

PRACTITIONER SUMMARY

Implications of Employee Satisfaction and Work-Life Balance in Accounting Firms

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SUMMARY: This article summarizes and reflects on the implications of the published study “Employee Satisfaction and Work-Life Balance in Accounting Firms and Audit Quality” (Khavis and Krishnan 2021), which examines the link between employee satisfaction, work-life balance, and audit quality within accounting firms. The study uses employee-level reviews from Glassdoor.com to examine how accounting firms are perceived by their employees, and tests whether accounting firms’ workplace characteristics explain employee satisfaction and audit quality. We briefly summarize the findings of this study and highlight relevant practical implications related to audit quality, employee recruitment, and employee retention, which may interest practitioners, regulators, and academics.

Keywords: audit quality indicators; auditor work-life balance; audit quality framework; firm culture; Glassdoor.com.

I. INTRODUCTION

In their 2008 report, the Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury recommended that auditing firms consider the feasibility of developing and disclosing audit quality indicators (ACAP 2008). Since that time, there has been broad and continued stakeholder interest in audit quality indicators, as demonstrated by recent PCAOB

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Standing Advisory Group meetings (PCAOB 2013, 2015, 2017). Despite their interest, stakeholders have not reached a consensus on which of the proposed audit quality indicators best represent true audit quality. While certain international regulators such as the U.K. Financial Reporting Council and the Swiss Federal Audit Oversight Authority have put mechanisms in place to enhance the transparency of certain indicators, the U.S. regime continues to rely on voluntary market-based disclosure (PCAOB 2013). Proponents of this market-based approach advocate that it will encourage innovation and help build consensus on which metrics best represent audit quality (PCAOB 2017). The work of Khavis and Krishnan (2021) explores one such potential metric that may be of interest to regulators as well as practitioners.

Due to the profession's history of long working hours (Persellin, Schmidt, Vandervelde, and Wilkins 2019) and high employee turnover rates (AICPA 2004, 2011), discussions of audit quality are incomplete without examining factors such as work-life balance, which lead to low audit-staff continuity. However, the link between these factors and audit quality has been largely unexplored empirically due to a lack of available data. In order to study this link, Khavis and Krishnan (2021) utilize a unique dataset of crowd-sourced employee reviews from the employment website Glassdoor.com (hereafter, Glassdoor). These reviews rank employers on a five-star scale in the following categories: overall satisfaction, career opportunities, compensation and benefits, senior management, work-life balance, and, starting in 2012, culture and values.¹ The data represent 140 accounting firms spanning the period 2008–2016.

The study focuses on two main research questions. First, it explores how accounting firm employees rate their employers and which workplace characteristics best explain overall job satisfaction. Interestingly, the study finds that accounting firm employees' assessments of overall satisfaction are associated more with firm culture and values, career opportunities, and senior management than they are with compensation and benefits, and work-life balance. Second, the study examines whether audit employees' reported overall satisfaction and work-life balance ratings are associated with audit quality. The study provides large sample evidence suggesting that negative perceptions about work-life balance are linked with lower audit quality, but overall satisfaction is not associated with audit quality.

In this article, we summarize the research questions, data, methodology, and results of Khavis and Krishnan (2021). We extend the original work by providing additional context in which to consider the results and explore the practical implications related to audit quality, as well as to the recruitment and retention of employees, which may be of interest to practitioners, regulators, and academics.

II. FACTORS ASSOCIATED WITH ACCOUNTING FIRM EMPLOYEE OVERALL SATISFACTION

Khavis and Krishnan (2021) begin their analysis by comparing the ratings of Big 4 accounting firm employees to those of Non-Big 4 firms, and then compare audit to non-audit employee reviews within Big 4 firms. Next, they examine the relative importance of various Glassdoor rating categories on the overall satisfaction rating. Their initial analyses address the following research question:

RQ1: How do accounting firm employees rate their employers, and which categories are most influential in determining overall satisfaction?

¹ Glassdoor utilizes a scale of one to five stars with one representing a very dissatisfied employee and five representing a very satisfied employee.

