements are a joint product of both client management and the auditor, it is difficult to draw decisive causal inference from this observational data. I ask readers to keep these limitations in mind when reviewing my results.

Appendix A Variable Definitions

Variable	Definition
Mandatory Rotation	An indicator variable equal to one if the observation is in the first year of a new audit partner's tenure following a mandatory audit partner rotation. A partner rotation is assumed to be mandatory if audit firm tenure during the outgoing partner's final year is at least five years and there are no previous partner rotations identified on Form AP. Source: Form AP, Audit Analytics
Voluntary Rotation	An indicator variable equal to one if the observation is in the first year of a new audit partner's tenure following a non-mandatory audit partner rotation. A partner rotation is assumed to be non-mandatory if audit firm tenure is less than 5 years during the outgoing partner's final year, or a previous audit partner rotation is identified on Form AP within five years of the current rotation. Source: Form AP, Audit Analytics
Misstatement	An indicator variable equal to one if the client's annual financial statements are subsequently restated, and zero otherwise. Source: Audit Analytics
Auditor Dismissal$_{(t+1)}$	An indicator variable equal to one if the client dismisses their audit firm in year t+1, and zero otherwise. Source: Audit Analytics
ARC	The natural logarithm of the total unique monetary XBRL tags per financial statement disclosure in the 10-K filings (Hoitash and Hoitash 2018). Source: www.xbrlresearch.com
Total Accruals	The client's year-over-year change in non-cash net assets, scaled by average total assets. Source: Compustat [(*ncna* - lag(*ncna*)) / average(at), where *ncna* = at - che - lt - pstk]
Receivables Change	The client's year-over-year change in receivables scaled by total assets. Source: Compustat [(rect / at) / (lag(rect)/lag(at))]
Inventory Change	The client's year-over-year change in inventory scaled by total assets. Source: Compustat [(invt / at) / (lag(invt)/lag(at))]
Soft Assets	The ratio of the client's non-cash and non-PPE assets to total assets. Source: Compustat [(at - ppent - che) / at]
Leverage	The client's debt-to-equity ratio. Source: Compustat [(ddl + dltt) / seq]

Variable	Definition
Issuance	An indicator variable if the client issued new stock or debt during the year, and zero otherwise. Source: Compustat [dltis > 0 or sstk > 0]
ROA Change	The year-over-year change in the client's ROA. Source: Compustat [*ROA* - lag(*ROA*)]
ROA	The client's return on total assets, calculated as net income divided by beginning total assets. Source: Compustat [ni / lag(at)]
Book-to-Market	The ratio of the client's book value of equity to its market value of equity. Source: Compustat [teq / (csho * prcc_f)]
ln(Market Value)	The natural logarithm of the client's total market value. Source: Compustat [log (chso * prcc_f)]
Accelerated	An indicator variable equal to one if the client is an accelerated filer, and zero otherwise. Source: Audit Analytics
ln(Client Age)	The natural logarithm of the total number of years that the client appears on Compustat. Source: Compustat
Ln(Office Size)	The natural log of the total assets of all clients audited by the audit firm office during the year. Source: Audit Analytics, Compustat
Office Growth	The year-over-year increase in the total audit fees paid to the audit office by all audit clients, scaled by prior year total office fees. Source: Audit Analytics
Industry Expert	An indicator variable equal to one if the audit firm office accounts for more than 50% of audit fees within industry (2-digit SIC) and audit office CBSA, and zero otherwise. Source: Audit Analytics
Annually Inspected	An indicator variable equal to one if the audit firm is subject to annual inspections by the PCAOB, and zero otherwise. Source: PCAOB
Announced Restatement	An indicator variable equal to one if the client announces the restatement of a *prior period's* financial statements, and zero otherwise. Source: Audit Analytics
MW	An indicator variable equal to one if the client is issued a material weakness on its 10-K, and zero otherwise. Source: Audit Analytics
ln(Audit Firm Tenure)	The natural logarithm of the total number of years that the client is audited by the current auditor. Source: Audit Analytics
Large (Small) Client	An indicator variable equal to one if the client's total assets are greater than (less than or equal to) the median client assets of the local auditor-office, and zero otherwise.

Variable	Definition
High (Low) Complexity	An indicator variable equal to one if the client's accounting reporting complexity (*ARC*) is greater than (less than or equal to) the median client *ARC* of the local auditor-office, and zero otherwise.
To Big 4 Firm	An indicator variable equal to one if the client has dismissed their audit firm and subsequently engaged the services of a Big 4 firm, and zero otherwise. Source: Audit Analytics
Upgrade Firm	An indicator variable equal to one if the client has dismissed their audit firm and subsequently engaged the services of a higher tier firm (e.g., from triennially inspected to annually inspected), and zero otherwise. Source: Audit Analytics
Upgrade Office Fees	An indicator variable equal to one if the client has dismissed their audit firm and subsequently engaged the services of an audit firm office with greater total audit fees than the dismissed audit office, and zero otherwise. Source: Audit Analytics
Upgrade Office Size	An indicator variable equal to one if the client has dismissed their audit firm and subsequently engaged the services of an audit firm office that audits greater total assets than the dismissed audit office, and zero otherwise. Source: Audit Analytics
Industry Experience (No Industry Experience)	An indicator variable equal to one if *Mandatory Rotation* equals one and the new lead engagement partner audits at least one other audit client (zero other audit clients) within the same SIC 1-digit industry and year as the observation client, and zero otherwise.
PY Public Client (No PY Public Client)	An indicator variable equal to one if *Mandatory Rotation* equals one and the new lead engagement partner served as the lead engagement partner for at least one other public client (zero other public clients) in the year immediately prior to the current observation-year, and zero otherwise. Source: Form AP
High Partner Capacity (Low Partner Capacity)	An indicator variable equal to one if *Mandatory Rotation* equals one and the ratio of total audit partners to total public clients in the local audit office is greater than (less than or equal to) the median ratio across all firms in the same CBSA in the year immediately prior to the current observation-year, and zero otherwise. Source: Form AP

References

Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury (ACAP). 2008. *Final Report of the Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury*.

