

Audit Partners in Leadership Roles: Implications for Audit Quality

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Abstract

In the U.S., audit partners are generally tasked with client service responsibilities; however, a select group are appointed to office, regional, or national leadership roles. We examine how audit partners' leadership roles influence the quality of their audits. Although leadership partners' experience, expertise, and reputational incentives could lead to the delivery of higher quality audits, additional administrative responsibilities and an enhanced focus on business development could detract attention from the audit, leading to lower quality outcomes. We find that clients of audit partners in leadership roles are more likely to subsequently restate their financial statements through a non-reliance restatement. To better understand this result, we perform 21 semi-structured interviews of U.S. partners who have held leadership positions. Based on insights from these interviews, we conduct further analyses that suggest both capacity constraints and an increased emphasis on business development play an influential role in the quality of leadership partners' audits.

Keywords: audit firm leadership, audit quality, audit partners, partner capacity constraints

JEL codes: M41, M42

Audit Partners in Leadership Roles: Implications for Audit Quality

1. Introduction

In this study, we examine the association between audit partners holding leadership roles and the quality of their audits. Although partners act as agents for the partnership and share in the profits and risks of the firm, roles and responsibilities among partners can vary considerably. While many partners focus exclusively on serving clients over the course of their careers, some partners assume leadership roles in their firms with significant administrative and strategic responsibilities. Because leadership positions are often filled by audit partners who typically continue to serve clients, it is important to understand how the administrative tasks and strategic nature of leadership roles influence the quality of the audits these partners conduct.

To be elevated to leadership roles, partners have likely proven themselves to be knowledgeable and capable through strong performance. Accordingly, audit partners in leadership positions have presumably developed significant experience and expertise during their career, which could lead to the delivery of high quality audits. This reasoning is supported by research suggesting that audit quality improves with general and client-specific experience (Chen, Lin, and Lin 2008; Chi, Myers, Omer, and Xie 2017) and that both audit fees and audit quality are positively associated with partner expertise (Chin and Chi 2009; Chi and Chin 2011; Aobdia, Siddiqui, and Vinelli 2021a). Additionally, reputational considerations should incentivize these partners to provide high quality audits given the prominent status of these leadership roles within the audit firm and the local marketplace (DeAngelo 1981), as well as recent standard setting initiatives that emphasize the role of accounting firm leadership in establishing and maintaining effective quality management (IAASB 2020).

However, if audit partners' focus on the additional administrative responsibilities of leadership positions or enhanced commitment to business development and growth detracts

attention from the audit process, then the quality of their audits could decline. This conjecture is supported by research suggesting that audit quality suffers for busier audit partners (Gul, Wu, and Yang 2013; Goodwin and Wu 2016; Cameran, Campa, and Francis 2020) and that partners' objective functions are not necessarily to improve audit quality (e.g., Knechel, Niemi, and Zerni 2013; Aobdia 2019a). Notably though, the source of busyness and business development incentives under study – leadership roles and responsibilities – has not been explored in the literature. Given these competing predictions, the influence of audit partners' leadership roles on the quality of audits they conduct is an empirical question.

We begin by hand-collecting U.S. audit partners' office, regional, and national leadership experience from professional networking website profiles, firm websites, and other websites (where available) for the six largest accounting firms in the U.S. (PwC, EY, Deloitte, KPMG, GT, and BDO).¹ We merge this leadership information with audit partner information disclosed in Form AP filings over our sample period, comprising company fiscal years 2016 through 2019. Of the 2,169 audit partners from the audit firms included in our final sample, 374 (approximately 17 percent of our sample) serve in a key office, regional, or national role within their audit firm. In our archival sample, approximately 69 percent of leaders hold office-level roles, 24 percent hold regional-level roles, and 11 percent hold national-level roles.

In our empirical analyses, we employ entropy balanced regressions (see Hainmueller 2012), to reduce covariate imbalance and, in doing so, mitigate concerns that our results are due to inherent differences in the observable characteristics of these partners or of their client portfolios relative to those of partners that do not hold leadership positions. We focus our tests on what investors, regulators, and auditors view as a leading indicator of low audit quality –

¹ See Figure 1 for example titles by scope of role – office, regional, or national.

misstatements identified through subsequent financial statement restatements (e.g., Christensen, Glover, Omer, and Shelley 2016; Aobdia 2019b; Rajgopal, Srinivasan, and Zheng 2021). After balancing observable partner and client characteristics, as well as controlling for these characteristics and industry and year fixed effects, we find that clients of audit partners in leadership roles are more likely to subsequently restate their financial statements through a non-reliance restatement (i.e., file an Item 4.02 8-K filing). With regard to economic magnitude, the predicted probability of a misstatement revealed through a non-reliance restatement is nearly double for clients audited by partners in leadership roles compared to partners focused solely on client service (0.8% compared to 0.4%). This finding suggests that audit partners' leadership roles can have negative repercussions for the quality of their audit engagements.

To gauge the underlying mechanism for this finding, we conduct 21 semi-structured interviews of U.S. audit partners from large accounting firms who have held office, regional, or national leadership roles.² This approach is similar to the methodologies employed by prior studies (Soltes 2014; Christ, Masli, Sharp, and Wood 2015; Lambert, Jones, Brazel, and Showalter 2017; Beck, Gunn, and Hallman 2019; Bills, Cobabe, Pittman, and Stein 2020; Donelson, Ege, Imdieke, and Maksymov 2020; Downar, Ernstberger, and Koch 2020; Ege, Knechel, Lamoreaux, and Maksymov 2020). The collective responses from these interviews yield unique insights into the features of leader selection, responsibilities, and evaluation which could be driving our findings and contribute to the limited literature on audit firm leadership (e.g., Beck et al. 2019; Mowchan 2021).

With respect to leader selection, while technical expertise is an important criterion for promotion to partner (Carter and Spence 2014; Downar et al. 2020), it is not a focal consideration

² Thirteen of our interview participants are included in our archival analysis sample.

of leadership candidates and therefore expertise may not be as pronounced as initially postulated. Instead, senior leadership places a greater emphasis on business growth and development in selecting partners into leadership roles. Additionally, many leadership appointments come with concurrent client assignments. Leaders often assume (or retain) higher profile clients within the office which often have priority in staffing assignments (e.g., S&P 500 clients).³ Conversely, the interview evidence does not suggest that audit partners in leadership roles are systematically assigned to more troublesome or risky clients.

With respect to leadership responsibilities and evaluation, interviewees suggested that the primary responsibilities and evaluations of those in leadership positions often vary depending on the role. Importantly, office-level leaders, particularly within smaller offices, stated that leadership responsibilities associated with practice management, profitability, and growth were added to their workload without an offsetting reduction in client service obligations. Interviewees suggested that the focus on firm growth and profitability is also present at regional and national leadership levels, yet these responsibilities are more often offset by reductions in client service demands. Notably though, these leaders generally retain at least one client to remain relevant in the audit firm and marketplace.

Based on the insights from these interviews, we conduct further tests to investigate the underlying mechanisms for the higher likelihood of misstatement revealed through non-reliance restatements among audit partners in leadership roles. Specifically, we examine partner capacity constraints as well as incentives for greater leniency toward client financial reporting preferences as two possible explanations. To examine the potential influence of partner capacity constraints on audit quality outcomes, we exploit variation in the number of public clients served by partners

³ This interview finding highlights the importance of our empirical design choice to entropy balance on audit client characteristics to ensure client attributes are similar across leader and non-leader partners.

in leadership roles, the distance of leader partners' clients from the audit office, the scope of the leadership roles and office size. To examine whether enhanced business development and growth incentives detract from audit quality, we determine whether the likelihood of misstatement is more pronounced when clients purchase a greater amount of non-audit services (NAS) from a leadership partner. The results from these analyses provide evidence that capacity constraints play a role in the observed association between audit partners in leadership roles and audit quality. Specifically, we find that audit quality is lower when the partner in a leadership role serves a larger number of clients, serves clients located farther from the office, is an office-level leader or resides in a smaller office. Furthermore, we also find some evidence suggesting that a heightened focus on business development and growth (i.e., when leaders' clients purchase more NAS) may be an influential factor explaining the lower audit quality of partners in leadership roles.

To draw more reliable inferences, we re-perform our primary and cross-sectional tests using an alternative proxy for audit quality – income-increasing discretionary accruals. We find similar evidence of lower audit quality, as measured by greater income-increasing discretionary accruals, among clients of partners who occupy leadership roles. In cross-sectional analyses, consistent with the misstatement tests, we find that these results are evident among clients of leaders in smaller offices, leaders serving more clients, and clients that purchase a greater amount of NAS. Collectively, the results provide corroborative evidence of lower audit quality among partners in leadership roles driven by both capacity constraints and the incentives that arise from increased emphasis on business development and growth.

Finally, we supplement our association-based tests with an alternative design to further strengthen identification. We limit the sample to companies that had a partner that became a leader during 2017-2019 and do not change their audit partner or audit firm so that we have at

least two consecutive years with the same audit firm and partner. In doing so, this provides us with an opportunity to examine how audit quality changes for clients in the years before and after their audit partners' leadership appointment. In this within-firm analysis, we find that both the likelihood of misstatement and income-increasing discretionary accruals are higher after the partner assumes the leadership role.

This study makes important contributions to the auditing literature and has meaningful implications for accounting firms, audit committees, regulators, and standard setters. First, in our archival analyses, we find that audit partners in leadership roles provide lower audit quality on average relative to colleagues focused solely on client service. This result appears to be driven by capacity constraints, particularly within smaller offices, and may extend to business development incentives (at least in terms of NAS fees). These findings should be particularly informative to audit firms when designing and implementing leadership transitions, workload allocations, concurring partner assignments, and performance evaluations as well as audit committees when determining who is best suited to be the client's next audit partner. Furthermore, they may also be of importance to regulators when selecting audit engagements for inspection that pose a higher risk of quality deficiencies and to standard setters in their efforts to finalize quality control standards that emphasize the importance of audit firm leadership (IAASB 2020).

Second, the qualitative aspect of our study provides unique insights into the characteristics and responsibilities of accounting firm leaders that have seldom been examined in the accounting literature. Although Beck et al. (2019) conducts interviews to learn more about the *oversight responsibilities* of regional managing partners, we interview prominent leaders of large accounting firms at all levels (office, regional, and national). In doing so, we provide insight into not only leadership responsibilities, but also the *selection and evaluation* of partners in leadership roles.

Furthermore, this study's findings contribute to the growing literature which examines the influence of audit partner characteristics and experience on audit effectiveness. Although certain studies in international settings suggest that partners' client-specific and industry experience positively influence audit quality (Chen et al. 2008; Chin and Chi 2009; Chi and Chin 2011; Chi et al. 2017), recent research in the U.S. suggests that observable lead partner characteristics may not matter to audit quality (Burke, Hoitash, and Hoitash 2019; Lee, Nagy, and Zimmerman 2019; Gipper, Hail, and Leuz 2020; Aobdia et al. 2021a; Aobdia, Choudhary, and Newberger 2021b). Our study provides initial empirical evidence of the influence that holding a key leadership role can have on audit quality, particularly when reductions in partners' allocated workloads are minimal and business development is a priority. As such, the results of this study provide empirical support for the recent trend among large accounting firms to consolidate leadership positions and simplify their market and sector structures, thereby shifting more audit partners back to client service roles.⁴

The remainder of the paper is organized as follows. Section 2 reviews prior literature and provides motivation for our hypothesis. Section 3 outlines our research design and archival sample. Section 4 presents the descriptive statistics and empirical results. Section 5 describes the results of interviews we conducted to provide additional insights into our empirical results. Section 6 presents additional empirical analyses based on observations from our interviews, and Section 7 concludes.

