

**Navigating Auditor Turnover:  
Early Promotion and Retention in the Audit Profession**

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### **Abstract**

This study examines whether early promotion is related to enhanced retention or accelerated exits in the audit labor market, especially during periods of heightened turnover. Using detailed employment data, we track cohorts of junior auditors who began their careers at the top 25 public accounting firms from 2016 to 2020. We document that roughly 50% of each cohort had left their firm by the end of their third year, highlighting the substantial turnover challenge facing audit firms. Cox hazard models reveal that female auditors, those with accounting degrees from target universities, and those starting at Big 4 firms experience lower exit risk. With respect to promotion timing, early promotions are linked to lower overall exit rates, while regular promotions show dynamic retention patterns—an initial reduction in exit risk that diminishes over time and reverses by the third quarter after promotion. Cause-specific hazard analyses show that early promotion is persistently associated with lower exit risk to other public accounting firms, whereas regular promotion shows no reduction in such exits and corresponds with earlier transitions into corporate accounting roles. We further find that during the Great Resignation (GR)—a period of elevated voluntary turnover—audit firms substantially accelerated promotions. Overall, drawing on large-sample evidence, we document distinct exit dynamics for early versus regular promotions and highlight how firms adjust this practice in response to turnover pressures, despite the risk of employee poaching.

JEL Classification: M42; J44; J63

Keywords: auditor turnover; employee retention; promotion timing; career mobility; early promotion

## 1. Introduction

The audit profession fundamentally depends on human capital, with professional judgment and skepticism at its core. Maintaining a healthy talent pool is therefore critical. Recent research shows that structural forces in the accounting labor market, such as entry barriers (Barrios, 2022) and employer market power, shape the allocation of accountants across sectors (Choi et al., 2024). It is equally important to understand how firms manage their workforce at the micro level, as these practices influence whether talent remains within the audit profession. When disruptions occur in the auditor labor market, they can impair firms' production capacity, strain client relationships, and ultimately compromise audit quality (e.g., Abramova, 2024; Kerckhofs et al., 2024; Ma et al., 2024; Khavis and Szerwo, 2025).<sup>1</sup> Despite these challenges, there is limited empirical evidence on how firms respond to labor market disruptions or how promotion practices are linked to retention. In this study, we address this gap by examining one commonly used practice—accelerated promotion.<sup>2</sup> Specifically, we examine 1) how early promotion relates to junior auditor retention and career mobility, and 2) whether firms adjust promotion practices during periods of heightened turnover. The audit profession's relatively standardized promotion pathway from associate to senior associate provides an ideal setting to address these questions.

To maintain an optimal level of turnover, audit firms must balance the cost of replacing departing staff against the cost of retaining them. While turnover itself is not always undesirable—firms anticipate and even design for some level of attrition through up-or-out promotion systems or forced exits of underperformers—unexpected voluntary exits, especially among high-potential

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<sup>1</sup> These challenges are further complicated by rigid workforce adjustments due to specialized certification requirements (Cascino et al., 2021; Barrios, 2022).

<sup>2</sup> We use fast-track, early, and accelerated promotion interchangeably throughout the paper.

auditors, can create costly and disruptive staffing shortfalls.<sup>3</sup> Salary adjustments are often the first lever firms consider to address retention pressure. However, in professional service settings, especially in audit, broad-based pay increases are difficult to sustain: higher salaries directly compress partner margins under the residual-profit partnership structure and are often infeasible to pass on to clients (Banker et al., 2003; Gerakos and Syverson, 2017; Huddart and Liang, 2003; Jensen and Meckling, 1979). This constraint is particularly salient in auditing, where salary growth has been relatively moderate compared to financial services and consulting and has generally lagged behind other sectors (Ellis, 2023; Schmalz, 2024).

Early promotion, which operates within existing pay structures, is a lever to address retention pressure and can signal organizational recognition and career potential. This signal may be conveyed through several channels, including the timing of promotion itself and the private discussions that often accompany it, and it serves as affirmation of ability and a credible assurance of future advancement. When paired with a pay adjustment, early promotion can also help narrow compensation gaps with external opportunities earlier in the career (Allen et al., 2010; Sull et al., 2022). However, early promotion entails trade-offs. The economics and psychology literatures suggest that it can signal employee value to external employers (Milgrom and Oster, 1987; Bernhardt and Scoones, 1993; Trevor et al., 1997), thus increasing marketability and the risk of being poached—a dynamic often described as the “employability paradox” (Hardy III et al., 2025). Hence, whether early promotion is associated with delayed or accelerated exit is ultimately an empirical question. Because early promotions can reflect varying motives—retention, recognition,

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<sup>3</sup> Conversations with partners at the Big 4 indicate that firms invest heavily in training associates during their first two years, making turnover among experienced staff especially costly.

or operational need to address staffing gaps during busy season, our analysis is agnostic about managerial intent and focuses instead on observed retention outcomes.<sup>4</sup>

Beyond the retention outcomes, understanding whether firms adjust promotion timing during periods of labor market disruption, when firms face pressure to fill mid-level staffing gaps and maintain client service capacity (AOMAR, 2006), is also important. The Great Resignation (GR)—a period marked by elevated voluntary departures—provides a timely opportunity to study such adjustments. In 2021 alone, over 47 million U.S. employees voluntarily left their jobs—the highest level in over two decades (BLS, 2022). The spike in exits, fueled by strong labor demand and shifting work-life preferences after the pandemic, created retention pressures across sectors (Cook, 2021; Faccini et al., 2022; De Smet et al., 2022). The audit profession was no exception: more than 300,000 accountants and auditors left their jobs between 2021 and 2022, representing a 17% decline since 2019 (BLS, 2022), and audit firms reported difficulty in filling open roles (Warren, 2024). These staffing pressures may have been amplified by rising client demand during the economic recovery, increasing incentives to retain workers. While our goal is not to explain the GR itself, we leverage this labor market shock to examine whether audit firms accelerate promotion timing during periods of heightened voluntary turnover—and how such adjustments relate to junior auditor retention and mobility.

To address these questions, we construct a sample comprising cohorts of auditors who began their careers between 2016 and 2020 and track their employment outcomes over time.<sup>5</sup> We use LinkedIn employment data, which includes detailed employment histories, educational

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<sup>4</sup> While most audit firms follow fixed annual promotion cycles, conversations with Big 4 staff suggest that some also use off-cycle promotions (e.g., mid-year promotions) under certain circumstances, such as staffing needs or exceptional performance.

<sup>5</sup> For example, the 2016 cohort includes all new associates who started between July 2016 and June 2017, and we track their career progression through their fourth year, ending in June 2020.

backgrounds, office locations, and demographic information. Our sample includes 416,071 auditor-quarter observations, representing 37,451 unique junior auditors—specifically, audit associates and senior audit associates—employed at the top 25 accounting firms from 2016 to 2024. We focus on junior auditors—a vulnerable group with historically high turnover (Comunale et al., 2023)—who staff audit teams and form the profession’s leadership pipeline.

We begin by presenting descriptive evidence on labor market trends for junior auditors across our sample cohorts. Several observations are worth noting. First, female representation remains relatively stable, with each cohort initially comprising approximately 44-45% female auditors across the 2016-2020 period. Second, minority representation shows modest growth over time, increasing from approximately 15% in earlier cohorts to 18% in later cohorts. Third, roughly 50% of each cohort had left the firm by the end of their third year, highlighting the substantial turnover audit firms face among junior staff. Fourth, about 69% (26%) of promotions from associate to senior associate occur in the second (third) year, consistent with the profession’s typical two- to three-year promotion schedule (Lewczyk, 2017; PwC Strategy& Career Path, 2025). The highest concentration of promotions—roughly 40%—occurs in the eighth quarter of an auditor’s tenure. Drawing on this distribution and prevailing industry norms, we define early promotion as occurring within the first seven quarters of tenure and regular promotion as occurring thereafter.

Turning to our main analysis, we estimate Cox hazard models to examine the link between early promotion and auditor retention. This framework is well-suited because it accommodates censored data (auditors who remain at the firm through the end of our observation period), compares auditors at the same quarter of tenure, and focuses on hazard—the instantaneous risk of exit at a given point in tenure. In other words, it allows us to study not only *who* leaves but also

when auditors are most at risk of leaving, which is central to understanding the promotion–retention relationship. Our models include cohort and firm fixed effects to control for time-invariant differences across entry cohorts (such as labor market conditions at hire and cohort-specific characteristics) and firm-specific factors (such as culture, compensation structures, and reputation). We find that female auditors, those with accounting degrees from target universities, and those starting at Big 4 firms experience lower exit risk, whereas auditors with a graduate degree face higher exit risk.

We find that early promoters experience a significantly lower overall exit risk compared to regular promoters. The exit dynamics, however, follow distinct temporal patterns. Over the two years following promotion, both groups show an immediate reduction in exit risk, but the magnitude and persistence differ markedly. Two quarters after promotion, early promoters have a 38% lower exit risk, while regular promoters have a 15% reduction in their exit risk. One year and a half after promotion, early promoters remain 31% *less* likely to exit, whereas regular promoters are 9% *more* likely to exit. Although both promotion types eventually see elevated exit risk—consistent with the employability paradox, where promoted employees gain greater visibility to external employers—the retention benefit persists longer for early promoters: their exit risk remains below baseline for six quarters post-promotion, whereas regular promoters see their risk turn positive after just two quarters.<sup>6</sup>

One possible explanation is that our findings reflect tenure-based milestones—such as certification requirements or external market preferences for auditors with at least two years of experience—that shape exit opportunities. Because early promoters reach these milestones later in their careers, their retention benefit could mechanically appear to persist longer. However,

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<sup>6</sup> To mitigate the concern that our early promotions merely capture later start dates promoted in the same annual cycle, we include cohort-by-start-quarter fixed effects in robustness analyses, and the results remain consistent.

additional analyses suggest that tenure-related milestones are unlikely to fully explain our results, as the difference in exit risk between early and regular promoters persists even when comparing auditors at comparable tenure levels. Taken together, our findings are consistent with early promotion being associated with more sustained retention benefits compared to regular promotion. These benefits—potentially reflecting stronger employee loyalty and satisfaction from accelerated advancement and recognition of long-term potential within the firm—appear to outweigh, at least in the near term, the increased poaching risk from heightened external marketability.

To better understand how promotion relates to talent flows, we examine auditors' career transitions by destination. We find that early promotion is associated with persistently lower exit risk to other public accounting firms, whereas regular promotion shows no reduction in such exits and is linked to earlier transitions into corporate accounting. Over time, however, the corporate exit risk of early promoters converges with that of regular promoters. These patterns suggest that career trajectories vary between early and regular promoters: early promotion is associated with fewer exits to rival audit firms, yet longer-term moves into corporate accounting remain—roles that may be particularly attractive in the post-pandemic environment given their greater schedule predictability and reduced travel demands (De Smet et al., 2022; Parker and Horowitz, 2022).

We then examine how firms adjust promotion timing during periods of labor market disruptions by leveraging the Great Resignation (hereafter, GR) as a labor market shock. We first validate that the audit profession experienced disruptions similar to those in other sectors during this period. Specifically, we document a substantial spike in auditor attrition in 2021, with exits increasing by approximately 46% compared to 2020, consistent with broader labor market trends (BLS, 2022). To assess the statistical significance of this pattern in our cohort sample, we employ

Cox hazard models and find that in 2021, the hazard of auditor exit is about 47.5% higher than in prior years.

Given the audit profession experienced significant disruption during the GR, we examine whether firms adjusted their promotion practices amid this period. We focus on whether promotion timing differs for cohort 2020, which experienced the GR shock during its second year of tenure (July 2021 to June 2022)—the typical time of promotion. While the GR began around March-April 2021, firms likely needed time to observe the spike in exits before responding with accelerated promotion. We find a significantly higher likelihood of early promotion for the 2020 cohort, along with a reduced likelihood of regular promotion—consistent with an overall acceleration in promotion timing during this period. Specifically, compared to preceding cohorts, the 2020 cohort is 32.1% more likely to be promoted to senior associate within their first seven quarters.<sup>7</sup> This shift suggests that audit firms adjust promotion practices during times of heightened turnover, plausibly to retain junior staff in the short term and address staffing gaps at the middle ranks.<sup>8</sup>

The observed acceleration of promotions during the GR raises a natural question: does the relationship between early promotion and retention change during periods of heightened turnover? To explore this, we return to our survival analysis framework and find no significant shifts in the effects associated with early or regular promotion during the GR. Thus, despite the expanded external opportunities during this period, the retention effects associated with both early and regular promotion remain largely unchanged. This may reflect the use of additional retention

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<sup>7</sup> This pattern is not driven by delayed start dates during COVID, as we find similar results after excluding late starters or restricting the sample to first-fiscal-quarter entrants.

<sup>8</sup> Although the profession faced ongoing labor supply pressures during our sample period, these gradual trends are unlikely to explain the sharp shift in promotion timing observed during the short GR period. The GR represents an acute labor market shock rather than a continuation of long-run trends. Moreover, untabulated analyses including the 2021 cohort show a slight decline in early promotion likelihood, indicating that the acceleration was not part of a steady upward trend in early promotion use.

strategies alongside the wider adoption of accelerated promotion, or the targeting of employees less susceptible to outside opportunities, as a way to offset the additional exits during this period.

Our findings are subject to potential endogeneity concerns—auditors promoted early may differ from those promoted on the regular schedule in unobservable ways that also affect retention. To further assess this possibility, we perform an additional robustness test and consider alternative mechanisms in light of our findings. First, we perform a propensity-score-based weighting analysis using observable auditor characteristics and find qualitatively similar results.<sup>9</sup> Second, if early-promoted auditors were inherently higher quality, they would likely be more aggressively sought after by external employers (e.g., Jovanovic, 1979; Spence, 1973), leading to higher—not lower—exit rates. Instead, we observe the opposite. Third, during the period of heightened turnover, the increase in early promotion coincides with a decline in regular promotions, consistent with firms shifting auditors who would have been promoted later into earlier slots. This pattern suggests that early and regular promoters are broadly similar, mitigating concerns that the results reflect fundamental differences in auditor quality. Taken together, although selection on unobservable attributes remains possible, the evidence points to retention differences linked to early promotion.

Our study makes the following contributions to the literature. First, we advance understanding of the link between promotion timing and auditor retention and career mobility—an evidence-scarce area important for talent management in the profession. While prior accounting research emphasizes the importance of human capital for audit quality (e.g., Gao et al., 2023; Ham et al., 2025) and finds that staff and mid-level departures can impair audit quality and disrupt client service (Ma et al., 2024; Khavis and Szerwo, 2025), little is known about the factors associated

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<sup>9</sup> Specifically, we use inverse probability of treatment weighting (IPTW) based on time-varying propensity scores estimated using gender, educational background, and other demographic variables as covariates. This approach balances observed characteristics between early- and regular-promotion auditors at the time of promotion.

with auditor retention and career mobility. Using a dynamic labor market equilibrium model, Choi et al. (2024) show that entry barriers, employer market power, technology shocks, and “up-or-out” partner promotions influence the allocation of accountants across sectors. Complementing their analysis, we highlight the trade-offs firms face regarding early promotion, and document distinct career paths for early promoters and shifts in promotion strategy during labor market disruptions.