Motivated by existing research indicating that Big 4 and Non-Big 4 accounting firms differ in clientele (Lawrence, Minutti-Meza, and Zhang 2011) and audit quality (Becker, DeFond, Jiambalvo, and Subramanyam 1998; Eshleman and Guo 2014), Khavis and Krishnan (2021) find that, relative to Non-Big 4 firms, Big 4 firms receive higher employee ratings across all categories except work-life balance. Figure 1, Panel A summarizes the differences in ratings between Big 4 and Non-Big 4 accounting firms. The Big 4 hold their highest ratings premium (12.5 percent) in the career opportunities category. Figure 1, Panel B illustrates the differences between audit and non-audit employees within Big 4 firms.² The most significant differences between Big 4 auditors and non-auditors are in compensation and benefits and work-life balance, which are ranked higher by non-auditors, and in career opportunities, which is ranked higher by auditors. The higher compensation and work-life balance ratings by Big 4 non-auditors may have audit quality implications as non-audit divisions may divert talent away from audit. Indeed, James Doty, PCAOB's former Chairman, voiced concern that the accounting firms' strategic shift toward offering more consulting services may lead to "talent misallocation, with the best minds going to consulting at the expense of audit expertise and competence" (Verschoor 2014). Taken together, these findings highlight the diminished level of work-life balance experienced by Big 4 auditors, the extent to which auditors are willing to sacrifice work-life balance and compensation for career advancement opportunities, and the non-audit division's potential to attract new talent away from audit.

Using an ordinary least squares regression analysis, Khavis and Krishnan (2021) estimate the relative importance of each of the five rating categories on the overall satisfaction rating. Somewhat surprisingly, the results indicate that the categories of work-life balance and compensation are less powerful components of overall satisfaction than are career opportunities, senior management, and firm culture. This result holds when analyzing the reviews of all accounting firm employees and when restricting the reviews to audit employees only.

III. OVERALL SATISFACTION AND WORK-LIFE BALANCE RATINGS' IMPACT ON AUDIT QUALITY

In the second phase of their study, Khavis and Krishnan (2021) analyze the relationships between (1) audit quality and (2) auditor ratings of work-life balance and overall satisfaction to address the following research question:

RQ2: Do audit employees' overall satisfaction and work-life balance impact audit quality?

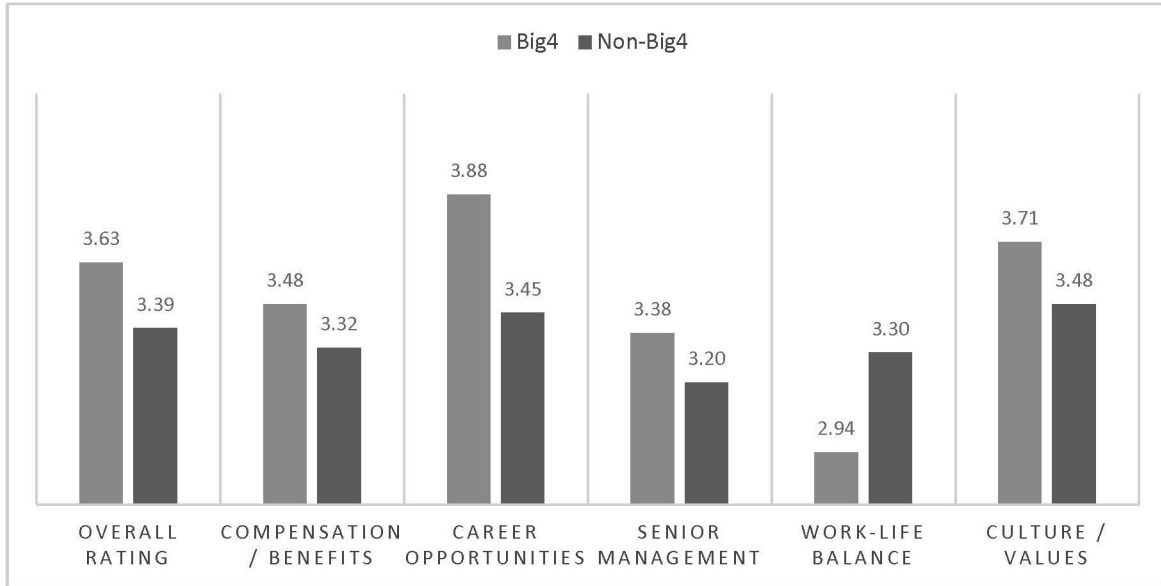
Since audit quality is not directly observable, the authors follow previous research and proxy for audit quality using three measures: discretionary accruals (e.g., Reynolds and Francis 2000; Hribar and Nichols 2007; Reichelt and Wang 2010), financial restatements (Newton, Wang, and Wilkins 2013), and propensity to issue a going concern opinion (e.g., Reynolds and Francis 2000; Carson et al. 2013).