Ai, X., L. M. Cunningham, X. Li, and L. A. Myers. 2021. How Can Small International Accounting Firms Improve Audit Quality? The Role of Accounting Associations and Networks. Working paper, University of Tennessee, Knoxville and Central University of Finance and Economics

Azizkhani, M., G. S. Monroe, and G. Shailer. 2012. Audit Partner Tenure and Cost of Equity Capital. *AUDITING: A Journal of Practice & Theory* 32 (1): 183–202.

Bamber, E. M., and L. S. Bamber. 2009. Discussion of 'Mandatory Audit Partner Rotation, Audit Quality, and Market Perception: Evidence from Taiwan'*. *Contemporary Accounting Research* 26 (2): 393–402.

Bamber, E. M., and V. M. Iyer. 2007. Auditors' Identification with Their Clients and Its Effect on Auditors' Objectivity. *AUDITING: A Journal of Practice & Theory* 26 (2): 1–24.

Beck, M. J., J. R. Francis, and J. L. Gunn. 2018. Public Company Audits and City-Specific Labor Characteristics. *Contemporary Accounting Research* 35 (1): 394–433.

Bedard, J. C., and K. M. Johnstone. 2004. Earnings Manipulation Risk, Corporate Governance Risk, and Auditors' Planning and Pricing Decisions. *The Accounting Review* 79 (2): 277–304.

Bills, K. L., L. M. Cunningham, and L. A. Myers. 2016a. Small Audit Firm Membership in Associations, Networks, and Alliances: Implications for Audit Quality and Audit Fees. *The Accounting Review* 91 (3): 767–792.

Bills, K. L., C. Hayne, and S. E. Stein. 2018. A Field Study on Small Accounting Firm Membership in Associations and Networks: Implications for Audit Quality. *The Accounting Review* 93 (5): 73–96.

Bills, K. L., Q. T. Swanquist, and R. L. Whited. 2016b. Growing Pains: Audit Quality and Office Growth. *Contemporary Accounting Research* 33 (1): 288–313.

Bowlin, K. O., J. L. Hobson, and M. D. Piercey. 2015. The effects of auditor rotation, professional skepticism, and interactions with managers on audit quality. *The Accounting Review* 90 (4): 1363–1393.

Brown, S. V., and W. R. Knechel. 2016. Auditor–Client Compatibility and Audit Firm Selection. *Journal of Accounting Research* 54 (3): 725–775.

Burke, J. J., R. Hoitash, and U. Hoitash. 2019. Audit Partner Identification and Characteristics: Evidence from U.S. Form AP Filings. *AUDITING: A Journal of Practice & Theory* 38 (3): 71–94.

Carcello, J. V., and C. Li. 2013. Costs and Benefits of Requiring an Engagement Partner Signature: Recent Experience in the United Kingdom. *The Accounting Review* 88 (5): 1511–1546.

Carey, P., and R. Simnett. 2006. Audit Partner Tenure and Audit Quality. *The Accounting Review* 81 (3): 653–676.

Cassell, C. A., G. Giroux, L. A. Myers, and T. C. Omer. 2013. The Emergence of Second-Tier Auditors in the US: Evidence from Investor Perceptions of Financial Reporting Credibility. *Journal of Business Finance & Accounting* 40 (3–4): 350–372.

Chamberlain, G. 1984. Chapter 22 Panel data. In *Handbook of Econometrics*, 2:1247–1318. Elsevier.

Chang, H., C. S. A. Cheng, and K. J. Reichelt. 2010. Market Reaction to Auditor Switching from Big 4 to Third-Tier Small Accounting Firms. *AUDITING: A Journal of Practice & Theory* 29 (2): 83–114.

Chen, C.-Y., C.-J. Lin, and Y.-C. Lin. 2008. Audit Partner Tenure, Audit Firm Tenure, and Discretionary Accruals: Does Long Auditor Tenure Impair Earnings Quality?. *Contemporary Accounting Research* 25 (2): 415–445.

Chi, W., H. Huang, Y. Liao, and H. Xie. 2009. Mandatory Audit Partner Rotation, Audit Quality, and Market Perception: Evidence from Taiwan. *Contemporary Accounting Research* 26 (2): 359–391.

Chychyla, R., A. J. Leone, and M. Minutti-Meza. 2019. Complexity of financial reporting standards and accounting expertise. *Journal of Accounting and Economics* 67 (1): 226–253.

Cohen, M. F., L. J. Seidler, W. S. Holmes, L. Layton, W. C. Norby, K. W. Stringer, J. J. van Benten, et al. 1978. The Commission on Auditors' Responsibilities: 223.

Coleman, D., D. Tanona, and D. Whalen. 2020. *2019 Financial Restatements: A Nineteen Year Comparison*. Audit Analytics.

Cunningham, L. M., C. Li, S. E. Stein, and N. S. Wright. 2019. What's in a Name? Initial Evidence of U.S. Audit Partner Identification Using Difference-in-Differences Analyses. *The Accounting Review* 94 (5): 139–163.

Daugherty, B. E., D. Dickins, R. C. Hatfield, and J. L. Higgs. 2012. An Examination of Partner Perceptions of Partner Rotation: Direct and Indirect Consequences to Audit Quality. *AUDITING: A Journal of Practice & Theory* 31 (1): 97–114.

Dechow, P. M., W. Ge, C. R. Larson, and R. G. Sloan. 2011. Predicting Material Accounting Misstatements. *Contemporary Accounting Research* 28 (1): 17–82.

DeFond, M. L., and C. S. Lennox. 2011. The effect of SOX on small auditor exits and audit quality. *Journal of Accounting and Economics* 52 (1): 21–40.

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

Dodgson, M. K., C. P. Agoglia, G. B. Bennett, and J. R. Cohen. 2020. Managing the Auditor-Client Relationship Through Partner Rotations: The Experiences of Audit Firm Partners. *The Accounting Review* 95 (2): 89–111.