⁴ Several interviewees referred to recent trends to consolidate leadership positions and simplify market and regional sectors in their firms. For example, PwC (EY) transitioned the U.S. market structure from 20 (5) to 9 (3) regions.

2. Prior literature and hypothesis development

Reputation, experience, and expertise

The influence of leadership roles on the quality of audit partners' engagements is an important empirical question. Leaders in accounting firms often set the standard by which performance is measured (IFAC 2007) through their commitment to quality. According to ISQM 1, leaders are a component of a firm's quality management system (IAASB 2020). Although regulatory oversight and firm quality control structures should incentivize a minimal level of audit quality among all audit partners, reputational concerns among partners in leadership roles are likely more salient given their prominent status within their firms and in the local marketplace. DeAngelo (1981) argues that the risk of reputational damage incentivizes auditors with greater reputational capital at stake to provide high quality audits. Several studies provide empirical support for this argument. For instance, research suggests that audit quality is higher among larger audit firms (Becker, DeFond, Jiambalvo, and Subramanyam 1998) and larger audit offices (Francis and Yu 2009), which arguably have greater reputation at risk. Other studies highlight the detrimental effects of a tarnished reputation (e.g., Weber, Willenborg, and Zhang 2008; Skinner and Srinivasan 2012). Thus, given the prominent status of audit partners with leadership roles within the audit firm and the local marketplace, reputational considerations should incentivize these partners to provide high quality audits.

In addition to reputational concerns, partners promoted into leadership roles have presumably acquired significant experience and expertise during their careers. Recent archival evidence, primarily in international settings, suggests a positive association between partner experience/expertise and audit quality (Chi et al. 2017; Chen et al. 2017). For example, using data from Taiwan, Chi et al. (2017) find that, after controlling for the partner's client-specific experience, a partner's generic (pre-client) experience is negatively associated with discretionary

accruals. In the U.S. setting, the influence of partner age and experience on audit effectiveness in the U.S. is limited to associations with audit fees (Lee et al. 2019, Burke et al. 2021), which could reflect increased audit hours and effort (Caramanis and Lennox 2008; Deis and Giroux 1992, 1996). Yet as a measure of expertise, Bell, Causholli, and Knechel (2015) find that partner industry specialization is associated with higher audit quality using internal assessments of audit quality from a Big 4 firm.

Partner capacity constraints and objective functions

Although reputation, experience, and expertise predict higher audit quality outcomes among audit partners holding leadership roles, the additional administrative tasks could lead to a lower level of involvement in audit engagements. In their review of the audit partner literature, Lennox and Wu (2018, p. 9) state that “a heavy workload could distract a partner from giving adequate attention to an audit and could motivate the partner to take shortcuts instead of gathering all the required audit evidence.” Thus, the busyness of an audit partner in a leadership role could have direct bearing on their time and effort available for each audit engagement, leading to less involvement with the engagement team and more cursory reviews of audit work (Christensen et al. 2021; Goodwin and Wu 2016; Sundgren and Svanström 2014).

To date, much of the research examining the association between audit partner busyness focuses on the number and size of client engagements the partner oversees and has yet to consider the influence of administrative responsibilities associated with leadership roles, which likely involve a significant time commitment. For example, Sundgren and Svanström (2014) find a negative association between partner busyness and the propensity to issue a going concern opinion for soon-to-be-bankrupt private companies in Sweden. Lai, Sasmita, Gul, Foo, and Hutchinson (2018) find evidence in Malaysia that partner busyness is associated with larger absolute discretionary accruals. For Chinese and U.K. audit partners, respectively, Gul et al.

(2013) and Cameran et al. (2020) also find a negative association between partner busyness and audit quality proxies. Thus, to the extent administrative responsibilities of leadership roles constrain the amount of time partners are able to allocate to their engagements, audit quality may suffer.

In addition to capacity constraints, we recognize that partners in leadership roles may place increased emphasis on client satisfaction or retention given the market-related expectations placed on these partners. Accordingly, auditors often need to balance regulator and other stakeholder expectations with client demands. In this regard, not all research suggests that audit partners' primary objective is to maximize audit quality. For example, Knechel et al. (2013) find a positive association between audit partner compensation and client portfolio size and client gains, suggesting that auditors may prioritize growing the business and maintaining client relationships over other considerations. In a discussion of Kallunki, Kallunki, Niemi, and Nilsson (2019), Aobdia (2019a) comments on the weak association between engagement partner IQ and audit quality suggesting that higher IQ partners may be more concerned with conducting profitable audits or growing the business.⁵

Given the tension inherent in these competing arguments with respect to the influence of leadership roles on audit partners' audit quality, we express our hypothesis in the null form. Formally stated, our hypothesis is as follows:

⁵ An illustrative example of how a focus on firm growth and profitability can impact audit quality is Melissa Koeppel, Grant Thornton's Milwaukee office audit practice leader from 2002 to 2008 and later the office managing partner from 2008 to 2011. During her time in these leadership positions, Grant Thornton Milwaukee, and specifically Koeppel, won three new clients, serving as the initial engagement partner for each. However, these clients were fraught with both fraudulent activity and audit deficiencies during her time as the audit engagement partner, with Koeppel being named in both SEC and PCAOB enforcements (See SEC AAER No. 3719 for more details). This example highlights how a partner's objective function can promote new business and profitability over audit quality considerations.

HYPOTHESIS 1 (H1): *Audit quality does not differ for audit partners in office, regional, or national leadership roles relative to audit partners that do not hold such roles.*

3. Empirical methodology

Measures and models

Test variables

Our explanatory variable of interest is whether an audit partner holds an office, regional and/or national leadership role during the sample period. To specify this measure, we begin by collecting U.S. engagement partner identities for publicly traded companies using the PCAOB Form AP disclosure.⁶ On October 13, 2020, the Auditor Search database included 3,092 unique audit partners affiliated with the six global network U.S. audit firms (the Big 4, GT and BDO), of which, 2,766 conduct audits of issuers during our sample period. The remaining partners, which we exclude from our sample, conduct audits of employee benefit plans or investment companies exclusively.

To determine whether these partners hold a leadership position, we undertook online searches based on the partner's name and audit firm. Many of these searches led to press releases announcing the leadership role appointment or professional networking website profiles (e.g., LinkedIn). In the event that these websites lacked complete information, or profiles were not available, we searched for partner profiles on their respective audit firm's website (more typical for the non-Big 4 audit firms) or for mentions on university alumni websites or nonprofit board websites for boards on which these partners serve. This search process enabled us to ascertain whether partners held office, regional, or national leadership roles during the sample period for 2,602 of the 2,766 (94 percent) audit partners that conduct audits of issuers, minimizing concerns

⁶ PCAOB Rule 3211 (available at: <https://pcaobus.org/Rules/Pages/Rule-3210-3211.aspx>) requires audit partners to be identified in the Form AP disclosure within 35 days of the annual audit report filing for auditors' reports issued on or after January 31, 2017.

surrounding sample selection bias. Further, we were able to determine gender, CPA licensure date, and undergraduate alma mater for 2,411 of these partners. However, due to unavailable data in Compustat or Audit Analytics and the removal of financial institutions and utilities, we exclude 242 of these partners, resulting in a final sample comprised of clients audited by 2,169 audit partners, of which 374 (approximately 17 percent) hold at least one firm leadership role.⁷

Model design, control variables and estimation technique

To test our hypothesis regarding whether audit quality varies among audit partners with and without leadership roles, we estimate the following model using logistic regression with robust standard errors clustered by client:

$$Audit\ Quality_{it} = \beta_0 + \beta_1 PARTNER_LEADER_{i,t} + \beta Controls_{i,t} + Industry\ Fixed\ Effects + Year\ Fixed\ Effects + \varepsilon_{it} \quad (1)$$

Audit Quality is captured as misstated annual periods revealed through subsequent annual financial statement restatements (*RESTATE*) identified in the Audit Analytics Non-Reliance Restatement database. However, we recognize that not all restatements are indicative of a failed audit (Plumlee and Yohn 2015). As such, we separately examine the subset of “non-reliance” restatements (often referred to as Big R restatements) that trigger an 8-K filing with the Securities and Exchange Commission (*BIGR*) and the subset of “revision” restatements (often referred to as little r restatements) corrected in subsequent periodic filings (*LITTLEr*). Big R restatements not only retract reliance on the previously issued audit opinion but are also associated with subsequent litigation against the auditor (Christensen et al. 2020). Little r restatements relate to

⁷ In 2018, the Top 6 firms had 336 unique office locations identified in audit opinions. Given that we identify audit partners holding office, regional, and national-level leadership roles, the number and percentage of audit partners holding leadership roles in our sample appears reasonable. Importantly, only 42 audit partners with a leadership role, i.e., less than 2 percent of partners for the global 6 firms in the Form AP database, were excluded from the sample due to missing control variable data.

instances in which prior periods are assessed as materially correct on a standalone basis, but the accumulation of errors is deemed to be material in the current year. These cumulative errors are corrected in the prior year accounts displayed in the current periodic filing without issuing a separate amended filing or revised audit opinion for the misstated financial statements (Plumlee and Yohn 2015).⁸

Controls is a vector of control variables that have been shown in prior research to influence audit quality (Francis et al. 2005; Francis and Yu 2009; Reichelt and Wang 2010; Aobdia 2019a). This vector of variables is composed of various measures to control for observable partner characteristics, audit firm/office characteristics, and client and industry characteristics. Audit partner characteristics include partner gender (*PARTNER_GENDER*), years of work experience (*PARTNER_YRS_EXP*), education (*PARTNER_EDUC*), industry local market share (*PARTNER_IND_SHARE*), and number of clients (*PARTNER_NUM_CLIENTS*) (Che et al. 2018; Lee et al. 2019; Burke et al. 2019). We also control for audit firm size (*BIG4*), whether the client is new to the audit firm (*AUDITOR_SWITCH*), and whether the client's fiscal year-end occurs in the traditional busy season for auditors (*BUSY*). Additionally, we control for audit office industry specialization (*OFFICE_IND_EXP*) and office size (*OFFICE_SIZE*). We include controls for client characteristics such as client size (*LNASSETS*), complexity (*LNGEOSEG*, *LNBUSSEG*, *FOREIGN*), whether the client is involved in a merger or acquisition (*MERGEACQ*), current and expected growth (*SGROW*, *BM*), performance (*CFO*), volatility (*SDCFO*), inherent risk as proxied by the ratio of accounts receivable and inventory to total assets (*INVREC*), leverage (*LEVERAGE*), and financial distress (*LOSS*, *GC*). We control for the risk of litigation (*LIT*) and the effectiveness of

⁸ In our primary test with *BIGR* as the dependent variable, we exclude all company-year observations with a *LITTLEr* restatement and vice versa, which leads to slightly different sample sizes across these tests.

the client’s internal control environment based on whether the client has a material weakness in internal controls (*WEAKNESS*). To reduce concerns that partners in leadership roles are more typically assigned to problematic clients, we include controls for whether the client disclosed a material weakness in internal controls or announced a restatement of the financial statements in the two years prior to the current year (*LAG2_ICMW, LAG2_RES_ANN*). Finally, we include industry and year fixed effects to control for variation in audit quality across industries and over time. All variables are defined in Appendix A and all continuous variables are winsorized at the 1st and 99th percentiles.

Further, we employ entropy balancing on the first (mean) and second (variance) moments to mitigate concerns that our results are due to observable differences in partner, audit firm/office, and client characteristics between audit partners with and without leadership roles.⁹ We balance on all partner, audit firm/office, and client characteristics (*Controls* described above) plus all fixed effects (year and industry). We present entropy balancing descriptive statistics showing the effectiveness of rebalancing in Appendix C.

