Does Greater Diversity among Local Audit Practice Leadership Foster a Climate Conducive to Retention and Audit Quality?

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ABSTRACT: We examine the influence of a local audit practice leadership climate fostering gender and ethnic diversity on retention of local audit practice professionals and office-level audit quality. Grounded in prior research suggesting that employees' *perceptions* of how leaders value diverse perspectives and backgrounds are positively related to *actual* diversity in leaders' demographic characteristics, we operationalize our construct by capturing variety in local audit partners' gender and ethnic diversity is associated with lower turnover among office audit professionals and higher office-level audit quality. Further analyses reveal that the influence on audit quality is both direct and indirect through increased retention. These findings underscore the importance of a local audit practice leadership climate fostering diversity and provide important practical implications.

Keywords: leadership climate, diversity, audit offices, auditor retention, audit quality, audit partners

JEL Classifications: M41, M42

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I. INTRODUCTION

Accounting firms claim they have been making concerted efforts to broaden their recruitment of diverse candidates, foster inclusive work environments, and retain and promote diverse professionals.¹ While there are certainly socially motivated reasons for these efforts (e.g., promote equality, eliminate discrimination), a growing body of research highlights the benefits of establishing a climate that fosters diversity and inclusion to organizational outcomes (Cox 1994; Hopkins, Hopkins, and Mallette 2001; McKay, Avery, Tonidandel, Morris, Hernandez, and Hebl 2007; McKay, Avery, and Morris 2008). In this study, we examine the influence of a local audit practice (i.e., office) leadership climate fostering gender and ethnic diversity on retention of local audit practice professionals and office-level audit quality.

Climate refers to a particular aspect of the work environment and reflects the cultureembedding mechanisms designed to help direct the attitudes and behaviors of employees (Kuenzi and Schminke 2009; Schneider, Ehrhart, and Macey 2013). Leaders can imbue an organization with a climate focused on any number of aspects related to the work environment, and multiple climates can and often do exist simultaneously (Chatman and O'Reilly 2016). While the tone set by the highest leaders of an organization is important for establishing a particular climate, leadership climate is also likely engendered at lower levels of an audit practice, including at the office and engagement team levels (Andiola et al. 2020). As such, audit leaders at various levels

¹ For example, three of the Big Four accounting firms have recently promoted women to lead their firms' U.S. operations and all four firms highlight their commitment to diversity and inclusion in their respective annual transparency/audit quality reports (Deloitte 2019; EY 2019; KPMG 2018, 2019; PwC 2019). However, while there is an increasing amount of discussion about diversity and inclusion on the websites and in the transparency reports of these firms, we acknowledge that anecdotal evidence and existing research (e.g., Kornberger et al. 2011; Hardies et al. 2021) suggest that discrimination still occurs and the promotion by the firms could be just window-dressing.

play an important role in establishing a particular climate within the audit practice (Kornberger, Justesen, and Mouritsen 2011).²

Despite the fact that leadership climates are engendered at multiple levels within an accounting firm, auditing research to date focuses almost exclusively on leadership climates at the engagement level (Andiola, Downey, and Westermann 2020). In contrast, we focus on the local audit practice given that large "audit firms operate through a network of semi-autonomous practice offices" that "contract with clients, administer audit engagements, and issue audit reports signed on the local office letterhead" (Francis and Yu 2009, 1523). As the key executives of audit engagement teams, audit partners lead the local audit practice, assess and reward performance of local audit professionals serving on those engagement teams, and have significant influence over retention and promotion decisions. Prior research suggests that individuals within an organization pay attention to the actions and attitudes of the organization's leaders responsible for their supervision and promotion (Kelly and Earley 2009; Schein 2010).³

We define a local audit practice leadership climate fostering gender and ethnic diversity (hereafter, a diversity leadership climate) as employees' shared perceptions that the employer values diverse perspectives and backgrounds and adheres to fair personnel practices (Mor Barak, Cherin, and Berkman 1998). Grounded in prior research suggesting that employees' *perceptions* of how leaders value diverse perspectives and backgrounds are positively related to *actual* diversity in leaders' demographic characteristics (Tsui, Egan, and O'Reilly 1992; Riordan 2000; Harrison, Price, Gavin, and Florey 2002; Cunningham 2007), we operationalize the construct of a

² Climates commonly studied include service, safety, justice, diversity, ethical, and leadership (see Kuenzi and Schminke 2009; Beus, Payne, Bergman, and Arthur 2010; Hong, Liao, Hu, and Jiang 2013; and Ehrhart, Schneider, and Macey 2014).

³ Although partners from other service lines (e.g., tax, advisory) sometimes assist in certain auditing procedures, those partners have significantly less association with, or influence over, the non-partner audit professionals.

diversity leadership climate by creating a measure that captures variety in local audit partners' gender and ethnicity (Harrison and Klein 2007).⁴ Minimum variety occurs when all local audit partners within an office belong to the same gender or ethnic group. Maximum variety occurs when all gender and ethnic groups are equally represented. We conduct all analyses at the audit office-level and separately examine variety in office audit partner gender and ethnicity on retention of non-partner audit professionals and office-level audit quality. We also combine the two measures capturing variety in office audit partner gender and ethnicity under the pretext that they are formative, rather than reflective, indicators of the underlying construct of a diversity leadership climate.

We first examine the influence of a diversity leadership climate on local audit practice retention. We take a novel approach to operationalizing retention of audit professionals within an office. Specifically, we use Burning Glass data to identify all audit-related job postings (senior associate level and above) associated with an audit firm office.⁵ Using a two-stage regression approach, we estimate abnormal audit-related job postings within an office-year. We find that variety in office audit partner gender and ethnicity, separately and combined, are negatively associated with abnormal audit-related job postings within an office, implying that a diversity leadership climate is associated with less audit personnel turnover (i.e., greater local audit practice personnel retention).⁶

We next examine the influence of a diversity leadership climate on office-level audit

⁴ Each of the large accounting firms emphasize these demographic characteristics in their efforts to promote diversity and inclusion (Cohn 2015; EY 2019; PwC 2020; Deloitte 2021).

⁵ We focus on job postings for audit senior associates and above as auditor job postings at the associate level are often related to routine, annual, recent graduate recruiting efforts. In robustness tests, we include staff postings.

⁶ Chen, Hribar, and Melessa (2018) find that two-stage regression approaches can generate biased coefficients and standard errors. One proposed solution is to estimate the model in a single stage where all first stage independent variables are included as independent variables in the second stage. We find that results are generally consistent using this alternative approach.

quality. We use the number of misstatements (identified through subsequent restatements) in an office-year scaled by the number of public office clients as a proxy for office-level audit quality.⁷ We further examine misstatements based on their impact to net income and separately, misstatements identified specifically through non-reliance (Big R) restatements. In further analyses, we use the number of going-concern opinions issued within an office scaled by the number of financially distressed public office clients.⁸ We find that variety in office audit partner gender and ethnicity, separately and combined, are negatively associated with the proportion of misstatements within an audit office-year. We find consistent evidence with misstatements that, when corrected, reduce net income and misstatements specifically related to non-reliance restatements. Further, we find that variety in office audit partner gender and ethnicity, separately and combined, are positively related to the issuance of going-concern opinion modifications among financially distressed public office clients. In additional robustness tests performed at the client-year level, we find that these results are incremental to the gender and ethnicity of the engagement partner, as well as other engagement partner characteristics including age and education. Collectively, these results suggest that a diversity leadership climate is associated with higher office-level audit quality.

In additional analyses, we employ path analysis to test for direct and indirect effects of a diversity leadership climate on audit quality. A direct effect can occur from the permeating influence of the leadership climate on audit engagements. Having a more balanced representation of gender and ethnicity among the leaders of the local audit practice can potentially bolster the performance and attitudes of the office audit professionals sharing those demographics (Tsui et al.

⁷ Misstatements are a clear indication of a lower quality audit (Christensen, Glover, Omer, and Shelley 2016) and exhibit a strong association with PCAOB inspection findings (Aobdia 2019).

⁸ Given the need to aggregate engagement level outcomes to the office-year level, continuous measures of audit quality are less tenable.

1992; Wesolowski and Mossholder 1997; Mueller, Finley, Iverson, and Price 1999; Hopkins et al. 2001; McKay et al. 2007), thereby strengthening local audit professionals' identification with the organization (Ashforth and Mael 1989; Hogg and Terry 2000; McKay et al. 2008). An indirect effect could occur as the result of audit personnel retention. Prior research and anecdotal evidence suggests that turnover can negatively impact audit quality (Christensen, Newton, and Wilkins 2021; FRC 2021).

To conduct our path analysis, we create an indicator variable equal to one if abnormal audit-related job postings within an office-year are in the lowest quartile of the sample to capture audit personnel retention and ease interpretation of the results. Consistent with the regression results, the path analysis shows a positive association between our combined measure of variety in office audit partner gender and ethnicity and audit professional retention. The path analysis also reveals a direct negative association between our combined measure of variety in office audit partner gender and ethnicity and the proportion of audit office misstatements and an indirect negative association through local audit professional retention. The indirect effect highlights an important mechanism through which audit quality is enhanced (audit professional retention). The direct effect suggests that the positive effects of a leadership climate fostering diversity on audit quality extend beyond retention, possibly reflecting other mechanisms that are difficult to observe and measure in our setting (e.g., employee satisfaction, increased productivity, greater identification with the organization, etc.).

Our main analyses focus on the leaders of a local audit practice (i.e., office audit partners). In additional analyses, we examine whether the retention and audit quality results are more pronounced, only observed, or exacerbated when the most visible and influential office-level leader (i.e., the office managing partner or OMP) comes from a typically underrepresented group (i.e., female or non-Caucasian). The results indicate that an OMP from a typically underrepresented group is associated with lower abnormal audit-related job postings within an office while greater variety in gender and ethnic diversity among office audit partners is associated with both lower abnormal audit-related job postings and with a lower proportion of office-level misstatements. The interaction of an OMP from a minority group and greater variety in gender and ethnicity among office audit partners has a significant negative association with both audit professional turnover and lower audit quality (driven by misstatements that when corrected reduced previously reported earnings). To the extent local audit professionals perceive that a minority group OMP values diversity, these results provide further corroborating evidence on the influence of a diversity leadership climate on retention and office-level audit quality.

Our study focuses on an issue that is very important in audit practice. Accounting firms have invested significant resources in diversity initiatives related to recruiting, retention, and promotion. Our findings provide empirical evidence regarding the importance of establishing a leadership climate fostering gender and ethnic diversity to auditor retention and audit quality. These findings should be of interest to accounting firms and regulators responsible for overseeing and promoting audit quality, particularly given the role that leaders play in setting the organizational climate within audit firms (IFA 2007; CAQ 2010; COSO 2013; PCAOB 2015).