Dopuch, N., R. R. King, and R. Schwartz. 2001. An Experimental Investigation of Retention and Rotation Requirements. *Journal of Accounting Research* 39 (1): 93–117.

Downes, J. F., M. A. Draeger, and A. E. Sadler. 2022. Does Audit Committee Disclosure of Partner-Selection Involvement Signal Greater Audit Quality? *Accounting Horizons* 36 (1): 49-75.

Fargher, N., H. Lee, and V. Mande. 2008. The effect of audit partner tenure on client managers' accounting discretion. *Managerial Auditing Journal* 23 (2): 161–186.

Fitzgerald, B. C., T. C. Omer, and A. M. Thompson. 2018. Audit Partner Tenure and Internal Control Reporting Quality: U.S. Evidence from the Not-For-Profit Sector. *Contemporary Accounting Research* 35 (1): 334–364.

Francis, J. R., N. Golshan, and N. J. Hallman. 2022. Does Distance Matter? An Investigation of Partners Who Audit Distant Clients and the Effects on Audit Quality. *Contemporary Accounting Research*. Forthcoming.

Francis, J. R., D. J. Stokes, and D. Anderson. 1999. City Markets as a Unit of Analysis in Audit Research and the Re-Examination of Big 6 Market Shares. *Abacus* 35 (2): 185–206.

Francis, J. R., and M. D. Yu. 2009. Big 4 Office Size and Audit Quality. *The Accounting Review* 84 (5): 1521–1552.

Gipper, B., L. Hail, and C. Leuz. 2021a. On the Economics of Mandatory Audit Partner Rotation and Tenure: Evidence from PCAOB Data. *The Accounting Review* 96 (2): 303-331.

Gipper, B., L. Hail, and C. Leuz. 2021b. Determinants and Career Consequences of Early Audit Partner Rotations. Center for Financial Studies Working Paper No. 676, Stanford University, University of Pennsylvania, and University of Chicago.

Hainmueller, J. 2012. Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies. *Political Analysis* 20 (1): 25–46.

Harris, S. B. 2017. Audit Industry Concentration and Potential Implications. https://pcaobus.org/news-events/speeches/speech-detail/audit-industry-concentration-and-potential-implications_674.

Hennes, K. M., A. J. Leone, and B. P. Miller. 2014. Determinants and Market Consequences of Auditor Dismissals after Accounting Restatements. *The Accounting Review* 89 (3): 1051–1082.

Hoitash, R., and U. Hoitash. 2018. Measuring Accounting Reporting Complexity with XBRL. *The Accounting Review* 93 (1): 259–287.

Johnson, E., I. K. Khurana, and J. K. Reynolds. 2002. Audit-Firm Tenure and the Quality of Financial Reports. *Contemporary Accounting Research* 19 (4): 637–660.

Kanodia, C., and A. Mukherji. 1994. Audit Pricing, Lowballing and Auditor Turnover: A Dynamic Analysis. *The Accounting Review* 69 (4): 593–615.

Kuang, H., H. Li, M. G. Sherwood, and R. L. Whited. 2020. Mandatory Audit Partner Rotations and Audit Quality in the United States. *AUDITING: A Journal of Practice & Theory* 39 (3): 161–184.

Laurion, H., A. Lawrence, and J. P. Ryans. 2017. U.S. Audit Partner Rotations. *The Accounting Review* 92 (3): 209–237.

Lennox, C. 2000. Do companies successfully engage in opinion-shopping? Evidence from the UK. *Journal of Accounting and Economics*: 17.

Lennox, C., and B. Li. 2014. Accounting misstatements following lawsuits against auditors. *Journal of Accounting and Economics* 57 (1): 58–75.

Lennox, C. S., X. Wu, and T. Zhang. 2014. Does Mandatory Rotation of Audit Partners Improve Audit Quality? *The Accounting Review* 89 (5): 1775–1803.

Litt, B., D. S. Sharma, T. Simpson, and P. N. Tanyi. 2014. Audit Partner Rotation and Financial Reporting Quality. *AUDITING: A Journal of Practice & Theory* 33 (3): 59–86.

Manry, D. L., T. J. Mock, and J. L. Turner. 2008. Does Increased Audit Partner Tenure Reduce Audit Quality? *Journal of Accounting, Auditing & Finance* 23 (4): 553–572.

McKeon, J., and K. Plante. 2020. Who Audits Public Companies- 2020 Edition. *Audit Analytics*. https://blog.auditanalytics.com/who-audits-public-companies-2020-edition/.

McMullin, J. L., and B. Schonberger. 2022. When Good Balance Goes Bad: a Discussion of Common Pitfalls When Using Entropy Balancing. *Journal of Financial Reporting*. Forthcoming

Newton, N. J., J. S. Persellin, Dechun Wang, and M. S. Wilkins. 2016. Internal Control Opinion Shopping and Audit Market Competition. *The Accounting Review* 91 (2): 603–623.

Petersen, M. A. 2009. Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches. *The Review of Financial Studies* 22 (1): 435–480.

Public Company Accounting Oversight Board (PCAOB). 2011. Concept Release on Auditor Independence and Audit Firm Rotation. PCAOB Release No. 2011-006.

Public Company Accounting Oversight Board (PCAOB). 2015. Improving the Transparency of Audits: Rules to Require Disclosure of Certain Audit Participants on a New PCAOB Form and Related Amendments to Auditing Standards.

SEC. 2003. Final Rule: Strengthening the Commission's Requirements Regarding Auditor Independence; Rel. Nos. 33-8183, 34-47265; 35-27642; IC-25915; IA-2103; File No. S7-49-02. https://www.sec.gov/rules/final/33-8183.htm.

Sharma, D. S., P. N. Tanyi, and B. A. Litt. 2017. Costs of Mandatory Periodic Audit Partner Rotation: Evidence from Audit Fees and Audit Timeliness. *AUDITING: A Journal of Practice* 36 (1): 129–149.

Shipman, J. E., Q. T. Swanquist, and R. L. Whited. 2017. Propensity Score Matching in Accounting Research. *The Accounting Review* 92 (1): 213–244.