Sample composition

In assembling the sample, we begin by retrieving all available company-year data from Audit Analytics. After merging this data with the Compustat Fundamental Annual database and Form AP data on issuer audits for companies with fiscal years 2016 to 2019, we are left with 18,734 company-year observations with available data.¹⁰ Our sample period begins in 2016 as this is the

⁹ Entropy balancing is a covariate balancing technique introduced by Hainmueller (2012). The technique is an “equal percent bias reducing” matching method, which ensures that covariate imbalance improves after matching. It uses an iterative process to reweight control sample observations until the means (and other higher order moments) of the control sample covariate distributions approximately equal those in the treatment sample. This technique also has the benefit of not generating random matches and not discarding observations, leading to increased power (McMullin and Schonberger 2020). McMullin and Schonberger (2020) discuss and apply entropy balancing in an accounting setting. We follow their approach in implementing entropy balancing in our paper.

¹⁰ Data on restatements was obtained in July 2021.

first year Form AP data is available and ends in 2019 to allow sufficient time for misstatements to be revealed through subsequent restatement announcements. We then remove 6,618 observations not audited by one of the six largest U.S. audit firms (the Big 4 and GT, BDO) and 25 observations with assets that do not exceed \$1 million (Bills et al. 2016). We lose 2,878 observations due to missing partner background data, including education, gender, and work experience, and missing data in Compustat or Audit Analytics necessary for specifying client and auditor control variables. Table 1 outlines the sample selection procedures.

[INSERT TABLE 1]

4. Empirical test results

Descriptive statistics

Table 2, Panel A, presents descriptive statistics of the variables used in our analyses. Within our final sample of 9,213 company-year observations, we find that 17 percent are audited by audit partners in a leadership role (*PARTNER_LEADER*). Approximately 65 percent of these observations (12 percent of the final sample) are audited by partners with office leadership roles, while 35 percent hold regional or national leadership roles (5 percent of the final sample). Mean logged total assets (*LNASSETS*) are 7.31, which translates to average total assets of \$1.50 billion. We note that 5 percent of the company-year observations in our sample are misstated (*RESTATE*), with 20 percent of those misstated observations (1 percent of the final sample) being revealed through an 8-K filing disclosing a non-reliance restatement (*BIGR*) and 80 percent (4 percent of the final sample) revised in subsequent periodic filings (*LITTLEr*). Distributions of other model variables appear reasonable based on prior research.

Table 2, Panel B, presents univariate tests of mean differences in our dependent and independent variables between company-year observations audited by partners in leadership roles and partners not in leadership roles *prior to* entropy balancing. We find that the mean

frequency of misstatements as revealed through any restatement (*RESTATE*) are higher for clients of audit partners in leadership roles compared to audit partners not in leadership roles. This higher frequency appears to be driven by a higher incidence in misstatements revealed through non-reliance restatements (*BIGR*). In subsequent analyses, we investigate our hypothesis in a multiple regression framework to control for important covariates that can influence audit quality. Before turning to those tests, we note that partners in leadership roles exhibit greater gender diversity (*PARTNER_GENDER*), have more experience (*PARTNER_YRS_EXP*), are more likely to have been educated in a top accounting program (*PARTNER_EDUC*), have larger client industry local market-share in terms of client fees (*PARTNER_IND_SHARE*), and serve fewer clients (*PARTNER_NUM_CLIENTS*) relative to audit partners focused solely on client service. We also note several differences in audit firm/office characteristics and client portfolio characteristics, highlighting the importance of the entropy-balancing procedure to achieve covariate balance along these observable dimensions. Appendix C displays the pre- and post-entropy balancing descriptive statistics for all model independent variables. As shown in the last column of Appendix C, entropy balancing achieves effective reweighting of control (non-leader) observations to match the mean and variance of auditor and client characteristics of treatment (leader) observations.

Table 2, Panel C, presents the Pearson correlations between model variables. We find positive correlations between clients served by partners in leadership roles and misstatements revealed through any restatement and Big R restatements. Consistent with the univariate tests presented in Panel B, we find a positive correlation between leadership roles and partner experience, education in a top accounting program, market share in the industry, and a negative correlation with the number of clients served by a partner. Other correlations appear consistent with prior research findings.

[INSERT TABLE 2]

Hypothesis tests

Table 3 presents the results of tests of our hypothesis. Our estimation of the model for Big R and little r restatements excludes little r and Big R restatement observations, respectively.¹¹ Although we find an insignificant association between audit partners holding leadership roles and misstatements generally (*RESTATE*) and little r restatements (*LITTLEr*), we find a significant positive association ($p < 0.05$) between audit partner leadership status and misstatements revealed through a subsequent non-reliance restatement (*BIGR*). In terms of economic significance, the predicted probability of a misstatement revealed through a non-reliance restatement is about double for clients audited by partners in leadership roles compared to partners focused solely on client service (0.8% compared to 0.4%) holding all other model variables at their mean values. These results provide evidence suggesting that on average, the quality of audits performed by partners in leadership roles is lower than that of partners not in leadership roles.¹²

[INSERT TABLE 3]

5. Interview evidence

Institutional background from interviews

Our empirical analyses suggest that leadership roles can impact audit partners' audit quality; however, the initial results provide limited insights about the underlying cause. Following recommendations to incorporate field evidence into archival research by

¹¹ Results including all observations in all models are quantitatively and qualitatively consistent with tabulated results.

¹² In an untabulated test, we find the results are robust to limiting the sample to existing clients only (i.e., removing first year client assignments to reduce the possibility that the results are an artifact of short tenure).

communicating directly with individuals involved in the phenomena to develop a richer understanding of the setting (Peecher and Solomon 2001; Soltes 2014), we conduct semi-structured interviews of 21 U.S. audit partners who hold or recently held leadership roles. As previously discussed, this approach follows recent multi-method studies and allows for additional insight into the nature and nuances of leadership positions at audit firms.¹³

We identified our participants through alumni contacts and recommendations from participants. In Table 4, we report demographic information of the interview participants. All participants currently serve or have served as engagement partners on SEC issuer audits. Of the 21 respondents, 14 (7) are current (retired) partners; 12 (9) identified as Big 4 audit partners (non-Big 4 partners); and 18 (3) are male (female). In terms of leadership positions held by the interviewees, 19 hold or held office-level leadership roles, 7 hold or held regional-level roles, 2 hold or held national-level roles.¹⁴ Three of the interviewees hold or held local professional practice leadership roles, 4 hold or held audit practice leadership roles, and 13 hold or held managing partner roles. Thirteen of the 21 participants are included in our archival dataset used for our empirical tests.

[INSERT TABLE 4 HERE]

In our semi-structured interviews, we asked participants a series of open-ended questions about their career path to probe for information with respect to the selection process for audit firm leadership roles, leadership responsibilities, and the leader evaluation process. The interviews were conducted virtually over video conferencing software in October-November

¹³ Institutional Review Board (IRB) approval was received prior to conducting the interviews. The study was marked exempt by the IRB.

¹⁴ Of the 7 retired participants, all except one retired in the last 4 years while the latter retired ten years ago. Our inferences are unchanged with the exclusion of retired participant responses. All except one of the non-Big 4 firm partners is from a second-tier non-Big 4 firm (Grant Thornton, BDO, RSM); the latter is from a national firm and our inferences are unchanged if we exclude this participant's responses.

2020, with interviews lasting from 35 to 60 minutes (average of 50 minutes). The interviews were recorded and transcribed for accuracy. Appendix B provides the full interview protocol.

Following the interviews, we identified categories for potential responses to each question and determined whether the interviewee responses addressed these categorizations. Based on an initial test coding of the interviews, we made minor modifications to the coding scheme by combining or adding response categories. Two of the authors coded the responses independently, and then reconciled all remaining differences with the third author present. The inter-coder agreement averaged 90.87 percent, Scott's Pi = 0.733, and Cohen's Kappa = 0.735, which is an acceptable level of reliability (Landis and Koch 1977). In the next section, we highlight key themes that emerged from our interviews with respect to the leader selection process as well as leader responsibilities and evaluation.¹⁵

Leader selection process

We begin with the leadership selection process. From the interviews, three key themes emerged. First, leaders are generally asked to assume these roles by existing leadership, even if they do not seek to hold these roles, and their selection often coincides with a prominent client assignment. Second, selection criteria tend to focus on client service, development of firm personnel, and ability to grow the practice. Third, while candidates must demonstrate an acceptable level of technical expertise, a higher level of technical expertise is not a determining criterion for selection into most leadership roles.

Most (about 60%) of our interview participants suggested that while they were willing to

¹⁵ We believe that the number of interviewees was sufficient to draw reliable inferences from the interview process as no new information was provided in the final interviews. Saturation is reached when little or no new information is added by successive interviews (Guest et al. 2006). Accordingly, we examined the frequency of new topic discussion over the set of interviews ordered by time to verify that saturation was achieved (Guest et al. 2006).

take on leadership roles when asked to serve by existing leadership, they did not actively seek out these roles. About half of the interviewees (10 of the 21) noted a formal selection process, whereby leaders are selected by a panel of senior audit firm leadership. Interviewees suggested that larger offices often had a “grooming” process for office managing partners whereby new leaders shadow their predecessor, whereas the process was less formalized in smaller offices.

When identifying partners for leadership positions, the selection criteria often include assessments of a partner’s abilities to *serve their clients, develop their people, and grow the practice* within their service line. For example, Interviewee 10 stated that “Office managing partners are really focused on new business development.” In this regard, Interviewees 1-3, 5-9, 14, and 17-21 mentioned that entrance into a leadership role generally occurs with consideration of client assignments and rotations. According to Interviewee 5, “In my case, the rotations really drove my relocation and then the leadership assignments came with whatever I happened to be doing.” Furthermore, Interviewee 3 shared “I had to win new clients and roll on to actually one of the biggest ones [in the office, which] is one I won right when I got here.” This emphasis on growth and business development is important not only for an initial leadership position but remain so as a leader progresses to higher positions within the firm.

Interviewees suggested that audit quality was important in building and maintaining a strong reputation with senior leadership. For example, Interviewee 8 offered that “a good track record in terms of serving their clients and a good quality history” was integral to earning the respect of partners. However, technical expertise was not necessarily deemed a key consideration in leadership candidate evaluation. According to our interview participants, partners must demonstrate an acceptable standard of quality with respect to technical skills in order to be promoted to partner, but audit partners in leadership roles are not necessarily the partners with the greatest technical expertise in the firm. Interviewee 2 suggested that technical experts can

sometimes even find themselves ill-equipped for a role that requires a significant emphasis on business growth and managing and developing people.

Leader responsibilities and the evaluation process

As with the selection process, the evaluation of leadership partners is generally conducted by other leaders at a higher rank (i.e., regional leaders evaluate office leaders, national leaders evaluate regional leaders, and audit firm board evaluates national leaders). Beyond that though, participant responses offered the perspective that evaluations of those in leadership positions can vary depending on the role, where emphasis is placed on clients and business lines (e.g., office audit practice leaders and client industry leaders) or on overall management of the firm at the identified market level (e.g., office managing partners, regional or market leaders, and national leaders). Although leaders have a technical component to their evaluation, it is a more limited aspect of their evaluation compared to partners focused exclusively on client service. Instead, they are evaluated heavily in areas consistent with their responsibilities, including practice management and growth, human capital allocation and utilization, and client-oriented profitability and satisfaction. To shed light on the primary responsibilities for each role, we discuss each major designation separately.

With respect to office leadership, interviewees described two types: the office practice leader and the office managing partner. The office audit practice leader is responsible for balancing the risks of current and potential clients with growing the local office audit business¹⁶ and also audit staff development, including coaching and evaluating audit staff to partners. The office managing partner (OMP) is responsible for representing the firm in the local area and is focused on strategy and office growth. For example, Interviewee 14 stated, “The OMP all at one

¹⁶ This includes providing local consultations for audit matters to ensure an appropriate level of audit quality is maintained within the office.

time was focused on building or growing the market, being the person in the market, from a community, from a client satisfaction, and from a people perspective, I mean everything about it.” Importantly though, this growth is not constrained by service line as Interviewee 11 stated that the OMP’s responsibility is “across all three service lines and their primary focus is on revenue growth” and Interviewee 4 emphasized trying to “sell more services to our existing clients as well as obtaining new clients.”

