A Fresh Look or Resource Constraints? Examining Changes to Component Auditor Use Following Audit Partner Rotation

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Keywords: Audit Partner Rotation; Component Auditor; Audit Quality; Audit Fees

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ABSTRACT

This paper examines whether component auditor use changes following audit partner rotation. For U.S. multinationals, the audit partner must determine whether and to what extent audit procedures, and therefore component auditors, are needed in foreign locations. A new audit partner may not change component auditor use given audit firms strive for continuity during rotations, however, they may provide a fresh look at these decisions or face resource constraints and need time to acquire client and component auditor-specific knowledge. We find incoming partners significantly decrease the number of component auditors used. This decrease is not associated with audit quality changes and is magnified when the audit partner faces fee pressure, suggesting that resource constraints and the need to acquire knowledge explain the finding. While prior literature demonstrates increased hours following audit partner rotation, we provide insight into a specific, important, and complex decision made by new audit partners.

Keywords: Audit Partner Rotation; Component Auditor; Audit Quality; Audit Fees

I. INTRODUCTION

Audit partner rotation is of great interest to the auditing profession, as well as investors and researchers, who seek to understand the tradeoff between the fresh look provided by a new partner and the loss of client-specific knowledge. While researchers have examined aggregate consequences of audit partner rotation, including audit hours, quality, and fees, little is known about specific ways the audit process changes. In this study, we investigate audit process changes for complex multinational engagements, where the impacts of partner rotation are likely to be particularly salient. We use recent component auditor disclosure requirements to examine whether there are changes to the audit process, specifically component auditor use, following audit partner rotation.

During the planning phase of each year's audit, the audit partner leads their team in establishing the overall audit strategy and developing an audit plan. When the client operates in multiple geographic locations, the audit partner must determine whether and to what extent audit procedures are needed in these locations (Downey and Bedard 2019; Downey and Westermann 2021; PCAOB 2010). Essentially, the audit partner must decide whether the location is material enough (individually or when combined with other locations) to impact the team's ability to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. If the location is determined to be material to the resulting audit, a component auditor is typically used to conduct audit work in the location.[1] These planning decisions are complex and subjective, and the audit partner has discretion over their yearly judgments for the materiality of foreign locations and associated component auditor use. Further, this is an important

[1] Component auditors are legally separate audit firms with licenses to operate in the foreign location and are typically affiliated with the lead auditor via a global network. U.S. auditors are generally not allowed to conduct audit work in foreign locations and must engage component auditors.

assessment and decision made by the audit partner, made particularly true as the use of component auditors has garnered significant attention from regulators and investors. For example, the PCAOB frequently issues inspection deficiencies related to component auditor work and the lead auditor's oversight of this work and has adopted two recent standards to enhance the disclosure and supervision of component auditors (PCAOB 2015; PCAOB 2022).

The Sarbanes-Oxley Act of 2002 requires U.S. audit partners to rotate off an engagement after five years. Regulators intend for this periodic change to engagement leadership to provide a "fresh look" at the audit and ensure objectivity and independence in the auditor-client relationship (Laurion et al. 2017; PCAOB 2011). For example, the new partner rotating on to an engagement may provide new perspectives on the existing audit process, whereas a partner with longer tenure may be less likely to change the status quo. However, critics of the rotation requirement highlight the loss of client-specific knowledge and that the new partner must invest additional audit hours to gain this knowledge, despite often facing resource pressure in their first year (Bedard and Johnstone 2010; Gipper et al. 2021). To lend insights to this debate, studies focusing on audit partner tenure and rotation have examined audit pricing and quality consequences yet find mixed evidence.[2] We argue that changes to component auditor use can provide a nuanced look at decisions made by the new partner. Further, decisions made during the planning process are generally not publicly observable, but audit firms are now required to publicly disclose the participation of component auditors. We, therefore, have an opportunity to study whether new partners make different decisions during the planning phase of the audit.

[2] Certain studies have reported increased audit quality following rotation or in the early years of the partner-client relationship (Gopalan et al. 2022; Krishnan and Zhang 2019; Laurion et al. 2017; Manry et al. 2008), while others have reported decreased audit quality (Litt et al. 2014) or no significant change to audit quality (Gipper et al. 2021; Kuang et al. 2020). Similarly, Sharma et al. (2017) report increased fees, Kuang et al. (2020) report no change to fees, and Gipper et al. (2021) and Bedard and Johnstone (2010) report decreased fees following audit partner rotation.

According to the fresh look argument, the new audit partner should be more likely to re-evaluate and update planning and risk assessment decisions, including the evaluation of the materiality of specific locations and thus, the need for component auditors. Given the discretion involved in allocating effort across geographic locations, new partners may conclude that certain locations now require or no longer require a component auditor. The loss of client-specific knowledge may also prompt new partners to change component auditor use. Specifically, the new partner needs time to evaluate both the materiality of foreign operations and the component auditor's independence, competence, and capabilities in order to assume responsibility for their work. Reducing component auditor use, particularly those that are not individually material, may help partners deal with resource constraints faced during the first year. However, it is also possible that the new audit partner will not make different planning judgments in the first year. For instance, Dodgson et al. (2020) report that audit firms invest significant resources into building continuity during the partner transition and that the new audit partner shadows the outgoing partner. Therefore, the new partner may follow the status quo and repeat prior year assessments when deciding whether to use a component auditor in a specific location. Given these competing predictions, we propose our hypothesis in null form – that audit partner rotation is not associated with changes to component auditor use.

Our sample includes 6,714 client-year observations with non-zero foreign earnings from 2018-2022.[3] On average, client-years in our sample use 2.8 component auditors. We use Form AP disclosures to identify audit partner rotations. Our sample includes 1,389 client-years with an audit partner rotation, which is 20.6 percent of the sample. We use a change model to test the difference

[3] We must begin our sample in 2018 to observe component auditor changes in Form AP data. Specifically, the requirement to disclose component auditor use in Form AP became effective for audit reports filed on or after June 30, 2017 (i.e., fiscal year 2017) and we can observe changes in the second year (i.e., fiscal year 2018). We also limit our sample to those with non-zero foreign earnings, since this is a crucial determinant of component auditor use.

associated with the rotation since it better controls for client characteristics that remain fixed over time.