These findings provide important contributions to prior research. While a significant body of research focuses on the benefits and consequences of diverse working groups (Pelled, Eisnenhardt, and Xin 1999; Andersen, Reeb, Upadhyay, and Zhao 2011; Bernile, Bhagwat, and Yonker 2018; Cameran, Ditillo, and Pettinicchio 2018), our study focuses on the influence of a leadership climate that fosters gender and ethnic diversity. While we recognize that data constraints limit us from examining other service lines within accounting firms and offices (e.g.,

tax and advisory), recent research suggests that different climates/cultures can exist not only across offices within the same audit firm, but also among different service lines within the same office (Bik, Bosman, and Bouwens 2021). As such, we believe the study provides important evidence about the influence of a leadership climate fostering diversity within local audit practices. By focusing on leadership climates established at the local audit practice level, our study extends audit research examining facets of leadership and leadership climates at the engagement-level on audit outcomes (Andiola and Bedard 2018; Bol, Estep, Moers, and Peecher 2018). Our study also extends research examining the benefits and consequences of diversity on audit outcomes. Importantly, our findings indicate that a diversity leadership climate has both direct and indirect influences on audit quality through increased retention. This is especially important for audit firms, which often experience high levels of employee turnover, particularly given evidence of the negative repercussions that turnover can have on audit quality (Christensen et al. 2021; FRC 2021; van Linden, Vandenhaute, and Zimmerman 2021).⁹

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Organizational climate reflects employees' perceptions of the work environment (Schneider and Reichers 1983; Kuenzi and Schminke 2009), which includes the policies, practices, and procedures within the organization as well as the expectations and support for certain behaviors and performance (Schneider, White, and Paul 1998; Ehrhart et al. 2014). Because climate captures the shared perceptions of employees, it is more transitory and easily changed than an organization's culture or underlying norms and values (Andiola et al. 2020). Climates arise from the culture-embedding mechanisms designed to help align the attitudes and behaviors of

⁹ See page xxiv of The Inside Public Accounting National Benchmarking Report at <u>http://insidepublicaccounting.com/wp-content/uploads/2015/09/INSIDE-Public-Accounting_Executive-Summary-2015-FINAL.pdf</u>.

employees with organizational goals and priorities (Quinn and Rohrbaugh 1983; Kuenzi and Schminke 2009; Schneider et al. 2013). Organizational leadership plays a key role in designing and implementing those culture-embedding mechanisms to establish a particular climate (Ehrhart et al. 2014). Leaders set the tone within an organization by exemplifying certain characteristics or demonstrating and rewarding desirable behaviors (Chen and Bliese 2002; Schyns and Van Veldhoven 2010). As such, leaders can imbue an organization with a climate focused on any number of aspects related to the work environment. In fact, Chatman and O'Reilly (2016) argue that multiple climates can and often do exist simultaneously within a work environment. In this study, we focus on a particular aspect of the work environment and how it affects employee behavior – a diversity leadership climate.

All the major accounting firms advocate the importance of diversity in publications, on their websites, on social media, and in their recruiting materials. In these materials, the firms stress the importance of diversity and inclusiveness and how leaders consistently reinforce this message in town hall meetings, trainings sessions, webcasts, and emails (e.g., EY 2019; PwC 2020; Deloitte 2021). The firms often measure their progress on diversity and inclusion by monitoring the percentages of women and minorities recruited and promoted into leadership positions, including those who are in charge of audits (e.g., EY 2019).

Despite the fact that leadership climates are engendered at multiple levels within an accounting firm, auditing research to date focuses almost exclusively on leadership factors at the engagement level (Andiola et al. 2020). Findings from engagement-level studies suggest that climates established by audit leaders influence staff auditors' judgments and behaviors (e.g., Peecher, Piercey, Rich, and Tubbs 2010; Carpenter and Reimers 2013; Johnson, Lowe, and Reckers 2016; Kim and Harding 2017; Andiola and Bedard 2018; Herda, Cannon, and Young

2019; Kadous, Proell, Rich, and Zhou 2019). Certain studies highlight the influence of firm-level leadership climate on engagement team behaviors. For example, Bol et al. (2018) find that firm leadership values tacit knowledge in inexperienced auditors and that experienced supervisors' tacit knowledge is positively associated with staff auditors' tacit knowledge. In turn, higher tacit knowledge staff have a stronger commitment to the firm, suggesting that a leadership climate that emphasizes the value of tacit knowledge at the firm level can trickle down to engagement-level leadership to promote these skills.

However, studies directly examining the effects of leadership climate at the office-level are scarce despite the fact that audit firms operate through a network of semi-autonomous practice offices (Francis and Yu 2009). Gronewold and Donle (2011) and Gronewold, Gold, and Salterio (2013) provide some evidence of the impact of an ethical leadership climate at the office-level. They find evidence suggesting that a climate more open to reporting errors improves ethical climate and employees' ethical behaviors. We are not aware of studies directly examining office-level diversity leadership climate.

Prior research examining the influence of diversity in the audit setting has focused on the impact of certain individual aspects of engagement team diversity on audit outcomes (Ittonen, Vahamaa, and Vahamaa 2013; Hardies, Breesch, and Branson 2015; Cameran et al. 2018; Lee, Nagy, and Zimmerman 2019; Burke, Hoitash, and Hoitash 2019). Findings indicate that female audit partners' clients tend to have lower abnormal accruals (Ittonen et al. 2013), are less likely to restate (Li, Qi, Tian, and Zhang 2017), and pay higher audit fees (Hardies et al. 2015; Lee et al. 2019; Burke et al. 2019). Cameran et al. (2018) find that a greater number of female managers/partners on the engagement team and greater diversity in educational backgrounds of engagement team members are associated with higher quality audits. Krishnan, Singer, and Zhang

(2020) examine and find some evidence that ethnic minority audit partners (of Asian, Black, or Hispanic origin) are associated with higher quality audits. While these findings provide some evidence of the influence of engagement team diversity on audit quality, we focus on a leadership climate that fosters gender and ethnic diversity – demographic characteristics that the large accounting firms emphasize and monitor in their efforts to promote diversity and inclusion (Cohn 2015; EY 2019; PwC 2020; Deloitte 2021).

Prior research argues that a pro-diversity climate can influence organizational outcomes (Cox 1994). Importantly, prior research suggests that these positive outcomes can manifest among both minority and non-minority groups (Hopkins et al. 2001; McKay et al. 2007). Social identity theory suggests that people sort themselves into identity groups based upon salient characteristics (e.g., race, gender, etc.) and seek out environments that affirm their identity group (Ashforth and Mael 1989; Hogg and Terry 2000). Because leaders play a key role in establishing an organization's climate, we argue that having a more balanced representation of gender and ethnicity among the leaders of the local audit practice can help strengthen organizational identification among the local audit professionals (Tsui et al. 1992; Wesolowski and Mossholder 1997; Mueller et al. 1999). Greater organizational identification can enhance job satisfaction (Parker, Baltes, Young, Huff, Altmann, Lacost, and Roberts 2003) and compel employees to act and behave in the best interest of the organization (Hogg and Terry 2000). These findings are consistent with anecdotal evidence of a Big 4 audit partner who indicated that she left public accounting initially because she did not see women audit partners in her office. After working in industry for several years, she noticed women promoted to partner at her previous accounting firm and decided to return to the audit practice as a result. Consequently, we argue that a diversity

leadership climate within a local audit practice can help reduce turnover among local audit professionals. This leads to our first hypothesis stated as follows:

H1: Diversity leadership climate at the audit office-level is associated with greater retention of office audit personnel.

Our second hypothesis focuses on the quality of audits conducted within a local audit practice. Prior research and anecdotal evidence suggest that turnover can negatively impact audit quality (Christensen et al. 2021; FRC 2021). For example, Christensen et al. (2021) find that greater year-over-year engagement team staffing continuity is associated with improved audit quality, efficiency, and profitability. In a separate study, using data on public and private company audits in Belgium, van Linden et al. (2021) find that collective audit firm employee turnover is associated with lower engagement audit quality. Thus, increased retention as the result of a diversity leadership climate established by local audit practice leaders can have positive repercussions on audit quality. In addition to increased retention, Cox's (1994) interactional model of cultural diversity suggests that a pro-diversity climate can lead to enhanced productivity and work quality. As previously discussed, greater organizational identification as the result of a diversity leadership climate can lead to more favorable work attitudes (Hopkins et al. 2001; McKay et al. 2007) greater job involvement (Cox 1994), and more concern for the success and performance of the organization (Hogg and Terry 2000). While these constructs are difficult to observe and measure in an archival setting (e.g., employee satisfaction, increased productivity, greater identification with the organization, etc.), we argue that they should lead to the delivery of higher quality audits. As such, our second hypothesis is stated as follows:

H2: Diversity leadership climate at the audit office-level is associated with higher office-level audit quality.

Our directional hypotheses are grounded in social identity theory, organizational identification, and findings from prior research. However, we may fail to observe a link between diversity leadership climate and office-level retention and audit quality. For instance, some research suggests that perceptions of diversity climate vary based on one's racial group membership (Kossek and Zonia 1993). Although perceptions of minority group employees may be positively influenced by fostering a climate focused on diversity and inclusion, perceptions of the majority group employees may be unaffected or even negatively affected if they view the firm's efforts as unjustified or as a violation of the merit principle (McConahay 1983; Kossek and Zonia 1993; Dovidio, Gaertner, Kawakami, and Hodson 2002).

III. RESEARCH METHODOLOGY

Diversity Leadership Climate

A diversity leadership climate reflects employees' shared perceptions that the employer values diverse perspectives and backgrounds and adheres to fair personnel practices (Mor Barak et al. 1998). Given that prior findings suggest that *perceptions* of how others value diverse perspectives and backgrounds are positively related to *actual* diversity in others' demographic characteristics (Tsui et al. 1992; Riordan 2000; Harrison et al. 2002; Cunningham 2007), we operationalize our construct by capturing variety in local audit partners' gender and ethnicity. As noted in Riordan (2000), persons who are demographically different from their colleagues attach psychological meaning to these differences, which ultimately affects their attitudes and behavior. Tsui et al. (1992) suggest that perceptions of dissimilarity with others influences attitudes towards those others.

Following the guidance outlined in Harrison and Klein (2007), we conceptualize gender and ethnic diversity in terms of "variety", where local (i.e., office) audit practices differ in the extent to which the audit partners exhibit greater balance in these demographic characteristics. Minimum variety occurs when all local audit practice leaders belong to the same sex or ethnic group. Maximum variety occurs when all sex and ethnicity groups are equally represented.