At the regional level, leadership roles are similar to office roles but generally oversee the strategy and growth of multiple offices and their associated personnel. Given the increasing scope of these roles, regional practice or market leaders have reduced client service responsibilities to compensate for increased administrative responsibilities. Their primary responsibilities include oversight of human resources and partners in the region and strategic initiatives including growth of the regional practice line or market.

At the national level, the title and responsibilities of national managing partners can vary widely from National Audit Leader to Chief People Officer. Given their national focus and the large-scale administrative responsibilities, client serving responsibilities are often minimized or halted completely.¹⁷ Prone to a higher-level focus, national leaders are primarily evaluated on audit firm growth and profitability. Moreover, given their prominence within the firm, national leaders have significant influence over partner promotions and leadership candidate identification through their participation in selection committees and their reputational capital among other firm leaders.

Importantly, across all leadership levels, interviewees note significant administrative

¹⁷ A more client-oriented position within national leadership is the industry leader. Yet, this position also emphasizes national market initiatives for growth and risk management as well as building relationships with current and potential clients. Of note, some firms recognize industry leadership positions at the regional level.

responsibilities which include tasks related to practice management, profitability, and growth. Thus, evaluations based on these facets have the potential to alter the objective functions of partners in leadership roles to focus more heavily on business-oriented, rather than audit quality-focused, objectives. Furthermore, while these additional administrative obligations are generally offset by some client reductions for regional and national leaders, those at the office level, particularly within smaller offices, sometimes do not receive an offsetting reduction in client service. Thirteen of the 21 interviewees noted that the increase in administrative work associated with office-level leadership roles was not entirely offset by a reduction in client service, leading to more total work hours, particularly among those leading small offices. For example, Interviewee 14 stated “I would say it was like 60- 70% client and then 50% all the other things, which comes out to 120%. But that's how I kind of felt anyway.”

Interestingly, although the interviewees regularly spoke of the difficulty of maintaining a client workload while taking on these new administrative responsibilities, many spoke of the need to keep their largest or best clients to maintain relevance within the partnership. For example, Interviewee 2 stated, “don't give up your clients. I mean, stay close to clients, because the more you become this amorphous kind of back-office guy, the harder it is in a tough year to differentiate yourself.” Thus, it seems that even if offered the opportunity to reduce client demands further, some would choose to retain clients for their own profitability and perceived long-term success in the firm.¹⁸ Importantly, none of our interviewees provided any basis for the assumption that partners in leadership roles are systematically assigned to riskier or worse clients, thereby helping to mitigate concerns surrounding that particular source of endogeneity.

¹⁸ Notably, interview participants recognized the issue of being overburdened. Interviewee 1 stated the following, “We wanted to be very, very careful not to take on too many clients ourselves because quite frankly, then we're just going to fall down in our client quality and that's not going to be good for anybody.”

6. Additional Analyses

Partner capacity constraints

Based on statements from our interview participants, we perform additional analyses to further explore whether capacity constraints play a role in the results presented in Table 5. To examine this, we split our variable of interest, *PARTNER_LEADER*, based on the following dimensions: number of public clients served, client distance from the office, scope of the leadership role (i.e., the office-level versus regional or national-levels), and office size. We begin with the number of public clients these partners serve. We split our variable of interest (*PARTNER_LEADER*) into *L_ONE_CLIENT* and *L_GT1_CLIENT* based on the sample median of public clients served by partners in leadership roles (i.e., 1 client). Given the findings presented in Table 3, we focus our analyses on misstatements revealed through non-reliance restatements (*BIGR*). We present the results in the Column (1) of Table 5. We find that the coefficient on *L_GT1_CLIENT* is positive and significant ($p < 0.05$) while the coefficient on *L_ONE_CLIENT* is insignificant.¹⁹ However, we caution against strong inferences as a test of coefficient equality cannot be rejected at conventional levels of statistical significance.

Next, we examine the effect of the distance of the client from the audit office. This test relies on the assumption that clients further from the office incur greater demands on partners' time to travel to the client and be on-site to supervise the audit team and their work. We test this by splitting our variable of interest into two mutually exclusive variables (*L_DISTANCESHORT* and *L_DISTANCELONG*) based on whether the client headquarters is located less than or more

¹⁹ In terms of economic significance, the predicted probability of a misstatement revealed through a non-reliance restatement is more than triple for clients audited by partners in leadership roles with more than 1 client compared to partners focused solely on client service (1.7% compared to 0.5%) holding all other model variables at their mean values.

than 100 miles from the audit office, respectively.²⁰ We present the results in Column (2) of Table 5. Consistent with the expectation that greater distance can exacerbate partner distractedness when partners carry heavy administrative responsibilities, we find evidence that the higher likelihood of misstatement (revealed through Big R restatements) is only manifest when partners in leadership roles serve clients located farther from the audit office.²¹ We also find that the coefficient on *L_DISTANCELONG* is significantly different from the coefficient on *L_DISTANCESHORT* ($p < 0.10$).²²

Third, our variable of interest captures leadership roles at various levels within an audit firm (i.e., office, regional and national levels). Interview participants noted that the additional responsibilities for regional and national leaders are more often offset by reductions in client service demands relative to office-level leaders. Accordingly, we split our variable of interest into office-level leadership roles (*OFFICE_LEADER*) and regional/national-level leadership roles (*REGION_NAT_LEADER*).²³ See Figure 1 for example titles by scope of role – office, regional, or national.²⁴ We present the results in Column (3) of Table 5. We find that misstatements are more

²⁰ In untabulated analyses, we find similar results using a 50 miles cut-off.

²¹ We also analyzed the distance between the partner's current city location per their LinkedIn profiles, when available, and the client's headquarters and found qualitatively similar results.

²² In terms of economic significance, the predicted probability of a misstatement revealed through a non-reliance restatement is nearly four times higher for clients audited by partners in leadership roles with longer average distance to the client compared to partners focused solely on client service (1.8% compared to 0.5%) holding all other model variables at their mean values.

²³ To do this, we manually examine the titles/roles of the 374 partners with leadership roles and categorize office managing partners and office audit practice leaders as office-level leadership roles. Similarly, we classify regional (multi-office) managing/operations leaders, regional audit practice leaders, national audit practice leaders and national operations leaders as regional or national-level leadership roles. Because partners can hold various leadership roles simultaneously, we created these variables to be mutually exclusive so that, for example, partners holding both office and regional leadership roles are classified as regional leaders but not office leaders. In robustness checks, we find similar results using non-mutually exclusive.

²⁴ Notably, some of the roles in Figure 1 highlight a focus on practice and audit quality. However, to the extent that these leaders provide higher audit quality, this would bias against our initial finding which suggests that on average, the quality of audits performed by partners in leadership roles is lower than that of partners not in leadership roles.

likely among partners in office-level leadership roles ($p < 0.05$). Although the test of coefficient equality is not rejected, we find an insignificant coefficient on *REGION_NAT_LEADER*. While we caution against strong inferences from this test, the results do appear to concentrate among audit partners serving in office-level roles.

[INSERT FIGURE 1]

Finally, three interviewees suggested that leaders in small offices are disproportionately affected by the expectation of maintaining a substantial client portfolio even with the increased administrative workload. For example, Interviewees 2 and 9 discuss the importance of leaders' oversized roles in small offices where the local community and audit office personnel require a stronger relationship with the leader in comparison to large offices. If leaders in smaller offices take on greater administrative responsibility without a reduction in client service demands, then we would expect these partners to have greater constraints on their available time to perform high quality audits. Accordingly, we split our variable of interest into two mutually exclusive variables (*L_SMALL_OFFICE* and *L_LARGE_OFFICE*) based on the sample median level of office audit fees for each audit firm, each year. We present the results in Column (4) of Table 5. Consistent with interview responses that leaders in smaller offices are subject to greater capacity constraints, we find that the coefficient on *L_SMALL_OFFICE* is positive and significant ($p < 0.01$), while the coefficient on *L_LARGE_OFFICE* is insignificant. Furthermore, the coefficient on *L_SMALL_OFFICE* is significantly different from the coefficient on *L_LARGE_OFFICE* ($p < 0.10$).²⁵ Collectively, the results from Table 5 provide evidence suggesting that capacity constraints resulting from heavier workloads for partners in leadership positions play a role in the lower on-

²⁵ In terms of economic significance, the predicted probability of a misstatement revealed through a non-reliance restatement is more than double for clients audited by partners in leadership roles and small offices compared to partners focused solely on client service (0.9% compared to 0.3%) holding all other model variables at their mean values.

average audit quality documented in Table 3.

[INSERT TABLE 5]

Incentives to provide leniency to clients

Responses during our interviews also highlighted the importance of leaders' responsibility for growth and profitability. We explore the possibility that this increased emphasis on growth and profitability leads these partners to allow greater leniency on reporting matters. Consistent with prior research (Frankel et al. 2002; Ashbaugh et al. 2003; Chung and Kallapur 2003; Paterson and Valencia 2011), we use NAS to proxy for independence concerns due to economic bonding. Unlike audit fees, NAS provide a direct test of revenue generation that is not encumbered by the partner's experience/expertise. Specifically, we test the following model:

$$LNNASFEES_{it} = \beta_0 + \beta_1 PARTNER_LEADER_{i,t} + \beta Controls_{i,t} + Industry\ Fixed\ Effects + Year\ Fixed\ Effects + \varepsilon_{it} \quad (2)$$

where *LNNASFEES* equals the natural log of non-audit fees plus one. Control variables are consistent with model (1). Table 6, Panel A presents the results of this test. Consistent with interview evidence highlighting these partners' focus on revenue growth, we find a significant positive association ($p < 0.01$) between audit partner leadership status and NAS. In terms of economic significance, the results suggest that clients of partners in leadership roles pay 58 percent higher non-audit fees relative to clients of other partners.

To more directly tie the influence of NAS to audit quality, we re-estimate model (1) after splitting our variable of interest (*PARTNER_LEADER*) into two mutually exclusive variables (*L_LOW_NAS* and *L_HIGH_NAS*) based on the sample median level of NAS purchased by clients of partners in leadership roles. Consistent with the analyses in Table 5, we focus our analyses on misstatements revealed through non-reliance restatements (*BIGR*). Table 6, Panel B presents the

results of this test. Compounding the willingness of leadership partners' clients to purchase more NAS, we find that the coefficient on *L_HIGH_NAS* is positive and significant ($p < 0.05$), while the coefficient on *L_LOW_NAS* is insignificant.²⁶ However, we caution against strong inferences as a test of coefficient equality cannot be rejected at conventional levels of statistical significance. Thus, in addition to capacity constraints, we find some evidence suggesting that greater incentives stemming from an increased emphasis on growth and profitability also help explain the lower on-average audit quality of partners in leadership roles.

[INSERT TABLE 6]

Alternative proxy for audit quality

DeFond and Zhang (2014) conclude that no single proxy paints a complete picture of audit quality and recommend triangulating across more than one proxy to take advantage of their strengths and attenuate their weaknesses. While restatements provide a clear indication of lower audit quality (Christensen et al. 2016; Aobdia 2019), there is not a high frequency of non-reliance restatements during our sample period. As such, we take advantage of a continuous measure of audit quality that facilitates the detection of earnings manipulation within the confines of GAAP. Specifically, we use the modified Jones (1991) model, run cross-sectionally by two-digit SIC industry and year groupings with at least 10 observations, to estimate discretionary accruals for each firm.²⁷ We then re-estimate model (1) separately for income-increasing and income-decreasing discretionary accruals. Given incentives to manage earnings upward (Graham et al. 2005), we present the results of the income-increasing discretionary accruals tests in Table 7 and

²⁶ In terms of economic significance, the predicted probability of a misstatement revealed through a non-reliance restatement is double for clients audited by partners in leadership roles with high client NAS compared to partners focused solely on client service (0.86% compared to 0.4%) holding all other model variables at their mean values.