Our hypothesis test reveals a significant decrease in component auditor use following audit partner rotation.[4] In terms of economic significance, the decrease in the number of component auditors used is 1.8 times higher for client-years that have a partner rotation relative to those that do not. This finding suggests that the new audit partner uses fewer component auditors than the outgoing partner, representing a significantly different planning decision.

We conduct additional analyses to understand the implications of this finding. First, given the significant interest in audit quality consequences of audit partner rotation, we examine the impact of our primary finding on audit quality. We find that when the new partner decreases component auditor use, there are no significant changes to audit quality. Therefore, consistent with Gipper et al. (2021), we do not find evidence that a fresh look at the audit process creates benefits in terms of audit quality. We caution that this does not necessarily mean there is no fresh look benefit, as the change itself can be interpreted as a fresh look without affecting measurable quality outcomes. Second, we conduct cross-sectional analysis to examine whether findings differ when there is greater audit fee pressure on the engagement. Consistent with the resource constraint explanation, we find that the new partner is more likely to decrease component auditors when they face greater fee pressure.

Our study contributes to the literature on audit partner rotation. Prior literature in this space focuses on the fundamental tradeoff between fresh-look (i.e., greater independence) and loss of

[4] This result is explained by the new partner significantly decreasing the use of component auditors that are less material to the overall audit (i.e., individually contribute less than five percent of total audit hours). This finding is comforting for our interpretations since incoming partners likely do not have the discretion to scope out large component auditors associated with material foreign operations but have greater discretion when the component auditor's work is less material to the overall opinion.

client-specific knowledge, and related audit quality consequences (e.g., Laurion et al. 2017; Krishnan and Zhang 2019). Using proprietary data on audit hours, results of Bedard and Johnstone (2010) and Gipper et al. (2021) suggest new partners spend more time gaining client-specific knowledge. We examine changes to a specific area of the audit process – component auditor use. Audit planning decisions surrounding component auditor use represent specific, important, and complex decisions under the control of the new audit partner. Leveraging Form AP disclosure on component auditor use, we show that partners rotating on to an engagement make different audit planning decisions, and specifically, decrease the number of component auditors while maintaining audit quality. Our evidence is consistent with the loss of client-specific knowledge driving decisions to reduce component auditor use, particularly as new partners face resource constraints. Our evidence might be useful to regulators assessing the impact of partner rotation on audit quality in the U.S.

II. BACKGROUND AND LITERATURE REVIEW

Audit Partner Rotation

Under the Sarbanes-Oxley Act of 2002, U.S. audit partners are required to rotate off an engagement after five years. The motivation behind this requirement is to ensure objectivity and independence in the auditor-client relationship, which could be compromised when a partner develops a close relationship with their client over time. This is known as a "fresh look" in the literature, where the new partner is not as familiar with the client and is therefore less likely to approach the audit with bias. The new partner can provide a fresh perspective via an objective and skeptical approach to the audit and be more likely to challenge the client. For example, an incoming partner without relationship ties to the client may provide new perspectives on the existing audit approach and update reporting choices. Despite these potential benefits, critics of the five-year

rotation requirement note that incoming partners need time to acquire client and industry knowledge (e.g., Dodgson et al. 2020), which can damage the quality of the audit, particularly for complex engagements.

Research on audit partner rotations has taken unique approaches to identify rotations, including assuming rotation five years after a firm switch (Litt et al. 2014; Sharma et al. 2017), accessing proprietary non-public data (Gipper et al. 2021), observing changes to the partner copied on SEC comment letters (Laurion et al. 2017), and hand collecting rotation mentions in proxy statements and 8-K filings (Krishnan and Zhang 2019; Kuang et al. 2020). Audit partner rotation is now publicly observable for all U.S.-listed companies in Form AP. Specifically, beginning for fiscal year 2016, auditors of U.S. listed companies are required to file a Form AP within 35 days of the audit report that lists the name of the audit partner that led the engagement (PCAOB 2015), and year-over-year changes to the audit partner listed represent a rotation.

Consistent with the conflicting consequences of partner rotation presented above, where the fresh look can increase audit quality and the loss of knowledge can decrease audit quality, empirical evidence on the association between audit partner rotation and audit quality has also been mixed. Studies using U.S. data have reported increased audit quality following rotation or in early years of the partner-client relationship (Gopalan et al. 2022; Krishnan and Zhang 2019; Laurion et al. 2017; Manry et al. 2008), while others have reported decreased audit quality (Litt et al. 2014) or no significant change to audit quality (Gipper et al. 2021; Kuang et al. 2020).[5]

Two partner rotation studies use proprietary data and are particularly relevant to our study. Specifically, by obtaining data on partner-specific audit hours, these studies more directly examine

[5] The conflicting evidence in the U.S. literature on audit partner rotation is mirrored in non-U.S. studies (e.g., Carey and Simnett 2006; Chen et al. 2008; Chi et al. 2009; Lennox et al. 2014).

the new partner's effort following partner rotation, which can be obfuscated in quality and fee outcomes. First, using data from a large audit firm on their continuing clients from 2002-2003, Bedard and Johnstone (2010) report that planned engagement hours increase following partner rotation. Second, using data obtained from the PCAOB on Big 6 clients from 2008-2014, Gipper et al. (2021) report that actual overall and partner-specific hours increase following partner rotation. While both findings suggest that new partners spend more time gaining client knowledge, Gipper et al. (2021) additionally find that most audit quality outcomes do not change with rotation. This suggests that the additional effort exerted by new partners is enough to prevent a decrease in audit quality but does not necessarily result in higher audit quality.