The first proxy for audit quality, discretionary accruals, measures the portion of accruals that cannot be predicted based on a firm's operations. In this context, accruals are defined as the difference between net income and cash flow from operations of a given audit client. The lower the discretionary accruals, the higher the audit quality. The intuition here is that higher-quality auditors would be more likely to prevent management from manipulating accruals to inflate or deflate earnings. The second audit quality measure is the relative frequency of financial

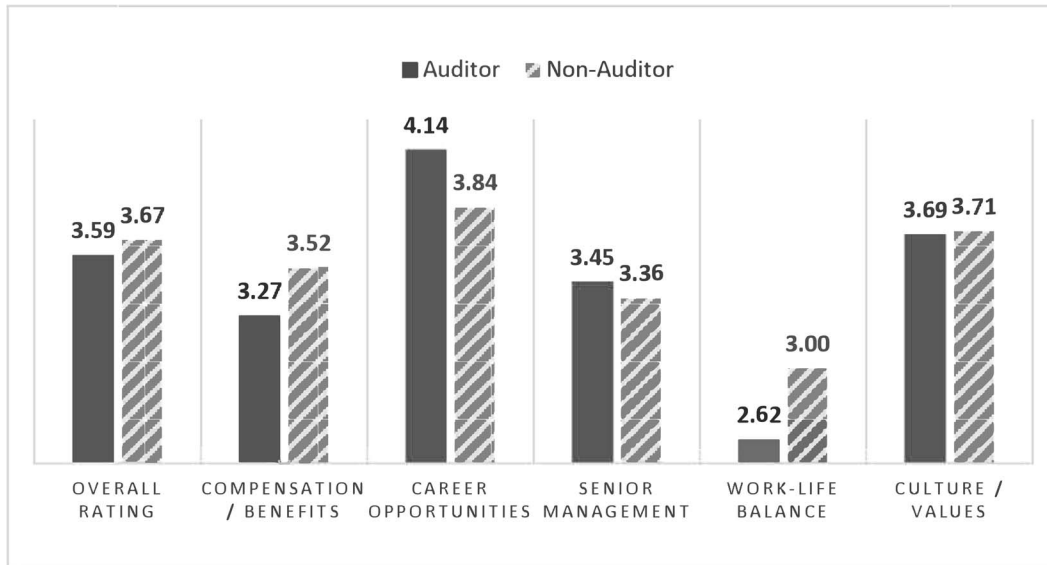
² Audit employees are defined as reviewers whose job title included the words "audit" or "assurance."

FIGURE 1
Employee Ratings

Panel A: Five-Star Ratings: Big 4 Versus Non-Big 4



Panel B: Big 4 Five-Star Ratings: Auditor Versus Non-Auditor



Source: [Khavis and Krishnan \(2021\)](#).

Figure 1 illustrates how accounting-firm employees rate their employer across six categorical measures (ranging from one to five stars), on average. All ratings measures are based on data obtained from Glassdoor.com and span 2008–2016, except for the “Culture/Values” measure, which begins in 2012, its first year of introduction. Panel A compares the average ratings of Big 4 and Non-Big 4 employees. Panel B compares the average ratings of audit and non-audit employees at the Big 4. An audit employee is defined as a reviewer with “audit” or “assurance” in their job title.