In our analyses, we focus on the local *audit* practice. We recognize that accounting firm offices engage in different service lines (e.g., audit, tax, and advisory) and office climates created by office leaders can permeate through all of these services; however, data constraints limit our ability to analyze the accounting firm office generally. Importantly, each of the aspects of the local audit practice under study – retention and quality – relates specifically to the audit service line and not to tax or advisory services. Also, audit partners within an office lead audit engagements and are primarily responsible for the supervision and evaluation of audit professionals within the office. In addition, recent research suggests that different climates/cultures can exist not only across offices within the same audit firm, but also among different service lines within the same office (Bik et al. 2021).

To construct our measures, we identify as many audit partners within an office as we can. We identify audit partners that sign opinions for publicly traded companies, public company employee benefit plans, or investment companies using the Public Company Accounting Oversight Board (PCAOB)'s AuditorSearch (Form AP) database. We also identify audit partners that sign opinions for non-profit or governmental entities subject to Uniform Guidance (Single Audits) using Audit Analytics' Nonprofit Audit database. Although these databases provide coverage for a significant number of audit partners, audit partners exclusively serving private companies would not be included. We recognize this data constraint as a limitation, but also argue that the audit partners serving public clients, which are included in the construction of our measure, are likely influential in establishing climates within the office. Importantly, findings in Mowchan, Seidel, and Zimmerman (2021) suggest that despite some re-allocation of responsibilities, audit partners holding office-level leadership roles, who would also be influential in establishing officelevel climate, typically maintain some level of client service as engagement partners, and as such, would be included in our data to the extent they serve non-profit or governmental entities, employee benefit plans, or publicly traded audit clients.

We identify audit partner gender by manually observing and coding the person's photograph online unless the gender is unambiguously clear from their first name. To operationalize gender diversity, we use Blau's index (1977) where the maximum Blau value is 0.5.¹⁰ We identify audit partner ethnicity using the Onomap classification algorithm following prior research (Ellahie, Tahoun and Tuna 2017; Bernile et al. 2018), which assigns ethnicity based on first and last name. The ethnic categories provided by Onomap include White/Caucasian, African American, Hispanic, Asian, and Other. Because name-based classifications of ethnicity may under-classify African Americans (Flam, Green, Lee, and Sharp 2020), we also view online photographs and biographical information such as membership in professional associations to verify that the Onomap classification is correct and adjust as necessary. We were able to find photographs for 79 percent of the individual partners in the sample. To operationalize ethnic diversity we use Blau's index (1977) where the maximum Blau value is 0.8 based on the five groups. We then standardize Blau's index for each measure by dividing the score by the theoretical maximum for each demographic characteristic.

¹⁰ Blau's index (1977) is computed with the following formula: $D = 1 - \sum_{j} p_{j}^{2}$ where *D* is diversity and p_{j} is the proportion of the total population from group *j*. If the entire population is from a single group, *D* will equal zero. *D* will approach 1 as the number of groups and individuals belonging to his or her own unique group increase (i.e., a higher value of D captures more diversity in variety). This index reaches its minimum value (0) when there is no variety (i.e., all individuals in the same category) while the maximum value is when individuals are evenly distributed in all categories. The upper bound depends on the number of categories. In this study we have two categories for our sex measure and five categories for our ethnicity measure.

In all empirical analyses, we examine our hypotheses using office audit partner gender and ethnicity separately. We also combine these measures. When combining the measures, we lean on the argument in Harrison and Klein (2007) that these measures of diversity serve as formative, rather than reflective, indicators, with each formative indicator contributing to a linear composite that is simply the sum of its parts. According to Coltman, Devinney, Midgley, and Venaik (2008), three broad theoretical considerations are important in deciding whether the measurement model is formative or reflective. These considerations include: (1) the nature of the construct, (2) the direction of causality between the indicators and the latent construct, and (3) the characteristics of the indicators used to measure the construct. Because our construct of interest refers to office audit personnel perceptions of how local leaders value gender and ethnic diversity, the construct depends upon the indicators (i.e., partner gender and ethnicity). Likewise, a change in the indicators results in a change in the construct under study. This direction of causality is consistent with a formative model rather than a reflective model, which assumes a change in the construct causes a change in the indicators. Further, the indicators are not necessarily interchangeable, consistent with a formative model.¹¹

With regard to empirical considerations for use of a formative measurement model approach, we conduct preliminary analyses on the data, including common factor analysis and examining for any evidence of collinearity. The results of the factor analysis indicate that the two measures – audit partner gender and ethnicity – are 96.6 percent unique. Although we find a low,

¹¹ According to Coltman et al. (2008, p. 1253), "in a reflective model, change in the latent variable must precede variation in the indicator(s). Thus, the indicators all share a common theme and are interchangeable. This interchangeability enables researchers to measure the construct by sampling a few relevant indicators underlying the domain of the construct (Churchill, 1979; Nunnally and Bernstein, 1994). Inclusion or exclusion of one or more indicators from the domain does not materially alter the content validity of the construct. However, the situation is different in the case of formative models. Since the indicators define the construct, the domain of the construct is sensitive to the number and types of indicators the researcher selects. Adding or removing an indicator can change the conceptual domain of the construct."

positive Pearson correlation between audit partner sex and ethnicity (0.06), the Spearman correlation is insignificant. These results support the use of a formative model approach.

To help assess the construct validity of the combined measure, we examine whether our proxies for diversity leadership climate (individually and combined) are associated with promotions of new partners whose gender and ethnicity are typically underrepresented (e.g., female or non-Caucasian). To do this, we hand-collect partner promotions from various public sources including press releases and the various accounting firm websites.¹² For each promoted partner, we identify their gender and ethnicity, as well as their office and service line. We aggregate the partner promotions by audit-office-year and calculate an overall diverse promotion score (DIVERSE PROMOTIONS) equal to the percent of female promotions plus the percent of non-White/Caucasian promotions. The analysis contains 237 audit-office-year observations spanning six of the top eight audit firms from 2017 to 2020. Since partner promotions occur in the summer or early fall, we lag the diversity leadership climate proxies by one year to avoid any potential mechanical relationship (simultaneity). Controlling for the number of office audit partners, the number of promotions, and audit firm fixed effects, we find that diversity leadership climate is positively associated with the promotion of new partners whose gender and ethnicity are typically underrepresented. We present these results in Appendix A.

Auditor Retention

Given the lack of publicly available data on audit professional turnover, we take a novel approach to operationalizing retention of audit professionals within an office. Specifically, we use the Burning Glass Labor Insights database to identify all audit-related job postings associated with an audit firm office. Burning Glass is an employment information firm that specializes in collecting

¹² While some audit firms publicly display partner promotions on their website, others only release a statement listing the promotions for the year.

and analyzing real-time labor market data. It scrapes more than 40,000 online job boards (including Glassdoor, Monster, and corporate websites) daily, tracking an average of 3.4 million active postings, to obtain details from each job advertisement and convert them into a systematic, machine-readable database.¹³ The complete dataset from Burning Glass includes an almost universal coverage of the online job postings in the United States. Burning Glass collects attributes from each job advertisement, such as the job's posting date, location, as well as the employer's name, allowing us to identify job postings specifically related to the audit service line, within specific offices of particular audit firms.

We perform our analyses at the audit office-year level. To do this, we capture audit-specific job postings related to a particular audit firm office from 2016 to 2020. To reduce measurement error and alleviate concerns that job postings reflect normal hiring practices or occur as the result of factors other than turnover, we perform the following. First, we limit the job postings to audit senior associates and above given that associate level job postings are often related to routine, annual, recent graduate recruiting efforts.¹⁴ Second, we orthogonalize the job posting data to factors that would influence normal or routine changes in demand for audit professionals. Specifically, we estimate abnormal audit-related job postings within an office-year by regressing audit job postings on the number of public clients (LN OFFICE CLIENTS), the total office audit (LN OFFICE FEES), and (CH OFFICE CLIENTS, fees the change in each CH OFFICE FEES). We also add audit office fixed effects to control for office-specific unobservable factors affecting auditor staffing levels in the following regression model:

$AUDITPOSTINGS_{it} = \beta_0 + \beta_1 LN _OFFICE _CLIENTS_{it} + \beta_2 CH _OFFICE _CLIENTS_{it} + \beta_3 LN OFFICE FEES_{it} + \beta_4 CH OFFICE FEES_{it} + \beta_4 UDIT OFFICE FE + \varepsilon_{it} (1)$

¹³ See <u>https://www.burning-glass.com/about/faq/</u> for information about Burning Glass data collection procedures.

¹⁴ In further tests, we find that the results are robust to the inclusion of staff level postings.

where all variables are defined in Appendix B. The residual from this model, which we label *TURNOVER*, captures abnormal audit job postings within an office-year, which we use as a proxy for audit professional turnover.¹⁵

We then estimate the following model to test our first hypothesis:

 $TURNOVER_{it} = \beta_0 + \beta_1 SEX_{it} \text{ or } ETHNICITY_{it} \text{ or } COMBINED_{it} + \beta_2 BIG4_{it} + \beta_3 PY_RESTATE_\%_{it} + \beta_4 PY_MW_\%_{it} + \beta_5 MERGER_\%_{it} + \beta_6 OFFICE_NAS_{it} + \beta_7 ABN_FEES_MEAN_{it} + \beta_8 MSA_FEMALE_\%_{it} + \beta_9 MSA_ETHNICITY_{it} + \beta_{10} MSA_POPULATION_{it} + \beta_{11} LN_OFFICE_CLIENTS_{it} + \beta YEAR FE + \varepsilon_{it}$ (2)

where *SEX*, *ETHNICITY*, and *COMBINED* serve as proxies for a diversity leadership climate. Consistent with hypothesis 1, we expect a negative and significant coefficient on β_1 , which would suggest that a diversity leadership climate reduces turnover, and hence increases retention of office audit professionals.

We control for other factors that could influence audit professional turnover. First, we control for any systematic differences in turnover between Big N and second tier audit firms (*BIG4*). Next, we control for prior office-level audit quality issues that would not only increase the likelihood of poor performance evaluations but also drive increased hours and workloads that could increase the likelihood of burnout and job dissatisfaction. Specifically, we control for the proportion of office public client restatements relative to the number of office public clients in the previous year (*PY_RESTATE_%*). Next, we control for client quality issues that may necessitate increased hours and workloads using the proportion of office public client material weaknesses in internal controls relative to the number of office public clients in the previous year (*PY_MW_%*). We also control for the percentage of office public audit clients involved in a merger (*MERGER_%*), which could increase staffing demands, for office-level non-audit services provided to public audit clients (*OFFICE_NAS*), and for audit effort by including an average

¹⁵ We note that the adjusted R^2 for model (1) is 0.501.

office-level measure of abnormal audit fees (*ABN_FEES_MEAN*).¹⁶ In addition, we control for local characteristics that could potentially impact office-level turnover. Specifically, we control for the level of gender and ethnic diversity within the metropolitan statistical area (MSA) as well as the size of the local area population (*MSA_FEMALE_%*, *MSA_ETHNICITY*, and *MSA_POPULATION*). Finally, we control for the number of office public clients (*LN_OFFICE_CLIENTS*) and year fixed effects. We winsorize continuous variables at the 1/99 percentiles of their respective distributions, and we cluster standard errors by audit firm. All variables are defined in Appendix B.