Swanquist, Q. T., and R. L. Whited. 2015. Do Clients Avoid "Contaminated" Offices? The Economic Consequences of Low-Quality Audits. *The Accounting Review* 90 (6): 2537–2570.

U.S. House of Representatives. 2002. *The Sarbanes-Oxley Act of 2002*. *Public Law 107-204*.

Wang, K. J., and B. M. Tuttle. 2009. The impact of auditor rotation on auditor–client negotiation. *Accounting, Organizations and Society* 34 (2): 222–243.

Winn, A. M. 2021. The Joint Effects of Partner Rotation and PCAOB Inspections on Audit Effort. *AUDITING: A Journal of Practice & Theory* (AJPT-18-121).

Tables

Table 1 Sample construction

	Observations	Mandatory Rotations
Observations on Form AP and Compustat with fiscal years ended during 2017, 2018, and 2019	16,575	
Less: Observations incorporated outside the U.S. or audited by with non-U.S. audit firms or missing audit firm location data	(3,391)	
Less: Observations with less than $1 million in total assets	(450)	
Less: Observations in first year of a new audit firm's tenure or after an audit firm merger	(792)	
Less: Observations missing at least two years of Form AP data required to calculate partner changes	(1,323)	
Less: Observations for which the audit firm has fewer than five public clients in the calendar year (thus not subject to mandatory rotation requirements).	(339)	
Less: Client-years audited by one of the Big 4 audit firms	(6,898)	
Mandatory Rotation Sample	3,382	492
Misstatements Sample		
Less: Observations ending after 2018 to allow time for misstatements to be discovered and announced	(1,210)	
Less: Observations missing data to calculate necessary control variables	(175)	
Audit Quality Sample	1,997	312
Audit Firm Dismissals Sample		
3,382 observations (from Mandatory Rotation Sample)		
Less: Observations missing data to calculate necessary control variables	(214)	
Dismissals Sample	3,168	464

Notes: Table 1 presents the sample selection process for the Audit Quality and Dismissals analyses. See section III for discussion of the sample selection process.

Table 2 Descriptive statistics

Panel A: Audit Firm Characteristics

Audit Firm Name	(1) Annually Inspected	(2) N (AQ)	(3) N (Dismiss)	(4) Total Offices	(5) Total Partners	(6) AAN Member
BDO USA LLP	1	331	495	35	145	1
Grant Thornton LLP	1	281	447	34	135	1
RSM US LLP	1	161	259	35	79	1
Marcum LLP	1	98	177	10	32	1
Moss Adams LLP	1	87	148	12	40	1
Crowe LLP	1	70	147	17	44	1
Crowe Horwath LLP	1	62	63	14	33	1
EisnerAmper LLP	0	57	92	3	17	1
BKD LLP	0	53	89	10	20	1
Baker Tilly Virchow Krause LLP	0	52	84	12	18	1
Dixon Hughes Goodman LLP	0	45	66	9	19	1
MaloneBailey LLP	1	35	55	1	5	1
CohnReznick LLP	0	33	50	3	12	1
Mayer Hoffman McCann (CBIZ MHM) PC	0	31	52	8	20	1
Cherry Bekaert LLP	0	27	42	7	12	1
Friedman LLP	0	26	47	2	16	1
Squar Milner LLP	0	25	42	2	13	1
RBSM LLP	0	23	37	3	6	1
SR Snodgrass PC/AC	0	24	39	1	5	0
Wolf & Company PC (MA)	0	23	35	1	11	1
Yount Hyde & Barbour PC	0	23	38	3	7	1
BPM LLP	0	21	36	3	6	1
EKS&H LLLP	0	22	22	2	13	1
Elliott Davis LLC	0	20	30	6	7	1
OUM & Co LLP	0	20	30	1	4	0
Whitley Penn LLP	0	19	26	2	8	1
Plante & Moran PLLC	0	18	40	7	23	1
Sadler Gibb & Associates LLC	0	19	30	1	4	0
KMJ Corbin & Company LLP	0	16	23	1	3	1
Freed Maxick CPAs PC	0	15	23	2	4	1
Eide Bailly LLP	0	14	20	4	7	1
Porter Keadle Moore LLC	0	13	13	1	5	0
UHY LLP	0	13	18	3	8	1
Liggett & Webb PA	0	12	18	2	5	0
Tanner LLC/LC	0	12	18	1	6	1
BF Borgers CPA PC	0	11	17	1	3	0
DeCoria Maichel & Teague PS	0	10	15	1	3	0

HoganTaylor LLP	0	10	15	2	5	1
Peterson Sullivan LLP/PLLC	0	10	10	1	2	0
39 Firms with fewer than 10 observations in the Audit Quality Sample	0%	155	260	55	112	75%
Total/Weighted Average	**55%**	**1,997**	**3,168**	**318**	**917**	**93%**

Table 2 (continued)

Panel B: Audit Quality Sample

	N	Mean	Median	SD	25th	75th
Mandatory Rotation	1,997	0.156	0.000	0.363	0.000	0.000
Voluntary Rotation	1,997	0.066	0.000	0.248	0.000	0.000
Misstatement	1,997	0.056	0.000	0.229	0.000	0.000
ARC	1,997	5.640	5.635	0.448	5.298	5.999
Total Accruals$_{(t-1)}$	1,997	0.005	0.006	0.312	-0.056	0.063
Receivables Change$_{(t-1)}$	1,997	0.005	0.002	0.051	-0.011	0.023
Inventory Change$_{(t-1)}$	1,997	-0.001	0.000	0.032	-0.003	0.001
Soft Assets$_{(t-1)}$	1,997	0.612	0.691	0.316	0.336	0.914
Leverage$_{(t-1)}$	1,997	0.378	0.139	2.244	0.000	0.671
Issuance$_{(t-1)}$	1,997	0.842	1.000	0.365	1.000	1.000
ROA Change$_{(t-1)}$	1,997	0.060	-0.000	0.850	-0.042	0.050
ROA$_{(t-1)}$	1,997	-0.282	0.004	0.782	-0.245	0.022
Book-to-Market$_{(t-1)}$	1,997	0.685	0.718	0.373	0.387	0.949
ln(Market Value)	1,997	4.756	4.777	1.808	3.399	6.025
Accelerated	1,997	0.535	1.000	0.499	0.000	1.000
ln(Client Age)	1,997	2.727	2.890	0.710	2.079	3.219
ln(Office Size)	1,997	8.118	8.422	1.894	6.906	9.406
Office Growth	1,997	0.153	0.078	0.501	-0.102	0.253
ln(Audit Firm Tenure)	1,997	1.888	1.792	0.683	1.386	2.485
Auditor Dismissal$_{(t+1)}$	3,168	0.056	0.000	0.229	0.000	0.000
Announced Restatement	3,168	0.078	0.000	0.268	0.000	0.000
MW	3,168	0.170	0.000	0.376	0.000	0.000
GC	3,168	0.171	0.000	0.377	0.000	0.000