TABLE 1
Audit Quality

	Discretionary Accruals (1)	Financial Restatements (2)	Going Concern (3)
<i>Overall Satisfaction Score</i>	No Evidence of Significant Association	No Evidence of Significant Association	No Evidence of Significant Association
<i>Work-Life Balance Score</i>	Negative Association ^{a, **}	Negative Association ^{a, ***}	Positive Association ^{b, **}

***, ** Denote significance at the 0.01 and 0.05 levels (two-tailed), respectively.

^a Higher discretionary accruals and higher restatement rates indicate lower audit quality. Therefore, a negative association implies that work-life balance score is positively associated with audit quality.

^b Higher likelihood of going concern issued to distressed clients indicates higher audit quality. Therefore, a positive association implies that work-life balance score is positively associated with audit quality.

restatements of audit clients. Restatements represent an indicator of material errors in a previously issued financial statement, which is indicative of lower audit quality. The third and final measure of audit quality is the propensity of an auditor to issue a going concern opinion to a “financially distressed” client—one that reports a loss or negative cash flows for the year. A higher propensity to issue a going concern opinion for distressed clients is indicative of higher audit quality based on the auditor’s ability and willingness to accurately identify and issue going concern opinions. This analysis is based on 6,613 observations of which 227 received a going concern opinion.

All audit quality measures are computed using data from public companies obtained from the intersection of the Compustat and Audit Analytics databases from 2008 to 2015 that comprise 22,376 client years, 4,788 unique clients, and 64 unique auditors. Whereas the audit quality data represent only audits of public companies, the Glassdoor data contain reviews from auditors who work on both public and private companies. Nonetheless, the Glassdoor data likely capture the average overall firm environment and experience of a firm’s employees independent of an individual reviewer’s public/private portfolio. In order to accurately match audit quality measures with Glassdoor ratings, average annual accounting firm ratings are calculated based on ratings from audit employees on Glassdoor. These annual averages of firm rating scores are then matched by year and by accounting firm with the audit quality data.

Using ordinary least squares regression analysis for discretionary accruals and logistic regression for financial restatements and going concern opinions, [Khavis and Krishnan \(2021\)](#) find that higher work-life balance ratings are associated with lower discretionary accruals, lower incidence of financial restatements, and a higher propensity to issue a going concern opinion for potentially distressed clients. However, [Khavis and Krishnan \(2021\)](#) find no association between overall satisfaction and the audit quality measures.

Table 1 summarizes the results of the audit quality analysis. Taken together these findings indicate that an overly demanding work environment (i.e., low work-life balance) is associated with lower audit quality as measured by each audit quality proxy. For example, a one standard deviation decrease in the work-life balance rating is associated with a 13 percent increase (11.5 percent to 13.0 percent) in the probability of a financial restatement while a one standard deviation increase in the work-life balance rating is associated with a 22 percent increase (0.76 percent to 0.93 percent)

in the probability of issuing a going concern opinion to a financial distressed client. Although these findings suggest that work-life balance has a significant incremental impact on audit quality, the findings *do not* suggest that Non-Big 4 firms with higher work-life balance scores provide better audit quality than Big 4 firms with lower work-life balance scores.

IV. IMPLICATIONS FOR PRACTICE, REGULATION, AND ACADEMIA

The findings in [Khavis and Krishnan \(2021\)](#) offer implications for practitioners, regulators, and academics related to audit quality and the recruitment and retention of accounting firm employees.

Implications for Practitioners

Recruiting and Retention

While the main results of the study are concerned with the relationship between audit quality and Glassdoor ratings, the ratings distributions themselves provide interesting insights into the labor market for accounting firms. The analyses performed on the aggregated ratings data provide several avenues for accounting firms to potentially improve their employee recruitment and retention strategies. The challenges that accounting firms face recruiting and retaining qualified employees ([Hermanson, Houston, Stefaniak, and Wilkins 2016](#)) and the PCAOB's concerns about the profession's response to such challenges ([AICPA 2011, 2014](#)) are acutely felt by accounting firm leadership and have been well documented by academics. The results of [Khavis and Krishnan \(2021\)](#) reinforce prior findings suggesting that inexperienced accountants tolerate highly demanding work schedules at the beginning of their careers to gain public accounting experience ([Hermanson et al. 2016](#)), which enables accounting firms to demand longer hours from their employees.