Given recent findings suggesting that two-stage regression approaches can generate biased coefficients and standard errors (Chen et al. 2018), we also present results using the single stage regression approach as advocated by Chen et al. (2018). Specifically, we include all first and second stage independent variables from models (1) and (2) in model (1).

Audit Quality

We use the number of misstatements (identified through subsequent restatements) scaled by public office clients to serve as a proxy for office-level audit quality. We use the Audit Analytics Nonreliance Restatement database to identify restatements and the associated misstated periods. In subsequent analyses, we separately examine misstatements identified specifically through nonreliance (Big R) restatements and misstatements based on their impact to net income. We test our second hypothesis using the following OLS regression model:

$$MISSTATE_\%_{it} = \beta_0 + \beta_1 SEX_{it} \text{ or } ETHNICITY_{it} \text{ or } COMBINED_{it} + \beta_2 LN_OFFICE_CLIENTS_{it} + \beta_3 BIG4_{it} + \beta_4 SIZE_MEAN_{it} + \beta_5 MW_\%_{it} + \beta_6 OFFICE_NAS_{it} + \beta_7 ABN_FEES_MEAN_{it} + \beta YEAR FE + \varepsilon_{it}$$
(3)

¹⁶ We estimate abnormal audit fees first at the engagement-level following Blankley, Hurtt, and MacGregor (2012) and then take the average across public client office engagements in a given year.

where *SEX*, *ETHNICITY*, and *COMBINED* serve as proxies for a diversity leadership climate. Consistent with hypothesis 2, we expect the coefficient β_1 to be negative, suggesting that a diversity leadership climate is associated with higher office-level audit quality.

We control for various characteristics that could influence office-level audit quality, such as office busyness using the number of office public audit clients (*LN_OFFICE_CLIENTS*), whether the audit firm is one of the Big 4 (*BIG4*), the average size of the office public audit clients (*SIZE_MEAN*), the relative internal control risk of the office public audit clients (*MW_%*), the potential for threatened independence or distraction due to non-audit services provided to office public audit clients (*OFFICE_NAS*), audit effort (*ABN_FEES_MEAN*), and year fixed effects. We winsorize continuous variables at the 1/99 percentiles of their respective distributions and we cluster standard errors by audit firm. All variables are defined in Appendix B.

IV. SAMPLE AND RESULTS

Sample composition and descriptive statistics

Our sample is comprised of audit offices (and their public audit clients) from 2016–2020 because audit partner information from Form AP starts from 2017. Auditor characteristics, including office location and audit fees, are obtained from the Audit Analytics Audit Opinions dataset, while client financial reporting data are obtained from the Compustat North American Fundamentals Annual database. Office-years are defined by year and office of the auditor signing the audit opinion. Table 1 displays the sample selection procedure for the office-year samples. We begin by identifying U.S. audit offices of the eight largest accounting firms (PwC, EY, Deloitte, KPMG, Grant Thornton, BDO, RSM, and Crowe) that serve public audit clients from 2016 to 2020. For the audit quality tests, we end the sample in 2019 to allow sufficient time for misstatements to be revealed through subsequent restatement announcements. We remove office-

year observations with insufficient data to calculate control variables. We further remove observations with fewer than two partners. Finally, we remove office-year observations where we do not have data on the Office Managing Partner (for the OMP analysis) and turnover data (for the turnover analysis). We outline our sample selection procedures in Table 1.

[INSERT TABLE 1]

Table 2 presents descriptive statistics of the variables used in our analyses. With regard to audit-related job postings, we find that the average number of audit professional job postings for an office at the senior associate level or higher is approximately 8, with an interquartile range between 2 and 11. With regard to turnover (*TURNOVER*), we find an average office-level value of -1.97, with a positive value of 1.55 at the third quartile, indicating that turnover is likely reflected in office-years in the upper end of the distribution.¹⁷ We find that the average proportion of office-level misstatements is 0.09, with an interquartile range of 0.00 to 0.11. The average standardized Blau's (1977) index for audit partner gender (ethnicity) within an office is 0.52 (0.26), with an interquartile range of 0.00 to 0.89 (0.00 to 0.47). The combined measure is the sum of the two individual measures.

[INSERT TABLE 2]

Table 3 presents the Pearson and Spearman correlations for the individual measures and the combined measure of diversity leadership climate with certain key aspects of the office including the gender and ethnic diversity of the OMP and the number of public audit clients in an office. As noted previously, although we find a low positive Pearson correlation between audit partner sex and ethnicity (0.06), the Spearman correlation is insignificant. These low correlations support the use of a formative model approach. We find that our diversity leadership climate

¹⁷ The results hold if we use an indicator variable equal to one if *TURNOVER* is in the highest quartile.

measures are positively correlated with the gender and ethnic diversity of the OMP. We also find that our diversity leadership climate measures are positively correlated with office size in terms of the number of public audit clients, the size of the audit firm, average office client size, and both abnormal audit fees and the level of office-level non-audit fees from public audit clients. These correlations highlight the importance of controlling for these firm and office-level characteristics in our multiple regression models.

[INSERT TABLE 3]

Figure 1 provides a visual overview of the average gender and ethnic diversity of office audit partners by state within the U.S. Panel A presents diversity based on gender while Panel B presents diversity based on ethnicity, and Panel C presents the combined measure of gender and ethnic diversity. As shown in each of the panels in Figure 1, office audit partner diversity does not appear to be concentrated in any region in the country. All four geographical regions (Northeast, Midwest, South, and West) contain at least one state in the top tercile of the sample distribution of average state-level office audit partner diversity.

Figure 2 lists the five audit-office-year observations in the sample with the highest level of office audit partner diversity (*COMBINED*) and the five audit-office-years with the lowest level of office audit partner diversity in the sample. Importantly, although we find a positive correlation between the combined measure of office audit partner gender and ethnic diversity and office size, this figure highlights that greater variety in these demographic characteristics among office audit partners does not always occur in the largest offices.

Figure 3 provides additional descriptive statistics by year of our audit partner diversity measures. Our sample contains between 328 and 353 unique offices each year. The number of audit partners used to construct our measures ranges from 2,866 and 3,358 in each year during our

sample period. We note that the average percent of non-white audit partners within an office is fairly consistent over the sample period ranging from 16.23 to 17.10 percent. The percent of female partners in an office steadily increases from 20.31 percent in 2016 to 23.20 percent in 2020. Furthermore, the average number of audit partners in a given office, which we are able to identify, ranges from 8.7 to 9.6 during our sample period. The mean value of our *SEX (ETHNICITY)* diversity measure ranges from 0.51 to 0.53 (0.25 to 0.27).

Hypothesis tests

Auditor Retention

Table 4 presents the results of the tests of our first hypothesis related to audit personnel retention. Columns (1) and (2) present the results using the individual measures of diversity leadership climate (*SEX* and *ETHNICITY*) separately, while column (3) includes both in the same model. Column (4) presents the results using the combined measure of diversity leadership climate (*COMBINED*). We report one-tailed *p*-values for coefficients with hypothesized directions. We find a negative, statistically significant association between the individual measures of diversity leadership climate and our proxy for local audit professional turnover (*TURNOVER*) when examining these measures separately or together in the same model.¹⁸ We also find a negative, statistically significant association between the combined measure of diversity leadership climate and our proxy for local audit professional turnover. In terms of economic significance, a one standard deviation increase in *SEX* (*ETHNICITY*) for the coefficients in Column (3) implies a decrease in *TURNOVER* equal to 18 percent (20 percent) of mean *TURNOVER* (-1.96).¹⁹ A one

¹⁸ We examine the explanatory power of our combined measure compared to a base model without it and find that the R^2 value increases from 14.06 to 14.84 percent, an overall percent change of 5.55 percent. When compared to a base model without our measure, the Vuong (1989) likelihood ratio test for equivalence of explanatory power is rejected (*p*-value < 0.01) suggesting that the improvement in model explanatory power is statistically significant.

¹⁹ The economic significance is consistent if we use the coefficients on *SEX* and *ETHNICITY* from Columns (1) and (2).

standard deviation increase in *COMBINED* implies a decrease in *TURNOVER* equal to 26 percent of mean *TURNOVER*.

In columns (5) through (8), we repeat our analysis using a single-stage regression approach as advocated by Chen et al. (2018). Here, the dependent variable is *AUDITPOSTINGS* and we include all of the independent variables, including our variables of interest, in model (1). Consistent with results from the two-stage regression approach presented in columns (1) through (4), we find negative and statistically significant associations between *ETHNICITY* and *AUDITPOSTINGS* as well as between *COMBINED* and *AUDITPOSTINGS*. Although the association between *SEX* and *AUDITPOSTINGS* is not statistically significant at conventional levels, the sign of the coefficient exhibits a similar pattern with that in columns (1) and (3). Given the general consistency of the results, the use of a two-stage regression approach does not appear to unduly affect the overall inferences. Collectively, the evidence presented in Table 4 provides support for our first hypothesis, suggesting that a diversity leadership climate is associated with less local audit professional turnover and therefore greater retention.

[INSERT TABLE 4]

Audit Quality

Table 5 presents the results of the tests of our second hypothesis related to office-level audit quality, measured using the proportion of audit firm office public audit client misstatements to total public audit clients each year. Panel A presents the results using misstatements identified through any subsequent restatements (*MISSTATE_%*). Columns (1) and (2) present the results using the individual measures of diversity leadership climate (*SEX* and *ETHNICITY*) separately, while column (3) includes both in the same model. Column (4) presents the results using the results using the combined measure of diversity leadership climate (*COMBINED*). We find a negative, statistically

significant association between the individual measures of diversity leadership climate and our proxy for office-level audit quality (*MISSTATE_%*) when examining these measures separately or together in the same model. We also find a negative, statistically significant association between the combined measure of diversity leadership climate and our proxy for office-level audit quality.²⁰ In terms of economic significance, a one standard deviation increase in *SEX (ETHNICITY)* for the coefficients in Column (3) implies a decrease in *MISSTATE_%* equal to 8 percent (13 percent) of mean *MISSTATE_%* (where the average sample misstatement percentage is 9 percent).²¹ Given the average office-year misstatement rate of 9 percent, a one standard deviation increase in *COMBINED* implies a decrease in *MISSTATE_%* equal to 14 percent of mean *MISSTATE_%*.