The association between audit partner rotation and audit fees is similarly mixed. Although Gipper et al. (2021) find increased overall audit and partner hours, they report decreased fees following rotation, which can be explained by new partners being less familiar with management and the audit committee and therefore less able to push for higher audit fees and/or the client using partner rotation as an opportunity to renegotiate fees. Consistent with these explanations, Bedard and Johnstone (2010) report, via lower planned realization rates, that clients do not compensate the audit firm for the additional effort of the new partner. In contrast, Kuang et al. (2020) report no change to audit fees following rotation and Sharma et al. (2017) report increased fees for larger clients of non-Big 4 firms, presumably due to the incoming partner's increased hours being billed to the client.

Component Auditor Use

The audit process and specific planning decisions have traditionally not been observable absent proprietary data on, for example, audit hours (Bedard and Johnstone 2010; Gipper et al. 2021), staffing (Christensen et al. 2021), or compensation (e.g., Dekeyser et al. 2021; Knechel et

al. 2013). A recent PCAOB requirement to disclose the participation of other auditors can enhance our understanding of this important process. Specifically, beginning for audit reports issued on or after June 30, 2017, the auditors of U.S.-listed companies are required to disclose the participation of other auditors in Form AP (PCAOB 2015). The use of other auditors is an important decision in the audit planning and risk assessment phase that is under the control of the audit partner and could be influenced by audit partner rotation.

In most countries, U.S. auditors are not legally allowed to perform audit work because of country-specific requirements for local licenses and professionals. Yet, U.S. public companies often have foreign subsidiaries, joint ventures, and other affiliates with operations, sales, and/or assets that are deemed to be material to the resulting financial statement audit (Sunderland and Trompeter 2017). To complete the audit when there are material foreign operations, the lead auditor typically must use auditors located in other countries to perform the audit work (Downey and Westermann 2019). These other auditors are known as component auditors. For example, Deloitte's Denver office leads the audit for Gates Corporation, a manufacturer of industrial and automotive products with significant multinational operations. The Form AP filed March 14, 2022 discloses that Deloitte Denver engages 12 component auditors to conduct up to 55 percent of the audit work. This includes component auditors in China, Mexico, Poland, and the U.K.

The use of component auditors has garnered significant attention from regulators, investors, and researchers, which highlights the importance of audit partner decisions regarding their use. Specifically, the PCAOB has repeatedly raised concerns about inconsistencies in the quality of audit work performed by component auditors and oversight of this work by the lead auditor. This has led to inspection deficiencies (PCAOB 2021)[6] and the adoption of standards to

[6] PCAOB Release 2021-005 states: "Over the last decade, PCAOB inspection staff have observed Part 1.A deficiencies in roughly 25 to 45 percent of referred work engagements selected for review," where referred work is work performed

enhance the disclosure and supervision of component auditors (PCAOB 2015; PCAOB 2022). Investors are also weary of component auditor involvement (e.g., Eaglesham 2022) as they inherently rely on their work and associated oversight by the lead auditor when relying on the company's audited financial statements in their investment decisions.

Researchers have largely focused on the consequences of component auditor use, including audit quality (Burke et al. 2020; Carson et al. 2022; Dee et al. 2015; Docimo et al. 2021; Gunny et al. 2024), investor reaction (Chen and Conoway 2021; Doxey et al. 2021), and lender reaction (Krishnan et al. 2024).[7] These studies generally identify challenges associated with component auditor use, where there are audit quality concerns when component auditors conduct a significant portion of the audit (Burke et al. 2020; Carson et al. 2022; Dee et al. 2015) and particularly when component auditors face geographic, cultural, and language barriers when coordinating with the U.S. lead auditor (Burke et al. 2020). The influence of audit partners on the planning decisions surrounding component auditor use has yet to be studied.

III. HYPOTHESES DEVELOPMENT

Our hypothesis examines whether audit partner rotation is associated with changes in component auditor use. During the planning phase of each year's audit, the audit partner leads their team in establishing the overall audit strategy and developing an audit plan. Since the objective of a public company audit is to provide reasonable assurance that the financial statements are free of material misstatement (PCAOB 2010), the audit partner must choose an acceptable level of audit risk and allocate audit effort accordingly. For audits of companies with operations

by component auditors. These deficiencies include, for example, the component auditor did not follow lead auditor instructions or failed to communicate significant issues to the lead auditor and where the lead auditor did not appropriately supervise the work of component auditors.

[7] Carson et al. (2022) examine component auditor use in Australia and include audit partner changes as a control variable. The control is not significant when determining the level of component auditor use. Our study differs by examining the change in component auditor use and in a different institutional environment.

in multiple geographic locations, a significant part of audit planning is to decide how to allocate audit effort across locations.

In making this decision, auditing standards list the nature and amount of assets, liabilities, and transactions executed at the location, the materiality of the location, and specific risks associated with the location as factors to consider (PCAOB 2010).[8] Past research documents that there are several complex judgments made when deciding whether to scope a foreign location into the overall audit (e.g., Graham et al. 2018; Sunderland and Trompeter 2017). For example, the audit partner first must determine materiality thresholds (Choudhary et al. 2019), which become the cut-off for whether individual foreign operations require audit procedures (and thus a component auditor) based on their size and/or risk. For locations determined to be individually material, auditing standards typically require a full-scope audit conducted by a component auditor. For the remaining locations that are not individually material but could aggregate to a material amount when combined with other locations, auditing standards do not specifically require the use of a component auditor (e.g., Graham et al. 2018; Stewart and Kinney 2013; Sunderland and Trompeter 2017). These planning decisions are particularly complex and subjective when assets, revenues, and risk of material misstatement are widely dispersed (Graham et al. 2018). Therefore, the audit partner has discretion to change their yearly judgments for the materiality of foreign locations and associated component auditor use.[9]

There are at least two reasons why audit partner rotation could be associated with changes in component auditor use. First, based on fresh-look arguments (e.g., Laurion et al. 2017),

[8] Effective for fiscal years ending on or after December 15, 2024, Auditing Standard 2101 has been amended to strengthen the requirements for supervision of audits involving other auditors (e.g., evaluation of their work). None of the sections discussed are replaced in the amended standard.