Table 2 (continued)

Panel C: Mandatory rotations and all other observations

	Mandatory Rotation = 1 (n = 312)		*Mandatory Rotation = 0 (n = 1,554)*			
	Mean	Std. Dev	Mean	Std. Dev	Difference	T-stat
Misstatement	0.071	0.256	0.050	0.217	0.021	(1.51)
ARC	5.616	0.485	5.640	0.450	-0.024	(-0.84)
Total Accruals$_{(t-1)}$	-0.012	0.408	0.003	0.407	-0.015	(-0.59)
Receivables Change$_{(t-1)}$	0.001	0.066	0.007	0.068	-0.006	(-1.36)
Inventory Change$_{(t-1)}$	0.001	0.041	-0.002	0.045	0.003	(1.00)
Soft Assets$_{(t-1)}$	0.608	0.317	0.610	0.317	-0.002	(-0.12)
Leverage$_{(t-1)}$	0.500	2.099	0.363	2.232	0.137	(1.00)
Issuance$_{(t-1)}$	0.849	0.358	0.840	0.367	0.010	(0.42)
ROA Change$_{(t-1)}$	-0.011	1.525	0.278	5.879	-0.289	(-0.86)
ROA$_{(t-1)}$	-0.338	2.064	-0.408	2.182	0.069	(0.52)
Book-to-Market$_{(t-1)}$	0.691	0.360	0.686	0.377	0.005	(0.21)
ln(Market Value)	4.799	1.955	4.737	1.844	0.062	(0.54)
Accelerated	0.561	0.497	0.535	0.499	0.026	(0.85)
ln(Client Age)	2.816	0.668	2.725	0.711	0.091**	(2.08)
ln(Office Size)	8.121	1.974	8.070	1.970	0.051	(0.42)
Office Growth	0.408	2.351	0.329	5.846	0.079	(0.23)
ln(Audit Firm Tenure)	2.266	0.440	1.856	0.699	0.411***	(9.98)

Notes: Table 2 presents descriptive statistics for the Audit Quality and Dismissals samples.
Panel A presents descriptive statistics at the audit firm level for both the Audit Quality Sample and Dismissals Sample.
Panel B presents descriptive statistics for the variables used in the Audit Quality analyses, as well as the additional variables used in the Dismissals Analyses. All variables are defined in the Appendix. Continuous variables are winsorized at the 1st and 99th percentile.
Panel C presents means and standard deviations of variables in the Audit Quality Sample for mandatory audit partner rotation observations and all other observations. *, **, and *** denote the difference in means between *Mandatory Rotation* observations and all other observations is statistically different than zero at the 10 percent, 5 percent, and 1 percent levels (two-tailed), respectively.

Table 3 Mandatory audit partner rotation and audit quality

DV =	(1) *Misstatement*	
Mandatory Rotation	**0.030****	**(1.98)**
Voluntary Rotation	0.034	(1.23)
ARC	0.019	(0.81)
Total Accruals$_{(t-1)}$	0.014	(0.86)
Receivables Change$_{(t-1)}$	0.025	(0.24)
Inventory Change$_{(t-1)}$	0.375**	(2.36)
Soft Assets$_{(t-1)}$	-0.002	(-0.07)
Leverage$_{(t-1)}$	-0.000	(-0.07)
Issuance$_{(t-1)}$	0.027*	(1.93)
ROA Change$_{(t-1)}$	-0.001	(-0.11)
ROA$_{(t-1)}$	-0.000	(-0.03)
Book-to-Market$_{(t-1)}$	0.044**	(2.13)
ln(Market Value)	-0.000	(-0.09)
Accelerated	0.014	(0.80)
ln(Client Age)	-0.008	(-0.89)
ln(Office Size)	0.001	(0.24)
Office Growth	-0.010	(-0.93)
Constant	-0.122	(-0.89)
Industry FE	Yes	
Year FE	Yes	
Audit Firm FE	Yes	
Auditor Tenure FE	Yes	
Observations	1,997	
R^2	0.148	
Adjusted R^2	0.060	

Notes: Table 3 presents analysis of the relationship between mandatory audit partner rotation and audit quality. Fixed effects are included as indicated but suppressed for brevity. All variables are defined in the Appendix, and all continuous variables are winsorized at the 1st and 99th percentile. I cluster robust standard errors by client. T-statistics are presented in parentheses to the right of coefficient estimates. *, **, and *** denote significance levels of 10 percent, 5 percent, and 1 percent (two-tailed) respectively.