Panel B of Table 5 presents the results of using misstatements identified through specific types of subsequent restatements. Columns (1) through (4) present the results using only misstatements that, when corrected, reduce net income (*MISSTATE_NEG_%*). Columns (5) through (8) present the results using misstatements identified specifically through non-reliance (Big R) restatements (*MISSTATE_R_%*). In columns (1) through (4), we find negative and statistically significant associations between *ETHNICITY* and *MISSTATE_NEG_%* as well as between *COMBINED* and *MISSTATE_NEG_%*. In columns (5) through (8), we find negative and statistically significant associations between *SEX* and *MISSTATE_R_%* as well as between *COMBINED* and *MISSTATE_R_%*. Although the statistical significance varies slightly for the individual measures of diversity leadership climate when focusing on certain types of

²⁰ We examine the explanatory power of our combined measure compared to a base model without it and find that the R² value increases from 14.42 to 15.12 percent, an overall percent change of 4.85 percent. When compared to a base model without our measure, the Vuong (1989) likelihood ratio test for equivalence of explanatory power is rejected (*p*-value < 0.01) suggesting that the improvement in model explanatory power is statistically significant. ²¹ The economic significance is consistent if we use the coefficients on *SEX* and *ETHNICITY* from Columns (1) and (2).

misstatements, the collective evidence in Table 5 provides support for our second hypothesis, suggesting that a diversity leadership climate is associated with higher office-level audit quality.

[INSERT TABLE 5]

Additional Analyses

Path Analysis

In further tests, we employ path analysis to test for direct and indirect effects of a diversity leadership climate on audit quality. Prior research and anecdotal evidence suggests that turnover can negatively impact audit quality (Christensen et al. 2021; FRC 2021). Given that we find a negative association between proxies for a diversity leadership climate and local audit professional turnover (results in Table 4), it is possible that the association between the proxies for a diversity leadership climate and office-level audit quality (results in Table 5) reflect an indirect effect through increased retention. However, our motivation grounded in social identity theory and organizational identification suggests that a direct effect, beyond the effect on retention, can occur if a diversity leadership climate bolsters the performance and attitudes of the office audit professionals (Tsui et al. 1992; Wesolowski and Mossholder 1997; Mueller et al. 1999; Hopkins et al. 2001; McKay et al. 2007) and strengthens their identification with the organization (Ashforth and Mael 1989; Hogg and Terry 2000; McKay et al. 2008).

To determine the extent of direct and indirect effects of diversity leadership climate on our outcomes of interest, we perform a path analysis (see Mayew, Sethuraman, and Venkatachalam 2015) where diversity leadership climate directly influences audit quality and where it indirectly influences audit quality through increased local audit personnel retention. We provide a theoretical model for these paths in Table 6, Panel A. In Panel B of Table 6, we present the results from estimating a Simultaneous Equations Model. For ease of interpretation, we replace the continuous

measure of TURNOVER with an indicator variable capturing the bottom quartile of TURNOVER to reflect local audit professional retention, which we label as RETENTION. We use the combined measure (COMBINED) to serve as the proxy for diversity leadership climate and MISSTATE % to serve as the proxy for audit quality. We include model-specific controls in each equation that are consistent with those presented in Tables 4 and 5. In terms of the direct effect of diversity leadership climate on local audit professional retention (Path B), we find that COMBINED is positive and statistically significant at the 1 percent level.²² In terms of the indirect effect of diversity leadership climate on audit quality, we find that *COMBINED* is negative and statistically significant at the 10 percent level. We also find a significant and negative direct effect of *COMBINED* on audit quality at the 1 percent level (Path A). When we compare the indirect effect to the total effect of diversity leadership climate on audit quality, we find that COMBINED reflects 5.8 percent of the total effect.²³ These results suggest that the positive effects of a diversity leadership climate on audit quality extend beyond retention, possibly reflecting other mechanisms that are difficult to observe and measure in our setting (e.g., employee satisfaction, increased productivity, greater identification with the organization, etc.).

[INSERT TABLE 6]

Office OMP Diversity and Partner Leadership Diversity

Our main analyses focus on the leaders of a local audit practice (i.e., office audit partners). In additional analyses, we explore whether the retention and audit quality results are most pronounced, only observed, or exacerbated when the most influential office-level leader (i.e., the OMP, regardless of service line) is female or non-Caucasian. We identify OMPs by searching the

²² The results in Table 6 provide similar inferences if we use the continuous measure *TURNOVER*.

²³ The total effect of diversity leadership climate on audit quality is -0.057 and is calculated as the sum of the indirect path (B*C = 0.128*-0.026) and direct path (Path A = -0.054). The indirect effect as a percent of the total effect is calculated as -0.003/-0.057.

internet for the name of the accounting firm, the specific office, and the title office managing partner. Some of the accounting firms list the OMPs of each of their offices on their websites. We also use the Internet Archive to identify historical OMPs. Finally, we also search press releases and news articles naming OMPs. We then examine the influence of a diverse OMP on retention and audit quality directly, and whether the association between the combined measure of variety in office audit partner gender and ethnicity (*COMBINED*) is incremental to whether the OMP is female and/or non-Caucasian (*OMP_COMBINED*). Finally, we examine whether the interaction of *OMP_COMBINED* and *COMBINED* moderates the diversity leadership climate effect on local audit professional retention and local office-level audit quality.

Table 7 presents the results of this analysis. In column (1), we find that both *OMP_COMBINED* and *COMBINED* are negatively associated with *TURNOVER*. An F-test of coefficient equality suggests that the effects are statistically different at the 5% level. Thus, variety in office audit partner gender and ethnic diversity as well as whether the OMP is female and/or non-Caucasian appear to play a similar role in local audit personnel retention. In column (2) we find that the interaction between *OMP_COMBINED* and *COMBINED* is negative and significant, suggesting that the effect of diversity leadership climate on local audit personnel retention is most pronounced or exacerbated when the OMP is female and/or non-Caucasian.

Columns (3) through (8), present the results for the office-level measures of audit quality based on misstatements. Columns (3) and (4) provide the results for misstatements generally. Columns (5) and (6) present the results using misstatements that, when corrected, reduce income and columns (7) and (8) present the results using only misstatements that are identified through a Big R restatement. When examining misstatements generally, we continue to find a negative and statistically significant association between *COMBINED* and *MISSTATE %;* however, the

association between *OMP_COMBINED* and *MISSTATE_%* is insignificant. Despite this insignificant association, we find the interaction between *OMP_COMBINED* and *COMBINED* is negative and statistically significant, suggesting that the effect of diversity leadership climate on office-level audit quality is even more pronounced when the OMP is female and/or non-Caucasian. The results in columns (5) and (6) related to misstatements that when corrected reduce income provide similar inferences except that only the interaction effect is negative and statistically significant in columns (7) and (8), we only find a negative and significant association between *COMBINED* and *MISSTATE_R_%*. Overall, the analyses in Table 7 provide further corroborating support for the influence of diversity leadership climate on local audit professionals retention and office-level audit quality and provide some support suggesting that the effects are most pronounced when the OMP is comes from a gender or ethnic group that is typically underrepresented.

[INSERT TABLE 7]

Robustness Tests

Diversity Leadership Climate and Auditor Conservatism

In our main analyses, we use misstatements to capture office-level audit quality. In additional tests to corroborate our findings, we use an alternative measure of office-level audit quality – the likelihood of issuing a going-concern modification to financially distressed office public audit clients. Specifically, we capture the proportion of office public audit clients receiving a going concern modification among financially distressed office public audit clients. We follow prior research (Reynolds and Francis 2000; Aobdia 2019) and define financial distress as companies with negative income per the full Audit Analytics Opinions database.

Table 8 presents the results of this analysis. Columns (1) and (2) present the results using the individual measures of diversity leadership climate (*SEX* and *ETHNICITY*) separately, while column (3) includes both in the same model. Column (4) presents the results using the combined measure of diversity leadership climate (*COMBINED*). We find a positive, statistically significant association between the individual measures of diversity leadership climate and *GOING_CONCERN_%* when examining these measures separately or together in the same model. We also find a positive, statistically significant association between the combined measure of diversity leadership climate and *GOING_CONCERN_%*. These results provide consistent, corroborating evidence of the influence of diversity leadership climate on an important auditor reporting decision that is often equated with quality. Specifically, a diversity leadership climate is associated with more conservative auditor reporting.

[INSERT TABLE 8]

The Use of Alternative Cutoffs in the Diversity Leadership Climate Measures

In our main analyses, we utilize a minimum cutoff of two audit partners within an office in order to construct our measures of audit partner gender and ethnic diversity since they are based on the distribution of the categorical attribute (Harrison and Klein 2007). Furthermore, a cutoff of two allows us to include the maximum number of offices to examine our hypotheses. If we increase the cutoff to three audit partners, our sample size decreases by 11 (12) percent for the turnover (audit quality) tests. However, despite the sample attrition, we find a negative and statistically significant association between *COMBINED* and *TURNOVER* (*p*-value < 0.01) as well as between *COMBINED* and *AUDITPOSTINGS* (*p*-value < 0.01) consistent with our results in Table 4. Furthermore, we find a negative and statistically significant association between the maximum and statistically significant association between the cutoff is a negative and statistically significant association between the maximum of the sample attribute (*p*-value *COMBINED* and *COMBINED* and *statistically* significant association between the cutoff (*p*-value *COMBINED* and *statistically* significant association between the sample attribute (*p*-value *COMBINED* and *statistically* significant association between *COMBINED* and *statistically* significant association be

association between *COMBINED* and *MISSTATE_R_%*, (*p*-value < 0.01). An increase in the cutoff to four partners further decreases our sample by an additional 17 (19) percent for the turnover (audit quality) tests. Even with this large sample attrition, our results on our *COMBINED* measure remain significant for both the *TURNOVER* (*p*-value = 0.011) and *AUDITPOSTINGS* (*p*-value = 0.015) tests as well as the *MISSTATE_%* (*p*-value < 0.01), *MISSTATE_NEG_%* (*p*-value = 0.015), and *MISSTATE_R_%* (*p*-value = 0.051) tests.²⁴ Thus, the results do not appear sensitive to the cutoff design choice used in our primary analyses.

Office Leadership Diversity or Individual Engagement Partners?

Our measures intend to capture a diversity leadership climate within an office. However, given findings from prior research (Ittonen et al. 2013; Hardies et al. 2015; Cameran et al. 2018; Lee et al. 2019; Burke et al. 2019; Krishnan et al. 2020), we acknowledge the possibility that an engagement partner's gender and ethnic diversity might play a role in the aggregated office-level results we present. To determine whether the office-level diversity leadership climate measures are incremental to engagement partner characteristics, we perform the audit quality tests in untabulated analyses at the client-year level. In these tests, our dependent variable is equal to one if the client subsequently restates their financial statements, and zero otherwise. We include engagement partner gender, ethnicity, age, and education in these regressions.²⁵ Furthermore, we include a host of controls for client and auditor characteristics that have been shown in the literature

 $^{^{24}}$ Beyond a cut off of four, the sample attrition ranges from 38 (42) percent for a cutoff of five to 54 (57) percent for a cutoff of seven in the turnover (audit quality) tests. While our inferences remain the same, the significance of the results is reduced due to the loss of power.