Second, using survival analysis, we identify who is more likely to leave and when—insights critical for talent management and workforce planning, given that roughly half of junior auditors exit by year three and that turnover is associated with lower audit quality (Ma et al., 2024; Khavis and Szerwo, 2025). We find that female auditors, those with accounting degrees from target universities, and those starting at Big 4 firms experience lower exit risk. Moreover, our analysis reveals that while exit risk temporarily decreases following early promotion, the benefit dissipates quickly after three quarters, suggesting that firms can benefit from pairing early promotion with supplemental retention strategies during this critical post-promotion window.

Third, we extend the literature on human capital development and career advancement in professional services. Prior research has examined the effects of early promotion on wages, status, and employee movement between internal and external labor markets (e.g., Baker et al., 1994; Bidwell et al., 2025; DeOrtentiis et al., 2018; Bidwell and Keller, 2014). However, there is limited empirical evidence on how early promotion is used during labor disruptions or how it relates to retention and external mobility. We show how internal advancement decisions, even when made under short-term pressure, can be associated with broader career dynamics. Standardized advancement in audit offers a clean context to identify early promotion and assess subsequent outcomes, with dynamics that may generalize to other pyramid-structured professional services with similar challenges in balancing short-term staffing needs with long-term talent retention.

Lastly, our findings offer new perspectives on the profession's evolving talent challenges. While attention often centers on the shrinking pipeline of accounting graduates and CPA candidates (AICPA, 2023a; Burke and Polimeni, 2023), retention is equally important: firms invest heavily in junior staff who become invaluable as they learn to review engagements and supervise new associates. The temporary reduction in auditor exit risk after early promotion suggests that firms may be able to pair early promotion with complementary retention strategies that lengthen careers in public accounting. As automation and technological advances continue to reshape entry-level work across sectors, retaining experienced talent will likely become an even more critical component of firms' human capital strategies, with audit being no exception.

The remainder of the paper proceeds as follows. Section 2 provides background and presents the hypotheses. Section 3 describes the sample, data, and research design. Section 4 presents our empirical results. Finally, Section 5 concludes.

## **2. Related Literature and Hypothesis Development**

### **2.1 Human Capital in the Audit Profession**

The audit profession fundamentally relies on human capital, particularly the professional judgment and skepticism exercised by auditors. Human capital expenses are the largest cost component for audit firms (Conway, 2015), and prior research shows that higher auditor salaries are associated with higher audit quality (Hoopes et al., 2018).

A robust body of research highlights the importance of audit talent in sustaining audit quality. Firms have stronger demand for accounting-specific skills when hiring rank-and-file employees after experiencing internal control weaknesses, consistent with a close link between the human capital of these employees and internal control quality (Gao et al., 2023). Audit offices differ in their emphasis on auditors' cognitive and social skills, and a higher prevalence of

cognitive and social skill requirements in job postings is positively associated with audit quality (Ham et al., 2025). Detailed PCAOB data further highlight that middle-level auditors, such as senior associates and managers, play an important role in delivering high-quality audits (Aobdia et al., 2024a). City-specific labor characteristics, including average educational attainment and the concentration of accountants—which proxy for a city's human capital—are also positively associated with audit quality (Beck et al., 2018).

As the decline in accounting graduates and prolonged accounting vacancies are associated with deteriorations in audit and financial reporting quality (Ahn et al., 2024; Hann et al., 2024), studies have also examined factors fueling turnover in the audit profession. The traditional “up or out” business model—where relatively few reach the partner level while most employees exit within three to five years (Johnson and Pike, 2018; Nouri and Parker, 2020; Downar et al., 2021)—is one significant driver. Recent pressures, including the increasing reliance of firms on corporate software investment (Friedman et al., 2024), have made public accounting less competitive. Salaries for auditors have stagnated relative to careers in finance, consulting, and technology sectors (Ellis, 2022; Ellis and Overberg, 2023; Maurer, 2023). Moreover, routine work tasks, high burnout, and perceptions of limited career growth have deterred potential entrants and pushed current professionals to leave (Trapnell et al., 2023).<sup>10</sup> These pressures are reflected in declining interest in the profession: the number of CPA exam candidates fell to a record low of 67,335 in 2022, compared to over 100,000 in 2016 (AICPA, 2023a; Burke and Polimeni, 2023).

Staff and mid-level departures can negatively affect audit quality and disrupt client service (Ma et al., 2024; Khavis and Szerwo, 2025), highlighting the importance of effective talent management, especially during workforce disruptions. Prior research has examined the effects of

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<sup>10</sup> Studies also show that same-group representation in the workforce is crucial for retaining diverse auditors, as auditors are less likely to leave when surrounded by peers and leaders of their own group (Ahn et al., 2025).

early promotion on wages, status, and employee mobility between internal and external labor markets (e.g., Baker et al., 1994; Bidwell et al., 2025; DeOrtentiis et al., 2018; Bidwell and Keller, 2014). Importantly, changes in labor supply are reshaping the structure of the audit market itself, with reductions in the supply of accountants increasing merger and acquisition (M&A) activity among audit firms and resulting in more concentrated audit labor markets (Abramova, 2024). Structural forces—including entry barriers (Barrios, 2022) and the equilibrium between supply and demand across sectors (Choi et al., 2024)—further shape these turnover dynamics. Our paper contributes to this literature by examining promotion practices and career mobility outcomes in the audit profession, and by showing how these effects change in the context of labor market disruptions.

## **2.2 Early Promotion and Auditor Retention**

Retention of junior auditors has long been a challenge for audit firms due to the demanding nature of public accounting work, relatively lower pay compared to alternative business careers, and the traditional “up or out” promotion structure (Johnson and Pike, 2018; Nouri and Parker, 2020; Downar et al., 2021). Given the importance of audit talent to the audit firm business model, our first hypothesis focuses on the link between early promotion and the risk of auditor exit.

Whether early promotion is connected to more stable staffing remains unclear. From one perspective, an early promotion can signal to the employee that they are valued by the firm and can expect further career advancement. The growing gap between junior staff and partners, as highlighted in surveys of the accounting profession (Rosenberg, 2016), suggests that promotion can serve as a signal of upward mobility, potentially including explicit communication of managers’ private assessment that the employee has long-term potential, encouraging junior auditors to reassess their prospects within the firm. More broadly, a longitudinal study of German

workers promoted to managerial positions found that promotions positively affected job satisfaction within the first year (Otto et al., 2022). Promoted employees can thus feel a stronger sense of commitment to the firm and have a lower likelihood of exit (Benson and Rissing, 2020). In addition, because early promotions happen sooner in auditors' careers, they plausibly reduce the gap between internal advancement and external opportunities more than regular promotions do. This sharper decrease in the career progression "wedge" means that early promotions are linked to stronger retention outcomes than regular promotions, which occur later in one's career when outside opportunities may be even more lucrative.

From another perspective, early promotions can enhance employees' external opportunities by increasing their perceived market value, thus leading to more exits (Milgrom and Oster, 1987; Costa, 1988; Bernhardt and Scoones, 1993). A study of 1.2 million U.S. workers by the ADP Research Institute found that individuals who received a promotion faced a significantly higher risk of leaving their job within six months compared to those who were not promoted (ADP Research Institute, 2023). This suggests that employees may use promotions as leverage to explore better opportunities elsewhere. If the associated pay increase is modest, they may be more inclined to pursue higher compensation from competing employers. Additionally, if the promotion leads to increased workload and responsibility without adequate support, employees may perceive a decline in work-life balance or heightened burnout—factors that can further motivate their decision to exit (ADP Research Institute, 2023).

This tension is particularly salient in the audit profession. Public accounting experience—especially at the senior associate level—is highly valued in corporate accounting and finance roles, which offer attractive alternatives in terms of compensation, work-life balance, and career progression (Tang Kmet, 2018). Thus, early promotion may be linked to both improved internal

standing for auditors and greater attractiveness in external labor markets. We, therefore, state our first hypothesis as follows:

**H1:** *Junior auditors promoted early are equally likely to exit the firm as those promoted on the regular schedule.*

### **2.3 Early Promotion During Periods of Heightened Turnover**

The economic friction related to improving employee retention is related to firms deciding how to allocate their financial resources. On the one hand, when employees leave, firms incur significant costs associated with recruiting and training new hires. This includes advertising for job openings, time spent interviewing candidates, onboarding expenses, and the time it takes for new employees to get up to speed. On the other hand, in order to retain their current employees and reduce turnover, firms may need to increase overall compensation packages. This presents a tradeoff: the firm must weigh the ongoing expense of enhancing compensation against the potentially repeated and often substantial costs of replacing departing employees. Striking the right balance between these options is a key consideration in managing workforce costs and ensuring organizational stability.

No employee retention strategy is without costs. When firms increase labor costs in order to retain employees, they often cannot simply pass these additional expenses on to their clients by raising fees, since higher prices could discourage clients and decrease demand—the nature of a downward-sloping demand curve (Gerakos and Syverson, 2017). Implementing broad-based wage increases or improving benefits across the entire workforce, while effective in retaining employees, can be a particularly expensive approach. This is because labor costs already represent the largest portion of expenses for audit firms (Jensen and Meckling, 1979; Banker et al., 2003; Huddart and Liang, 2003) and salaries in this profession also tend to be relatively rigid. Such sweeping increases

in compensation could therefore have a significant impact on a firm's profitability and competitiveness.

Given the constraints described above, accelerating the timing of promotions may be a practical and cost-effective retention strategy, particularly when it targets a subset of the workforce. By promoting high-performing employees or those most at risk of leaving, firms can address retention issues without broadly increasing salary structures. Studies suggest that promotions can enhance employees' perceptions of career progression, which can help delay departures and reduce turnover among junior staff (Allen et al., 2010; Sull et al., 2022). By focusing retention efforts on these key individuals, firms can better manage the costs associated with employee turnover.

Retention challenges likely intensify during periods of elevated voluntary turnover. The increased costs of hiring and training plausibly push firms to reconsider their workforce management strategies. In this context, an important question is how audit firms can quickly adapt to labor disruptions without undermining their economic models. One timely response is to implement fast-track promotions, which can target top performers who are most likely to be enticed by external opportunities, thereby delaying their departure. Additionally, accelerating promotions during periods of high attrition enables firms to maintain capacity by filling mid-level vacancies more quickly. Since senior positions command higher billing rates, early promotions can help firms maintain their overall client billing rates (AOMAR, 2006). Promotions with wage increases can also make outside job opportunities less attractive by narrowing the difference in compensation between the current employer and the broader job market.

However, fast-track promotion may also entail costs. External employers often rely on observable signals—such as promotions and job titles—because they cannot directly assess employee productivity (Milgrom and Oster, 1987; Costa, 1988). Promotion can signal the worker's

productivity to competing employers, thereby increasing their attractiveness to other employers and exit risk (Bernhardt and Scoones, 1993). As a result, early promotions may make employees more attractive to external employers, thereby increasing the risk of poaching and subsequent departure—an especially costly outcome during periods of high turnover. In addition, shortening the period of performance measurement before promotion increases the risk of making poor promotion decisions, which can ultimately weaken the firm's performance and reputation.

Given these considerations, our second hypothesis examines the relationship between accelerated promotion and periods of heightened turnover:

**H2:** *The likelihood of early promotion is the same during periods of heightened turnover as during other periods.*

### **3. Data, Measures, and Research Design**

#### **3.1 Data and Sample**

We obtain data on auditors' employment history from Revelio Labs. Revelio Labs is an information technology company that collects and analyzes detailed workforce information from public employee profiles. The dataset provides individual-level information, including complete self-reported employment histories, job titles, tenure, demographics, educational background, and professional skills. This comprehensive data allows us to gain insights into auditors' career trajectories and the labor dynamics within the auditing profession.

Our sample contains the top 25 CPA firms based on their 2022 audit fees, according to Audit Analytics. This includes all the Big 4 and second-tier accounting firms, which comprise most of the public audit market. We start with all users and positions associated with the accounting firms in our sample, using data from Revelio Labs. To identify audit roles, we analyze the job titles and apply the following criteria. The job titles (1) contain common audit-related terms, like "associate," "senior associate," "manager," "senior manager," "director," and "partner"; (2)

are unrelated to other core functions, such as tax and consulting; (3) do not include terms related to other supporting roles, like law, compliance, administration, recruiting, marketing, or technology; (4) indicate full-time roles—titles indicating interns, temporary and seasonal workers, part-time employees, incoming hires, and retirees are excluded. Appendix B details the auditor identification process. We then classify each audit position based on job titles into six levels of seniority: associate, senior associate, manager, senior manager, director, and partner. Although Revelio Labs provides a variable for job levels across professions, it is not specific to auditors and often combines multiple levels into one category. Therefore, we do not use their classification for job seniority. Appendix C outlines our ranking classification process.

We construct two samples for our analyses. First, we create a cohort-based sample of junior auditors, comprising individuals who began their public accounting careers between 2016 and 2020.<sup>11</sup> We focus on junior auditors given their high turnover rates (Ma et al., 2024) and their central role in audit firms’ talent pipelines. We track each cohort for up to four years following their entry into the profession. To align with audit firms’ typical hiring cycles, each cohort consists of auditors who joined between July 1 of one year and June 30 of the following year. For example, the 2020 cohort consists of auditors who started between July 1, 2020, and June 30, 2021. This structure standardizes the “years-of-service” clock across cohorts, allowing us to measure promotion timing on a consistent scale. We start our sample in 2016, coinciding with Microsoft’s acquisition of LinkedIn, which significantly improved the platform’s data coverage. We end our main sample with the 2020 cohort to have sufficient follow-up data for this cohort. Cohort sizes in our sample remain relatively stable, with approximately 8,500 unique auditors entering each cohort. This cross-sectional junior auditor sample comprises 37,451 unique individuals.

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<sup>11</sup> Since our focus is on junior auditors, we require auditors in our sample to have no prior auditing experience when joining a company.

To assess the role of the GR in auditor exit risk, we construct a second sample at the auditor-quarter level, based on the junior auditor sample. We track each auditor for up to 16 quarters from their start date, yielding 416,071 auditor-quarter observations spanning from July 2016 through June 2024.