[9] A recent study by Sherwood et al. (2024) suggests that although engagement leaders must consult with the national office regarding component auditor decisions, these consultations appear to be a limited compliance exercise and do not have a substantial impact on the resulting decision.

incoming partners would re-evaluate and update audit procedures when they conduct planning work on the engagement for the first time.[10] Since the new partner is not tied to the prior audit plan, they can bring a fresh perspective which could identify insufficient audit procedures or more effective audit strategies to ensure reasonable assurance. This fresh perspective could lead the partner to conclude that certain locations are material and increase component auditor use or that certain locations are not material and decrease component auditor use. In addition, given the discretion involved in allocating effort across geographic locations that are not individually material, the new audit partner could have a different overall audit strategy on whether and how to use component auditors. For example, if a company has operations in four locations that are not individually material, one partner could decide to conduct analytical procedures at the group level on all four locations, while the other partner might use a component auditor at one location to conduct an audit of specified account balances (e.g., inventory). Only one of these audit strategies uses a component auditor. In this case, audit partner rotations would be associated with increases or decreases in component auditor use.

Second, the incoming partner may need time to acquire client-specific knowledge, particularly for complex multinational engagements. The new partner likely faces a learning curve when working with new component auditors because they need time to acquire knowledge about the component auditor to assume responsibility for their work. While knowledge transfer strategies within the audit firm can help this transition (Dodgson et al. 2020), component auditor-specific knowledge is unlikely to be completely transferred given stringent PCAOB requirements.

[10] Fresh look benefits are supported by studies that find audit quality improvements following audit partner rotation (Gopalan et al. 2022; Krishnan and Zhang 2019; Laurion et al. 2017; Manry et al. 2008) and by the literature that finds audit partners have individual styles that can influence the audit and resulting financial statements (e.g., Ahn and Sonu 2021; Cameran et al. 2022; Frost et al. 2024; Hossain et al. 2016; Mauritz et al. 2023; Rousseau and Zehms 2024). However, other audit partner rotation studies find conflicting support for fresh look benefits (Gipper et al. 2021; Kuang et al. 2020; Litt et al. 2014), and therefore it is equally possible that the incoming audit partner will not make different planning judgments in their first year.

Specifically, partners are expected to evaluate each component auditors' independence, competence, and capabilities (PCAOB 2010), as well as regularly supervise, coach, and review their work, which can even involve in-person site visits (Downey and Westermann 2021). To reduce complexity in their first year, partners may temporarily halt the use of component auditors that are not individually material. Aside from component auditor-related resource constraints, prior literature suggests incoming partners already face resource pressure because they must invest effort (i.e., audit hours) to gain client knowledge but the effort is not fully compensated in terms of audit fees (Bedard and Johnstone 2010; Gipper et al. 2021).[11] Decreasing component auditor use could free up time and budget and therefore be one way to deal with these resource constraints. In this case, audit partner rotations would be associated with decreases in component auditor use.

In contrast, while audit partners are expected to update the audit plan each year based on specific risks and challenges, "SALY" or "same as last year" is a common slang phrase in the audit profession, where staff look at prior year workpapers and procedures to complete a task in the current year. A SALY approach can limit the critical evaluation of whether procedures are still relevant and sufficient in the current year. For example, Bonner et al. (2018) find auditors that access prior-year risk assessments are more likely to repeat these assessments, which results in decreased accuracy for risks that have changed. Reinforcing this at the partner level, Dodgson et al. (2020) report that audit firms invest significant resources into building continuity during the partner transition, including having the incoming partner shadow the outgoing partner. Therefore, the incoming partner could also merely repeat SALY when assessing whether to use a component auditor in a specific location. In this case, we would not expect audit partner rotation to be associated with changes in component auditor use.

[11] Gipper et al. (2021) suggest new partners are less familiar with management and audit committees and thus less likely to push for higher audit fees.

In sum, there are reasons to expect that incoming audit partners will and will not change component auditor use. We therefore present our first hypothesis in the null form.

Hypothesis: Audit partner rotation is not associated with changes to component auditor use.

IV. RESEARCH DESIGN

Sample Selection

The sample derivation is shown in Panel A of Table 1. Since the Form AP requirement to disclose component auditor use became effective for audit reports filed on or after June 30, 2017 (i.e., fiscal year 2017), we begin our sample in fiscal year 2018 to observe changes. We download Form AP filings from the PCAOB AuditorSearch database for fiscal years 2018 through 2022 (i.e., fiscal year ends ending in May 2023). To better isolate engagements with the potential for component auditor use, we remove 13,363 observations with no foreign earnings. After removing observations missing control variables in Compustat and Audit Analytics and with audit firm and audit office switches, our final sample is 6,714 client-year observations.

The number of partner rotations by fiscal year are presented in Panel B of Table 1. Total partner rotations (1,389) across the sample period are evenly distributed, with the percentage of total rotations ranges from 18.8 percent in 2018 to 21.4 percent in 2020.

Model Specification

We use the following model to test our hypothesis:

$$\Delta CA\_Num_{\square} = a + \beta_1 PartnerRotation_{\square} + \beta_2 LagCA\_Num_{\square} + \beta_n Control\ variables_{\square} + Year\ Fixed\ Effects + Industry\ Fixed\ Effects + \varepsilon \quad (1)$$

We use a change model because it better isolates the difference associated with new partners following rotation since the model controls for client characteristics that remain fixed over time. From Form AP data, we measure component auditor use as the change in the number of

component auditors from t-1 to t (*ΔCA_Num*).[12] This and all other continuous variables are winsorized at the 1st and 99th percentile. In addition, we measure audit partner rotation (*PartnerRotation*) as equal to one if the name of the engagement partner on Form AP differs from the prior year, and zero otherwise. Our hypothesis is in null form, which would be supported by an insignificant β_1. A significant β_1 would suggest that the incoming partner changes the number of component auditors used on the audit engagement.

Following Burke et al. (2020), we control for several client-specific characteristics associated with component auditor use.[13] In addition, we include controls that could influence both the likelihood of partner rotation and component auditor use (*LagCA_Num. M&A*, *Restructure, LagGoingConcern*, *LagRestateAnnounce*, *CA_Experience*).