²⁵ Education controls include whether the partner obtained a graduate degree or graduated from a top accounting program. Top accounting program is obtained from the "Best Undergraduate Accounting Programs" in the most recent U.S. News and World Report rankings following Sunder, Sunder, and Zhang (2017). These schools include: the University of Texas, Brigham Young University, the University of Illinois, the University of Michigan, the University of Pennsylvania, Indiana University, the University of Notre Dame, the University of Southern California, New York University, the Ohio State University, the University of Florida, and Boston University.

to influence misstatements (Bills, Swanquist and Whited 2016; Beck, Francis and Gunn 2018).²⁶ Following our primary analysis, we first examine *SEX* and *ETHNICITY* individually, then jointly in the same model, followed by our *COMBINED* measure. Across all four tests, we continue to find consistent results with those in our main analyses, suggesting that the effect of a diversity leadership climate on audit quality is *incremental* to these individual engagement partner characteristics. In separate untabulated analyses, we alternatively include audit partner fixed effects to control for time-invariant unobservable engagement partner characteristics. We continue to find robust results with the inclusion of these fixed effects.

V. CONCLUSION

In this study, we examine the influence of a local audit practice (i.e., office) leadership climate fostering gender and ethnic diversity on retention of local audit practice professionals and office-level audit quality. We operationalize the construct of a leadership climate fostering gender and ethnic diversity by creating a measure that captures variety in local audit partners' gender and ethnicity (Harrison and Klein 2007). We conceptualize gender and ethnic diversity in terms of "variety" (Harrison and Klein 2007), where local audit practices differ in the extent to which the audit partners within the office exhibit greater balance in these demographic characteristics.

We find that variety in office audit partner gender and ethnicity, separately and combined, are negatively associated with abnormal audit-related job postings within an office, implying that a local audit practice diversity leadership climate is associated with less audit personnel turnover (i.e., greater local audit practice personnel retention). We also find that variety in office audit

²⁶ These controls include audit firm, audit office, and client characteristics, as well as audit firm and MSA fixed effects. Our audit firm-related control variables include audit firm fixed effects, as well as audit firm changes, whether the audit firm has national industry specialization, and the presence of economic incentives in the form of client influence and non-audit fees. Audit office-level control variables include office size and office industry specialization. To control for geographic variations of labor market supply, we include MSA fixed effects. We control for client characteristics including client size, profitability, valuation and financial condition, ability to manage earnings, and complexity and risk.

partner gender and ethnicity, separately and combined, are negatively associated with the proportion of misstatements within an audit office-year and positively associated with the proportion of going-concern opinion modifications issued among financially distressed office clients. Collectively, these results suggest that a local audit practice diversity leadership climate is associated with higher office-level audit quality.

In additional analyses, we employ path analysis to test for direct and indirect effects of a diversity leadership climate on audit quality and find that a diversity leadership climate has both direct and indirect influences on audit quality through increased retention. We also find some evidence that effects on auditor retention and audit quality are enhanced when the OMP is female and/or non-Caucasian. These findings have important implications for public accounting firms given the high levels employee turnover among audit professionals in public accounting. These findings should also be of interest to regulators responsible for overseeing and promoting audit quality, particularly given the role that leaders play in setting the organizational climate within audit firms (IFA 2007; CAQ 2010; COSO 2013; PCAOB 2015). Further, these findings contribute to the growing body of research highlighting benefits of establishing a climate emphasizing diversity and inclusion on organizational outcomes (Cox 1994; Hopkins et al. 2001; McKay et al. 2007; McKay et al. 2008) and the limited research of the influence of leadership climate on office-level outcomes (Gronewold and Donle 2011; Gronewold et al. 2013).

We recognize that our study is subject to limitations. Consistent with much archival audit research, we recognize that auditor retention and audit quality are largely unobservable and that our proxies likely contain measurement error. We also recognize that data constraints limit our ability to identify all audit partners within offices. Although our data collection procedures likely identify a large majority of audit partners, audit partners exclusively serving private clients are not likely captured in our measures of diversity leadership climate. We also recognize that data constraints limit us from examining the effect of a diversity leadership climate on outcomes of other office service lines (e.g., tax and advisory). Despite these limitations, we believe the findings in this study provide growing evidence that underscores the importance of a leadership climate focused on diversity and inclusion to the local audit practice.

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APPENDIX A PARTNER PROMOTIONS

In this appendix, we provide the results of tests to assess the construct validity of the individual measures and the combined measure used in our analyses as proxies for a diversity leadership climate. To perform these tests, we aggregate the partner promotions by audit-office-year and calculate an overall diverse promotion score (*DIVERSE_PROMOTIONS*) equal to the percent of female promotions plus the percent of non-White/Caucasian promotions. We then estimate the following regression model at the audit firm-year level:

DIVERSE PROMOTIONS_{it} = $\beta_0 + \beta_1 SEX_{it}$ or ETHNICITY_{it} or COMBINED_{it} + $\beta_2 OFFICE_PARTNER_COUNT_{it}_+\beta_3 PROMOTIONS_{it}+\beta_4 BIG4_{it}+\beta YEAR FE$ (or $\beta YEAR FE$ and $\beta AUDIT FIRM FE$) + ε_{it}

where all variable definitions are provided in Appendix B. The results of these tests are presented below.

		DV =			DV =				
	DIVER	SE_PROMC	DTIONS	DIVER	DIVERSE_PROMOTIONS				
	(1)	(2)	(3)	(4)	(5)	(6)			
SEX	0.205***			0.199**					
	[2.985]			[2.058]					
ETHNICITY		0.031			0.096				
		[0.165]			[0.588]				
COMBINED			0.156***			0.170**			
			[3.530]			[2.138]			
OFFICE_PARTNER_COUNT	0.001	0.002	0.001	0.000	0.001	-0.000			
	[0.883]	[1.042]	[0.366]	[0.095]	[0.453]	[-0.050]			
PROMOTIONS	-0.006	-0.012	-0.006	-0.004	-0.008	-0.003			
	[-0.455]	[-0.826]	[-0.506]	[-0.145]	[-0.332]	[-0.108]			
BIG4	0.022	0.031	0.016	0.166	0.183*	0.168			
	[0.361]	[0.457]	[0.249]	[1.545]	[1.684]	[1.573]			
INTERCEPT	0.351**	0.445***	0.343**	0.225**	0.291**	0.196*			
	[3.713]	[5.680]	[3.705]	[2.109]	[2.517]	[1.696]			
Year FE	Yes	Yes	Yes	Yes	Yes	Yes			
Audit Firm FE	No	No	No	Yes	Yes	Yes			
Ν	223	223	223	223	223	223			
Adj R ²	0.014	-0.006	0.010	0.019	0.001	0.019			

Note: This table presents the OLS regression results from the partner leadership diversity and partner promotion analysis. Robust standard errors are clustered by audit firm. The t-statistic are in brackets under the coefficient estimate. *, **, and *** denote statistical significance at the 10, 5 and 1% levels. The significance of the coefficients is based on a one-tailed test when there is a directional prediction. For brevity, coefficients on year and audit firm fixed effects are not reported.

APPENDIX B VARIABLE DEFINTIONS

Variables of Interest:	
	the gender diversity for office j in year t calculated using the Blau
SEX	(1977) Index. Following Harrison and Klein (2007), we scale the
	measure by 0.5 which is the maximum value of gender diversity.
	the ethnicity diversity for office j in year t calculated using the Blau
ETHNICITY	(1977) Index. Following Harrison and Klein (2007), we scale the
	measure by 0.8 which is the maximum value of ethnicity diversity.
COMBINED	the sum of SEX and ETHNICITY for office j in year t.
	the sum of Office Managing Partner gender (equal to one if the OMP
OMP_COMBINED	is female, zero otherwise) and ethnicity (equal to one if the OMP is
	non-white, zero otherwise) for office j in year t.
DIVERSE PROMOTIONS	equal to the sum of the percentage of diverse sex and ethnicity
DIVERSE_PROMOTIONS	promotions for office j in year t.

Dependent Variables:

	the total number of audit-related job postings for office j in year
AUDITPOSTINGS	t, advertising for a senior associate position or above.
	residual from a first stage model designed to predict normal levels of
TURNOVER	audit postings (model 1).
	the number of restatements scaled by the number of public clients for
MISSTATE_%	office j in year t.
	the number of restatements having a negative impact on the income
MISSTATE_NEG_%	statement scaled by the number of public clients for office j in year t.
	the number of 8-K restatements scaled by the number of public clients
MISSTATE_R_%	for office j in year t.
	the number of going concern opinions scaled by the number of
	distressed public clients for office j in year t. We classify a client as
GOING_CONCERN_%	distressed if they have negative income for the year.

Other Variables:

BIG4	equal to one if the auditor is a Big 4 accounting firm, and zero otherwise.
PY_RESTATE_%	the number of restatements scaled by the number of public clients for office j in year t-1.
PY_MW_%	the number of material weaknesses scaled by the number of public clients for office j in year t-1.
MERGER_%	the number of public clients with merger activity scaled by the number of public client audited by office j in year t.
OFFICE_NAS	the ratio non-audit fees to total fees for office j in year t.
ABN_FEES_MEAN	the mean abnormal audit fee following Blankley, Hurtt, and MacGregor (2012) for office j in year t.
MSA_FEMALE_%	the percentage of females for the Metropolitan Statistical Area for office j in year t.
MSA_FEMALE_% MSA_ETHNICITY	 the percentage of females for the Metropolitan Statistical Area for office j in year t. the Herfindahl Index of ethnicity for the Metropolitan Statistical Area for office j in year t.

APPENDIX B (Continued) VARIABLE DEFINITIONS

SIZE MEAN	the mean client size for office j in year t. We calculate size as the					
	natural log of client assets.					
	the number of material weaknesses scaled by the number of public					
MIW_~~	clients for office j in year t.					
IN OFFICE CLIENTS	natural log of 1 plus the number of public clients audited by office					
	j in year t.					
CH_OFFICE_CLIENTS	the change in public clients for office j from year t-1 to t.					
IN OFFICE FEES	natural log of 1 plus the total audit fees public clients audited by					
	office j in year t.					
CH_OFFICE_FEES	the change in audit fees for office j from year t-1 to t.					
PROMOTIONS	the number of audit partner promotions for office j in year t.					
OFFICE PARTNER COUNT	the number of audit partners for office j in year t.					

FIGURE 1 OFFICE LEADERSHIP DIVERSITY BY STATE

PANEL A – GENDER



PANEL B – ETHNICITY



FIGURE 1 (CONTINUED) OFFICE LEADERSHIP DIVERSITY BY STATE



PANEL C – COMBINED

Note: The figures above display the average value of the office leadership diversity in each state. Averages are based on the office-year observations over the entire sample period.