### 3.2 Research Design

#### *Early Promotion and Auditor Exit*

We study the connection between early promotion and auditor exit risk using the following Cox proportional hazard model for auditors' exit risk, with failure time measured in quarters since each auditor's entry into the firm:

$$h_{i,j,t}^{(m)} = h_0^{(m)}(t) \cdot \exp(\beta_1 \text{Early Promo}_{i,j,t} + \beta_2 \text{Regular Promo}_{i,j,t} + \lambda \text{Controls}_{i,j,t} + \text{Firm FE} + \text{Cohort FE}), \quad (1)$$

where  $h_{i,j,t}^{(m)}$  is the hazard rate—the instantaneous probability auditor  $i$  at firm  $j$  in MSA group  $m$  exits in quarter  $t$ , conditional on survival until quarter  $t$ . We stratify the baseline hazard using a binary indicator for whether the auditor is located in one of the ten most populous MSAs in the U.S. in the year they joined the firm, based on population rankings from the BLS.<sup>12</sup> The subscript  $m$  equals 1 for top ten MSAs, and 0 otherwise. The term  $h_0^{(m)}(t)$  denotes the baseline hazard, which is given no particular parameterization and can be left unestimated, consistent with the semi-parametric nature of the Cox model. The key covariates of interest are  $\text{Early Promo}_{i,j,t}$  and  $\text{Regular Promo}_{i,j,t}$ , which are time-varying indicator variables equal to 1 for the quarter of promotion and all subsequent quarters.  $\text{Early Promo}_{i,j,t}$  equals 1 in the post-promotion quarters

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<sup>12</sup> This approach allows the shape of the baseline hazard function to vary flexibly between auditors in large and small labor markets, capturing potential geographic differences in turnover timing without imposing parametric assumptions.

if the auditor was promoted within their first seven quarters at the firm, while  $Regular\ Promo_{i,j,t}$  equals 1 in the post-promotion quarters if the auditor was promoted after their seventh quarter.<sup>13</sup>

Our control variables include *Grad Degree*, an indicator for whether an auditor holds a master's degree or higher; *Acct Degree*, an indicator for whether an auditor has an accounting degree at either the bachelor's or master's level; *Miss Acct Degree*, an indicator equals to 1 if an auditor does not disclose whether she holds a bachelor's or master's degree in accounting; *TargetAcctU*, an indicator variable equals to 1 if the auditor holds a bachelor's or master's degree in accounting from a feeder school (i.e., a school with a strong accounting program), as identified in Appendix F of Ahn et al. (2024); *Female*, an indicator variable for women auditors; *Minority*, an indicator equals to 1 if an auditor is of Black, African American, or Hispanic descent; and *Unemp*, the annual Metropolitan Statistical Area (MSA)-level seasonally adjusted unemployment rates. To control time-invariant firm and time-specific factors, we include firm fixed effects and cohort fixed effects.

### ***Career Destinations Following Auditor Exit***

We further investigate how promotion timing relates to the type of post-exit transition auditors pursue by modeling auditor exits into distinct career destinations. While the model specification remains the same as in Equation (1), the failure event is redefined to reflect exit into a specific employment category. We estimate separate cause-specific hazard analyses to model auditors' career transitions into six mutually exclusive destinations: (1) Big 4 firm, (2) non-Big 4 firm, (3) corporate accounting, (4) financial consulting, (5) technology, and (6) other fields.<sup>14</sup> Exits

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<sup>13</sup> The next section provides details on the distribution of promotion timings and suggests that a promotion within the first seven quarters of tenure appears to be early.

<sup>14</sup> In a separate, untabulated analysis, internal moves from audit to non-audit roles within the firm show an exit-risk pattern similar to that for corporate accounting roles.

into alternative categories are treated as censored observations. This approach enables us to examine how early and regular promotion is connected to auditor exit risk across exit destinations.

### ***Junior Auditor Exit Risk during Heightened Turnover***

We use the Great Resignation (GR) as a setting of heightened voluntary turnover to examine how the link between promotion and retention changes during labor market disruptions. Beginning in 2021, the U.S. labor market experienced record-high job openings and quits; in December alone, 4.5 million workers quit and job openings reached 11.4 million, while layoffs fell to historic lows (Penn and Nezamis, 2022). Surveys conducted during this period point to dissatisfaction with pay, career advancement, and workplace culture, along with increased preferences for flexibility and wellbeing, as primary drivers of exits (Parker and Horowitz, 2022; Sull et al., 2022; Bagga et al., 2025). Existing research has examined this shock in the context of aggregate labor market effects (e.g., Faccini et al., 2022; Woods et al., 2024). Applying it to the audit profession offers a particularly relevant setting for studying retention strategies, as audit firms were already experiencing high voluntary turnover prior to the GR—especially among junior staff—making the profession more vulnerable to further increases in turnover during periods of labor market disruption. Heavy workloads, slow promotion paths, and relatively low pay have contributed to turnover among accountants and auditors, with over 300,000 leaving the workforce between 2019 and 2021 (Maurer, 2023)—a pattern consistent with evidence that sectors facing preexisting challenges were disproportionately affected during the GR (Parker and Horowitz, 2022).

We begin by validating this period as one of elevated exit risk among junior auditors. We estimate a modified Cox proportional hazard model described in Equation (1), where the failure

event is defined as an auditor's separation from her employer. Specifically, we estimate the hazard of exit using the following model:

$$h_{i,j,t}^{(m)} = h_0^{(m)}(t) \cdot \exp(\beta_1 GR + \lambda Controls_{i,j,t} + Firm FE + Cohort FE) \quad (2)$$

The key variable of interest, *GR*, is an indicator equals to 1 for calendar year 2021, representing the Great Resignation, when widespread voluntary resignations occurred across sectors. We include the same set of control variables and fixed effects as in Equation (1).

### ***Audit Firms' Promotion Practices During High-Turnover Periods***

We next examine whether audit firms adapt their promotion practices as employee exit pressure mounts during the GR. Using a cohort-based analysis and an OLS framework, we test whether firms accelerated promotion from associate to senior associate in the wake of the GR shock (corresponding to our second hypothesis):

$$\begin{aligned} Early\ Promotion_{i,c} &= \beta_0 + \beta_1 Cohort\ 2020_{i,c} + \lambda Controls_{i,j} \\ &\quad + Firm\ FE + MSA\ FE + FQtr\ FE + e_{i,c}, \end{aligned} \quad (3)$$

where the dependent variable, *Early Promotion<sub>i,c</sub>*, takes the value of 1 if auditor *i* of cohort *c* is promoted from the associate position to the senior associate position within the first seventh quarters after joining the firm, and 0 otherwise. The indicator variable *Cohort 2020* equals 1 if auditor *i* belongs to the 2020 cohort and 0 otherwise. This cohort experienced the GR shock during its second year of tenure (July 2021–June 2022), the typical promotion window. We include the same set of control variables as in Equation (1) and control for audit firm fixed effects, MSA fixed effects, and fiscal quarter fixed effects. In specifications without firm fixed effects, we additionally include a control for *Big4*, an indicator equals to 1 if the auditor works for a Big 4 accounting firm and 0 otherwise, to account for variation in promotion practices across audit firm types.

## **4. Empirical Results**

### **4.1 Descriptive Statistics**

Table 1, Panel A presents the distribution of junior auditors in our sample across the top 25 U.S. audit firms, focusing on individuals who entered the profession between July 2016 to June 2021 (Cohorts 2016-2020). The sample is heavily concentrated among the Big 4 firms—PricewaterhouseCoopers (PwC), Ernst & Young (EY), KPMG, and Deloitte—which collectively account for over two-thirds of all junior auditors. PwC alone comprises 25.0% of the sample, followed by EY (19.5%), KPMG (17.8%), and Deloitte (13.6%). The second-tier firms—RSM, Grant Thornton, BDO, CohnReznick, Moss Adams, and Crowe—together account for approximately 18% of the sample, with RSM (5.9%), Grant Thornton (4.8%), and BDO (3.6%) as the largest among them. The remaining firms are smaller, regionally focused practices, each contributing a much smaller share of junior auditors and together accounting for roughly 5% of the sample. This distribution reflects the hierarchical structure of the public accounting profession, where the Big 4 dominate entry-level hiring, followed by a set of national second-tier firms and a long tail of smaller regional firms.

Table 1, Panel B presents the descriptive statistics for the variables in our auditor sample used in the promotion timing test, Equation (3). Approximately 19.1% of junior auditors in the sample received an early promotion (defined as promotion by the end of the seventh quarter). Just over half of the auditors hold a graduate degree (53.3%), consistent with prior studies (Ma et al., 2024). About 21.8% of auditors graduated from a feeder school. Female auditors represent 44.5% of the sample, and minority auditors account for 16.4%. The average local unemployment rate at the time of entry was 4.9%, with relatively low dispersion. Finally, 75.9% of auditors began their careers at Big 4 firms, reflecting the concentration of entry-level hiring in the largest audit firms.

Table 1, Panel C presents the Pearson correlations (below the diagonal) and Spearman correlations (above the diagonal) among the key variables. Most pairwise correlations are modest in magnitude, suggesting limited multicollinearity. The strongest relationships appear between educational background variables. For example, *Acct Degree* is positively correlated with *TargetAcctU* (0.484) and *Grad Degree* (0.416), as expected.

In Table 2, we report the summary statistics on promotion and exit for each cohort from 2016 to 2021. We track each cohort for four years, except the 2021 cohort, which we observe for only three years due to data limitations. Column (4) reports the number of junior auditors at the beginning of each year. The initial sizes of the six cohorts range from 7,931 to 9,488. Columns (5) and (6) report the share of junior auditors who are female and minority, respectively. Across all six cohorts, there are initially more male than female auditors. The proportion of female auditors starts at 44% to 45% and gradually increases over time. By the end of the fourth year, this proportion rises to 47–49% for most cohorts, suggesting that female junior auditors have a relatively lower exit rate compared to their male counterparts. Columns (7) to (16) report annual promotion rates (from associate to senior associate), annual exit rates, and cumulative exit rates, with additional breakdowns by gender and ethnicity.

Several key patterns emerge from the data. First, junior auditor turnover remains persistently high: nearly 10% of new auditors exit by the end of their first year, and about 50% leave their firms by the end of their third year. Second, most promotions to senior associate occur during the second and third years, while the rate is low during the first year (ranging from 1% to 3% across cohorts). Of particular importance for our paper, the second-year promotion rate for the 2020 cohort is markedly higher than in previous cohorts, reaching 49%. This suggests that accounting firms may have relied more on early promotion during the elevated turnover in 2021.

To further examine junior-auditor promotion practices, Figure 1 shows the distribution of time to promotion from associate to senior associate for auditors promoted in the 2016–2020 cohorts. The promotions are heavily clustered in the seventh and eighth quarters. Specifically, over 40% of promotions occur in the eighth quarter, while the seventh quarter accounts for another 22.7%. Cumulatively, about 32.4% are promoted by the end of the seventh quarter. The concentration of promotions in the latter half of junior auditors' second year reflects the relatively standardized promotion cycle in audit firms. Given these patterns, we define early promotion as occurring within the first seven quarters after joining the firm.

## 4.2 Auditor Exit Risk

### *Early Promotion and Exit Risk*

Table 3, Panel A reports the results of the Cox proportional hazard model specified in Equation (1). We first assess the overall relationship between promotion and exit risk using *Promo*, a time-varying indicator that equals one in the quarter of promotion and all subsequent quarters. Columns (1) to (3) report the results. All specifications control for cohort fixed effects. In Column (3), the specification further controls for audit firm fixed effects. We find a negative and statistically significant association between promotion and exit risk across our specifications, suggesting that promotion is correlated with greater auditor retention.

Columns (4)–(6) focus on promotion timing, reporting exit risk separately for early promotion, *Early Promo*, and regular promotion, *Regular Promo*. Both early and regular promotions are associated with lower exit risk; and the reduction is larger for early promotion. Panel A (last row) reports p-values for the difference between early- and regular-promotion coefficients and shows sharper decline in exit risk for early-promoted auditors than for regular ones, which weakens to just below the 10% significance level once audit firm fixed effects are

included. Therefore, auditors receiving regular promotions may perceive fewer internal advancement opportunities and greater external ones, with cross-firm differences in promotion norms or retention policies potentially explaining the stronger effect observed for early promotion.

To show how the Panel A results in Table 3 translate into auditors' likelihood of staying at the firm, Figure 2 plots the Cox-based survival curves from quarter zero through quarter sixteen of tenure.<sup>15</sup> Figure 2(a) compares the survival probabilities of female versus male auditors and shows the lower exit risk for female auditors, consistent with Chen et al. (2025). Although women have historically faced structural disadvantages in promotion and pay, this finding is consistent with recent evidence that they may prioritize job stability and may also reflect audit firms' attempts to retain more female auditors (Chen et al., 2025). Figure 2(b) compares survival probabilities across three groups of auditors: (1) those with an accounting degree from a feeder school (i.e., a school with a strong accounting program), (2) those with an accounting degree from a non-feeder school, and (3) those without an accounting degree.<sup>16</sup> Auditors with accounting degrees from feeder schools exhibit slightly higher retention, while those without accounting degrees show relatively lower survival. This might suggest that accounting education and familiarity with the profession—captured by academic background—can enhance early-career fit and improve retention. Figure 2(c) shows that auditors with graduate degrees have slightly lower retention than those without, likely reflecting greater outside opportunities that increase their likelihood of exit. Figure 2(d) shows that auditors at Big 4 firms consistently exhibit a relatively lower exit risk than those at non-Big 4 firms. This may reflect both stronger selection of junior auditors by Big 4 firms and the prestige, resources, and advancement opportunities available at larger firms, which

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<sup>15</sup> The survival probabilities reported in the plot correspond to the Cox hazard model from equation (1) and keep the covariates at their mean values.

<sup>16</sup> We follow the feeder school definition provided in Appendix F of Ahn et al. (2024).

together help mitigate turnover relative to non-Big 4 firms. It also underscores that exit risk is influenced not only by personal attributes but also by firm size.

### **Promotion Timing and Exit Risk Dynamics**

To further explore how retention effects associated with promotion evolve over time, we estimate a piecewise Cox hazard model that divides the post-promotion period into five intervals: the promotion quarter ( $Q0$ ), quarters 1-2 ( $Q12$ ), quarters 3-4 ( $Q34$ ), quarters 5-6 ( $Q56$ ), and quarters 7-8 or later ( $Q78+$ ). We construct indicators for each of these post-promotion intervals, along with versions specific to early and regular promotion. For example,  $Promo\_Q12$  equals 1 during the two quarters following the promotion quarter for auditors promoted from associate to senior associate, and 0 otherwise.  $Early\ Promo\_Q12$  ( $Regular\_Promo\_Q12$ ) equals 1 during the two quarters following the auditor's early (regular) promotion from associate to senior associate, and 0 otherwise.