V. RESULTS

Descriptive Statistics

Table 2, Panel A presents the descriptive statistics for key variables in the full sample. Mean *PartnerRotation* is 20.7 percent of the sample, which is reasonable given the mandatory five-year rotation period for audit partners.[14] The mean number of component auditors used on an engagement in year t (*CA_Num*) is 2.8. Mean (median) change in the number of component auditors from t-1 to t (*ΔCA_Num*) is -0.06 (0.00).

Table 2, Panel B presents a univariate comparison between client-year observations where the partner does and does not rotate. Mean change in component auditors (*ΔCA_Num*) for partners that rotate is -0.13 while the change for partners that do not rotate is -0.04. The mean difference is

[12] We do not use the percentage of audit work conducted by component auditors in our tabled analysis because it is impacted by both component auditor hours and lead auditor hours and its reporting by range increases measurement error. Nonetheless, untabulated sensitivity tests confirm our findings are consistent when percentage is used.

[13] The one exception is that we do not control for the number of country mentions in the 10-K, since this unconventional variable is used to capture significant foreign operations and Burke et al. (2020) only find it associated with the likelihood of component auditor use (yes/no) and not the number of component auditors used.

[14] We replicate analysis using only mandatory rotations and results (untabulated) are significant.

statistically significant and given that the mean number of component auditors used is 2.8, this difference is also economically significant.[15] Untabulated descriptives also reveal that within firm-years with a rotation, 28.01 percent decrease the number of component auditors, which is significantly more than within non-rotation years. For the three audit quality proxies (*Misstate*, *RestateAnnouce*, *MaterialWeakness*) and *FeePressure*, which are used in additional analysis, there are no significant differences across partners that do and do not rotate.

Multivariate Results

The results of model (1) are reported in Table 3. The coefficient on *PartnerRotation* is negative and significant at the 0.01 level, indicating that the number of component auditors significantly decreases with partner rotation, on average.[16,17] In terms of economic significance, holding all other variables at their sample mean, the decrease in the number of component auditors used is 1.8 times higher for client-years that have a partner rotation relative to those that do not.

Since our hypothesis was proposed in null form, it is rejected. Instead, these results imply that even though firms invest significant resources into building continuity (e.g., incoming partner shadowing outgoing partner) and minimizing disruptions during the partner transition (Dodgson et al. 2020), new partners still make significantly different planning decisions.

VI. ADDITIONAL ANALYSIS

Consequences: Audit Quality

[15] While this suggests incoming partners use fewer component auditors, we suggest caution be exercised in interpreting these univariate results because they may be driven by omitted correlated variables. Until these variables are controlled for, we cannot convincingly conclude whether or not we are able to reject the null hypothesis.

[16] Since our dependent variable is continuous, a negative coefficient could indicate that incoming partners have smaller increases compared to partners that do not rotate. However, untabulated sensitivity tests confirm that our results are driven by decreases.

[17] It is possible that the treatment group of client-years with a partner rotation are inherently different than the control group of client-years without a partner rotation. To address this concern, we perform entropy balancing (Hainmueller 2012) to reweight the control variables between treatment and control groups. Untabulated results are consistent with our main analysis.

In this section, we examine the consequences for audit quality of incoming partners changing the number of component auditors. The evidence presented in Table 3, that audit partners change audit procedures regarding component auditor use, could be consistent with both the fresh-look and resource constraint explanations. However, prior literature suggests that only the fresh-look explanation would improve audit quality (e.g., Gipper et al. 2021; Laurion et al. 2017). To examine this, we estimate the following regression:

$$Audit\ Quality_t = a + \beta_1 PartnerRotation_t + \beta_2 CA\_Num_t + \beta_3 ParnerRotation * CA\_Num_t + \beta_4 LagCA\_Num_t + \beta_n Control\ variables + Year\ Fixed\ Effects + Industry\ Fixed\ Effects + \varepsilon \quad (2)$$

Following Gipper et al. (2021), which focuses on the consequences of audit partner rotation, we measure audit quality in four ways (*Misstate, RestateAnnouce*, *TotalAccruals*, *MaterialWeakness*). In this analysis, we are interested in whether the change in component auditors by new partners influences the aforementioned outcomes. We therefore include *PartnerRotation*, *ΔCA_Num*, and their interaction. Our variable of interest is *PartnerRotation*ΔCA_Num,* where the coefficient on this variable captures whether changes in component auditors have a differential impact on audit quality when they coincide with a partner rotation. We use the same control variables as in model (1).

Table 4 reports the audit quality results. The coefficient on the interaction term is insignificant in all specifications, which suggests that changes in component auditors by rotating partners do not have an impact on audit quality. Overall, our results suggest that new partners make different decisions regarding component auditor use and these decisions do not seem to impact audit quality. These results provide comfort that the fresh-look explanation (measured by its audit quality impact) is not solely driving our finding.

Cross-sectional Analysis: Impact of Fee Pressure

In this section, we conduct cross-sectional analysis to examine whether the association is more pronounced with greater audit fee pressure on the engagement. If incoming partners must invest additional audit hours to gain the lost knowledge about the client and component auditors and the effort is not fully compensated in audit fees, decreasing component auditor use could free up budget and help partners deal with these resource constraints. To the extent resource constraints explain our result, we would expect this association to be more pronounced for partners on audit engagements that are likely to experience more audit fee pressure from their clients.

To test this, we follow Model (1) of Beardsley et al. (2019) and measure client-level audit fee pressure as the residual from a regression that models expected audit fees as a function of client characteristics. *FeePressure* is equal to one for client-years in the lowest quartile of change in residual from year *t*-1 to year *t*, indicating these partners face lower than expected audit fees (i.e., significant fee pressure). We include *PartnerRotation*, *FeePressure*, and their interaction in model (1). Our variable of interest is *PartnerRotation*FeePressure,* where the coefficient on this variable captures the impact of audit fee pressure on rotating partners' changes in the use of component auditors. We use the same control variables as in model (1) and add a control for fee pressure at the office-level (*OfficeFeePressue*) since Beardsley et al. (2019) find this type of pressure has audit quality consequences. The sample size for this analysis is slightly lower than our main analysis (n = 6,277) because the fee pressure model requires additional variables (e.g., number of employees).