The results of [Khavis and Krishnan \(2021\)](#) also indicate that out of all five Glassdoor categories, the strongest predictors of overall satisfaction are firm culture, career opportunities, and senior management. This result is true for both audit and non-audit professionals and exists broadly across all Glassdoor reviews ([Chamberlain 2017](#)). The importance of firm culture is likely to increase with the approaching generational shift as the more senior positions held by Baby Boomers and Generation X employees are taken over by Millennials, and as entry-level positions are filled with Generation Z employees.³ As more Generation Z employees enter the workforce, their unrealistic expectations due to a lack of real-world work experience, and their lower levels of autonomy due to growing up in a "culture of safety," may result in their disillusionment with their new job and lead to higher turnover.⁴ Employers may be able to avert such issues by fostering a workplace culture that emphasizes clear expectations of their employees and provides greater work resources, including managers who provide coaching to less experienced employees in addition to task allocation ([Schroth 2019](#)). Given large accounting firms' heavy reliance on recruiting recent graduates, the accounting profession may experience this generational shift

³ Generation Z is defined as individuals born between 1997 and 2013. On average, individuals classified as Generation Z highly value diversity, equity, inclusion, and workplace coaching ([Schroth 2019](#)).

⁴ Since the 1970s there has been a downward trend in the percentage of teen employment. This percentage is expected to drop to 25 percent by 2024, down from 34 percent in 2015 and 60 percent in 1979 ([Schroth 2019](#)). [Schroth \(2019\)](#) also notes, "Gen Z is unique in growing up with a culture of safety where overprotective parenting inadvertently took away their opportunity to learn life skills . . . making it difficult for them to become autonomous adults, able to navigate the challenges of life, let alone the workplace."

sooner than many other professions.⁵ Accounting firms looking to improve their ability to attract and retain future employees should market their firm culture to better cater to a workforce that is increasingly idealistic and reliant on at-work coaching (Schroth 2019).

Career opportunities, the second most important element explaining overall satisfaction, can play a major role in attracting employees to accounting firms in the first place, especially auditors who join public accounting to gain valuable experience (Dalton, Buchheit, and McMillan 2014; Hermanson et al. 2016). As such, accounting firms that build the technological capabilities of their staff and incorporate best-in-class innovative technology into their daily operations and service offerings will be able to better attract talented employees with the promise of career enhancement and improved marketability and potentially retain them longer.⁶ Many large firms such as EY have created badging programs to improve employees' technological competencies (Weinberger 2018), evidencing that large accounting firms have already made investments in building the infrastructure to improve employee competency in new technologies.⁷ These efforts must be continually monitored and refined given the ever-quickening pace of technology development and adoption by competing employers. Thus, accounting firms should view this not only as a recruiting and retention mandate but also as a market imperative to remain competitive.

Due to their size, resources, and market share, Big 4 accounting firms likely have a comparative advantage in recruitment and retention from a career opportunity standpoint. As observed in this study, the Big 4 firms are ranked higher in all categories except work-life balance. As such, Non-Big 4 firms can leverage their higher work-life balance ranking to improve recruiting, especially by targeting experienced hires.⁸ Given that employee turnover rates at Big 4 firms can be as high as 30 percent (AICPA 2004, 2011), Big 4 employees potentially represent a large, high-quality talent pool from which smaller firms can scout talent. Non-Big 4 accounting firms that offer a superior work-life balance experience and effectively market that comparative advantage to experienced Big 4 professionals may find an engaged audience of well-trained experienced professionals who wish to stay in public accounting but are no longer willing to work the long hours demanded by the Big 4 firms.