²⁷ We find consistent evidence if we employ the performance-adjusted discretionary accruals model proposed in Kothari et al. (2005).

discuss the income-decreasing discretionary accruals tests untabulated for brevity. Our discretionary accruals models use year fixed effects and client firm fixed effects to alleviate concerns that results are an artifact of correlated omitted time-invariant firm characteristics.

In Column (1) of Table 7, we provide the results of estimating model (1) with income-increasing discretionary accruals (*POSDA_MJONES*). Consistent with the *BIGR* results presented in Table 3, we find evidence of larger income-increasing discretionary accruals among clients audited by partners in leadership roles. In Columns (2) through (6) we present the cross-sectional tests related to capacity constraints and economic-related incentives. Although we find evidence of larger income-increasing discretionary accruals among clients of partners in leadership roles that are closer to their clients (inconsistent with our *BIGR* results), we find corroborative evidence of lower audit quality among leaders with more than one audit client, in smaller offices and whose clients purchase more NAS. In untabulated tests, we note insignificant associations with income-*decreasing* discretionary accruals. Overall, the tenor of these results provide corroborative support for the inferences from our main analyses.²⁸

[INSERT TABLE 7]

Analyses focusing on the change in partner leadership role status

We supplement our association-based tests with an alternative within-firm design to strengthen identification. We limit the sample to firms that do not change their audit partner (or audit firm) so that we have at least two consecutive years with the same audit firm and partner. In doing so, this provides a sample of companies that are audited by the same partner both before and after they have assumed a leadership role in their audit firm. We use *POST_LEADER* as the

²⁸ Results using an alternative specifications of discretionary accruals – Kothari et al. (2005) performance-matched discretionary accruals are quantitatively and qualitatively consistent with the tabulated results using the modified Jones model.

test variable, which captures the years following the leadership appointment. Table 8 presents the results of these tests. Despite a small sample size, we find that relative to years before the audit partner's appointment to a leadership role, the likelihood of misstatement and income-increasing discretionary accruals are both higher in years following the leadership appointment. The insights from this analysis provides corroborative evidence that helps strengthen identification and the inferences from our main association-based tests.

7. Conclusion

Although partners in accounting firms act as agents for the partnership and share in the profits and risks of the firm jointly, roles and responsibilities among partners vary. Some partners assume leadership roles in their firms with significant administrative and strategic responsibilities. Because leadership positions are often filled by audit partners who typically continue to serve clients while in leadership positions, we examine whether the administrative tasks and strategic nature of their roles influence the quality of the audits they conduct.

We use a hand-collected dataset to empirically examine the influence of leadership roles on audit quality. We find that relative to audit partners focused solely on client service, clients of partners in leadership roles are more likely to subsequently restate their financial statements through a non-reliance restatement, suggesting that leadership roles and responsibilities can have a detrimental impact on audit quality. We then conduct semi-structured interviews of partners who have held office, regional, and national leadership roles to further understand the underlying mechanisms for this result. Specifically, we gain insights into the leader selection process, leader responsibilities, and the leader evaluation process. Based on the interview evidence, we conduct additional analyses to draw further insight into the audit quality result. The results from these analyses provide evidence that capacity constraints play a role in the observed association between audit partners in leadership roles and audit quality. Specifically,

we find that audit quality is lower when the partner in a leadership role serves a larger number of clients, serves clients located farther from the office, or resides in a smaller office. Further evidence suggests that incentives stemming from an increased emphasis on business development and growth (i.e., greater sales of NAS to clients of partners in leadership roles) may also play a role in explaining the lower on-average audit quality of partners in leadership roles.

This study contributes to our understanding of the selection, expectations, and evaluation of partners in leadership roles and highlights how the additional capacity constraints placed on partners in leadership roles and the incentives that arise from increased emphasis on business development and growth can have unintended consequences for audit quality. These findings should be particularly relevant to audit firms when designing and implementing leadership transitions, workload allocations, and performance evaluations. Furthermore, they may also be of importance to regulators when selecting audit engagements for inspection that pose a higher risk of quality deficiencies and to standard setters in their efforts to finalize firm quality management standards that emphasize the importance of audit firm leadership (IAASB 2020). This study also contributes to the growing literature examining the influence of audit partner characteristics and experience on audit effectiveness in the U.S., by highlighting how partner busyness that extends beyond the size of a client portfolio can negatively impact audit quality.

Finally, we recognize the limitations of this study. First, although we observe a negative association between audit partner leadership status and audit quality, we are unable to rule out that lower audit effectiveness is driven by lower-level engagement team members. Second, like many other studies that examine the effect of partner characteristics on audit outcomes, this study suffers from endogeneity concerns as the partner assignment process does not occur randomly (Lennox and Wu 2018; Lee et al. 2019) despite our best attempts to mitigate these concerns in our empirical analyses and through the insights garnered from interview participants.

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APPENDIX A

Variable definitions

Audit Quality Proxies:

<i>RESTATE</i>	An indicator variable set equal to one if the annual financial statements are misstated as indicated by a subsequently revealed restatement, and zero otherwise.
<i>BIGR</i>	An indicator variable set equal to one if the annual financial statements are misstated as indicated by a subsequently revealed restatement and the restatement is disclosed via Form 8-K, and zero otherwise.
<i>LITTLEr</i>	An indicator variable set equal to one if the annual financial statements are misstated as indicated by a subsequently revealed revision (little r) restatement, and zero otherwise.
<i>POSDA_MJONES</i>	Positive discretionary accruals measured as the positive residuals resulting from the estimation of the modified Jones(1991) discretionary accruals model.

Audit Partner Test Variables:

<i>PARTNER_LEADER</i>	An indicator variable set equal to 1 if the lead audit partner is an office, regional, and/or national leader during the sample period according to their job title and 0 otherwise.
<i>L_ONE_CLIENT</i>	An indicator variable set equal to 1 if the client is audited by a partner with leadership responsibilities in the audit firm and the partner has only one issuer audit client that year, and 0 otherwise.
<i>L_G1_CLIENT</i>	An indicator variable set equal to 1 if the client is audited by a partner with leadership responsibilities in the audit firm and the partner has more than one issuer audit client that year, and 0 otherwise.
<i>L_DISTANCE_LONG</i>	An indicator variable set equal to one if the engagement was led by a partner in a leadership role and the distance between the client's headquarters and the audit office is greater than 100 miles.
<i>L-DISTANCE_SHORT</i>	An indicator variable set equal to one if the engagement was led by a partner in a leadership role and the distance between the client's headquarters and the audit office is less than or equal to 100 miles.
<i>L_LARGE_OFFICE</i>	An indicator variable set equal to one if the engagement was led by a partner in a leadership role in a large office. Large office is determined by the median split of the sum of office issuer audit fees for each firm and year.
<i>L_SMALL_OFFICE</i>	An indicator variable set equal to one if the engagement was led by a partner in a leadership role in a small office. Small office is determined by the median split of the sum of office issuer audit fees for each firm and year.
<i>L_HIGH_NAS</i>	An indicator variable set equal to 1 if the client is audited by a partner with leadership responsibilities in the audit firm and the client purchases more than the median amount of non-audit services (based on such fees) in the sample.
<i>L_LOW_NAS</i>	An indicator variable set equal to 1 if the client is audited by a partner with leadership responsibilities in the audit firm and the client purchases more than the median amount of non-audit services (based on such fees) in the sample.

APPENDIX A Continued

<i>OFFICE_LEADER</i>	An indicator variable set equal to 1 if the lead audit partner is an office managing partner or office audit practice leader during the sample period according to their job title and 0 otherwise.
<i>REGION_NAT_LEADER</i>	An indicator variable set equal to 1 if the lead audit partner is a regional or national leader during the sample period according to their job title and 0 otherwise.
<i>POST_LEADER</i>	An indicator variable set equal to 1 if the lead audit partner became a leader during 2017-2019 and the audit was conducted after they became a leader and 0 otherwise.
<u>Audit Partner Control Variables:</u>	
<i>PARTNER_GENDER</i>	An indicator variable set equal to one if the lead audit partner is female and 0 if male. Gender is coded manually based on first name and photographs of the partner observed online.
<i>PARTNER_YRS_EXP</i>	The natural log of 1 + the number of years that elapsed between the lead audit partner obtaining their first CPA license and the fiscal year under audit. CPA license date is obtained from State Boards of Accountancy license lookup websites or cpaverify.org.
<i>PARTNER_EDUC</i>	An indicator variable set equal to one if the lead audit partner attended a college or university ranked in the top 50 for undergraduate accounting programs by the Public Accounting Report in the last ten years and 0 otherwise.
<i>PARTNER_IND_SHARE</i>	Partner industry share measured as ratio of the partner's audit fees in the client's industry to total audit fees paid by all issuers audited by the signing office in the client's industry in the year under audit.
<i>PARTNER_NUM_CLIENTS</i>	Number of SEC issuers the partner serves as lead audit partner on in the year under audit.
<u>Audit Firm and Office Control Variables</u>	
<i>BIG4</i>	An indicator variable set equal to one if the audit firm is a Big 4 firm and 0 if it is a second-tier firm - GT, BDO, RSM or Crowe.
<i>AUDITOR_SWITCH</i>	1 if the one if the company changes auditors in the current year, and 0 otherwise.
<i>BUSY</i>	1 when fiscal year end is in December, and 0 otherwise.
<i>OFFICE_IND_EXP</i>	The ratio of total office audit fees in the client's industry to total audit fees paid by all issuers in the client's industry in the audit office's MSA in the year under audit.
<i>OFFICE_SIZE</i>	The natural log of total office audit fees for the Compustat fiscal year.
<u>Client Control Variables:</u>	
<i>LNASSETS</i>	Natural log of assets in millions of U.S. dollars.
<i>LNGEOSEG</i>	Number of geographic segments from Compustat Historical Segments.
<i>LNBUSSEG</i>	Number of business segments from Compustat Historical Segments.
<i>FOREIGN</i>	Absolute value of pretax income from foreign operations (PIFO) divided by the absolute value of pretax income (PI).

APPENDIX A Continued

<i>MERGEACQ</i>	An indicator variable equal to one if the client had a merger or acquisition in the year under audit.
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<i>SGROW</i>	Year-on-year sales growth of the client firm.
<i>BM</i>	Shareholder's equity (book value) deflated by fiscal year-end market capitalization
<i>CFO</i>	Client's cash flows from operations deflated by beginning assets.
<i>SDCFO</i>	Standard deviation of the client's cash flows from operations deflated by beginning assets, computed over years t-3 and t.
<i>INVREC</i>	Ratio of accounts receivable (RECT) plus inventories (INVT) to total assets (AT).
<i>LEVERAGE</i>	Total debt (DLC + DLTT) divided by total assets (AT).
<i>LOSS</i>	Indicator variable equal to one when income before extraordinary items (IB) is negative.
<i>GC</i>	An indicator variable equal to one if the audit opinion for the fiscal year under audit contained a going-concern modification.
<i>LIT</i>	Indicator variable if the client is in a high litigation industry (SIC code between 2833 and 2836, 8731 and 8734, 3570 and 3577, 7370 and 7374, 3600 and 3674, or 5200 and 5961).
<i>WEAKNESS</i>	An indicator variable equal to one if the client reports a material weakness.
<i>LAG2_ICMW</i>	An indicator variable equal to one if the client received adverse internal control over financial reporting (ICFR) audit opinions for year t-1 or t-2.
<i>LAG2_RES_ANN</i>	An indicator variable equal to one if the client announcement any restatement during year t, t-1 or t-2.
<i>LNNASFEES</i>	The natural logarithm of non-audit fees from Audit Analytics + 1
<i>Industry FE</i>	Dummy variable for Fama-French 12 industry grouping
<i>Year FE</i>	Dummy variable for fiscal year under audit

Note: All continuous variables are winsorized at the 1% and 99% cut points of their respective distributions.