Table 4 Mandatory audit partner rotation and client size, complexity

Panel A: Large and small clients within audit firm

DV = *Misstatement*	(1) Large Clients		(2) Small Clients	
Mandatory Rotation	**0.079*** **	**(3.19)**	**-0.019**	**(-0.83)**
Voluntary Rotation	0.004	(0.12)	0.057	(1.15)
ARC	0.018	(0.53)	0.029	(0.72)
Total Accruals$_{(t-1)}$	0.018	(0.49)	0.001	(0.03)
Receivables Change$_{(t-1)}$	0.096	(0.71)	-0.085	(-0.53)
Inventory Change$_{(t-1)}$	0.420*	(1.71)	0.214	(0.94)
Soft Assets$_{(t-1)}$	0.004	(0.07)	-0.000	(-0.01)
Leverage$_{(t-1)}$	-0.001	(-0.17)	-0.001	(-0.36)
Issuance$_{(t-1)}$	0.042**	(1.98)	0.016	(0.68)
ROA Change$_{(t-1)}$	-0.005	(-0.81)	-0.001	(-0.10)
ROA$_{(t-1)}$	-0.005	(-0.47)	0.005	(0.36)
Book-to-Market$_{(t-1)}$	0.046	(1.40)	0.044	(1.46)
ln(Market Value)	-0.007	(-0.69)	0.013	(1.41)
Accelerated	0.012	(0.46)	0.006	(0.23)
ln(Client Age)	-0.005	(-0.37)	0.000	(0.01)
ln(Office Size)	0.001	(0.08)	-0.001	(-0.12)
Office Growth	-0.017	(-1.20)	0.000	(0.02)
Constant	-0.031	(-0.15)	-0.264	(-1.07)
Industry FE	Yes		Yes	
Year FE	Yes		Yes	
Audit Firm FE	Yes		Yes	
Auditor Tenure FE	Yes		Yes	
Observations	1,064		933	
R^2	0.234		0.203	
Adjusted R^2	0.082		0.036	

Table 4 (continued)

Panel B: More and less complex clients within audit firm

DV = *Misstatement*	(1) High *ARC*		(2) Low *ARC*	
Mandatory Rotation	**0.048***	**(1.80)**	**0.019**	**(0.87)**
Voluntary Rotation	0.006	(0.15)	0.059	(1.42)
ARC	-0.008	(-0.15)	0.032	(0.67)
Total Accruals$_{(t-1)}$	-0.012	(-0.43)	0.028	(1.11)
Receivables Change$_{(t-1)}$	0.218	(1.39)	-0.127	(-0.84)
Inventory Change$_{(t-1)}$	0.594**	(2.01)	0.148	(0.73)
Soft Assets$_{(t-1)}$	-0.018	(-0.33)	-0.012	(-0.28)
Leverage$_{(t-1)}$	0.000	(0.03)	0.001	(0.27)
Issuance$_{(t-1)}$	0.023	(0.93)	0.030	(1.63)
ROA Change$_{(t-1)}$	0.003	(0.29)	-0.004	(-0.47)
ROA$_{(t-1)}$	-0.001	(-0.09)	-0.001	(-0.07)
Book-to-Market$_{(t-1)}$	0.068	(1.54)	0.028	(1.10)
ln(Market Value)	0.002	(0.25)	-0.002	(-0.20)
Accelerated	-0.020	(-0.75)	0.035	(1.33)
ln(Client Age)	-0.001	(-0.06)	-0.007	(-0.58)
ln(Office Size)	0.003	(0.32)	-0.003	(-0.37)
Office Growth	0.005	(0.29)	-0.017	(-1.15)
Constant	0.341	(0.99)	-0.193	(-0.70)
Industry FE	Yes		Yes	
Year FE	Yes		Yes	
Audit Firm FE	Yes		Yes	
Auditor Tenure FE	Yes		Yes	
Observations	1,034		963	
R^2	0.246		0.181	
Adjusted R^2	0.091		0.013	

Notes: Panels A and B of Table 4 present analyses of the relationship between mandatory audit partner rotation and audit quality for large and small (more complex and less complex) clients.
Panel A presents results in the Large Clients subsample (column 1) and Small Clients Subsample (column 2), and Panel B presents results in the High *ARC* subsample (column 1) and Low *ARC* subsample (column 2). Large (High *ARC*) clients are identified as those clients with total assets (*ARC*) greater than the median value within audit firm-office-year.
In both panels, fixed effects are included as indicated but suppressed for brevity. All variables are defined in the Appendix, and all continuous variables are winsorized at the 1st and 99th percentile. I cluster robust standard errors by client. T-statistics are presented in parentheses to the right of coefficient estimates. *, **, and *** denote significance levels of 10 percent, 5 percent, and 1 percent (two-tailed) respectively.

Table 5 Mandatory audit partner rotation and audit firm dismissal

Panel A: First year after mandatory rotation

DV =	(1) *Auditor Dismissal*$_{(t+1)}$	
Mandatory Rotation	**-0.011**	**(-0.84)**
Voluntary Rotation	0.008	(0.42)
ARC	0.029	(1.59)
Total Accruals	0.014	(0.69)
Receivables Change	0.105	(1.06)
Inventory Change	-0.279**	(-2.06)
Soft Assets	0.002	(0.09)
Leverage	-0.002*	(-1.65)
Issuance	-0.001	(-0.08)
ROA Change	-0.003	(-0.40)
ROA	-0.007	(-0.64)
Book-to-Market	-0.024	(-1.36)
ln(Market Value)	-0.005	(-1.11)
Accelerated	0.017	(1.15)
ln(Client Age)	0.005	(0.76)
ln(Office Size)	0.004	(1.04)
Office Growth	0.015	(1.41)
Announced Misstatement	0.053**	(2.39)
MW	0.042**	(2.40)
Going Concern	-0.031*	(-1.84)
Constant	-0.130	(-1.23)
Industry FE	Yes	
Year FE	Yes	
Audit Firm FE	Yes	
Auditor Tenure FE	Yes	
Observations	3,168	
R^2	0.082	
Adjusted R^2	0.019	

Table 5 (continued)