Audit Quality

While the results in the previous section indicate that auditors may be willing to accept long work hours, there are consequences for firms who extract too much overtime from their employees. The study's results, which illustrate the linkage between lower work-life balance

⁵ According to bls.gov, the average age of the U.S. labor force was 41.9 and 41.5 in 2019 and 2009, respectively (BLS 2020). On February 9, 2018, Former EY Global Chairman and CEO Mark Weinberger (2018) announced on Twitter that "The average age at EY is 28." In a 2011 report release by PwC the average age of U.S. employees was 27 (Wiessner 2016).

⁶ According to a recent PwC survey of 10,000 U.S. respondents across a variety of industries "[m]ore than a third (37%) of candidates said they'd be willing to take a pay cut for a chance to learn new skills. The same percentage said they see upskilling opportunities as the most important factor in deciding on a new job, after salary and benefits" (PwC 2019).

⁷ EY's badging program allows staff to earn digital badges in areas such as artificial intelligence, data science, and data visualization. The badges serve as credentials signifying a level of competency in the awarded area. The badges not only distinguish staff members within the firm but are also portable and can be listed on sites such as LinkedIn.com or included on a resume to distinguish the earner from other potential job applicants (EY 2019).

⁸ There is evidence that some non-Big 4 firms already include information in their recruitment materials that highlight their competitive advantage in work-life balance. For example, see: <https://www.kmco.com/careers-blog/my-experience-at-a-big-four-firm-vs-a-regional-firm/>

ratings by auditors and diminishing audit quality, are consistent with findings in other fields that provide evidence for the relationship between lower work-life balance and impaired performance (MacEwen and Barling 1994). The findings are also consistent with the views of auditors themselves, who report working overtime hours beyond the point at which they believe audit quality starts to decline (Persellin et al. 2019). Despite audit employees' willingness to tolerate higher workloads, accounting firms should look to maintain a healthy and sustainable working schedule for their employees in order to avoid the negative impacts that low levels of work-life balance can have on audit quality. This implication is likely to become more impactful given the level of shared service center outsourcing (Dee, Gunny, and Lulseged 2018; PCAOB 2019) and process automation (Moffitt, Rozario, and Vasarhelyi 2018) currently experienced by audit providers in the United States.⁹ These changes are likely to push auditing staff into more technically and cognitively challenging roles earlier in their careers, which may make any negative impacts of low levels of work-life balance on audit quality more acutely felt by the accounting firm.

Juxtaposed with the study's finding that work-life balance is directly linked with audit quality, the reported lack of association between overall job satisfaction and audit quality is worth exploring. As documented by Nouri and Parker (2020), current theory within accounting research maintains that job satisfaction represents a key determinant of turnover intentions. Indeed, international survey-based evidence from Australia suggests that job satisfaction is inversely associated with turnover intentions (Chong and Monroe 2015). Studies in other disciplines also document a negative association between employees' overall satisfaction and turnover (Stamoulampros, Korfiatis, Chalvatzis, and Buhalis 2019). High employee turnover at accounting firms inevitably translates into low audit team continuity, which is likely to be noticed by audit clients and regulators who are concerned about turnover's deleterious impact on audit quality. However, the lack of an observable relationship between overall employee satisfaction and audit quality reported by Khavis and Krishnan (2021) suggests that the portion of turnover explained by satisfaction may not impact audit quality. One explanation is that accounting firms may have achieved a sustainable level of audit team continuity whereby high employee turnover does not necessarily translate into worse audit quality. The drawbacks of a high auditor attrition rate, such as lost client knowledge and strained client relationships, are apparent, but high turnover rates may also provide positive rejuvenating characteristics by bringing in new talent, energy, and ideas, which firms should not necessarily strive to minimize. Practitioners who accept Glassdoor satisfaction ratings as a proxy for turnover may find its lack of association with audit quality to be an interesting aggregate data point that may reflect the effectiveness of investments made by accounting firms to standardize audit procedures intended to improve audit quality and staff efficiency. Such investments may have had a role in diminishing the potential deleterious effects of high turnover rates on audit quality during the studied period. For example, from 2008 to 2016, many accounting firms invested in greater cloud storage capacity and the development of improved audit platforms.¹⁰ These improved platforms

⁹ On the topic of the use of advanced technologies in audits, Bill Tomazin, Managing Partner, West Region and National Audit Solutions for KPMG U.S. said, "The look and feel of an audit five years from now will be 180-degrees different than the look and feel of an audit five years ago" (KPMG 2018).