APPENDIX B

Semi-structured interview protocol

Study Overview

We are conducting interviews with accounting firm partners to understand how public accounting firms select partners into office, regional and national leadership roles and the responsibilities of each type of leader. As a partner at a large public accounting firm, your experience and perspective is unique. We are interested in learning how your accounting firm selects its leaders, the various responsibilities of each type of leader and how leaders allocate their time between those responsibilities. Your candid responses will be invaluable in understanding the current practice environment and will provide rich insights to help contribute to this research topic. The results of our study intend to benefit the public accounting profession as well as accounting research and education.

This interview should last approximately 30-45 minutes. Interview questions are provided below for your review in advance to allow you to think about the questions and expedite the interview process. Because participation in these interviews is voluntary, you are free to refuse to answer any question. We would like to record the interviews for accuracy. To protect your anonymity, all recordings, transcripts, and interview notes will be securely maintained and only reviewable within our research team. Further your individual responses will be aggregated with all of our collected data and individuals will not be identifiable in any reports, including any and all direct quotes presented in a research manuscript. If you prefer that we do not record, then at least two researchers will participate in the call, take detailed notes, and then send you any notes to verify their accuracy.

Following is information on the backgrounds of the research team, of which two will participate in your interview. [omitted] If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), you are encouraged to contact the Office of Research Compliance at the XXX Office for Human Subjects Protection at XXX. If you have questions for the scholars, please contact us at the following email addresses: XXX.

Interview Questions

PART 1: DEMOGRAPHICS

1. How many years of auditing experience do you have?
2. How many years have you been a partner?

PART 2: INDIVIDUAL EXPERIENCE QUESTIONS

1. What leadership roles have you held in the firm?
2. How many years have you been in each of those roles?
3. How did you come to be promoted to each of your leadership roles?
 - a. Was the decision to serve in the role influenced by your willingness and/or desire to voluntarily serve in the role, or were you simply asked by the firm to serve?

- b. What qualities/experiences must a partner have/demonstrate to be selected for and be successful in each leadership role? How would you weight the importance of the following characteristics in being chosen/promoted into leadership roles: 1) client-relationship management and ability to sell services, 2) technical expertise and track record of high-quality work, 3) other qualities (please indicate)? Does that weighting differ based on the type of leadership role (i.e., managing partner roles at the office, region or national levels versus industry or assurance leadership roles)?
 - c. What hurdles, if any, did you overcome to be promoted to your leadership role?
 4. What are the main responsibilities of each of your leadership roles?
 5. About what percentage of your time do you spend on each of the following: administrative responsibilities, client recruitment and proposals, audit client service work, quality control and other (please indicate)? Did these responsibilities change significantly from those prior to your leadership position? For example, was it necessary for you to reduce your client service work? How many SEC issuer and how many non-issuer clients do you serve/did you serve before and during your leadership roles or how did (do) you split your time between issuer and non-issuer clients?
 6. How are (were) you evaluated (and/or rewarded) in each leadership role you held?
 7. What are the challenges and benefits, personally and professionally, of each role you've held?

PART 3: GENERAL QUESTIONS ABOUT LEADERSHIP ASSIGNMENTS IN YOUR FIRM

1. What are the general and/or specific responsibilities of office, regional and national leaders in your firm? How do they vary by region or type of role?
2. What is the process of selecting/promotion firm office/regional/national leaders in your firm?
 - a. What must partners achieve or demonstrate to be considered for office leadership roles and to maintain their roles? For example, what type of personal characteristics does the firm look for, years of experience, expertise, etc.?
 - b. Is there a general term or term limit for leadership roles?
3. How is each type of leader evaluated and compensated?

APPENDIX C

Entropy balancing descriptive statistics – balancing on the 2nd moment

Balancing Variables	Mean Leader	Mean Non-Leader Pre	Mean Non-Leader Post	Var. Leader	Var. Non-Leader Pre	Var. Non-Leader Post	Skew. Leader	Skew Non-Leader Pre	Skew Non-Leader Post	Sdiff Pre	Sdiff Post
<i>PARTNER_GENDER</i>	0.19	0.17	0.19	0.16	0.14	0.16	1.56	1.73	1.56	0.05	(0.00)
<i>PARTNER_YRS_EXP</i>	3.13	2.99	3.13	0.07	0.10	0.07	(0.82)	(0.44)	(0.47)	0.51	0.00
<i>PARTNER_EDUC</i>	0.50	0.42	0.50	0.25	0.24	0.25	0.02	0.32	0.02	0.15	0.00
<i>PARTNER_IND_SHARE</i>	0.24	0.16	0.24	0.08	0.06	0.08	1.51	2.25	1.44	0.28	0.00
<i>PARTNER_NUM_CLIENTS</i>	1.98	2.16	1.98	1.08	1.32	1.08	1.26	1.24	1.34	(0.18)	0.00
<i>BIG4</i>	0.75	0.86	0.75	0.19	0.12	0.19	(1.14)	(2.05)	(1.14)	(0.26)	0.00
<i>AUDITOR_SWITCH</i>	0.04	0.03	0.04	0.04	0.03	0.04	4.77	5.40	4.77	0.04	(0.00)
<i>BUSY</i>	0.79	0.82	0.79	0.17	0.15	0.17	(1.40)	(1.64)	(1.40)	(0.07)	0.00
<i>OFFICE_IND_EXP</i>	0.49	0.33	0.49	0.25	0.22	0.25	0.04	0.73	0.04	0.32	0.00
<i>OFFICE_SIZE</i>	17.08	17.68	17.08	2.15	1.90	2.15	(0.45)	(0.73)	(0.47)	(0.41)	0.00
<i>LNASSETS</i>	7.59	7.26	7.58	4.28	3.89	4.28	(0.23)	(0.03)	(0.04)	0.16	0.00
<i>LNCEOSEG</i>	0.86	0.83	0.86	0.13	0.12	0.13	2.05	2.45	2.04	0.09	0.00
<i>LNBUSSEG</i>	0.89	0.84	0.89	0.16	0.12	0.16	1.64	2.07	1.63	0.13	0.00
<i>FOREIGN</i>	0.35	0.30	0.35	0.52	0.44	0.52	3.49	3.87	3.50	0.07	0.00
<i>MERGEACQ</i>	0.40	0.34	0.40	0.24	0.22	0.24	0.40	0.68	0.40	0.13	0.00
<i>SGROW</i>	0.03	0.03	0.03	0.04	0.03	0.04	(1.33)	(1.51)	(2.06)	(0.01)	(0.00)
<i>BM</i>	0.44	0.43	0.44	0.69	0.92	0.69	(3.36)	(4.34)	(4.11)	0.01	0.00
<i>CFO</i>	0.04	(0.00)	0.04	0.08	0.14	0.08	(12.58)	(9.36)	(11.49)	0.16	0.00
<i>SDCFO</i>	0.05	0.08	0.05	0.01	0.06	0.01	8.21	13.40	10.65	(0.24)	(0.00)
<i>INVREC</i>	0.22	0.21	0.22	0.03	0.04	0.03	1.16	1.30	1.11	0.05	0.00
<i>LEVERAGE</i>	0.31	0.31	0.31	0.06	0.11	0.06	1.33	6.97	1.43	0.02	(0.00)
<i>LOSS</i>	0.31	0.36	0.31	0.21	0.23	0.21	0.83	0.57	0.83	(0.12)	(0.00)
<i>GC</i>	0.04	0.05	0.04	0.03	0.04	0.03	5.05	4.36	5.05	(0.06)	(0.00)
<i>LIT</i>	0.25	0.30	0.25	0.19	0.21	0.19	1.13	0.89	1.13	(0.10)	(0.00)
<i>WEAKNESS</i>	0.06	0.05	0.06	0.05	0.05	0.05	3.78	4.24	3.78	0.04	(0.00)
<i>LAG2_ICMW</i>	0.02	0.02	0.02	0.02	0.02	0.02	7.42	6.74	7.42	(0.03)	0.00
<i>LAG2_RES_ANN</i>	0.17	0.15	0.17	0.14	0.13	0.14	1.78	1.99	1.78	0.06	0.00

Note: Only 71 out of 7647 control observations are above equal-weight, which indicates that less than 1% of the control sample is upweighted to achieve balance. Statistics for industry and year dummy variables (fixed effects) are omitted for brevity.

Figure 1

Examples of leadership roles and sample profile

Panel A: Example job titles

Office Leadership Job Titles

Office Managing Partners

- Office Managing Partner Birmingham AL
- Boca Raton Office Managing Partner and the Florida Market Co-Assurance Leader
- EY Central Region Growth Market Leader and Charlotte Managing Partner

Office Audit Practice Leaders

- Assurance Leader of PwC's Greater Chicago market
- Assurance Managing Partner for BDO's Los Angeles Practice
- Chicago office audit leader

Regional Leadership Job Titles

- Partner-in-Charge of Deloitte's Carolinas/Tennessee audit practice
- Partner in Charge of the Chicago, Milwaukee and Eastern Iowa Audit Practices
- Chief Operating Officer (COO) for Deloitte's Central Region Audit Practice
- Regional Operations Leader

National Leadership Job Titles

- AERS Executive Committee National Managing Partner, Audit Committee Programs and Client Matters
- Americas Audit Leader
- Audit National Managing Partner, Audit Operations
- Managing Partner US Audit Global Office
- National Partner in Charge, Inspections

Figure 1 Continued

Panel B: Example profile from LinkedIn® professional networking profile

John Doe

Assurance Partner & City L Market Managing Partner at Audit Firm A
City L, State Y

About

In John's 24 year tenure in Audit Firm A's audit practice, he has gained broad-based accounting, auditing and business advisory experience working with clients in a variety of industries such as automotive, industrial and consumer products. He maintains a strong network of partners within Audit Firm A, including leaders in the national technical group, and an extensive international network. He leverages these relationships along with his own technical experiences to provide clients timely quality technical advice.

John sees matters from a 360 degree view working together with his clients through complex technical issues in the constantly changing/evolving regulatory audit environment. He develops trusting and deeply valued relationships allowing clients to reach the best possible solutions that maximize their business objectives while adhering to related accounting and regulatory reporting requirements.

Experience

Audit Firm A
Market Managing Partner, City L, State Y
2018 - Present (3 years)

John is responsible for managing Audit Firm A's City L office. Besides his client responsibilities within City L, his leadership role is to drive the Audit Firm A Brand in the market, the business community and in civic affairs.

Greater State Z Market Assurance Leader
2015 - Present (6 years)

Lead various aspects of the practice including monitoring client relationships, people initiatives and driving audit quality for a team of 100+ assurance professionals working in the City K and City L offices.