Panel B: Adding second and third year following mandatory partner rotation

DV =	(1) *Auditor Dismissal$_{(t+1)}$*	
Mandatory Rotation	**-0.002**	**(-0.18)**
Early Tenure (Mandatory)	**0.036 ****	**(2.19)**
Voluntary Rotation	0.005	(0.27)
ARC	0.031 *	(1.68)
Total Accruals	0.014	(0.72)
Receivables Change	0.102	(1.03)
Inventory Change	-0.280 **	(-2.07)
Soft Assets	0.003	(0.14)
Leverage	-0.003 *	(-1.70)
Issuance	-0.002	(-0.15)
ROA Change	-0.003	(-0.38)
ROA	-0.007	(-0.68)
Book-to-Market	-0.024	(-1.39)
ln(Market Value)	-0.005	(-1.09)
Accelerated	0.016	(1.08)
ln(Client Age)	0.005	(0.71)
ln(Office Size)	0.004	(1.11)
Office Growth	0.015	(1.39)
Announced Misstatement	0.053 **	(2.40)
MW	0.042 **	(2.43)
Going Concern	-0.032 *	(-1.90)
Constant	-0.135	(-1.28)
Industry FE	Yes	
Year FE	Yes	
Audit Firm FE	Yes	
Auditor Tenure FE	Yes	
Observations	3,168	
R^2	0.084	
Adjusted R^2	0.021	

Notes: Table 5 presents analyses of the relationship between mandatory audit partner rotation and audit firm dismissals. Panel A presents results in the main specification, and Panel B presents results after including *Early Tenure (Mandatory)*, an indicator variable equal to 1 if the audit partner is in their second or third year following mandatory audit partner rotation, and 0 otherwise. Fixed effects are included as indicated but suppressed for brevity. All variables are defined in the Appendix, and all continuous variables are winsorized at the 1st and 99th percentile. I cluster robust standard errors by client. T-statistics are presented in parentheses to the right of coefficient estimates. *, **, and *** denote significance levels of 10 percent, 5 percent, and 1 percent (two-tailed) respectively.

Table 6 Audit firm dismissal and client size, complexity

Panel A: Large and small clients within audit firm

DV = *Auditor Dismissal*$_{(t+1)}$	(1) Large Clients		(2) Small Clients	
Mandatory Rotation	0.011	(0.57)	-0.032	(-1.56)
Early Tenure (Mandatory)	0.051**	(2.10)	0.030	(1.18)
Voluntary Rotation	-0.006	(-0.23)	0.006	(0.19)
ARC	0.080***	(2.78)	-0.003	(-0.13)
Total Accruals	0.023	(0.62)	0.007	(0.28)
Receivables Change	0.314*	(1.92)	0.009	(0.07)
Inventory Change	-0.268	(-1.20)	-0.383**	(-2.14)
Soft Assets	0.005	(0.12)	-0.018	(-0.52)
Leverage	-0.002	(-0.97)	-0.003	(-1.56)
Issuance	-0.014	(-0.62)	0.015	(0.88)
ROA Change	-0.010	(-0.71)	0.005	(0.54)
ROA	-0.018	(-0.83)	-0.006	(-0.45)
Book-to-Market	-0.016	(-0.49)	-0.054**	(-2.24)
ln(Market Value)	-0.011	(-1.39)	-0.004	(-0.46)
Accelerated	0.042*	(1.83)	-0.012	(-0.54)
ln(Client Age)	-0.013	(-1.26)	0.032***	(3.08)
ln(Office Size)	0.004	(0.60)	0.002	(0.42)
Office Growth	0.034**	(1.96)	-0.004	(-0.32)
Announced Misstatement	0.062*	(1.89)	0.030	(1.05)
MW	0.041	(1.34)	0.045**	(2.07)
Going Concern	-0.067**	(-2.09)	-0.008	(-0.41)
Constant	-0.366**	(-2.06)	-0.057	(-0.36)
Industry FE	Yes		Yes	
Year FE	Yes		Yes	
Audit Firm FE	Yes		Yes	
Auditor Tenure FE	Yes		Yes	
Observations	1,659		1,509	
R^2	0.142		0.137	
Adjusted R^2	0.028		0.019	

Table 6 (continued)

Panel B: More and less complex clients within audit firm

DV = *Auditor Dismissal*$_{(t+1)}$	(1) High *ARC*		(2) Low *ARC*	
Mandatory Rotation	0.021	(1.00)	-0.017	(-0.83)
Early Tenure (Mandatory)	0.045*	(1.86)	0.033	(1.36)
Voluntary Rotation	0.011	(0.35)	-0.002	(-0.08)
ARC	0.049	(1.13)	0.008	(0.24)
Total Accruals	0.021	(0.61)	0.005	(0.21)
Receivables Change	0.289*	(1.89)	-0.116	(-0.87)
Inventory Change	-0.251	(-1.20)	-0.300	(-1.55)
Soft Assets	-0.004	(-0.10)	-0.004	(-0.13)
Leverage	-0.005**	(-2.51)	0.000	(0.12)
Issuance	0.002	(0.08)	-0.002	(-0.14)
ROA Change	-0.005	(-0.36)	-0.001	(-0.08)
ROA	-0.012	(-0.55)	-0.016	(-1.23)
Book-to-Market	-0.014	(-0.38)	-0.033*	(-1.77)
ln(Market Value)	-0.003	(-0.39)	-0.007	(-1.02)
Accelerated	0.016	(0.74)	0.017	(0.74)
ln(Client Age)	-0.009	(-0.80)	0.025**	(2.54)
ln(Office Size)	0.006	(0.89)	0.001	(0.14)
Office Growth	0.023	(1.21)	0.009	(0.74)
Announced Misstatement	0.061*	(1.81)	0.036	(1.16)
MW	0.027	(1.01)	0.061**	(2.57)
Going Concern	-0.053*	(-1.78)	-0.026	(-1.26)
Constant	-0.205	(-0.81)	-0.067	(-0.37)
Industry FE	Yes		Yes	
Year FE	Yes		Yes	
Audit Firm FE	Yes		Yes	
Auditor Tenure FE	Yes		Yes	
Observations	1,623		1,545	
R^2	0.145		0.117	
Adjusted R^2	0.030		-0.003	