¹⁰ Each of the Big 4 accounting firms now has advanced global audit platforms that are intended to improve consistency of audit procedures performed and ensure that those procedures are aligned with regulator expectations. See the details of each of the Big 4's advanced audit platforms: (1) KPMG, Clara: <https://audit.kpmg.us/kpmg-clara.html>, (2) EY, Canvas: https://www.ey.com/en_us/audit/technology/canvas, (3) Deloitte, Omnia: <https://www2.deloitte.com/us/en/pages/audit/solutions/audit-technology-solutions.html>, and (4) PwC, Aura: <https://www.pwc.com/gx/en/services/audit-assurance/the-pwc-audit.html#:~:text=Aura%2C%20our%20global%20ERP%20system,efficient%20approach%20to%20audit%20risk>

included detailed interactive procedural guides for each audit process, which represented a substantial improvement over earlier audit programs available to staff. While the study does not provide specific evidence on the effectiveness of these investments on improving audit quality, practitioners who have access to a wider range of more specific firm data may be in a better position to assess the role individual firms' investments in standardized audit procedures played in mitigating turnover's negative effects on audit quality.

Implications for Regulators

This study gives credence to the PCAOB's concern that long working hours negatively impact audit quality (Persellin et al. 2019) and could be of interest to the PCAOB and other international market regulators as they continue to explore viable audit quality indicators to inform future standard-setting related to audit quality. Some regulators, such as in the case of South Korea, require public companies to disclose the audit hours in their annual reports (Lee and Park 2016). While measures like this improve transparency, they do not address the specific issue of work-life balance. If regulators are interested in more directly monitoring work-life balance, they can require the disclosure of a more nuanced metric such as staff utilization, which would be more informative. However, any regulation requiring the disclosure of such a metric would need to provide specific guidelines on how to calculate it. Any new regulation must undergo thorough cost/benefit analysis as regulations seeking to provide greater work-life balance or more transparent audit quality indicators may have unintended consequences such as increasing audit fees, increasing reliance on seasonal employees who may be less qualified than full time employees, and greater delays in filings. Regulators should also consider working directly with academic researchers, similar to the PCAOB's collaboration with Aobdia (2018), to facilitate development of more effective audit quality indicators by academic researchers.

Implications for Academics

The results of this study highlight several areas that encourage future research. This study provides evidence that work-life balance is negatively associated with audit quality, but that job satisfaction shows no association with audit quality based on self-reported data from Glassdoor. These links should be further explored with alternative data sources and improved audit quality measures. The link between work-life balance and audit quality could be more directly observed using audit hours data, however such data are only available through voluntary release by audit firms or through smaller sample survey results. Academics should look to develop new audit quality measures and refine existing proxies, which will allow researchers to gain greater insight into how firms' behavior and policies influence audit quality.

The lack of association between satisfaction and audit quality is a particularly interesting topic for further research given the PCAOB's focus on turnover and the negative association between satisfaction and turnover documented by the audit literature (Nouri and Parker 2020). While many large audit firms do periodically release turnover statistics, these data are likely not detailed enough to support a large sample academic study. More detailed firm office level or even engagement team level data would be beneficial in thoroughly exploring these relationships. Researchers could also look to alternative data sources as well as to data in the public domain to construct new human capital metrics for auditors and further study their relationship with audit quality. In addition to archival turnover and satisfaction studies, this research stream could also benefit from direct access to current audit employees who could provide valuable input through

survey or interview responses. A synthesis of data from both archival and behavioral studies would provide a much richer context in which to consider how various aspects of auditor's human capital impact audit quality.

Finally, future research may be interested in exploring how the generational shift impacts the auditing profession, and how these macro changes impact firm characteristics or audit quality. Such research could utilize updated data sets such as Glassdoor and existing audit quality proxies or benefit from new innovative data sources and measures not yet considered by current researchers.

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