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(Further information when available)

*underlines are included for emphasis to highlight the background information collected

TABLE 1

Empirical analysis sample construction

Merger of Compustat, Audit Analytics, and Form AP for fyear 2016-2019	18,734
Less: Observations without Global 6 Auditor	6,618
Less: Observations with Total Assets less than \$1 million	25
Less: Missing partner, financial and audit data from Compustat and Audit Analytics for audit fees and model control variables	2,878
Final Sample	9,213
2016	2,177
2017	2,411
2018	2,350
2019	2,275

TABLE 2
 Descriptive statistics and univariate tests
Panel A: Summary statistics (N=9,213)

Variable	Mean	SD	P25	Median	P75
<i>PARTNER_LEADER</i>	0.17	0.38	0.00	0.00	0.00
<i>OFFICE_LEADER</i>	0.12	0.32	0.00	0.00	0.00
<i>REGION_NAT_LEADER</i>	0.05	0.23	0.00	0.00	0.00
<i>RESTATE</i>	0.05	0.22	0.00	0.00	0.00
<i>BIGR</i>	0.01	0.10	0.00	0.00	0.00
<i>LITTLEr</i>	0.04	0.20	0.00	0.00	0.00
<i>LNNASFEES</i>	10.47	4.59	10.01	11.97	13.30
<i>POSDA_MJONES</i>	0.07	0.08	0.03	0.05	0.09
<i>PARTNER_GENDER</i>	0.18	0.38	0.00	0.00	0.00
<i>PARTNER_YRS_EXP</i>	3.01	0.31	2.83	3.04	3.22
<i>PARTNER_EDUC</i>	0.43	0.50	0.00	0.00	1.00
<i>PARTNER_IND_SHARE</i>	0.17	0.26	0.02	0.06	0.19
<i>PARTNER_NUM_CLIENTS</i>	2.13	1.13	1.00	2.00	3.00
<i>BIG4</i>	0.84	0.37	1.00	1.00	1.00
<i>AUDITOR_SWITCH</i>	0.03	0.18	0.00	0.00	0.00
<i>BUSY</i>	0.81	0.39	1.00	1.00	1.00
<i>OFFICE_IND_EXP</i>	0.36	0.48	0.00	0.00	1.00
<i>OFFICE_SIZE</i>	17.58	1.41	16.58	17.89	18.60
<i>LNASSETS</i>	7.31	1.99	5.97	7.36	8.65
<i>LNGEOSEG</i>	0.84	0.34	0.69	0.69	0.69
<i>LNBUSSEG</i>	0.85	0.36	0.69	0.69	0.69
<i>FOREIGN</i>	0.31	0.67	0.00	0.01	0.34
<i>MERGEACQ</i>	0.35	0.48	0.00	0.00	1.00
<i>SGROW</i>	0.03	0.18	-0.01	0.02	0.09
<i>BM</i>	0.43	0.94	0.18	0.39	0.69
<i>CFO</i>	0.01	0.36	0.01	0.07	0.12
<i>SDCFO</i>	0.07	0.23	0.01	0.03	0.06
<i>INVREC</i>	0.21	0.20	0.05	0.16	0.31
<i>LEVERAGE</i>	0.31	0.32	0.09	0.28	0.45
<i>LOSS</i>	0.35	0.48	0.00	0.00	1.00
<i>GC</i>	0.04	0.20	0.00	0.00	0.00
<i>LIT</i>	0.29	0.45	0.00	0.00	1.00
<i>WEAKNESS</i>	0.05	0.22	0.00	0.00	0.00
<i>LAG2_ICMW</i>	0.02	0.14	0.00	0.00	0.00
<i>LAG2_RES_ANN</i>	0.15	0.36	0.00	0.00	0.00

TABLE 2 Continued

Panel B: Univariate tests comparing audits of partners with and without leader roles

	Mean <i>PARTNER_LEADER=1</i> (N=1,566)	Mean <i>PARTNER_LEADER=0</i> (N=7,647)	t-stat
<i>RESTATE</i>	0.068	0.049	3.076***
<i>BIGR</i>	0.018	0.008	3.652***
<i>LITTLEr</i>	0.050	0.041	1.624
<i>LNNASFEES</i>	10.977	10.365	4.807***
<i>POSDA_MJONES</i> (<i>n</i> =3,769)	0.074	0.074	0.015
<i>PARTNER_GENDER</i>	0.193	0.173	1.877*
<i>PARTNER_YRS_EXP</i>	3.126	2.988	16.421***
<i>PARTNER_EDUC</i>	0.496	0.422	5.385***
<i>PARTNER_IND_SHARE</i>	0.239	0.159	11.240***
<i>PARTNER_NUM_CLIENTS</i>	1.978	2.165	-5.948***
<i>BIG4</i>	0.747	0.858	-10.980***
<i>AUDITOR_SWITCH</i>	0.039	0.031	1.593
<i>BUSY</i>	0.787	0.817	-2.690***
<i>OFFICE_IND_EXP</i>	0.491	0.329	12.306***
<i>OFFICE_SIZE</i>	17.079	17.683	-15.605***
<i>LNASSETS</i>	7.586	7.258	5.955***
<i>LNGEOSEG</i>	0.862	0.831	3.342***
<i>LNBUSSEG</i>	0.894	0.844	5.074***
<i>FOREIGN</i>	0.354	0.303	2.757***
<i>MERGEACQ</i>	0.403	0.338	4.883***
<i>SGROW</i>	0.032	0.033	-0.250
<i>BM</i>	0.438	0.427	0.426
<i>CFO</i>	0.043	-0.003	4.482***
<i>SDCFO</i>	0.052	0.078	-4.118***
<i>INVREC</i>	0.222	0.212	1.808*
<i>LEVERAGE</i>	0.314	0.310	0.496
<i>LOSS</i>	0.309	0.363	-4.081***
<i>GC</i>	0.035	0.046	-1.831*
<i>LIT</i>	0.254	0.296	-3.345***
<i>WEAKNESS</i>	0.058	0.048	1.725*
<i>LAG2_ICMW</i>	0.017	0.021	-0.879
<i>LAG2_RES_ANN</i>	0.168	0.147	2.086**

Notes: Variables are defined in the Appendix. ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively. These descriptive statistics are presented before entropy balancing as introduced by Hainmueller (2012). The technique uses an iterative process to reweight control sample observations until the means (and other higher order moments) of the control sample covariate distributions approximately equal those in the treatment sample. We balance on all partner and client characteristics (Controls described below) plus all fixed effects (year and industry). After entropy balancing on the second moment, means and variances for all client characteristic control variables are not significantly different across the two groups of observations - audits by partners with vs. without office, regional, or national leadership roles, and therefore are not presented.

TABLE 2 Continued
Panel C: Pearson correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 PARTNER_LEADER	1.00													
2 RESTATE	0.03**	1.00												
3 BGR	0.04***	0.42***	1.00											
4 LITTLEr	0.02	0.90***	-0.02*	1.00										
5 POSDA_MJONES	0.00	0.03	0.03*	0.02	1.00									
6 PARTNER_GENDER	0.02	0.00	-0.00	0.00	0.01	1.00								
7 PARTNER_YRS_EXP	0.17***	-0.01	-0.02	-0.00	0.18***	-0.11***	1.00							
8 PARTNER_EDUC	0.06***	-0.01	-0.01	-0.01	0.08***	0.02	0.02	1.00						
9 PARTNER_IND_SHARE	0.12***	0.03**	0.04***	0.02	0.09***	-0.04***	0.09***	-0.02	1.00					
10 PARTNER_NUM_CLIENTS	-0.06***	-0.02	-0.00	-0.02	-0.06***	-0.08***	0.04***	-0.01	-0.02*	1.00				
11 BIG4	-0.11***	-0.08***	-0.06***	-0.06***	-0.10***	0.03*	0.13***	0.01	0.10***	-0.04***	1.00			
12 AUDITOR_SWITCH	0.02	0.01	0.03*	0.00	0.01	-0.01	-0.02	-0.00	-0.05***	0.03**	-0.10***	1.00		
13 BUSY	-0.03**	-0.00	-0.01	0.00	-0.01	0.02	-0.03**	-0.00	-0.04***	0.04***	0.01	0.02	1.00	
14 OFFICE_IND_EXP	0.13***	0.03**	0.01	0.02*	0.12***	-0.02*	0.12***	0.03*	0.52***	-0.12***	0.10***	-0.04***	-0.08***	1.00
15 OFFICE_SIZE	-0.16***	-0.05***	-0.06***	-0.02*	-0.15***	0.06***	0.04***	0.03*	-0.27***	-0.00	0.56***	-0.07***	0.04***	-0.22***

Notes: ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 2 Panel C Continued

	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	<i>PARTNER_LEADER</i>	1.00																
2	<i>LNASSETS</i>	0.06***	1.00															
3	<i>LNGEOSEG</i>	0.03***	0.11***	1.00														
4	<i>LNBUSSEG</i>	0.05***	0.23***	0.52***	1.00													
5	<i>FOREIGN</i>	0.03**	0.10***	0.21***	0.07***	1.00												
6	<i>MERGEACQ</i>	0.05***	0.24***	0.13***	0.13***	0.13***	1.00											
7	<i>SGROW</i>	-0.00	0.02*	-0.02*	-0.04***	0.00	0.13***	1.00										
8	<i>BM</i>	0.00	0.06***	-0.02*	-0.01	0.00	-0.03**	0.01	1.00									
9	<i>CFO</i>	0.05***	0.35***	0.09***	0.10***	0.08***	0.17***	0.08***	0.02*	1.00								
10	<i>SDCFO</i>	-0.04***	-0.32***	-0.07***	-0.09***	-0.06***	-0.12***	-0.01	-0.05***	-0.61***	1.00							
11	<i>INVREC</i>	0.02	0.08***	0.04***	0.02	0.06***	0.06***	0.05***	0.02*	0.14***	-0.12***	1.00						
12	<i>LEVERAGE</i>	0.01	0.12***	-0.04***	0.04***	-0.03**	0.01	-0.02*	-0.31***	0.05***	-0.05***	-0.08***	1.00					
13	<i>LOSS</i>	-0.04***	-0.46***	-0.09***	-0.13***	-0.02	-0.19***	-0.12***	-0.04***	-0.38***	0.24***	-0.19***	0.00	1.00				
14	<i>GC</i>	-0.02	-0.33***	-0.06***	-0.08***	-0.07***	-0.12***	-0.08***	-0.16***	-0.35***	0.26***	-0.09***	0.13***	0.27***	1.00			
15	<i>LIT</i>	-0.03***	-0.33***	-0.05***	-0.16***	0.00	-0.13***	0.02*	-0.06***	-0.26***	0.22***	-0.16***	-0.11***	0.32***	0.15***	1.00		
16	<i>WEAKNESS</i>	0.02	-0.03*	0.01	-0.01	0.03**	0.03*	0.00	-0.03**	0.02	-0.02	0.04***	0.01	0.05***	0.01	-0.01	1.00	
17	<i>LAG2_ICMW</i>	-0.01	-0.02*	0.01	-0.00	0.01	0.00	-0.01	-0.05***	0.01	-0.02	0.04***	0.02	0.04***	0.01	-0.01	0.62***	1.00
18	<i>LAG2_RES_ANN</i>	0.02*	0.02	0.09***	0.10***	0.03**	0.03**	-0.03**	-0.01	0.02	-0.03*	0.01	0.02*	0.00	-0.02	-0.05***	0.10***	0.12***

Notes: ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively.