Notes: Panels A and B of Table 6 present analyses of the relationship between mandatory audit partner rotation and audit firm dismissals for large and small (more complex and less complex) clients.
Panel A presents results in the Large Clients subsample (column 1) and Small Clients Subsample (column 2), and Panel B presents results in the High *ARC* subsample (column 1) and Low *ARC* subsample (column 2). Large (High *ARC*) clients are identified as those clients with total assets (*ARC*) greater than the median value within audit firm-office-year.
In both panels, fixed effects are included as indicated but suppressed for brevity. All variables are defined in the Appendix, and all continuous variables are winsorized at the 1st and 99th percentile. I cluster robust standard errors by client. T-statistics are presented in parentheses to the right of coefficient estimates. *, **, and *** denote significance levels of 10 percent, 5 percent, and 1 percent (two-tailed) respectively

Table 7 Auditor choice following dismissal

Panel A: Firms hired by clients after dismissing their non-Big 4 auditor

	Number	Percentage
Big 4 Firm	50	28.4%
Mid 2 Firm	23	13.1%
Other Annually Inspected Firm	25	14.2%
Triennially Inspected Firm	78	44.3%
Total	176	100%

Panel B: Firms hired by Large Clients and Small Clients within each audit firm

	Large Clients (n = 98)		*Small Clients (n = 78)*			
	Mean	Std. Dev	Mean	Std. Dev	Difference	T-stat
To Big 4 Firm	0.367	0.485	0.179	0.386	0.188***	(2.79)
Upgrade Firm	0.561	0.499	0.282	0.453	0.279***	(3.84)
Upgrade Office Fees	0.611	0.490	0.360	0.483	0.251***	(3.33)
Upgrade Office Size	0.705	0.458	0.320	0.470	0.385***	(5.38)

Notes: Table 7 presents descriptive statistics showing which audit firms clients hire after dismissing their non-Big 4 auditors.
Panel A presents descriptive statistics for the total sample of client dismissals in the Auditor Dismissals Sample.
Panel B presents univariate statistics showing the means and standard deviations of which firms are hired following dismissal between Large Clients and Small Clients. *, **, and *** denote the difference in means between Large Clients and Small Clients is statistically different than zero at the 10 percent, 5 percent, and 1 percent levels (two-tailed), respectively.

Table 8 Industry experience, public client experience, and partner capacity

Panel A: Audit quality results

DV = *Misstatement*	(1) Industry Experience		(2) Public Client Experience		(3) Office Partner Capacity	
(a) Industry Experience	0.017	(0.77)				
(b) No Industry Experience	0.040*	(1.92)				
(a) PY Public Client			0.010	(0.54)		
(b) No PY Public Client			0.068**	(2.46)		
(a) High Partner Capacity					-0.012	(-0.53)
(b) Low Partner Capacity					0.046**	(2.46)
p-value: $(a) = (b)$	0.458		0.080*		0.046**	
Controls	Yes		Yes		Yes	
Fixed Effects	Yes		Yes		Yes	
Observations	1,997		1,997		1,997	
R^2	0.149		0.151		0.150	
Adjusted R^2	0.060		0.062		0.062	

Table 8 (continued)

Panel B: Auditor dismissals

DV = *Auditor Dismissal*$_{(t+1)}$	(1) Industry Experience		(2) Public Client Experience		(3) Office Partner Capacity	
(a) Industry Experience	0.022	(1.09)				
(b) No Industry Experience	0.046**	(2.10)				
(a) PY Public Client			0.039**	(2.04)		
(b) No PY Public Client			0.031	(1.28)		
(a) High Partner Capacity					0.013	(0.59)
(b) Low Partner Capacity					0.046**	(2.32)
Mandatory Rotation	-0.002	(-0.17)	-0.002	(-0.18)	-0.002	(-0.16)
p-value: $(a) = (b)$	0.371		0.791		0.202	
Controls	Yes		Yes		Yes	
Fixed Effects	Yes		Yes		Yes	
Observations	3,168		3,168		3,168	
R^2	0.084		0.084		0.085	
Adjusted R^2	0.021		0.020		0.021	

Notes: Panels A and B of Table 8 present analyses of the relationship between mandatory audit partner rotation and audit quality and audit firm dismissals for audit partners with industry experience (*Industry Experience*) and those without (*No Industry Experience*) (column 1), partners who served as the lead engagement partner for at least one public client in the year immediately prior to rotation (*PY Public Client*) and those who did not (*No PY Public Client*) (column 2), and between audit firm offices with relatively greater partner capacity (*High Partner Capacity*) and those offices with lower capacity (*Low Partner Capacity*) (column 3).
Panel A presents audit quality results, and Panel B presents audit firm dismissals results.
In both panels, controls and fixed effects are included as indicated but suppressed for brevity. All variables are defined in the Appendix, and all continuous variables are winsorized at the 1st and 99th percentile. I cluster robust standard errors by client. T-statistics are presented in parentheses to the right of coefficient estimates. *, **, and *** denote significance levels of 10 percent, 5 percent, and 1 percent (two-tailed) respectively.

Table 9 Mandatory rotation in Big 4 firms

	(1)		(2)	
DV =	*Misstatement*		*Auditor Dismissal*$_{(t+1)}$	
Mandatory Rotation	0.012	(1.32)	-0.007	(-1.33)
Early Tenure (Mandatory)			0.006	(0.83)
Voluntary Rotation	0.017	(0.68)	0.022	(1.17)
Controls	Yes		Yes	
Fixed Effects	Yes		Yes	
Observations	1,997		1,997	
R^2	0.149		0.151	
Adjusted R^2	0.060		0.062	

Notes: Table 9 presents analyses of the relationship between mandatory audit partner rotation and audit quality and audit firm dismissals for clients of Big 4 firms.
Column 1 presents audit quality results, and column 2 presents audit firm dismissals results.
In both columns, controls fixed effects are included as indicated but suppressed for brevity. All variables are defined in the Appendix, and all continuous variables are winsorized at the 1st and 99th percentile. I cluster robust standard errors by client. T-statistics are presented in parentheses to the right of coefficient estimates. *, **, and *** denote significance levels of 10 percent, 5 percent, and 1 percent (two-tailed) respectively.