TABLE 1SAMPLE CONSTRUCTION

	Table 4 Turnover	Table 5 Misstate	Table 7 OMP	Table 7 OMP	Table 8 Going
			Turnover	Misstate	Concern
Unique Top 8 audit firm office-years with public clients from 2016 to					
2020 (2019 for Misstatements)	1,965	1,581	1,965	1,581	1,965
Less:					
Office-years with insufficient data to calculate controls	(44)	(34)	(44)	(34)	(44)
Office-years with fewer than two partners	(215)	(169)	(215)	(169)	(215)
Office-years with insufficient data on OMP	0	0	(49)	(56)	0
Office-years with insufficient data to calculate turnover	(321)	0	(322)	0	0
Final office-year Sample	1,385	1,378	1,335	1,322	1,706

			St.	P25	P50	P75
Variable	Ν	Mean	Dev.	123	1 30	175
AUDITPOSTINGS	1,385	8.08	10.06	2.00	5.00	11.00
TURNOVER	1,385	-1.97	7.90	-4.60	-1.82	1.55
MISSTATE_%	1,378	0.09	0.17	0.00	0.00	0.11
MISSTATE_NEG_%	1,378	0.02	0.08	0.00	0.00	0.00
MISSTATE_R_%	1,378	0.06	0.15	0.00	0.00	0.05
GOING_CONCERN_%	1,706	0.11	0.25	0.00	0.00	0.06
SEX	1,706	0.52	0.38	0.00	0.64	0.89
ETHNICITY	1,706	0.26	0.24	0.00	0.27	0.47
COMBINED	1,706	0.78	0.46	0.56	0.89	1.10
OMP_COMBINED	1,335	0.32	0.56	0.00	0.00	1.00
BIG4	1,706	0.66	0.47	0.00	1.00	1.00
PY_RESTATE_%	1,385	0.09	0.14	0.00	0.00	0.13
PY_MW_%	1,385	0.06	0.13	0.00	0.00	0.07
MERGER_%	1,385	0.30	0.25	0.11	0.27	0.45
OFFICE_NAS	1,706	0.15	0.09	0.08	0.14	0.20
ABN_FEES_MEAN	1,706	0.05	0.31	-0.14	0.04	0.22
MSA_FEMALE_%	1,385	51.01	0.62	50.60	51.10	51.50
MSA_ETHNICITY	1,385	0.46	0.11	0.38	0.46	0.54
MSA_POPULATION	1,385	14.79	1.07	14.04	14.81	15.53
LN_OFFICE_CLIENTS	1,706	1.99	1.35	1.10	1.79	2.77
CH_OFFICE_CLIENTS	1,385	-0.09	0.41	-0.22	0.00	0.00
LN_OFFICE_FEES	1,385	16.06	1.68	14.87	16.12	17.26
CH_OFFICE_FEES	1,385	0.10	3.62	-0.18	0.00	0.13
SIZE_MEAN	1,706	7.24	1.52	6.27	7.42	8.28
MW_%	1,706	0.06	0.13	0.00	0.00	0.05

TABLE 2 SUMMARY STATISTICS PANEL A: DESCRIPTIVE STATISTICS

Note: Variables are defined in Appendix B.

TABLE 2 CONTINUED PANEL B: BOTTOM/TOP 5 OFFICES BASED ON COMBINED MEASURE OF DIVERSITY LEADERSHIP CLIMATE

	CEV	ETINICITY	Number of	Number of
	SEA	ETHNICITY	Partners	Public Clients
Audit Firm A	0.0	0.0	5	5
Audit Firm A	0.0	0.0	4	9
Audit Firm B	0.0	0.0	10	6
Audit Firm B	0.0	0.0	8	16
Audit Firm C	0.0	0.0	14	19
Audit Firm B	0.5	0.6	4	4
Audit Firm D	0.4	0.7	3	2
Audit Firm E	0.4	0.6	9	8
Audit Firm F	0.5	0.6	7	8
Audit Firm E	0.4	0.6	6	9

Audit Firm E0.40.669Note: The figure above displays the five audit-office-year observations in the sample with the
highest level of office audit partner diversity (based on the combined measure of diversity
leadership climate: COMBINED) and the five audit-office-years with the lowest level of office
audit partner diversity.

T	Year	Number of Offices	Number of Partners	Percent Non-White Partners	Percent Female Partners	Mean Number of Partners	Mean SEX	Mean ETHNICITY
2	2016	331	2,866	16.26%	20.31%	8.7	0.51	0.26
2	2017	349	3,358	16.23%	20.85%	9.6	0.52	0.25
2	2018	353	3,357	17.10%	21.03%	9.5	0.51	0.27
2	2019	345	3,250	16.40%	22.40%	9.4	0.53	0.27
2	2020	328	2,879	16.46%	23.20%	8.8	0.53	0.27
Г	otal	1,706	15,710	16.51%	21.54%	9.2	0.52	0.26

TABLE 2 CONTINUED PANEL C: ADDITIONAL DESCRIPTIVE STATISTICS

Note: The figure above displays additional descriptive statistics by year for our leadership diversity measure.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 - <i>SEX</i>		0.04	0.82	0.21	0.13	0.05	0.03	0.01	-0.04	0.04	0.03	0.04	0.03
2 - ETHNICITY	0.06		0.54	0.12	0.20	0.04	0.02	0.08	-0.04	0.17	0.08	0.02	0.06
3 - COMBINED	0.85	0.58		0.23	0.26	0.08	0.05	0.07	-0.05	0.13	0.07	0.05	0.07
4 - OMP_COMBINED	0.22	0.11	0.23		-0.02	0.04	-0.01	0.02	0.04	0.07	0.05	0.08	-0.03
5 - LN_OFFICE_CLIENTS	0.20	0.22	0.28	0.00		0.32	0.28	0.25	-0.05	0.24	0.14	0.11	0.31
6 - <i>BIG4</i>	0.07	0.04	0.08	0.03	0.31		0.05	-0.08	0.16	0.35	0.19	0.58	-0.06
7 - PY_RESTATE_%	-0.01	-0.05	-0.04	0.02	-0.02	-0.04		0.27	0.03	0.04	0.14	-0.03	0.24
8 - <i>PY_MW_%</i>	-0.09	0.00	-0.07	0.03	-0.08	-0.18	0.26		-0.02	-0.03	0.19	-0.17	0.40
9 - <i>MERGER_</i> %	-0.06	-0.07	-0.09	0.05	-0.17	0.09	0.02	0.01		0.11	-0.05	0.25	0.01
10 - OFFICE_NAS	0.02	0.14	0.09	0.06	0.19	0.31	-0.04	-0.14	0.06		-0.05	0.26	0.02
11 - ABN_FEES_MEAN	0.03	0.07	0.06	0.05	0.08	0.18	0.08	0.17	-0.06	-0.10		-0.09	0.18
12 - SIZE_MEAN	0.06	0.02	0.06	0.08	0.12	0.58	-0.02	-0.22	0.22	0.23	-0.09		-0.18
13 - <i>MW_</i> %	-0.06	-0.01	-0.05	-0.01	-0.05	-0.15	0.15	0.36	0.00	-0.07	0.13	-0.21	

TABLE 3PEARSON/SPEARMAN CORRELATIONS

Note: Pearson correlation coefficients are presented below the diagonal and Spearman correlation coefficients are presented above the diagonal. Coefficients are bolded if significant at the 5% level. Variables are defined in Appendix B.

		DV = TU	RNOVER			DV = AUDITPOSTINGS			
	(1)	(2)	(3)	(4)	,	(5)	(6)	(7)	(8)
SEX	-0.922**		-0.987**			-0.355		-0.442	
	[-2.006]		[-2.145]			[-0.711]		[-0.894]	
ETHNICITY		-1.623***	-1.718***				-2.233***	-2.277***	
		[-2.351]	[-2.621]				[-2.696]	[-2.763]	
COMBINED				-1.184***					-0.929**
				[-3.113]					[-2.223]
BIG4	-1.042	-1.111	-1.078	-1.059		-8.434***	-8.563***	-8.565***	-8.487***
	[-0.722]	[-0.786]	[-0.759]	[-0.735]		[-5.169]	[-5.231]	[-5.230]	[-5.190]
PY_MISSTATE_%	2.548**	2.371**	2.425**	2.477**		3.395***	3.166***	3.192***	3.349***
	[2.062]	[1.959]	[2.012]	[2.070]		[2.721]	[2.558]	[2.572]	[2.690]
PY_MW_%	0.504	0.816	0.597	0.519		-1.103	-0.878	-0.975	-1.173
	[0.669]	[1.217]	[0.841]	[0.775]		[-0.709]	[-0.576]	[-0.636]	[-0.769]
MERGER_%	0.924	0.915	0.884	0.890		-0.836	-0.890	-0.896	-0.867
	[1.149]	[1.167]	[1.113]	[1.116]		[-1.044]	[-1.112]	[-1.120]	[-1.084]
OFFICE_NAS	-9.527***	-8.963**	-9.003**	-9.182**		0.437	0.964	0.937	0.595
	[-2.681]	[-2.549]	[-2.557]	[-2.583]		[0.171]	[0.381]	[0.369]	[0.235]
ABN_FEES_MEAN	-1.644***	-1.566***	-1.557**	-1.583***		0.002	0.002	0.002	0.002
	[-2.461]	[-2.484]	[-2.318]	[-2.336]		[0.196]	[0.172]	[0.190]	[0.199]
MSA_FEMALE_%	-0.167	-0.140	-0.143	-0.152		0.752***	0.784***	0.782***	0.760**
	[-0.415]	[-0.341]	[-0.362]	[-0.384]		[2.533]	[2.639]	[2.628]	[2.552]
MSA_ETHNICITY	0.250	0.451	0.470	0.403		8.849***	9.157***	9.172***	8.992***
	[0.309]	[0.483]	[0.502]	[0.448]		[4.825]	[5.019]	[5.021]	[4.901]
MSA_POPULATION	-0.326	-0.344	-0.316	-0.313		1.367***	1.366***	1.378***	1.386***
	[-0.828]	[-0.841]	[-0.810]	[-0.802]		[5.552]	[5.565]	[5.590]	[5.599]
LN_OFFICE_CLIENTS	-1.041*	-1.025*	-0.970*	-0.981*		1.373***	1.413***	1.442***	1.435***
	[-1.810]	[-1.748]	[-1.689]	[-1.718]		[5.201]	[5.423]	[5.446]	[5.424]

 TABLE 4

 OFFICE AUDIT LEADER DIVERSITY AND TURNOVER

		DV = TU	RNOVER			DV = AUDITPOSTINGS						
	(1)	(2)	(3)	(4)	-	(5)	(6)	(7)	(8)			
CH_OFFICE_CLIENTS						-0.226	-0.255	-0.281	-0.278			
						[-0.330]	[-0.372]	[-0.411]	[-0.408]			
LN_OFFICE_FEES						1.659***	1.695***	1.694***	1.671***			
						[6.057]	[6.147]	[6.143]	[6.094]			
CH_OFFICE_FEES						-0.089***	-0.095***	-0.094***	-0.089***			
						[-3.997]	[-4.359]	[-4.309]	[-4.043]			
INTERCEPT	16.998	15.629	15.784	16.210		-74.301***	-76.312***	-76.181***	-74.864***			
	[0.779]	[0.708]	[0.734]	[0.756]		[-4.433]	[-4.548]	[-4.535]	[-4.450]			
Year FE	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes			
Audit Firm FE	No	No	No	No		Yes	Yes	Yes	Yes			
Ν	1,385	1,385	1,385	1,385		1,385	1,385	1,385	1,385			
Adj R ²	0.146	0.147	0.148	0.148		0.342	0.344	0.344	0.343			

TABLE 4 (CONTINUED)OFFICE AUDIT LEADER DIVERSITY AND TURNOVER

Note: This table presents the OLS regression results from the partner leadership diversity and office turnover analysis. Robust standard errors are clustered by audit firm. The t-statistic are in brackets under the coefficient estimate. *, **, and *** denote statistical significance at the 10, 5 and 1% levels. The significance of the coefficients is based on a one-tailed test when there is a directional prediction. For brevity, coefficients on year and audit firm fixed effects are not reported. Appendix B provides the variable definitions.