TABLE 3
 Test of H1: Partners with leadership roles and audit quality

<i>Variable</i>	<i>(1)</i>		<i>(2)</i>		<i>(3)</i>	
	<i>RESTATE</i>		<i>BIGR</i>		<i>LITTLER</i>	
	<i>Coeff.</i>	<i>Z-stat</i>	<i>Coeff.</i>	<i>Z-stat</i>	<i>Coeff.</i>	<i>Z-stat</i>
<i>PARTNER_LEADER (?)</i>	0.127	0.82	0.688**	2.07	-0.008	-0.05
<i>PARTNER_GENDER</i>	0.268	1.36	-0.031	-0.06	0.357*	1.69
<i>PARTNER_YRS_EXP</i>	0.068	0.25	-0.092	-0.21	0.113	0.36
<i>PARTNER_EDUC</i>	-0.008	-0.05	-0.283	-0.84	0.075	0.42
<i>PARTNER_IND_SHARE</i>	0.286	0.96	0.590	0.97	0.243	0.71
<i>PARTNER_NUM_CLIENTS</i>	0.060	0.84	0.126	0.96	0.041	0.52
<i>BIG4</i>	-0.985***	-4.13	-0.491	-1.23	-1.090***	-4.00
<i>AUDITOR_SWITCH</i>	-0.211	-0.64	0.193	0.33	-0.294	-0.75
<i>BUSY</i>	-0.190	-0.94	0.029	0.07	-0.220	-1.05
<i>OFFICE_IND_EXP</i>	0.339	1.60	0.356	0.76	0.337	1.48
<i>OFFICE_SIZE</i>	0.084	1.12	-0.026	-0.18	0.118	1.35
<i>LNASSETS</i>	-0.065	-0.96	-0.203	-1.60	-0.034	-0.44
<i>LNGEOSEG</i>	0.253	1.09	0.904**	1.96	0.059	0.23
<i>LNBUSSEG</i>	-0.048	-0.24	-0.336	-0.87	0.045	0.21
<i>FOREIGN</i>	0.067	0.74	-0.280	-1.10	0.115	1.21
<i>MERGEACQ</i>	0.275	1.57	0.241	0.57	0.294	1.55
<i>SGROW</i>	0.438	1.30	0.368	0.76	0.453	1.16
<i>BM</i>	-0.015	-0.16	0.381*	1.84	-0.082	-0.87
<i>CFO</i>	-0.631**	-1.99	-0.776	-1.60	-0.440*	-1.75
<i>SDCFO</i>	-2.885**	-2.26	-4.272**	-2.17	-2.092	-1.59
<i>INVREC</i>	-0.068	-0.15	-0.504	-0.52	0.012	0.02
<i>LEVERAGE</i>	0.354	1.02	1.045*	1.84	0.198	0.49
<i>LOSS</i>	-0.102	-0.62	-0.426	-1.09	-0.021	-0.12
<i>GC</i>	0.446	1.08	0.961*	1.71	0.202	0.44
<i>LIT</i>	0.091	0.39	-0.797	-1.42	0.348	1.47
<i>WEAKNESS</i>	1.383***	6.00	2.361***	6.23	0.950***	3.58
<i>LAG2_ICMW</i>	-0.922**	-2.26	-3.843***	-4.29	-0.345	-0.76
<i>LAG2_RES_ANN</i>	0.839***	4.67	0.309	0.67	0.939***	4.90
Intercept	-3.389**	-2.35	-2.717	-0.93	-4.416***	-2.67
Year FE Included	Yes		Yes		Yes	
Industry FE Included	Yes		Yes		Yes	
N	9,213		8,818		9,124	
Pseudo R ²	0.096		0.197		0.091	
Area under ROC curve	0.717		0.808		0.713	

Notes: All models utilize logistic regression estimated on entropy balanced samples - balancing is on all model variables other than the test variable on the second moment. Z statistics are reported based on robust standard errors are clustered by client firm. ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively, 2-tailed. The Appendix provides variable definitions.

TABLE 4
Interview participant demographics

ID	Firm Type	Sex	Office Leader Exp.	Office Size	Regional Leader Exp.	National Leader Exp.	Industry Leader Exp.	Professional Practice Leader Exp.	Audit Practice Role	Managing Role	In Archival Sample	Retired	Number of Years Leader
1	Big 4	Male	Y	Small	Y					Y	N	Y	13
2	Big 4	Male	Y	Small	Y					Y	N	Y	14
3	Second-Tier	Female	Y	Large	Y	Y			Y		Y	N	10
4	Second-Tier	Male	Y	Small						Y	Y	N	10
5	Big 4	Male	Y	Small	Y					Y	N	Y	8
6	National	Male	Y	Large						Y	N	N	8
7	Second-Tier	Male	Y	Small					Y		Y	Y	5
8	Big 4	Male	Y	Small	Y					Y	Y	Y	7
9	Big 4	Male	Y	Small						Y	N	N	6
10	Second-Tier	Male	Y	Large						Y	N	Y	5
11	Second-Tier	Female	Y	Large					Y		Y	N	2
12	Second-Tier	Male	N	Large	Y	Y				Y	N	N	9
13	Second-Tier	Male	Y	Small						Y	Y	N	5
14	Big 4	Male	Y	Small						Y	N	Y	7
15	Second-Tier	Male	Y	Small						Y	Y	N	4
16	Big 4	Male	N	Large			Y		Y		Y	N	9
17	Big 4	Male	Y	Small						Y	Y	N	10
18	Big 4	Male	Y	Large				Y			Y	N	4
19	Big 4	Female	Y	Large				Y			Y	N	3
20	Big 4	Male	Y	Small				Y			Y	N	6
21	Big 4	Female	Y	Small	Y		Y				Y	N	12

Notes: N denotes No and Y denotes Yes. Second-tier represents Non-Big 4 firms including Grant Thornton, BDO, and RSM. National represents Non-Big 4 firms outside of the second-tier but with a national presence in the U.S.

TABLE 5

Cross-sectional tests examining the influence of capacity constraints on likelihood of Big R restatements

Variable	(1)		(2)		(3)		(4)	
	BIGR		BIGR		BIGR		BIGR	
	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z
<i>L_ONE_CLIENT</i>	0.500	1.00						
<i>L_GT1_CLIENT</i>	0.747**	1.96						
<i>L_DISTANCE_SHORT</i>			0.342	0.94				
<i>L_DISTANCE_LONG</i>			1.369***	2.71				
<i>OFFICE_LEADER</i>					0.774**	2.20		
<i>REGION_NAT_LEADER</i>					0.394	0.78		
<i>L_SMALL_OFFICE</i>							1.042***	2.67
<i>L_LARGE_OFFICE</i>							-0.233	-0.38
Controls and FE included	Yes		Yes		Yes		Yes	
N	9,213		9,213		9,213		9,213	
Pseudo R ²	0.190		0.201		0.191		0.200	
Area under ROC curve	0.812		0.818		0.812		0.812	
Coeff diff test p-value	0.664		0.056		0.456		0.072	

Notes: All models utilize entropy balanced samples - balancing is on all model variables other than the test variable on the second moment. Z statistics are reported based on robust standard errors are clustered by client firm. ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively, 2-tailed. The Appendix provides variable definitions

TABLE 6
Partners with leadership roles and non-audit services

Panel A: Effect of leaders on non-audit service provision

<i>Variable</i>	<i>LNNASFEEES</i>	
	Coeff.	t-stat
<i>PARTNER_LEADER</i>	0.458***	2.95
<i>PARTNER_GENDER</i>	-0.063	-0.32
<i>PARTNER_YRS_EXP</i>	-0.031	-0.10
<i>PARTNER_EDUC</i>	0.126	0.83
<i>PARTNER_IND_SHARE</i>	-0.048	-0.13
<i>PARTNER_NUM_CLIENTS</i>	-0.094	-1.32
<i>BIG4</i>	2.130***	6.42
<i>AUDITOR_SWITCH</i>	-1.449***	-3.25
<i>BUSY</i>	-0.181	-0.85
<i>OFFICE_IND_EXP</i>	0.129	0.60
<i>OFFICE_SIZE</i>	-0.028	-0.34
<i>LNASSETS</i>	0.878***	14.93
<i>LNGEOSEG</i>	0.497***	2.64
<i>LNBUSSEG</i>	0.042	0.21
<i>FOREIGN</i>	0.361***	4.05
<i>MERGEACQ</i>	0.542***	3.80
<i>SGROW</i>	-0.645*	-1.78
<i>BM</i>	-0.079	-0.74
<i>CFO</i>	0.287	0.75
<i>SDCFO</i>	0.183	0.20
<i>INVREC</i>	0.871	1.63
<i>LEVERAGE</i>	0.330	0.88
<i>LOSS</i>	0.159	0.89
<i>GC</i>	0.011	0.02
<i>LIT</i>	-0.208	-0.81
<i>WEAKNESS</i>	-0.083	-0.28
<i>LAG2_ICMW</i>	0.849	1.52
<i>LAG2_RES_ANN</i>	0.112	0.57
Intercept	2.020	1.32
Year FE Included	Yes	
Industry FE Included	Yes	
N	9,207	
Adjusted R ²	0.321	

TABLE 6 Continued

Panel B: Effect of leader non-audit services cross-selling on likelihood of Big R restatements

Variable	BIGR	
	Coeff.	z-stat
<i>L_LOW_NAS</i>	0.613	1.33
<i>L_HIGH_NAS</i>	0.705**	2.04
Controls and FE included	Yes	
N	9,213	
Pseudo R ²	0.189	
Area under ROC curve	0.809	
Coeff diff test p-value	0.835	

Notes: All models utilize entropy balanced samples - balancing is on all model variables other than the test variable on the second moment. Panel B presents the summarized results of a cross-sectional test exploring why partners in leadership positions are associated with increased misstatement frequencies. Z statistics are reported based on robust standard errors are clustered by client firm. ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively, 2-tailed, or 1-tailed if a direction prediction was made. The Appendix provides variable definitions.

TABLE 7

Alternative audit quality proxy: income-increasing discretionary accruals with client fixed effects

Variable	(1) POSDA_ MJONES		(2) POSDA_ MJONES		(3) POSDA_ MJONES		(4) POSDA_ MJONES		(5) POSDA_ MJONES		(6) POSDA_ MJONES	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
<i>PARTNER_LEADER</i>	0.016**	2.02										
<i>L_ONE_CLIENT</i>			0.014	1.41								
<i>L_GT1_CLIENT</i>			0.018**	2.10								
<i>L_DISTANCE_SHORT</i>					0.020**	2.27						
<i>L_DISTANCE_LONG</i>					-0.001	-0.05						
<i>REGION_NAT_LEADER</i>							0.016	1.51				
<i>OFFICE_LEADER</i>							0.013	1.40				
<i>L_LARGE_OFFICE</i>									0.012	0.75		
<i>L_SMALL_OFFICE</i>									0.018*	1.75		
<i>L_LOW_NAS</i>											0.009	0.83
<i>L_HIGH_NAS</i>											0.022**	2.56
Controls and Client and Year												
Fixed Effects included	Yes		Yes		Yes		Yes		Yes		Yes	
N	3,126		3,126		3,126		3,126		3,126		3,126	
Adjusted R ²	0.186		0.442		0.442		0.442		0.440		0.441	
Coeff diff test p-value			0.718		0.756		0.824		0.753		0.244	

Notes: All models utilize entropy balanced samples – balancing is on the first and second moment for all model variables other than the test variable. This table presents the results of using an alternative proxy for audit quality – income-increasing discretionary accruals. The columns report the main and cross-sectional tests. T statistics are reported based on robust standard errors are clustered by client firm. ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively, 2-tailed, or 1-tailed if a direction prediction was made. The Appendix provides variable definitions.

TABLE 8

Additional audit quality tests – leadership status change for partners that became leaders

Variable	(1)		(2)	
	<i>RESTATE</i>		<i>POSDA_MJONES</i>	
	Coeff.	z-stat	Coeff.	t-stat
<i>POST_LEADER</i>	4.632**	2.44	0.030*	1.72
Controls and Industry, Year FE included	Yes		Yes	
N	231		134	
Pseudo R ²	0.618			
Adjusted R ²			0.110	

Notes: The sample is limited to firm-year observations without audit firm or audit partner changes that were audited by audit partners who became leaders during the sample period 2017-2019 only. Given exclusion of the control group, these regressions are not entropy balanced. Furthermore, we utilize *RESTATE* as our primary restatement variable, rather than *BIGR*, which has a low frequency in this significantly reduced sample. Z (t) statistics are reported based on robust standard errors are clustered by client firm. ***, **, and * represent significance at the 0.01, 0.05, and 0.10 levels, respectively, 2-tailed, or 1-tailed if a direction prediction was made. The Appendix provides variable definitions.