Table 3, Panel B reports the results and Panel C compares the corresponding hazard ratios and changes in exit risk for early versus regular promotion. In Columns (1)-(3), we examine the dynamic effects associated with promotion regardless of its timing. Relative to non-promoted auditors and to promoted auditors' pre-promotion quarters, exit risk is significantly lower in the promotion quarter and remains lower for up to six quarters before partially reversing. Thus, promotion is linked to stronger retention that gradually fades and reverses about seven or more quarters later.

Columns (4)-(6) decompose promotion into early and regular types. In the two quarters after promotion ( $Q12$ ), both groups show lower exit risk, but the decline is much larger for early promotions. As shown in Panel C, the hazard ratio is 0.62 (a 38% reduction in exit risk) for early promoters compared with 0.85 (a 15% reduction) for regular promoters. This difference is

statistically significant as indicated in the last column of Panel C. The gap widens over the following year. Early promoters continue to show below-baseline exit risk in Q34 and Q56, with hazard ratios of 0.87 and 0.69 (declines of 13% and 31% in exit risk, respectively). In contrast, regular promoters' exit risk rises above baseline in these intervals, with hazard ratios of 1.07 and 1.09 (increases of 7% and 9% in exit risk, respectively). Beyond six quarters (Q78+), both groups experience elevated exit risks—marking a reversal of the retention benefit for early promoters and a continuation of high exit risk for regular promoters.<sup>17</sup> Figure 3 summarizes the dynamic patterns for early and regular promoters, with the pre-promotion period as the baseline and hazard ratios with 95% confidence intervals for each post-promotion interval.<sup>18</sup> Blue diamonds represent early promotion effects, and pink circles represent regular promotion effects.

Thus, promotion is associated with improved outside options for both early- and regular-promoted auditors, but the timing of the reversal differs: the pattern persists for six quarters after early promotion and two quarters after regular promotion. These patterns are consistent with promotion serving as both a retention signal and a stepping-stone to external opportunities. The initial reduction in exit risk may reflect improved employee loyalty and satisfaction from accelerated advancement, while the eventual increase in exits is consistent with promotions making employees more attractive to external employers, as promotions plausibly signal higher employee value (Milgrom and Oster, 1987; Bernhardt and Scoones, 1993; Trevor et al., 1997).

We next examine the nature of the sustained retention benefits associated with early promotions relative to regular promotions. One possibility is that accelerated promotion strengthens employees' commitment to the firm and career satisfaction, thereby delaying exits.

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<sup>17</sup> For this interval, the changes in exit risk are similar across the two groups.

<sup>18</sup> We find similar results when including cohort-by-start quarter fixed effects, which compare auditors who started around the same time. This suggests that our early promotion measure likely reflects off-cycle accelerated promotion rather than later starters being promoted in the same fixed annual cycle.

Another possibility is that promotion amplifies exit opportunities once junior auditors reach tenure-based milestones—such as becoming eligible for CPA certification or accumulating enough experience to attract external employers. Since regular promotions occur later in tenure, these auditors reach such milestones sooner post-promotion, potentially explaining why early promotions exhibit more sustained retention effects.<sup>19</sup>

We conduct two additional tests to assess whether tenure-based milestones explain our results. First, we compare exit risk between early and regular promoters at equivalent tenure periods (one and a half years post-promotion for early promoters versus one-year post-promotion for regular promoters). In our sample, the difference between average tenure at promotion between early and regular promoters is two quarters, meaning that granting early promoters six additional months to accumulate tenure closes the gap between the average tenure at promotion for these two groups. The fourth row of Panel C in Table 3 compares Q56 post-promotion effects for early promoters with Q34 post-promotion effects for regular promoters. Even with this adjustment, early promoters show significantly lower exit risk at Q56, while regular promoters show higher exit risk at Q34, with the difference between these two types of promotions being significant at less than 1% significance level. This evidence is inconsistent with the idea that the retention benefits of early promotion are fully explained by tenure-related certification or experience thresholds.

Second, in untabulated analyses, we repeat the Table 3, Panel B tests for a sample that includes both non-promoters and auditors promoted in quarters 7–8, which restricts the difference in tenure between early and regular promoters to exactly one quarter. We find that a one-quarter-earlier promotion delays exit by approximately one year—substantially more than the mechanical

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<sup>19</sup> Note that the general effects of auditor tenure are absorbed by the baseline hazard function. Thus, our results may capture the interaction between promotion and tenure-based milestones but cannot be explained solely by milestone effects unrelated to promotion.

one-quarter timing difference. This further suggests that the retention benefit of early promotion is unlikely to be driven solely by differences in tenure at promotion between early and regular promoters.

Our findings are subject to potential endogeneity concerns: auditors promoted early may differ systematically from those promoted on schedule (e.g., in quality or career ambitions), making it difficult to attribute differences in exit patterns solely to promotion timing or to the positive assessment of career prospects that early promotions convey. Lower exit risk following early promotion is not fully consistent with the hypothesis that early-promoted auditors are higher quality, since such auditors should be more sought after by external employers, leading to higher—not lower—exit risk. To assess robustness to selection on observables, we estimate time-varying propensity scores for receiving early versus regular promotion based on gender, education (degree type, major, target-school indicator), and other demographics. We use these scores to construct inverse probability of treatment weights (IPTW) and incorporate them into a Cox proportional hazards model of exit risk. This reweighting balances the distribution of observable characteristics across promotion groups, with balance diagnostics showing substantial reductions in standardized mean differences. The untabulated IPTW-adjusted estimates reveal similar differences in exit risk between early and regular promoters, suggesting that observables are unlikely to drive our findings. While we cannot rule out selection on unobservable factors, our results are consistent with early promotion being associated with retention benefits.

In addition, while *involuntary* exits among non-promoted auditors could partly explain the negative coefficients on promotion indicators, our results are not fully consistent with this interpretation. Table 3, Panel B shows that promoted auditors are more likely to exit about half a year to one and a half years after promotion (depending on timing). These positive coefficients

imply that, relative to non-promoted auditors—who likely face higher *involuntary* exit—promoted auditors still exit more. Moreover, the difference between early and regular promotion effects discussed in the previous paragraph suggests that the findings cannot be explained solely by exit patterns of the non-promoted control group; otherwise, early and regular promotion would display similar tenure-based patterns.

#### 4.3 Promotion Timing and Auditor Exit Destination

We next turn to the career trajectories of junior auditors who exit their employer. Table 4, Panel A examines specific post-exit destinations of exiting auditors. We model the hazard of exiting into one of six career paths—Big 4 firms, non-Big 4 firms, corporate accounting, financial consulting, technology, or other roles—following the classification of Choi et al. (2024).<sup>20</sup> For ease of interpretation, Panel B converts the coefficients from Panel A into hazard ratios, showing the corresponding changes in exit risk and the statistical differences between early and regular promotions.

Columns (1) and (2) of Panel A show that early promotion is associated with a persistent reduction in exits to both Big 4 and non-Big 4 rivals. Relative to the pre-promotion baseline, exit risk for early promoters falls by 32–62% for Big 4 rivals and 22–51% for non-Big 4 rivals across post-promotion intervals. By contrast, regular promotion is linked to a sharp but short-lived retention effect: exit risk drops in the promotion quarter but quickly reverts toward the baseline,

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<sup>20</sup> We define each industry destination as follows: (1) Big 4 includes the top four accounting firms; (2) Non-Big 4 includes public accounting firms with NAICS codes beginning with 5412, excluding the Big 4; (3) Corporate Accounting includes roles with SOC codes 13-2011.00 (Accountants and Auditors), 13-2082.00 (Tax Preparers), 43-3031.00 (Bookkeeping, Accounting, and Auditing Clerks), and 43-4141.00 (New Accounts Clerks), outside of public accounting; (4) Financial Consulting includes non-auditing roles in industries with NAICS codes starting with 52 (Finance and Insurance) or 5416 (Management, Scientific, and Technical Consulting Services); (5) Tech includes non-auditing roles in industries with NAICS codes 51 (Information), 5415 (Computer Systems Design and Related Services), or 5417 (Scientific Research and Development Services); and (6) all remaining exits are classified under Other. In addition, when we model internal career transitions within our sample audit firms (e.g., junior auditors moving into non-audit roles), the exit risk pattern looks similar to that for corporate accounting roles.

with all subsequent coefficients insignificant. Thus, regular promotion shows no reduction in exits to rival audit firms.

For early promoters, the persistently lower exit risk to competitor public accounting firms is accompanied by higher exits into corporate accounting roles beginning about seven quarters after promotion, as indicated by the positive and significant coefficient on *Early Promo\_Q78+*. Regular promotion, by contrast, shows an earlier and sustained increase in exits to corporate accounting starting around one year post-promotion, reflected in the positive and significant coefficient on *Regular Promo\_Q34* and the following intervals. For financial consulting, both promotion types exhibit delayed increases on a similar timetable (both types of promotion have positive and significant coefficients 7 or more quarters after promotion), but the effect is much stronger after regular promotion than after early promotion. We do not find comparable, sustained increases for technology or other roles.

These patterns point to differences in subsequent career paths for early- versus regular-promoted auditors: in the near term early promotion is associated with firms retaining talent within public accounting, but over time it is linked to more auditors moving into corporate accounting and financial consulting.<sup>21</sup> The growing appeal of corporate accounting destinations—such as internal audit, financial reporting, and controllership—is consistent with traditional post-audit moves that leverage accounting expertise. This shift may be especially pronounced in the post-pandemic environment, as corporate roles often provide greater schedule predictability and reduced travel demands, factors increasingly valued by workers (De Smet et al., 2022; Parker and Horowitz, 2022). Consequently, promotion timing is connected to broader concerns about structural talent shifts out of the profession. Given persistent staffing challenges in both public and

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<sup>21</sup> In an untabulated set of tests, we repeat the analyses in Table 4 for IPTW-adjusted sample and find similar results, suggesting that observable auditor characteristics associated with early promotion are unlikely to drive our findings.

corporate accounting (Hann et al., 2024; AICPA, 2023b), it is important to recognize the link between promotion practices and the movement of auditors from firms into industry roles, reshaping the accounting labor force.

#### **4.4 Promotion Timing under Heightened Turnover**

##### *Heightened Turnover during the Great Resignation*

Before studying whether the relation between promotion and retention changes in periods of heightened turnover, we validate that the audit profession was subject to the same, well-documented wave of quits that swept the broader U.S. labor market in 2021—the GR period (BLS, 2022; Sull et al., 2022; Fuller and Kerr, 2022). We begin with descriptive evidence to visualize the impact of the GR on the audit profession. Figure 4, Panel A depicts the total annual count of auditor exits from 2016 to 2024, along with the counts for associates and senior associates. All three groups exhibit broadly similar trends over time. Consistent with the audit profession facing a turnover shock during the GR, the number of auditor exits increases sharply in 2021, relative to the prior years, and reverses back in 2022.

Figure 4, Panel B presents the number of Glassdoor reviews posted by our sample firms' employees from 2016 to 2024.<sup>22</sup> As Glassdoor requires users to submit their reviews before accessing others' information, the volume of reviews serves as a useful proxy for planned and active job-seeking behavior. Review counts are flat until mid-2020 and climb steeply, peaking in early 2021. The timing of the peak is consistent with the exit spike shown in Figure 4, Panel A, suggesting that auditors—like workers in other industries—were actively reassessing their employment options during the GR.

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<sup>22</sup> For Glassdoor reviews, we cannot differentiate employees' ranks and associated business lines (e.g., auditing and advisory). As a result, we report the number of reviews by all employees.

To assess the statistical significance of the increase in exit risk during the GR, while controlling for auditor characteristics, local unemployment, and firm- and cohort-specific effects, we use a Cox hazard framework. Table 5 reports the results, where the key independent variable,  $GR$ , is a binary indicator equal to one for quarters in calendar year 2021. Controls and fixed effects follow Equation (2). Across all four specifications, the coefficient on  $GR$  is positive and statistically significant at the 1% level, indicating that junior auditors were significantly more likely to leave their firms during the GR compared to other periods. The hazard ratios corresponding to the estimated coefficients imply a substantial increase in exit risk—ranging from 52.8% to 60.8%, depending on the specification. The control variable coefficients align with expectations. Junior auditors with graduate degrees show higher exit risk, likely reflecting stronger outside options. In contrast, those with accounting degrees or from target schools have lower exit risk, possibly due to closer alignment with the profession or stronger firm attachment. Female auditors exhibit significantly lower exit hazards than males (e.g., Chen et al., 2025), while minority status is not significantly related to exit risk.

Our results show that public accounting firms experienced an abnormal spike in junior auditor exit risk during the GR. This pattern closely mirrors the rise in quit rates observed in sectors such as manufacturing, technology, and healthcare (Fuller and Kerr, 2022; Sull et al., 2022; Gittleman, 2022). These findings validate the GR as a bona fide labor market shock, which we use in the following analyses to study how accounting firms respond to heightened turnover and the associated exit risk.

### ***Promotion Timing during Periods of Heightened Turnover***

Because the audit profession experienced significant disruption during the GR, we examine whether firms adjusted promotion practices. Specifically, we test whether promotion timing differs

for the 2020 cohort, which encountered the GR shock during its second year of tenure (July 2021–June 2022), the typical promotion window. Although the GR began in March–April 2021, firms likely needed time to register the spike in exits before responding with accelerated promotions.

In Figure 5, Panel A, we compare the promotion timing distributions between the 2016–2019 cohorts (pre-GR) and the 2020 cohort, whose second year aligns with the GR. We observe a clear leftward shift in the promotion timeline for the 2020 cohort. Most notably, the modal promotion quarter shifts from the eighth quarter to the seventh quarter, suggesting that audit firms likely accelerated promotion timing in response to elevated turnover risk during the GR. Figure 5, Panel B presents the empirical cumulative distribution functions (ECDFs) of promotion timing for the combined 2016–2019 cohorts and the 2020 cohort. The ECDF for the 2020 cohort lies above that of the earlier cohorts at nearly all points up to the eighth quarter—especially during the sixth and seventh quarters (around three quarters into the start of the GR in March 2021)—indicating a shift toward earlier promotion. Finally, untabulated Anderson-Darling test confirms that the promotion timing distribution for the 2020 cohort differs significantly from that of the 2016–2019 cohorts, at the 1% level.

Table 6 reports our analyses examining whether audit firms accelerated promotions of junior auditors during the GR. Panel A presents a univariate comparison of time to promotion (in months) between the 2020 cohort and the combined 2016-2019 cohorts. Auditors in the 2020 cohort—whose second year coincided with the GR—were promoted significantly faster than their pre-GR counterparts. The average promotion time fell from 23.74 months for the 2016–2019 cohorts to 20.67 months for the 2020 cohort, a reduction of 3.07 months. A two-sample t-test confirms that this difference is statistically significant at the 1% level. The median promotion time also declined, from 23 to 21 months, with a Wilcoxon rank-sum test similarly indicating a

significant difference ( $p < 0.01$ ). These findings suggest that the acceleration in promotion timing is not driven solely by outliers.