TABLE 5 OFFICE AUDIT LEADER DIVERSITY AND AUDIT QUALITY

PANEL A: All Misstatements

	$DV = MISSTATE_\%$						
	(1)	(2)	(3)	(4)			
SEX	-0.019**		-0.019**				
	[-1.777]		[-1.674]				
ETHNICITY		-0.048***	-0.047***				
		[-2.867]	[-2.791]				
COMBINED				-0.027***			
				[-3.110]			
LN_OFFICE_CLIENTS	-0.007	-0.006	-0.005	-0.005			
	[-1.233]	[-1.061]	[-0.845]	[-0.924]			
BIG4	-0.004	-0.006	-0.007	-0.006			
	[-0.149]	[-0.243]	[-0.267]	[-0.228]			
SIZE_MEAN	0.004	0.004	0.004	0.004			
	[0.448]	[0.429]	[0.465]	[0.474]			
MW_%	0.441***	0.443***	0.442***	0.441***			
	[9.036]	[8.522]	[8.677]	[8.893]			
OFFICE_NAS	-0.026	-0.006	-0.009	-0.017			
	[-0.397]	[-0.091]	[-0.128]	[-0.252]			
ABN_FEES_MEAN	0.038	0.041	0.042	0.041			
	[1.365]	[1.407]	[1.472]	[1.457]			
INTERCEPT	0.089	0.088	0.093	0.094			
	[1.496]	[1.436]	[1.514]	[1.534]			
Year FE	Yes	Yes	Yes	Yes			
Ν	1,378	1,378	1,378	1,378			
Adj R ²	0.148	0.151	0.152	0.151			

TABLE 5 (CONTINUED)OFFICE AUDIT LEADER DIVERSITY AND AUDIT QUALITY

PANEL B: Negative and Big R Restatements

	$DV = MISSTATE_NEG_\%$			$DV = MISSTATE_R_\%$				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SEX	-0.012		-0.012		-0.021*		-0.021*	
	[-1.163]		[-1.126]		[-1.413]		[-1.415]	
ETHNICITY		-0.022**	-0.022**			-0.008	-0.007	
		[-1.712]	[-1.680]			[-1.053]	[-1.005]	
COMBINED				-0.015**				-0.017*
				[-1.961]				[-1.406]
LN_OFFICE_CLIENTS	-0.008**	-0.008**	-0.007**	-0.007**	0.003	0.002	0.003*	0.003*
	[-1.841]	[-1.984]	[-1.663]	[-1.647]	[1.834]	[1.361]	[1.983]	[1.951]
BIG4	-0.006	-0.007	-0.007	-0.007	-0.004	-0.004	-0.005	-0.005
	[-0.320]	[-0.371]	[-0.391]	[-0.372]	[-0.387]	[-0.360]	[-0.432]	[-0.464]
SIZE_MEAN	0.004	0.004	0.004	0.004	-0.005	-0.006	-0.005	-0.005
	[0.532]	[0.511]	[0.540]	[0.544]	[-1.409]	[-1.425]	[-1.402]	[-1.394]
MW_%	0.400***	0.401***	0.400***	0.400***	0.137**	0.139**	0.137**	0.138**
	[6.362]	[6.209]	[6.264]	[6.318]	[2.696]	[2.591]	[2.670]	[2.625]
OFFICE_NAS	0.020	0.029	0.028	0.025	-0.034	-0.029	-0.032	-0.027
	[0.334]	[0.497]	[0.485]	[0.422]	[-0.884]	[-0.782]	[-0.857]	[-0.778]
ABN_FEES_MEAN	0.030	0.031	0.032	0.031	-0.008	-0.009	-0.008	-0.007
	[1.398]	[1.381]	[1.437]	[1.448]	[-1.028]	[-1.167]	[-0.986]	[-0.901]
INTERCEPT	0.041	0.040	0.043	0.043	0.062	0.056	0.063	0.063
	[0.744]	[0.709]	[0.765]	[0.771]	[1.617]	[1.632]	[1.602]	[1.597]
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ν	1,378	1,378	1,378	1,378	1,378	1,378	1,378	1,378
Adj R ²	0.093	0.084	0.093	0.093	0.146	0.146	0.146	0.147

Note: This table presents the OLS regression results from the office restatement test. Panel A presents the $MISSTATE_\%$ results while Panel B present the $MISSTATE_NEG_\%$ and $MISSTATE_R_\%$ results. Robust standard errors are clustered by audit firm. The t-statistic are in brackets under the coefficient estimate. *, **, and *** denote statistical significance at the 10, 5 and 1% levels. The significance of the coefficients is based on a one-tailed test when there is a directional prediction. For brevity, coefficients on year fixed effects are not reported. Appendix B provides the variable definitions.

TABLE 6PATH ANALYSIS

PANEL A



PANEL B

Outcome Variable = AUDIT QUALITY Moderating Variable = RETENTION

			Standardized		
Path	Direct effects		coefficient	t-stat	<i>p</i> -value
А	I. COMBINED	MISSTATE_%	-0.054	-2.79	0.005
В	II. COMBINED	RETENTION	0.128	2.88	0.004
С	III. RETENTION	MISSTATE_%	-0.026	-2.07	0.039
	Indirect effect COMBINED	MISSTATE_%	-0.003	-1.68	0.093

Model-specific controls: Included N 1,186

Note: This table presents the results from estimating a Simultaneous Equation Model of the relationship depicted in Panel A. We use *COMBINED* as a proxy for DIVERSITY LEADERSHIP CLIMATE, *RETENTION*, an indicator set equal to one if *TURNOVER* is in the bottom quartile of the sample distribution, as a proxy for RETENTION, and *MISSTATE_%* as a proxy for AUDIT QUALITY. Appendix B provides the variable definitions.

	DV = TURNOVER		DV = MISSTATE_%		DV = MISSTATE_NEG_%			$DV = MISSTATE_R_\%$	
	(1)	(2)	(3)	(4)	 (5)	(6)	-	(7)	(8)
OMP_COMBINED	-1.787***	0.348	0.002	0.048	0.008	0.062		-0.003	-0.022
—	[-4.019]	[0.801]	[0.149]	[1.138]	[0.867]	[1.724]		[-0.620]	[-1.107]
COMBINED	-0.678***	0.244	-0.033***	-0.023***	-0.021**	-0.009		-0.016*	-0.021*
	[-2.736]	[0.617]	[-3.683]	[-2.467]	[-3.207]	[-0.837]		[-1.362]	[-1.350]
OMP_COMBINED*COMBINED		-2.656***		-0.049*		-0.058**			0.020
		[-4.201]		[-1.362]		[-1.814]			[1.116]
Controls	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Ν	1,335	1,335	1,322	1,322	1,322	1,322		1,322	1,322
Adj R ²	0.165	0.171	0.153	0.156	0.148	0.153		0.092	0.094

 TABLE 7

 OMP DIVERSITY, ABNORMAL TURNOVER, AND AUDIT QUALITY

Note: This table presents the OLS regression results from the Office Managing Partner test. Columns 1, 3, 5, and 7 present the primary analysis with the inclusion of the OMP diversity measure. Columns 2, 4, 6, and 8 present the results of the interaction of the OMP measure and the partner leadership measure. Robust standard errors are clustered by audit firm. The t-statistic are in brackets under the coefficient estimate. *, **, and *** denote statistical significance at the 10, 5 and 1% levels. The significance of the coefficients is based on a one-tailed test when there is a directional prediction. For brevity, coefficients on controls and year fixed effects are not reported. Appendix B provides the variable definitions.

	(1)	(2)	(3)	(4)
SEX	0.034***		0.032***	
	[4.679]		[4.423]	
ETHNICITY		0.052**	0.050*	
		[1.669]	[1.572]	
COMBINED				0.037***
				[4.338]
LN_OFFICE_CLIENTS	0.000	0.000	0.000	0.000
	[0.755]	[0.754]	[0.539]	[0.561]
BIG4	0.021	0.023	0.022	0.022
	[0.466]	[0.531]	[0.517]	[0.500]
SIZE_MEAN	-0.050***	-0.050***	-0.050***	-0.050***
	[-4.363]	[-4.481]	[-4.469]	[-4.443]
MW_%	0.199**	0.195**	0.199**	0.200***
	[3.383]	[3.464]	[3.480]	[3.538]
OFFICE_NAS	-0.018	-0.037	-0.035	-0.031
	[-0.133]	[-0.303]	[-0.287]	[-0.237]
ABN_FEES_MEAN	0.013	0.011	0.009	0.010
	[0.495]	[0.438]	[0.359]	[0.380]
INTERCEPT	0.414***	0.419***	0.406***	0.406***
	[4.541]	[4.654]	[4.508]	[4.488]
Year FE	Yes	Yes	Yes	Yes
Ν	1,706	1,706	1,706	1,706
$Adj R^2$	0.104	0.104	0.106	0.106

TABLE 8 OFFICE AUDIT LEADER DIVERSITY AND CONSERVATISM

Note: This table presents the OLS regression results from the office going concern test. Robust standard errors are clustered by audit firm. The t-statistic are in brackets under the coefficient estimate. *, **, and *** denote statistical significance at the 10, 5 and 1% levels. The significance of the coefficients is based on a one-tailed test when there is a directional prediction. For brevity, coefficients on year fixed effects are not reported. Appendix B provides the variable definitions.