Table 5 reports the results. The coefficient on the interaction term is significant at the 0.10 level. This suggests that audit fee pressure magnifies the decrease in component auditor use for incoming partners. These results suggest that resource constraints explain the change in audit procedures by the incoming partner.

Sensitivity Tests

In untabulated sensitivity tests, we explore the nuances of the decrease in component auditors in the rotation year. First, we examine the type of component auditors that are scoped out by new audit partners. Form AP disclosures segment small and large component auditors by whether they individually contribute five percent of total audit hours. Since prior literature finds component auditor use is generally structural based on significant foreign operations (Burke et al. 2020; PCAOB 2010), we expect that new partners will have more discretion in their decisions regarding small component auditors. Results show that our finding is driven by small component auditors, confirming this expectation. Second, we examine how component auditor use changes throughout the partner's tenure on the engagement. To the extent incoming partners face a learning curve when acquiring knowledge on the materiality of foreign operations and component auditors, the decrease should be temporary and increase in subsequent years as the partner gains this knowledge. For example, the partner may determine they trust the competence and work and re-engage component auditors that were cut in the first year. Results show that component auditor use increases throughout the partner's tenure on the engagement, confirming this explanation.

VII. CONCLUSION

We examine whether component auditor use changes following audit partner rotation. During the planning phase of each year's audit, the audit partner leads their team in establishing the overall audit plan. Since many U.S. public companies have operations in several countries, the audit partner must determine whether and to what extent audit procedures are needed in these locations including any reliance on component auditors. In doing so, partners must make materiality judgments. Audit firms invest significant resources into building continuity minimizing disruptions during the partner transition. Therefore, we might expect partners to use a same as last

year approach and not change component auditor use. On the other hand, audit partners are expected to update procedures every year and there is some evidence of incoming partners improving audit quality and facing resource constraints, and therefore, we might expect audit partners to change component auditor use.

We find a significant decrease in the number of component auditors used following audit partner rotation, suggesting that incoming partners make different planning decisions. We also find that when the new partner decreases component auditor use, there is no significant change to audit quality and the decrease is greater when the audit partner faces fee pressure. These results suggest that resource constraints and the need to acquire client- and component auditor-specific knowledge drive this decision.

Our study contributes to the literature by providing new insights into the audit process following audit partner rotations. Specific planning decisions have traditionally not been observable absent proprietary data, however, Form AP disclosure requirements allow us to observe both audit partner rotations and component auditor use. Nevertheless, our study and its findings have limitations. For instance, since the Form AP requirements are relatively new and our model requires change variables, our sample is limited to five years. It is possible that trends in the use and disclosure of component auditors will change over time. Additionally, Form AP requirements restrict us from determining the identity of many component auditors, so we cannot conduct cross-sectional or other analyses to examine characteristics of the small component auditors driving our finding. This would be ideal to aid in our understanding of why new audit partners are willing to decrease their use.

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Appendix A: Variable Definitions

Dependent variables	
CA_Num	Number of component auditors [FormAP]
Δ	Change in variable from year t-1 to year t
Other variables of interest	
PartnerRotation	One for client-years that changed audit partners, zero otherwise [FormAP]
Misstate	One for client-years that misstated their annual financial reports, zero otherwise [Audit Analytics]
RestateAnnounce	One for client-years that announce a misstatement in their financial reports, zero otherwise [Audit Analytics]
TotalAccruals	Absolute value of net income minus cash flow from observations deflated by average total assets [COMPUSTAT]
MaterialWeakness	One for client-years with an internal control material weakness reported under SOX 404 in year t, zero otherwise [Audit Analytics]
FeePressure	One for client-years in the lowest quartile of change in fee pressure from year t-1 to year t, zero otherwise. Fee pressure is the residual from a client-level regression that models expected audit fees as a function of client characteristics following Beardsley et al. (2019) [COMPUSTAT, Audit Analytics]
FeePressureOffice	One for client years in the lowest quartile of change in office-level fee pressure, zero otherwise. Where office-level fee pressure is the office-level yearly mean of *FeePressure*.
Control variables	
LagCA_Num	Number of component auditors in the prior year [FormAP]
Size	Natural logarithm of total assets [COMPUSTAT]
BusSeg	Natural logarithm of the sum of reported business segments [COMPUSTAT Segment file]
GeoSeg	Natural logarithm of the sum of reported geographic segments [COMPUSTAT Segment file]
ForSales	Sum of sales reported in non-U.S. countries [COMPUSTAT Segment file]
ARC	The natural logarithm of the total number of distinct monetary XBRL tags in Item 8 of the 10-K filings [http://www.xbrlresearch.com/]
Loss	One for client-years that report a net loss, zero otherwise [COMPUSTAT]
Lev	The ratio of total liabilities to total assets [COMPUSTAT]

ExtFinance	One for client-years that report year-over-year change in the number of shares outstanding greater than 10 percent, zero otherwise [COMPUSTAT]
ExtremeGrowth	One for client-years that report year-over-year industry adjusted sales growth in the top quintile, zero otherwise [COMPUSTAT]
CapIntensity	The ratio of net property plant and equipment deflated by total assets [COMPUSTAT]
InvRec	The ratio of inventory plus accounts receivable deflated by total assets [COMPUSTAT]
Accelerated	One for clients that are accelerated filers, zero otherwise [Audit Analytics]
Big4	One for a Big 4 auditor, zero otherwise [Audit Analytics]
IndExpert	One if the audit office is responsible for more than 50 percent of the audit fees in a particular 2-digit SIC code and MSA, zero otherwise [Audit Analytics]
FirmAge	The natural logarithm of the number of years the firm has COMPUSTAT data
M&A	One for client-years that report merger or acquisition activity, zero otherwise [COMPUSTAT]
Restructure	One for client-years that report restructuring activity, zero otherwise [COMPUSTAT]
LagRestateAnnounce	One for client-years that announce a misstatement in their financial reports in the prior year, zero otherwise [Audit Analytics]
LagGoingConcern	One for client-years that report a going concern in the prior year, zero otherwise [COMPUSTAT]
CA_Experience	One for audit partners who had at least one client that used component auditors in the past, zero otherwise [FormAP]