Table 6, Panel B reports the results of OLS regressions using the cross-sectional sample of junior auditors described in Equation (3). All specifications include MSA and fiscal quarter fixed effects; some also include firm fixed effects. Columns (1)–(2) model the likelihood of any promotion, Columns (3)–(4) model the likelihood of early promotion, and Columns (5)–(6) model the likelihood of regular promotion. Columns (1) and (2) show a marginally positive coefficient on the *Cohort2020* indicator in the overall promotion regressions, though the effect is small in magnitude. In contrast, Columns (3)–(6) reflect a substantial increase in the likelihood of early promotion and a sizable decline in the likelihood of regular promotion. Specifically, auditors in the 2020 cohort are 32.1%–33.2% more likely to be promoted early and 25.6%–25.9% less likely to receive regular promotion, relative to auditors in the preceding cohorts. Although we observe a small increase in overall promotion rates for auditors exposed to heightened turnover in their second year, the relative magnitudes of the changes in early and regular promotion likelihoods suggest that firms primarily substituted regular promotions with earlier ones, rather than broadly lowering the promotion threshold and advancing lower-ability employees with limited outside opportunities.<sup>23</sup>

While accelerated promotion of the 2020 cohort may reflect firms' response to elevated turnover, an alternative explanation is the delayed start of auditors in this cohort. To assess this, Panel C of Table 6 reports two additional tests. Columns (1)–(2) exclude auditors who joined in the second fiscal quarter (October–December) of 2020. Columns (3)–(4) include all cohorts but

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<sup>23</sup> In untabulated analyses, we also estimate the regressions in Columns (3)–(4) on the subsample of auditors who were promoted, providing an alternative test for a shift in the type of promotions firms relied on during periods of heightened turnover. Consistent with the acceleration of promotion timing during the GR, we find a strong positive coefficient on *Cohort2020* in these tests.

restrict the sample to auditors who started in the first fiscal quarter (July–September). In both cases, we continue to find a significant increase in the likelihood of early promotion. Thus, delayed start is unlikely to fully explain the acceleration in promotion timing for the 2020 cohort.

Overall, the findings in Table 6 support our conjecture that audit firms accelerated junior auditor promotions during the period of heightened turnover marked by the GR. Taken together with our earlier evidence on exits from public accounting, these patterns are consistent with accelerated promotion during labor-market shocks being associated with greater movement from audit firms into industry (corporate) roles, with implications for the profession’s composition.

### ***Accelerated Promotion and Auditor Exit during Heightened Turnover***

We further examine whether the relationship between early promotion and auditor exit risk changes during the heightened turnover period. Specifically, we run a modified version of Equation (1) where we interact *Early Promo* and *Regular\_Promo* with an indicator variable, *Promo\_GR*, which equals one if an auditor is promoted from associate to senior associate during the period from July 2021 to June 2022. We begin the GR window for this test in July 2021 to allow for the lag between the spike in exits and firms’ adjustment of promotion policies after the GR began around March–April 2021.

Table 7 reports the results. There is little evidence that the GR altered the retention effects of promotion. Across specifications, the coefficients on *Early Promo* and *Regular Promo* remain negative and statistically significant, with magnitudes comparable to those in Table 3. In Column (3), which includes firm fixed effects and cohort-by-starting-quarter fixed effects, the interaction terms are small and statistically insignificant, indicating no material change in the promotion–exit relation during the GR. While early promotion has a stronger negative association with exit risk than regular promotion, the interaction with GR promotion is statistically similar across the two

types ( $p = 0.67$  for b - d), as shown by the p-values at the bottom of Table 7.

Overall, our findings suggest that firms' greater reliance on early promotion during the GR may have helped mitigate elevated turnover, with reduced exit risk persisting even amid broader labor market disruption.

#### 4.5 Labor Market Concentration and Auditor Exit Risk

Local labor market structure may shape how exposed audit firms were to elevated exit risk during the GR. In unconcentrated markets, where junior auditors have more outside opportunities, firms are likely more vulnerable to increased quits and thus face stronger pressures to manage retention. In contrast, firms operating in concentrated labor markets may be shielded from heightened turnover, as limited mobility leaves employees with fewer viable exit options (Aobdia et al., 2024b; Azar et al., 2020). Prior work supports this dynamic: for example, Aobdia et al. (2024b) show that audit offices in concentrated markets place higher demands on employees without compensating them with higher pay. Therefore, firms in concentrated labor markets might face muted incremental exit risk during the GR. In this section, we examine how local labor market concentration is associated with junior auditors' exit risk during the GR.

We estimate a modified Equation (2) where we interact the indicator for the GR period,  $GR$ , with MSA-level labor market concentration measures. We use two measures of concentration— $HHI_A$  (based on all audit firm job postings) and  $HHI_S$  (based on the job postings by audit firms in our sample). Table 8 reports the results. We find that labor market concentration is associated with a muted auditor exit risk during GR.<sup>24</sup> Consistent with prior work showing that firms in concentrated labor markets rely on limited external job options to retain staff (Azar et al.,

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<sup>24</sup> We restrict the analysis to audit offices with at least 30 job postings and check in untabulated tests the robustness of the results when lowering the cutoff to 20 or 10 postings per audit office.

2020; Aobdia et al., 2024b), we show that auditors in more concentrated markets face significantly lower exit risk, as indicated by the negative coefficients on both  $HHI_A$  and  $HHI_S$ . The interaction terms between the GR and both HHI measures are large and negative, indicating that audit firms in less concentrated markets face greater turnover risk during periods of heightened labor turnover than those in more concentrated markets.

## 5. Conclusion

Human capital is fundamental to the audit profession, where professional judgment and skepticism are crucial to audit quality and the integrity of financial reporting. Despite this critical dependency, there is limited empirical evidence on factors associated with auditor retention and career mobility, or how firms respond to labor market disruptions. In this study, we examine one specific mechanism that has received little attention in the literature: early promotion.

Using survival analysis, we find that promotion timing has distinct and dynamic associations with auditor retention. While both early and regular promotion are linked to initially lower exit risk, these effects diverge markedly over time. Early promotion is associated with a retention benefit that persists for more than a year, while regular promotion shows a short-lived reduction in exit risk that subsequently reverses. Cause-specific hazard models further reveal that early promotion is linked to altered career trajectories—early promotion is consistently associated with lower exit risk to other public accounting firms but shows increased association with exits to corporate accounting and financial consulting roles one and a half years after promotion. In contrast, regular promotion is not linked to a sustained reduction in exits to other public accounting firms, but shows a sooner increase in exits to corporate accounting roles. Extending this analysis to the Great Resignation, we find that firms actively accelerated promotion timelines during this

period of unprecedented turnover, suggesting that promotion might serve as a flexible lever for managing short-term retention and staffing needs.

Taken together, these findings demonstrate that early promotion is associated with differences in whether, when, and where auditors exit, with implications for firm-level talent strategies and the cross-sector flow of accounting expertise. Early promotion is linked to more sustained retention benefits and to lower talent flows to rival audit firms, yet eventual moves into corporate accounting still occur. This dynamic suggests that accelerated promotion coincides with shifts in workforce composition and the longer-term distribution of accounting expertise. More broadly, these insights contribute to understanding mobility patterns observed during labor-market shocks in professional service industries.

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## Appendix A: Variable Definitions

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### **Outcome Variables**

Early Promotion	An indicator variable equal to 1 if an associate auditor is promoted to senior associate within seven quarters of their start date, and 0 otherwise.
Auditor Count	The total number of auditors of the cohort at the beginning of the year.
Female (%)	The proportion of females within a cohort in a given year.
Minority (%)	The proportion of individuals from minority groups within a cohort in a given year, where minorities are defined as those of Black, African American, or Hispanic descent.
Ann. Exit	The number of exits from a cohort each year.
Promotion (%)	The promotion rate of a cohort in the year.
Annual Exit (%)	The exit rate of a cohort in the year.
Cumulative Exit (%)	The cumulative exit rate of a cohort up to a year.

### **Independent Variables**

GR	An indicator variable equal to 1 if it is the calendar year 2021, representing the Great Resignation, when widespread voluntary resignations occurred across sectors, otherwise 0.
Promo_GR	An indicator variable equal to 1 if an associate auditor is promoted to senior associate between July 2021 to June 2022, and 0 otherwise.
Cohort2020	An indicator variable equal to 1 if an auditor joins the firm in the fiscal year 2020 (2020 July 1 to 2021 June 30), otherwise 0. We align audit firms' fiscal years with their typical hiring cycles for consistency.
Promo	A time-varying indicator equal to 1 for the quarter of promotion and all subsequent quarters for auditors who are promoted after joining the firm, and 0 otherwise..
Early Promo	A time-varying indicator equal to 1 for the quarter of promotion and all subsequent quarters for auditors promoted within their first seven quarters at the firm, and 0 otherwise.
Regular Promo	A time-varying indicator equal to 1 for the quarter of promotion and all subsequent quarters for auditors promoted after their first seven quarters at the firm, and 0 otherwise.
Promo_QMN	An indicator variable equal to 1 for the <i>M</i> th and <i>N</i> th quarters <i>after</i> the promotion quarter (excluding the promotion quarter) for auditors who are promoted after joining the firm, and 0 otherwise. For example, <i>Promo_Q12</i> equals 1 in the first and second quarters after promotion. <i>Promo_Q78+</i> equals 1 in the seventh, eighth, and all subsequent quarters following promotion.
Early Promo_QMN / QMN Early	An indicator variable equal to 1 for the <i>M</i> th and <i>N</i> th quarters <i>after</i> the promotion quarter (excluding the promotion quarter) for auditors who are promoted within their first seven quarters at the firm (early promoters), and 0 otherwise. For example, <i>Early Promo_Q12</i> equals 1 in the first and second quarters after promotion. <i>Early Promo_Q78+</i> equals 1 in the seventh, eighth, and all subsequent quarters following promotion.
Regular Promo_QMN / QMN Regular	An indicator variable equal to 1 for the <i>M</i> th and <i>N</i> th quarters <i>after</i> the promotion quarter (excluding the promotion quarter) for auditors who are promoted after their first seven quarters at the firm (regular promoters), and 0 otherwise. For example, <i>Regular Promo_Q12</i> equals 1 in the first and second quarters after promotion.

*Regular Promo\_Q78+* equals 1 in the seventh, eighth, and all subsequent quarters following promotion.

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### **Control Variables and Cross-Sectional Variables**

Grad Degree	An indicator variable equal to 1 if an auditor holds a master's degree or above, otherwise 0.
Acct Degree	An indicator variable equal to 1 if an auditor holds a bachelor's or master's degree in accounting, and 0 otherwise.
Miss Acct Degree	An indicator variable equal to 1 if an auditor does not disclose whether she holds a bachelor's or master's degree in accounting, and 0 otherwise.
TargetAcctU	An indicator variable equal to 1 if the auditor holds a bachelor's or master's degree in accounting from a feeder school, as identified in Appendix F of Ahn et al. (2024), and 0 otherwise.
Female	An indicator variable equal to 1 if the auditor is female, and 0 otherwise.
Minority	An indicator variable equal to 1 if an auditor is of Black, African American, or Hispanic descent, and 0 otherwise.
Unemp	Annual MSA-level seasonally adjusted unemployment rates (U.S. Bureau of Labor Statistics).
Big4	An indicator variable equal to 1 if the auditor is employed by a Big 4 accounting firm, and 0 otherwise.
HHI_A	The decile ranking of an audit office's labor market concentration in a given year, based on the Herfindahl-Hirschman Index (HHI), scaled from 0 to 1. The HHI is calculated at the MSA-year level based on the distribution of audit job postings (associate, senior associate, and manager positions) among all accounting firms operating in the MSA, not limited to the 25 firms in our sample.
HHI_S	The decile ranking of an audit office's labor market concentration in a given year, based on the Herfindahl-Hirschman Index (HHI), scaled from 0 to 1. The HHI is calculated at the MSA-year level based on the distribution of audit-related job postings (associate, senior associate, and manager positions) among the 25 accounting firms included in our sample. A higher value indicates greater concentration of hiring activity among the sampled firms.

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## Appendix B: Methodology for Identifying Audit Positions

This appendix outlines the methodology used to identify audit positions based on the raw job titles reported by employees for each of their employments from Revelio.

### Step 1: Exclusion of Temporary Positions

First, we excluded all temporary positions. These positions were identified using specific keywords, as detailed in the table below:

Keywords	Example Job Titles
summer, winter, intern	Audit Intern, Deloitte Summer Program, Summer Associate, Winter Analyst
temporary, temp_	Temporary Associate
seasonal	Seasonal Tax Associate
contract	Contractor, Independent Contractor
part-time, part time	Part-time Assistant, Part Time Assistant
co-op, co op, coop, cooperative	Audit Co-op, Co Op
incoming	Incoming Audit Associate
retire	Retired Partner

### Step 2: Screening for Potential Audit Positions

After excluding temporary positions, we identified potential audit positions using the following keywords: *audit, assur, and attest*.

For users whose job titles do not contain these keywords, we applied an additional screening criterion. Specifically, if a job title includes one of the following designations—*associate, supervisor, manager, director, principal, or partner*—and the corresponding *role\_k1500* classification (Revelio's proprietary job classification system) falls under one of the following categories: *audit, tax, gm, md, director, account, financial, finance, or analyst*, the individual is also classified as an auditor.

### Step 3: Refining the Sample to Remove False Positives

To enhance the precision of the audit position classification, we implemented a two-step refinement process to exclude false positives from the initial screening.

#### 3.1 Exclusion of Non-Audit Roles

This step removed non-audit roles that, while part of CPA firms' core functions, do not involve auditing responsibilities, such as positions in tax or consulting. Relevant keywords and example job titles used for exclusion are summarized below.

This step further refines the identification process by excluding non-audit roles that are part of CPA firms' core functions, such as tax and consulting positions. The keywords and example job titles for these roles are shown below:

Keywords	Example Job Titles
tax	Tax Associate, Senior Tax Associate
consultant, consulting, advisor	Associate Consultant, Business Consulting Manager, Advisory Associate

### **3.2 Exclusion of Supporting Roles**

In this step, we excluded supporting positions within CPA firms that do not involve direct auditing responsibilities. These roles typically include legal professionals, IT specialists, and administrative staff.

### **Step 4: Manual Validation**

To ensure the robustness of our classification, we conducted a final round of manual validation. Specifically, we reviewed over 80% of the auditors, prioritizing job titles by frequency in descending order. This manual review ensured adherence to our predefined classification criteria.

### **Acknowledgment of Limitations**

We acknowledge that our methodology has inherent limitations, particularly in cases where job titles provide insufficient information (e.g., generic titles such as *manager*, *partner*, or *specialist*). In such instances, it is challenging to determine with certainty whether the individual is an auditor. However, these less specific job titles are more common at senior ranks, while our research focuses on junior auditors. Therefore, the potential impact of these limitations on our findings is expected to be minimal.

## **Appendix C: Auditors Ranking Classifications**

Revelio's algorithm provides a global seniority classification for positions; however, it is not specifically tailored to auditors in audit firms and often merges multiple levels into a single category. To address this limitation, we developed a customized ranking system based on the typical hierarchy used by audit firms.

Our ranking framework assigns each identified audit position to a specific seniority level, ranging from 1 to 6, corresponding to associates, senior associates, managers, senior managers, directors, and partners. While this classification system is effective for most levels, we acknowledge that its precision declines for senior positions such as managers and above. This is due to the general nature of job titles at higher levels, which tend to be less specific.

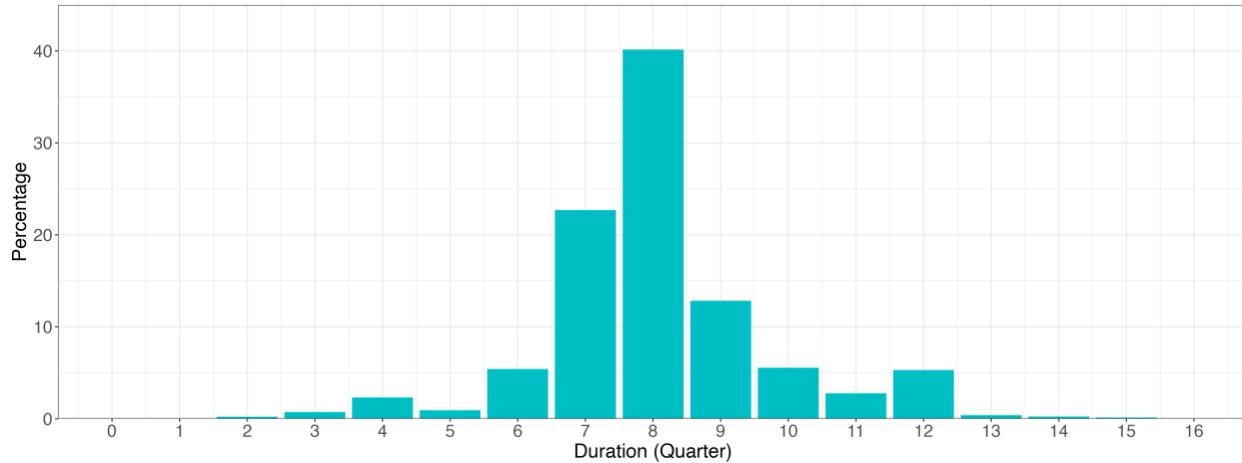
It is important to note that we focus on junior auditors—specifically associates and senior associates—making the decreased accuracy at senior levels less critical. Below, we present the seniority levels and examples of job titles that fall into each category:

<b>Ranking</b>	<b>Example of Job Titles</b>
1	Audit Associate, Audit Staff, Associate
2	Senior Audit Associate, Audit Senior, Senior Associate
3	Manager, Audit Manager, Assurance Manager
4	Audit Senior Manager, Sr. Manager
5	Director, Managing Director, Principal
6	Partner, Audit Partner

This ranking system ensures clarity and consistency when identifying auditors at varying levels of seniority within audit firms.

**Figure 1. Promotion Timing among Junior Auditors**

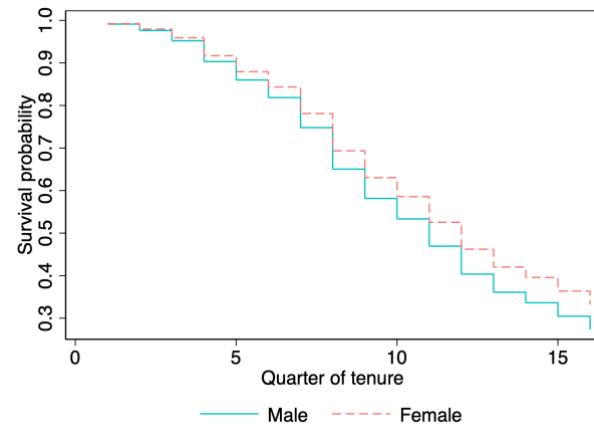
Figure 1 presents the distribution of promotion timing (measured in quarters of tenure) for junior auditors advancing from associate to senior associate in the 2016 – 2020 cohorts.



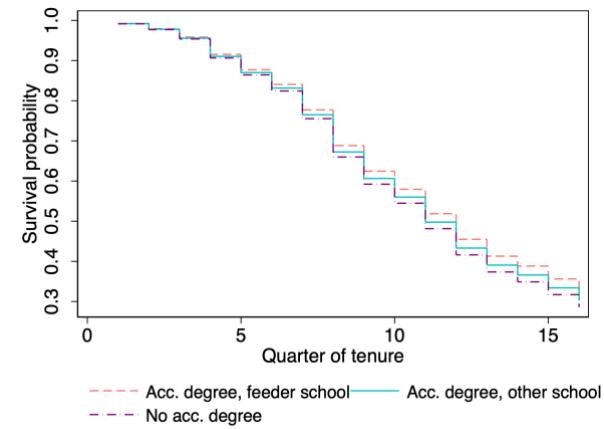
**Figure 2. Auditor Exit Risk by Individual and Firm-Level Characteristics**

Figure 2 displays survival curves from a Cox proportional hazards model in equation (1), estimated with a dummy variable for top 10 MSAs instead of MSA stratification. Each of the subfigures (a)–(d) illustrates the likelihood of junior auditors remaining at their firms by tenure quarter, comparing auditors by gender, educational background, graduate degree status, and Big 4 affiliation, respectively.

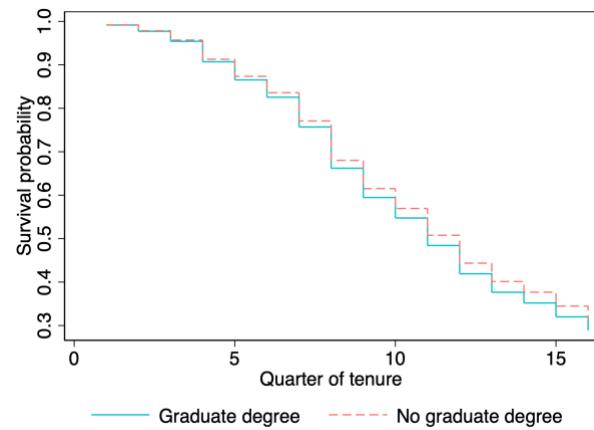
**(a) By Gender**



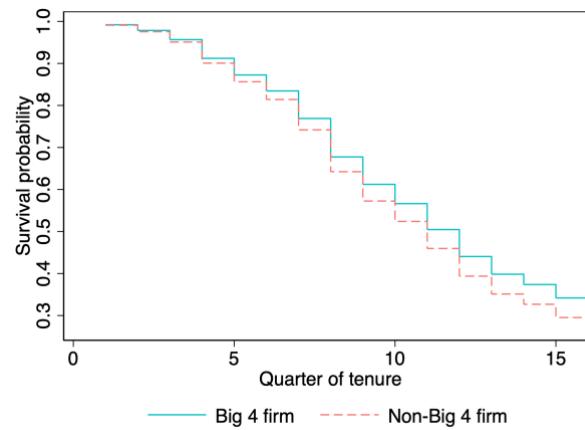
**(b) By Accounting Degree and School Tier**



**(c) By Graduate Degree Status**

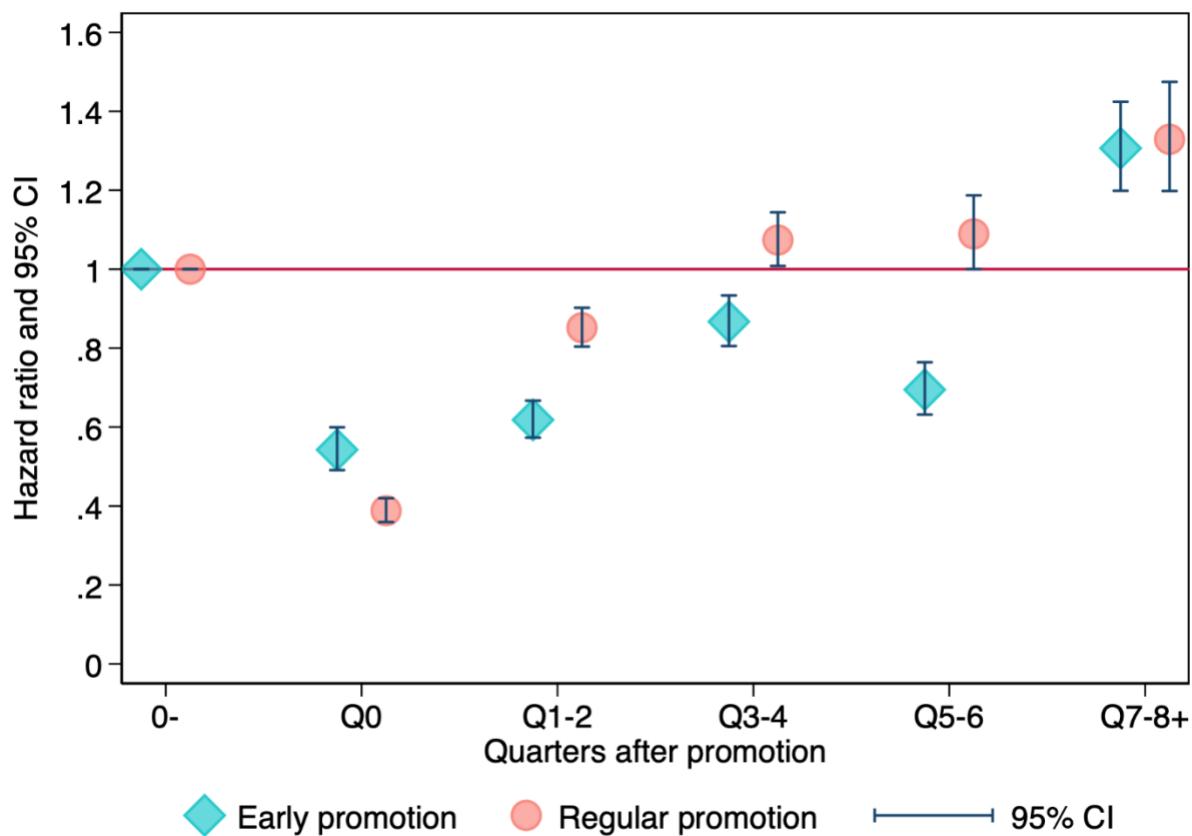


**(d) By Big 4 vs. Non-Big 4 Firm**



**Figure 3. Promotion Timing and Auditor Exit: A Dynamic Analysis**

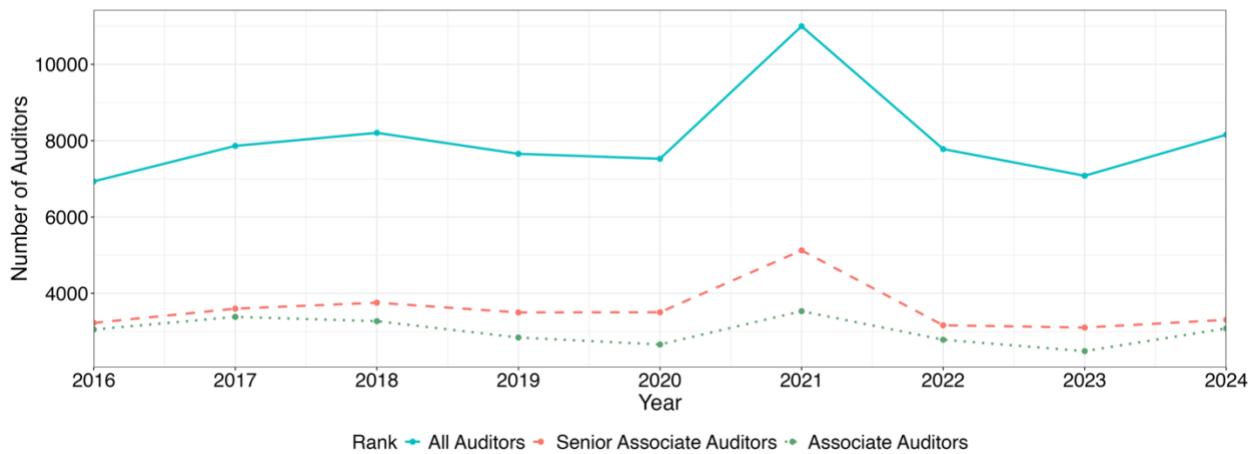
Figure 3 displays Cox hazard estimates that analyze how the association between promotion timing (early vs. regular) and auditor exit risk evolves over time. We estimate hazard coefficients for the promotion quarter and for post-promotion periods: half a year, one year, one year and a half, and two years or more after promotion. The baseline is the set of pre-promotion quarters. Each point shows a hazard ratio, with vertical bars indicating 95% confidence intervals. This figure highlights dynamic differences in exit risk following promotion by plotting the effects for early-promoted auditors (blue diamonds) next to those for regularly-promoted auditors (pink circles).



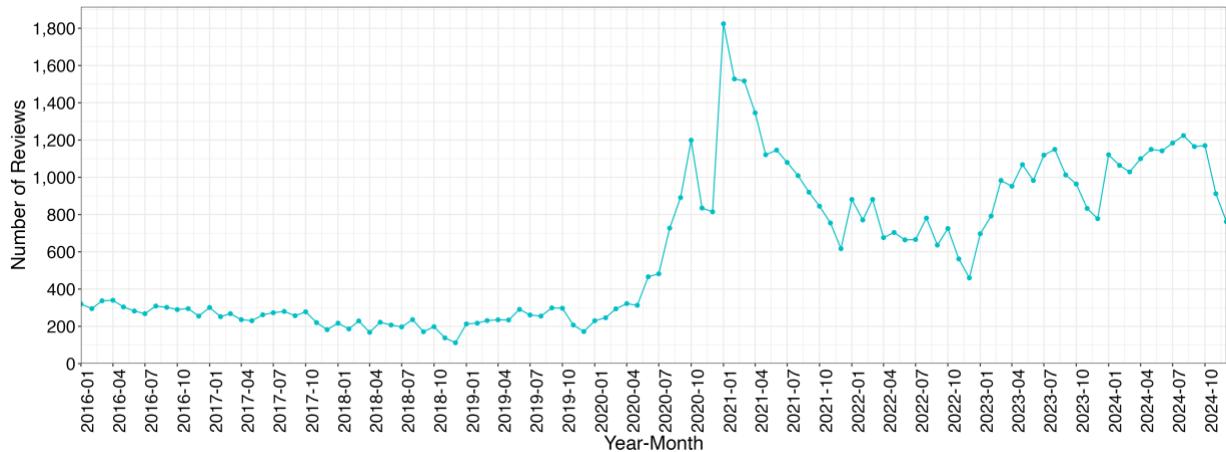
**Figure 4. Junior Auditor Exit and Glassdoor Reviews: 2016-2024**

Panel A of Figure 4 shows the number of departures of junior auditors and of all auditors from our sample audit firms over the period 2016–2024. Panel B of Figure 4 presents the monthly Glassdoor review counts submitted by employees of our sample audit firms from 2016 to 2024.