Table 1: Sample Selection

Panel A: Full sample derivation

	N
U.S. observations with Form AP in PCAOB AuditorSearch with fiscal year-end between 2018 and 2022	80,963
Less: Investment Company and Employee Benefit Plans	(33,881)
Less: Multiple Form AP filings for the same company and fiscal year	(6,847)
Less: Non-U.S. Lead Auditors	(6,350)
Less: Companies with zero foreign earnings	(13,363)
Less: Missing control variables in Compustat or Audit Analytics	(13,226)
Less: Audits firm and audit office switches	(582)
Final Sample	6,714

Panel B: Partner rotation frequency by year

Fiscal year	# of partner rotations	%
2018	261	18.8%
2019	296	21.3%
2020	297	21.4%
2021	270	19.4%
2022	265	19.1%
Total	1,389	

Table 2: Descriptive statistics of key variables

Panel A: Full sample

Variable	N	Mean	Median	Q1	Q3
PartnerRotation	6,714	0.207	0.000	0.000	0.000
CA_Num	6,714	2.818	1.000	0.000	4.000
ΔCA_Num	6,714	-0.059	0.000	0.000	0.000
Misstate	6,714	0.030	0.000	0.000	0.000
RestateAnnounce	6,714	0.055	0.000	0.000	0.000
MaterialWeakness	6,714	0.095	0.000	0.000	0.000
TotalAccruals	6,714	0.088	0.060	0.030	0.107
FeePressure	6,277	0.226	0.000	0.000	0.000
Total Assets (in millions)	6,714	1,668.002	1,827.853	489.513	6,321.300

Panel B: Univariate comparison between partners that rotate and those that do not

	PartnerRotation = 1 (N=1,389)				PartnerRotation = 0 (N=5,325)				Test of Differences	
	Mean	Med.	Q1	Q3	Mean	Med.	Q1	Q3	Mean	p-value
Key variables										
ΔCA_Num	-0.132	0.000	-1.000	0.000	-0.040	0.000	0.000	0.000	-0.092***	<0.01
Misstate	0.036	0.000	0.000	0.000	0.028	0.000	0.000	0.000	0.008***	0.130
RestateAnnounce	0.058	0.000	0.000	0.000	0.054	0.000	0.000	0.000	0.004***	0.580
MaterialWeakness	0.096	0.000	0.000	0.000	0.095	0.000	0.000	0.000	0.001***	0.920
TotalAccruals	0.088	0.061	0.030	0.108	0.088	0.059	0.030	0.106	0.000***	0.990
FeePressure	0.253	0.000	0.000	1.000	0.219	0.000	0.000	0.000	0.034	0.011
Control variables										
ΔSize	0.071	0.039	-0.045	0.147	0.081	0.041	-0.038	0.152	-0.010***	0.230
ΔBusSeg	-0.190	0.000	-0.405	0.000	-0.212	0.000	-0.405	0.000	0.022***	0.020
ΔGeoSeg	-0.179	0.000	-0.405	0.000	-0.197	0.000	-0.405	0.000	0.018***	0.040
ΔForSales	0.043	0.001	-0.030	0.143	0.061	0.016	-0.019	0.153	-0.018***	0.070
ΔARC	-0.008	0.027	-0.037	0.127	0.000	0.031	-0.032	0.144	-0.008***	0.650
ΔLoss	0.094	0.000	0.000	0.000	0.085	0.000	0.000	0.000	0.008***	0.350
ΔLev	0.018	0.007	-0.028	0.056	0.013	0.003	-0.032	0.052	0.005***	0.210
ΔExtFinance	0.055	0.000	0.000	0.000	0.076	0.000	0.000	0.000	-0.022***	<0.01
ΔExtremeGrowth	0.074	0.000	0.000	0.000	0.085	0.000	0.000	0.000	-0.010***	0.200
ΔCapIntensity	0.006	0.001	-0.013	0.021	0.005	0.001	-0.013	0.019	0.001***	0.660
ΔInvRec	0.002	0.002	-0.017	0.022	0.002	0.003	-0.016	0.024	0.000***	0.950
Accelerated	0.672	1.000	0.000	1.000	0.667	1.000	0.000	1.000	0.005***	0.730
Big4	0.817	1.000	1.000	1.000	0.798	1.000	1.000	1.000	0.019***	0.100
IndExpert	0.112	0.000	0.000	0.000	0.097	0.000	0.000	0.000	0.015***	0.120
FirmAge	2.935	3.178	2.303	3.611	2.903	3.135	2.197	3.584	0.032***	0.190
M&A	0.472	0.000	0.000	1.000	0.466	0.000	0.000	1.000	0.006***	0.690
Restructure	0.507	1.000	0.000	1.000	0.498	0.000	0.000	1.000	0.009***	0.550
LagRestateAnnoun	0.068	0.000	0.000	0.000	0.066	0.000	0.000	0.000	0.002***	0.780
LagGoingConcern	0.037	0.000	0.000	0.000	0.036	0.000	0.000	0.000	0.001***	0.910
CA_Experience	0.554	1.000	0.000	1.000	0.876	1.000	1.000	1.000	-0.322***	<0.01

*,**, and *** indicate, respectively, statistical significance at the 0.10, 0.05, and 0.01 levels for a two-tailed test. See Appendix A for variable definitions.