**Panel A: Junior Auditor Exit: 2016-2024**



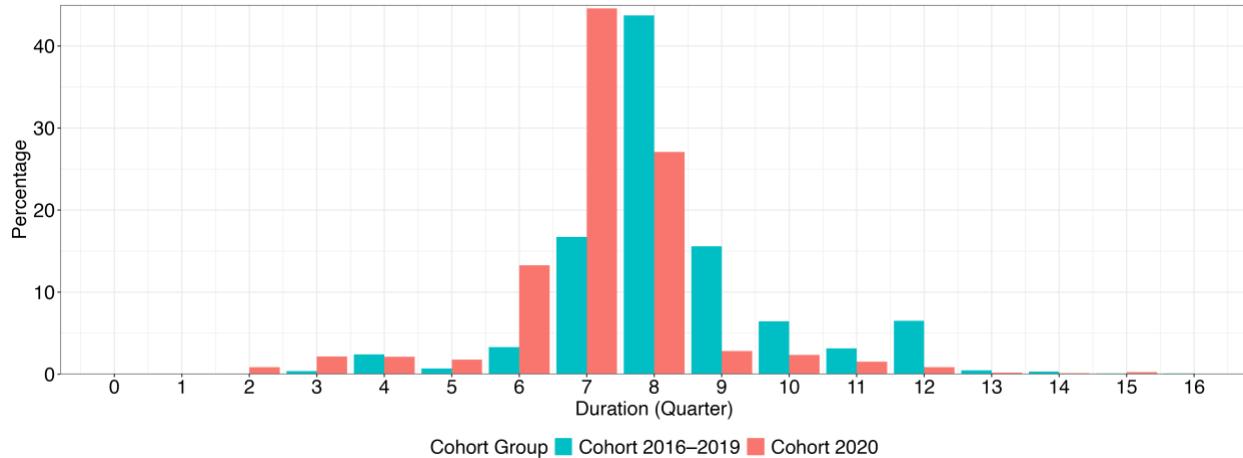
**Panel B: Glassdoor Reviews by Employees of Our Sample Audit Firms: 2016-2024**



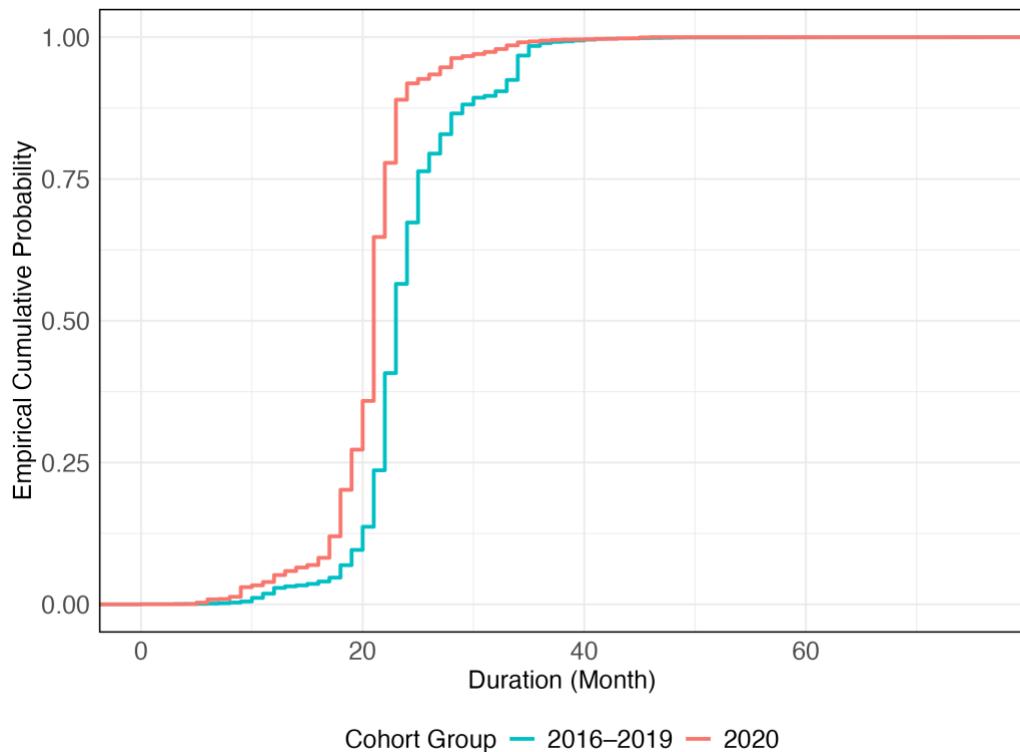
**Figure 5. Promotion Timing under Heightened Turnover Pressures**

Figure 5 Panel A compares promotion timing distributions for two groups: auditors from the 2016–2019 cohorts, whose second year of tenure occurred before the GR, and those from the 2020 cohort, whose second year coincided with the GR. Panel B presents the empirical cumulative distribution functions (ECDFs) of promotion timing for these groups, highlighting differences in promotion patterns between periods of heightened turnover and more typical turnover conditions.

**Panel A: Promotion Timing Distribution by Cohort**



**Panel B: Empirical Cumulative Distribution Function (ECDF) of Promotion Timing by Cohort**



**Table 1. Descriptive Statistics**

This table summarizes the sample of junior auditors from the top 25 U.S. audit firms, focusing on individuals who joined between 2016 and 2020. Panel A reports the distribution of auditors across firms, showing both the number and percentage employed by each firm. Panel B reports the descriptive statistics for the variables used in our main analyses. Panel C presents Pearson correlations (lower diagonal) and Spearman correlations (upper diagonal) among these variables.

**Panel A: Distribution of Auditors by Firm**

Firm	Auditors	Percentage
PricewaterhouseCoopers LLP	9,376	25.04%
Ernst & Young Global Ltd.	7,294	19.48%
KPMG LLP	6,668	17.80%
Deloitte LLP (New York)	5,095	13.60%
RSM US LLP	2,209	5.90%
Grant Thornton LLP	1,812	4.84%
BDO USA PC	1,353	3.61%
CohnReznick LLP	595	1.59%
Moss Adams LLP	518	1.38%
Crowe LLP	498	1.33%
Plante & Moran PLLC	444	1.19%
Baker Tilly US LLP	360	0.96%
CBIZ Advisors LLC	166	0.44%
EisnerAmper LLP	149	0.40%
Marcum LLP	147	0.39%
Cherry Bekaert LLP	142	0.38%
Armanino LLP (United States)	129	0.34%
PKF O'Connor Davies LLP	113	0.30%
Mazars USA LLP	111	0.30%
Macias Gini & O'Connell LLP	60	0.16%
WithumSmith+Brown PC	55	0.15%
Friedman LLP	53	0.14%
MaloneBailey LLP	41	0.11%
UHY Advisors, Inc.	36	0.10%
Cohen & Co.	27	0.07%

*Table 1, continued*

**Panel B: Descriptive Statistics**

	N	Mean	Std. Dev	p.25	p.50	p.75
Early Promo	37,451	0.191	0.393	0	0	0
Regular Promo	37,451	0.392	0.488	0	0	1
Grad. Degree	37,451	0.533	0.499	0	1	1
Acct Degree	37,451	0.548	0.498	0	1	1
Miss Acct Degree	37,451	0.083	0.277	0	0	0
TargetAcctU	37,451	0.218	0.413	0	0	0
Female	37,451	0.445	0.497	0	0	1
Minority	37,451	0.164	0.370	0	0	0
Unemp	37,451	0.049	0.021	0.036	0.041	0.051
Big4	37,451	0.759	0.428	1	1	1

Table 1, continued

**Panel C: Correlations**

	<i>Early Promo</i>	<i>Regular Promo</i>	<i>Grad. Degree</i>	<i>Acct Degree</i>	<i>Miss Acct Degree</i>	<i>TargetAcctU</i>	<i>Female</i>	<i>Minority</i>	<i>Unemp</i>	<i>Big4</i>
Early Promo	1	-0.383	0.036	0.040	-0.021	0.038	0.034	-0.019	0.125	-0.002
Regular Promo	-0.384	1	-0.010	0.034	-0.005	0.040	0.036	-0.027	-0.085	0.023
Grad. Degree	0.035	-0.005	1	0.418	0.107	0.231	-0.004	0.002	-0.011	0.049
Acct Degree	0.039	0.038	0.416	1	-0.326	0.484	0.019	0.002	-0.010	-0.013
Miss Acct Degree	-0.020	-0.008	0.109	-0.327	1	-0.158	0.003	0.003	0.001	0.022
TargetAcctU	0.034	0.041	0.226	0.471	-0.154	1	0.009	-0.007	-0.004	0.014
Female	0.032	0.037	-0.002	0.020	0.003	0.006	1	0.027	-0.007	0.036
Minority	-0.018	-0.027	0.005	0.004	0.003	-0.005	0.027	1	0.044	0.002
Unemp	0.162	-0.113	-0.021	-0.013	-0.001	-0.009	0.001	0.036	1	-0.015
Big4	-0.011	0.030	0.055	-0.012	0.025	0.017	0.035	0.003	-0.013	1

**Table 2. Labor Market Dynamics among Junior Auditors: Cohorts 2016-2021**

Table 2 reports the descriptive statistics for auditors who began their careers as audit associates in annual cohorts from 2016 to 2021. Each cohort comprises auditors who started their career from July of the starting year to June of the following year (e.g., the 2016 cohort spans July 2016 to June 2017). For each cohort, we track and report auditor flows, promotion rates, annual and cumulative exit rates, and provide breakdowns by gender and minority status over a period of up to four years.

Cohort	Year (July-June)	Yr. No. (3)	Auditor Count (4)	Female (%) (5)			Minority (%) (6)			Promotion (%)			Annual Exit (%)				Cumulative Exit (%)		
				All (7)	Female (8)	Minority (9)	Ann. Exit (10)	All (11)	Female (12)	Minority (13)	All (14)	Female (15)	Minority (16)	All (14)	Female (15)	Minority (16)			
2016	2016	1	8,079	44%	15%	1%	1%	1%	830	10%	10%	10%	10%	10%	10%	10%			
	2017	2	7,249	44%	15%	31%	33%	28%	1,839	25%	25%	28%	33%	33%	35%				
	2018	3	5,410	44%	15%	38%	40%	36%	1,508	28%	27%	28%	52%	51%	53%				
	2019	4	3,902	44%	15%	29%	31%	28%	730	19%	18%	20%	61%	60%	62%				
2017	2017	1	7,931	44%	16%	1%	2%	2%	778	10%	8%	10%	10%	8%	10%				
	2018	2	7,153	45%	16%	35%	37%	33%	1,649	23%	21%	24%	31%	27%	32%				
	2019	3	5,504	46%	16%	44%	47%	41%	1,199	22%	21%	23%	46%	43%	48%				
	2020	4	4,305	47%	16%	27%	30%	25%	1,423	33%	31%	34%	64%	60%	65%				
2018	2018	1	8,268	45%	16%	2%	2%	2%	770	9%	9%	10%	9%	9%	10%				
	2019	2	7,498	46%	16%	32%	33%	29%	1,329	18%	16%	19%	25%	24%	26%				
	2020	3	6,169	46%	16%	36%	40%	33%	2,349	38%	35%	38%	54%	51%	54%				
	2021	4	3,820	49%	16%	23%	27%	23%	928	24%	22%	24%	65%	62%	66%				
2019	2019	1	8,503	45%	17%	2%	2%	2%	612	7%	6%	8%	7%	6%	8%				
	2020	2	7,891	46%	16%	33%	37%	29%	2,144	27%	24%	27%	32%	29%	33%				
	2021	3	5,747	47%	16%	37%	41%	35%	1,702	30%	28%	29%	52%	49%	53%				
	2022	4	4,045	48%	16%	27%	31%	25%	708	18%	15%	18%	61%	57%	61%				
2020	2020	1	8,474	44%	17%	3%	3%	3%	980	12%	10%	13%	12%	10%	13%				
	2021	2	7,494	45%	17%	49%	54%	46%	1,853	25%	21%	25%	33%	30%	34%				
	2022	3	5,641	47%	17%	40%	45%	39%	1,336	24%	21%	23%	49%	44%	50%				
	2023	4	4,305	49%	17%	29%	34%	30%	806	19%	17%	17%	59%	54%	58%				
2021	2021	1	9,488	44%	18%	3%	3%	3%	1,035	11%	9%	13%	11%	9%	13%				
	2022	2	8,453	45%	18%	46%	51%	40%	1,866	22%	20%	23%	31%	27%	32%				
	2023	3	6,587	47%	18%	41%	45%	37%	1,528	23%	22%	22%	47%	43%	47%				

**Table 3. Promotion Timing and Auditor Exit Risk**

Table 3 presents Cox proportional hazard model estimates of junior auditors' exit risk as a function of promotion timing based on an auditor-quarter sample of 37,451 auditors. Panel A reports the effects associated with different timings of promotion. Specifically, *Promo* equals 1 in the quarter of promotion and all subsequent quarters for promoted auditors. *Early Promo* and *Regular Promo* are defined similarly but distinguish between auditors promoted within their first seven quarters at the firm (early promoters) and those promoted in or after the eighth quarter (regular promoters). All models stratify the baseline hazard by the top 10 MSAs (based on BLS population rankings) and cluster standard errors at the auditor (individual) level. Panel B reports the piecewise hazard model, which decomposes the post-promotion period into quarterly intervals. Panel C reports hazard ratios (HR), the corresponding percentage changes in exit risk relative to the baseline category, and the statistical differences between the coefficients reported in Panel B. Hazard ratios are obtained by exponentiating the estimated coefficients from the Cox proportional hazards model. The percentage change is calculated as  $(\text{HR} - 1) \times 100$ , which indicates the proportional increase (if positive) or decrease (if negative) in hazard relative to the baseline. All variables are defined in Appendix A. Statistical significance is indicated by \*, \*\*, and \*\*\* at the 10%, 5%, and 1% levels. Standard errors are reported in parentheses.