Table 3: Change in the number of component auditors and partner rotation

	ΔCA_Num	
Variable	Coef.	t-stat
PartnerRotation	**-0.109*****	**-3.02**
LagCA_Num	-0.086***	-19.48
ΔSize	0.248***	3.97
ΔBusSeg	0.054	0.79
ΔGeoSeg	0.028	0.40
ΔForSales	0.059	1.31
ΔARC	0.038	1.54
ΔLoss	-0.040	-0.80
ΔLev	0.195*	1.65
ΔExtFinance	0.136**	2.44
ΔExtremeGrowth	-0.009	-0.18
ΔCapIntensity	0.345	1.04
ΔInvRec	-0.239	-0.76
Accelerated	0.003	0.06
Big4	0.091**	2.36
IndExpert	0.096**	2.00
FirmAge	0.053***	2.77
M&A	0.032	1.09
Restructure	0.079**	2.56
LagRestateAnnounce	-0.013	-0.23
LagGoingConcern	-0.066	-0.83
CA_Experience	-0.075*	-1.92
Constant	-0.721	-1.29
Industry FE	Yes	
Year FE	Yes	
Observations	6,714	
Adjusted R-squared	0.072	

*,**, and *** indicate, respectively, statistical significance at the 0.10, 0.05, and 0.01 levels for a two-tailed test. See Appendix A for variable definitions.

Table 4: Additional analysis - Audit quality consequences

	Misstate		RestateAnnounce		TotalAccruals		MaterialWeakness	
Variable	Coef.	t-stat	Coef.	t-stat	Coef.	t-stat	Coef.	t-stat
PartnerRotation	0.105	1.26	0.039	0.58	-0.003	-0.95	0.034	0.55
ΔCA_Num	-0.087**	-2.44	0.016	0.61	0.000	-0.12	0.025	1.04
PartnerRotation * ΔCA_Num	**0.106**	**1.52**	**0.062**	**1.11**	**0.001**	**0.49**	**0.085**	**1.58**
LagCA_Num	0.007	0.54	0.004	0.42	-0.001*	-1.78	0.042***	4.27
Size	-0.020	-0.59	-0.053*	-1.91	-0.010***	-9.80	-0.122***	-4.90
BusSeg	0.025	0.57	-0.059*	-1.71	0.000	0.00	0.013	0.41
GeoSeg	0.138**	2.33	0.021	0.44	-0.003*	-1.66	0.145***	3.47
ForSales	-0.031	-1.25	0.001	0.03	0.002**	2.43	-0.043**	-2.46
ARC	-0.030	-0.70	0.297***	3.62	0.000	-0.09	0.020	0.59
Loss	0.181**	2.28	0.151**	2.39	0.043***	16.90	0.241***	4.26
Lev	-0.030	-0.25	0.034	0.36	0.058***	15.51	0.179**	2.24
ExtFinance	0.252***	2.62	-0.044	-0.54	0.004	1.25	0.214***	3.16
ExtremeGrowth	0.042	0.43	0.057	0.73	0.006*	1.95	0.042	0.60
CapIntensity	-0.180	-0.83	-0.128	-0.76	0.003	0.50	-0.145	-0.95
InvRec	-0.230	-0.87	-0.484**	-2.33	-0.067***	-8.34	0.232	1.30
Accelerated	-0.027	-0.25	-0.121	-1.44	0.005	1.58	-0.094	-1.30
Big4	-0.209**	-2.14	-0.131*	-1.66	-0.002	-0.73	-0.193***	-2.82
IndExpert	0.160	1.42	0.198**	2.33	0.002	0.67	0.013	0.14
FirmAge	-0.125***	-2.59	-0.114***	-3.03	-0.007***	-4.25	-0.275***	-8.03
M&A	0.065	0.91	0.054	0.94	-0.001	-0.26	0.137***	2.62
Restructure	0.170**	2.24	0.114*	1.90	0.002	0.88	0.056	1.03
LagRestateAnnounce	0.324***	3.06	0.422***	5.05	0.002	0.58	0.441***	5.60
LagGoingConcern	-0.117	-0.66	0.030	0.22	0.081***	13.17	0.288***	2.59
CA_Experience	-0.078	-0.91	-0.024	-0.33	-0.008***	-2.74	0.017	0.27
Constant	-1.847***	-4.99	-2.694***	-5.56	0.126***	9.06	-0.843***	-3.16
Industry FE	Yes		Yes		Yes		Yes	
Year FE	Yes		Yes		Yes		Yes	
Observations	6,714		6,714		6,714		6,714	
Pseudo/Adjusted R-squared	0.103		0.063		0.082		0.171	

*,**, and *** indicate, respectively, statistical significance at the 0.10, 0.05, and 0.01 levels for a two-tailed test. See Appendix A for variable definitions.

Table 5: Additional analysis – Change in the number of component auditors and partner rotation interacted by audit fee pressure

	ΔCA_Num	
Variable	Coef.	t-stat
PartnerRotation	-0.075*	-1.78
FeePressure	-0.095**	-2.39
PartnerRotation*FeePressure	**-0.136***	**-1.69**
FeePressureOffice	-0.044	-1.33
LagCA_Num	-0.088***	-19.22
ΔSize	0.283***	4.32
ΔBusSeg	0.049	0.70
ΔGeoSeg	0.052	0.73
ΔForSales	0.061	1.30
ΔARC	0.034	1.36
ΔLoss	0.001	0.02
ΔLev	0.263**	2.14
ΔExtFinance	0.165***	2.84
ΔExtremeGrowth	-0.019	-0.36
ΔCapIntensity	0.358	1.03
ΔInvRec	0.001	0.00
Accelerated	-0.001	-0.01
Big4	0.092**	2.26
IndExpert	0.113**	2.28
FirmAge	0.058***	2.90
M&A	0.037	1.23
Restructure	0.083***	2.63
LagRestateAnnounce	-0.010	-0.17
LagGoingConcern	-0.076	-0.90
CA_Experience	-0.080**	-1.97
Constant	-0.189	-1.32
Industry FE	Yes	
Year FE	Yes	
Observations	6,277	
Adjusted R-squared	0.077	

*,**, and *** indicate, respectively, statistical significance at the 0.10, 0.05, and 0.01 levels for a two-tailed test. See Appendix A for variable definitions.