**Panel A: Promotion Timing and Exit Risk**

	Hazard Model: Exit Risk					
	(1)	(2)	(3)	(4)	(5)	(6)
Promo	-0.337*** (0.018)	-0.335*** (0.018)	-0.330*** (0.018)			
Early Promo (a)				-0.365*** (0.022)	-0.370*** (0.022)	-0.351*** (0.023)
Regular Promo (b)				-0.318*** (0.019)	-0.311*** (0.019)	-0.317*** (0.020)
Grad. Degree		0.073*** (0.015)	0.070*** (0.015)		0.074*** (0.015)	0.071*** (0.015)
Acct Degree		-0.045*** (0.017)	-0.047*** (0.017)		-0.046*** (0.017)	-0.047*** (0.017)
Miss Acct Degree		0.047* (0.026)	0.046* (0.026)		0.046* (0.026)	0.046* (0.026)
TargetAcctU		-0.063*** (0.017)	-0.063*** (0.017)		-0.063*** (0.017)	-0.063*** (0.017)
Female		-0.170*** (0.013)	-0.169*** (0.013)		-0.170*** (0.013)	-0.169*** (0.013)
Minority		0.010 (0.017)	0.010 (0.017)		0.010 (0.017)	0.010 (0.017)
Unemp		0.099 (0.752)	0.434 (0.758)		0.078 (0.752)	0.421 (0.758)
Big4		-0.130*** (0.015)			-0.133*** (0.015)	
Firm Fixed Effects	No	No	Yes	No	No	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	416,071	416,071	416,071	416,071	416,071	416,071
P-value for Wald $\chi^2$	0.000	0.000	0.000	0.000	0.000	0.000
P-value of a - b				0.023	0.004	0.104

Table 3, continued

**Panel B: Promotion Timing and Dynamic Patterns**

	Hazard Model: Exit Risk					
	(1)	(2)	(3)	(4)	(5)	(6)
Promo_Q0	-0.831*** (0.032)	-0.828*** (0.033)	-0.820*** (0.033)			
Promo_Q12	-0.272*** (0.025)	-0.269*** (0.025)	-0.257*** (0.025)			
Promo_Q34	-0.050* (0.027)	-0.047* (0.027)	-0.029 (0.027)			
Promo_Q56	-0.198*** (0.035)	-0.196*** (0.035)	-0.168*** (0.035)			
Promo_Q78+	0.141*** (0.039)	0.139*** (0.039)	0.180*** (0.040)			
Early Promo_Q0			-0.625*** (0.051)	-0.633*** (0.051)	-0.611*** (0.051)	
Early Promo_Q12			-0.499*** (0.038)	-0.507*** (0.038)	-0.481*** (0.039)	
Early Promo_Q34			-0.167*** (0.037)	-0.170*** (0.037)	-0.143*** (0.038)	
Early Promo_Q56			-0.394*** (0.048)	-0.396*** (0.048)	-0.364*** (0.049)	
Early Promo_Q78+			0.232*** (0.043)	0.231*** (0.043)	0.267*** (0.044)	
Regular Promo_Q0			-0.955*** (0.039)	-0.949*** (0.039)	-0.946*** (0.040)	
Regular Promo_Q12			-0.171*** (0.029)	-0.162*** (0.029)	-0.161*** (0.029)	
Regular Promo_Q34			0.057* (0.032)	0.067** (0.032)	0.071** (0.032)	
Regular Promo_Q56			0.069 (0.043)	0.079* (0.043)	0.086** (0.044)	
Regular Promo_Q78+			0.264*** (0.052)	0.271*** (0.052)	0.284*** (0.053)	
Controls	No	Yes	Yes	No	Yes	Yes
Firm Fixed Effects	No	No	Yes	No	No	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	416,071	416,071	416,071	416,071	416,071	416,071
P-value for Wald $\chi^2$	0.000	0.000	0.000	0.000	0.000	0.000

*Table 3, continued*

**Panel C: Economic Magnitudes and Statistical Tests of Coefficient Differences for Panel B**

	Hazard Ratio	% Change		Hazard Ratio	% Change	Diff (p-val)
Q12 Early	0.62	-38%	Q12 Regular	0.85	-15%	0.000
Q34 Early	0.87	-13%	Q34 Regular	1.07	7%	0.000
Q56 Early	0.69	-31%	Q56 Regular	1.09	9%	0.000
Q56 Early	0.69	-31%	Q34 Regular	1.07	7%	0.000
Q78+ Early	1.31	31%	Q78+ Regular	1.33	33%	0.731

**Table 4. Promotion Timing and Post-Employment Destinations**

Table 4 Panel A presents Cox proportional hazard estimates of junior auditors' exit risk into specific post-employment destinations following promotion. Each column models the hazard of exiting to one of six career paths: Big 4 firms, non-Big 4 firms, corporate accounting, financial consulting, technology, or other fields, following the classification in Choi et al. (2024). The key independent variables are *Early Promo* and *Regular Promo*, which equal one in post-promotion quarters and indicate whether the auditor was promoted early or on a regular schedule, respectively. All models include firm and cohort fixed effects. Panel B reports hazard ratios (HR), the corresponding percentage changes in exit risk relative to the baseline category, and the statistical differences between the coefficients reported in Panel B. Hazard ratios are obtained by exponentiating the estimated coefficients from the Cox proportional hazards model. The percentage change is calculated as  $(\text{HR} - 1) \times 100$ , which indicates the proportional increase (if positive) or decrease (if negative) in hazard relative to the baseline. All variables are defined in Appendix A. Statistical significance is indicated by \*, \*\*, and \*\*\* at the 10%, 5%, and 1% levels. Standard errors are clustered at the auditor(individual) level, with standard errors reported in parentheses.

**Panel A: Promotion Timing and Dynamic Patterns**

	Big4	NonBig4	Corp Acct	Fin Consult	Tech	Other
	(1)	(2)	(3)	(4)	(5)	(6)
Early Promo_Q0	-0.369** (0.158)	-0.449*** (0.149)	-0.723*** (0.115)	-0.312*** (0.121)	-0.558** (0.230)	-0.621*** (0.119)
Early Promo_Q12	-0.455*** (0.137)	-0.717*** (0.130)	-0.343*** (0.078)	-0.236** (0.097)	0.040 (0.142)	-0.503*** (0.089)
Early Promo_Q34	-0.486*** (0.167)	-0.243** (0.116)	0.101 (0.070)	-0.057 (0.098)	-0.372** (0.183)	-0.235*** (0.088)
Early Promo_Q56	-0.976*** (0.263)	-0.456*** (0.142)	-0.169* (0.089)	-0.200 (0.125)	-0.285 (0.213)	-0.678*** (0.125)
Early Promo_Q78+	-0.379* (0.224)	0.041 (0.123)	0.296*** (0.080)	0.292** (0.119)	-0.212 (0.212)	-0.060 (0.111)
Regular Promo_Q0	-0.816*** (0.141)	-1.011*** (0.129)	-0.761*** (0.083)	-0.681*** (0.096)	-0.737*** (0.153)	-0.938*** (0.086)
Regular Promo_Q12	-0.065 (0.113)	-0.040 (0.085)	0.035 (0.059)	-0.035 (0.076)	-0.021 (0.115)	-0.243*** (0.064)
Regular Promo_Q34	0.099 (0.138)	0.096 (0.094)	0.265*** (0.062)	0.133 (0.082)	0.144 (0.130)	-0.078 (0.072)
Regular Promo_Q56	0.051 (0.205)	-0.019 (0.122)	0.214*** (0.082)	0.145 (0.117)	0.048 (0.180)	0.060 (0.102)
Regular Promo_Q78+	0.065 (0.271)	-0.030 (0.159)	0.230** (0.101)	0.722*** (0.151)	0.235 (0.217)	0.153 (0.128)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	416,071	416,071	416,071	416,071	416,071	416,071
P-value for Wald $\chi^2$	0.000	0.000	0.000	0.000	0.000	0.000

Table 4, continued

**Panel B: Economic Magnitudes and Statistical Tests of Coefficient Differences for Panel A**

**Big4**

	Hazard Ratio	% Change		Hazard Ratio	% Change	Diff (p-value)
Q12 Early	0.63	-37%	Q12 Regular	0.94	-6%	0.010
Q34 Early	0.62	-38%	Q34 Regular	1.10	10%	0.001
Q56 Early	0.38	-62%	Q56 Regular	1.05	5%	0.001
Q78+ Early	0.68	-32%	Q78+ Regular	1.07	7%	0.125

**NonBig4**

	Hazard Ratio	% Change		Hazard Ratio	% Change	Diff (p-value)
Q12 Early	0.49	-51%	Q12 Regular	0.96	-4%	0.000
Q34 Early	0.78	-22%	Q34 Regular	1.10	10%	0.008
Q56 Early	0.63	-37%	Q56 Regular	0.98	-2%	0.007
Q78+ Early	1.04	4%	Q78+ Regular	0.97	-3%	0.660

**CorpAcct**

	Hazard Ratio	% Change		Hazard Ratio	% Change	Diff (p-value)
Q12 Early	0.71	-29%	Q12 Regular	1.04	4%	0.000
Q34 Early	1.11	11%	Q34 Regular	1.30	30%	0.029
Q56 Early	0.84	-16%	Q56 Regular	1.24	24%	0.000
Q56 Early	0.84	-16%	Q34 Regular	1.30	30%	0.000
Q78+ Early	1.34	34%	Q78+ Regular	1.26	26%	0.502

**FinCon**

	Hazard Ratio	% Change		Hazard Ratio	% Change	Diff (p-value)
Q12 Early	0.79	-21%	Q12 Regular	0.97	-3%	0.060
Q34 Early	0.94	-6%	Q34 Regular	1.14	14%	0.082
Q56 Early	0.82	-18%	Q56 Regular	1.16	16%	0.019
Q56 Early	0.82	-18%	Q34 Regular	1.14	14%	0.009
Q78+ Early	1.34	34%	Q78+ Regular	2.06	106%	0.006

**Tech**

	Hazard Ratio	% Change		Hazard Ratio	% Change	Diff (p-value)
Q12 Early	1.04	4%	Q12 Regular	0.98	-2%	0.698
Q34 Early	0.69	-31%	Q34 Regular	1.15	15%	0.008
Q56 Early	0.75	-25%	Q56 Regular	1.05	5%	0.172
Q56 Early	0.75	-25%	Q34 Regular	1.15	15%	0.049
Q78+ Early	0.81	-19%	Q78+ Regular	1.26	26%	0.070

**Table 5. Auditor Exit Risk During the Great Resignation**

Table 5 presents the estimation results of Equation (2), which examines the role of the Great Resignation—a sharp rise in voluntary employee separations during 2021—in junior auditors' exit risk. The key independent variable, *GR*, is a binary indicator equal to one for quarters occurring in calendar year 2021. Columns (1) and (2) report the results without and with cohort fixed effects, respectively. Columns (3) and (4) include control variables capturing educational background, gender, minority status, and macroeconomic conditions. All models stratify the baseline hazard by the top 10 MSAs (based on BLS population rankings). All variables are defined in Appendix A. Statistical significance is denoted by \*, \*\*, and \*\*\* at the 10%, 5%, and 1% levels, respectively. Standard errors are clustered at the auditor(individual) level, with standard errors reported in parentheses.

	Hazard Model: Exit Risk			
	(1)	(2)	(3)	(4)
GR	0.426*** (0.014)	0.475*** (0.016)	0.424*** (0.014)	0.475*** (0.016)
Grad. Degree			0.062*** (0.015)	0.065*** (0.015)
Acct Degree			-0.055*** (0.017)	-0.057*** (0.017)
Miss Acct Degree			0.046* (0.026)	0.042 (0.026)
TargetAcctU			-0.066*** (0.017)	-0.069*** (0.017)
Female			-0.176*** (0.013)	-0.174*** (0.013)
Minority			0.015 (0.017)	0.016 (0.017)
Unemp			-1.026*** (0.313)	0.335 (0.738)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Cohort Fixed Effects	No	Yes	No	Yes
Observations	416,071	416,071	416,071	416,071
P-value for Wald $\chi^2$	0.000	0.000	0.000	0.000

**Table 6. Accelerated Promotion During Periods of Heightened Turnover**

Table 6 examines whether audit firms responded to increased turnover during the Great Resignation by accelerating promotions of junior auditors. Panel A reports a univariate comparison of promotion timing (in months) across cohorts: the full sample, auditors from the 2016–2019 cohorts (*Cohort16\_19*), and those from 2020 (*Cohort2020*). For the 2020 cohort, the second year of tenure aligned with the Great Resignation. The final column reports the mean and median differences in promotion timing between *Cohort2020* and *Cohort16\_19*, with p-values from the t-test and the Wilcoxon rank-sum test in parentheses. Panel B reports the results where we test audit firms' promotion intensity and promotion timing (early versus regular promotion) changes between the 2020 cohort and the 2016–2019 cohorts. Panel C presents robustness analyses. Columns (1)–(2) exclude auditors in the 2020 cohort who start their careers in the second fiscal quarter (between October 1 and December 31), while Columns (3)–(4) restrict the sample to auditors who start their careers in the first fiscal quarter (between July 1 and September 30). All variables are defined in Appendix A. Statistical significance is denoted by \*, \*\*, and \*\*\* at the 10%, 5%, and 1%. Standard errors are clustered at the firm level, with t-statistics reported in parentheses.

**Panel A: Univariate Comparison of Time to Promotion by Cohort Group**

Cohort_group	All	Cohort16_19	Cohort2020	Difference (Cohort2020 - Cohort16_19)
Mean	23.09	23.74	20.67	-3.07 (0.000)
Median	23.00	23.00	21.00	-2.00 (0.000)

Table 6, continued

**Panel B: Promotion Timing During Periods of Heightened Turnover**

	Promotion	Promotion	Early Promotion	Early Promotion	Regular Promotion	Regular Promotion
	(1)	(2)	(3)	(4)	(5)	(6)
Cohort2020	0.073*	0.064*	0.332***	0.321***	-0.259**	-0.256**
	(1.773)	(1.718)	(2.885)	(2.957)	(-2.588)	(-2.676)
Grad. Degree	-0.014	-0.013	0.019**	0.021**	-0.033***	-0.034***
	(-1.475)	(-1.275)	(2.363)	(2.170)	(-4.317)	(-4.734)
Acct Degree	0.047***	0.045***	0.010	0.007	0.038***	0.038***
	(4.250)	(3.490)	(1.017)	(0.687)	(4.492)	(5.445)
Miss Acct Degree	0.002	0.002	-0.018***	-0.017***	0.020**	0.019**
	(0.236)	(0.335)	(-10.366)	(-8.501)	(2.607)	(2.713)
TargetAcctU	0.060***	0.059***	0.028***	0.029***	0.032**	0.030**
	(7.116)	(6.810)	(3.451)	(3.937)	(2.659)	(2.504)
Female	0.055***	0.053***	0.019***	0.016***	0.035***	0.036***
	(9.157)	(8.687)	(4.348)	(4.406)	(5.290)	(6.378)
Minority	-0.025***	-0.024***	-0.018**	-0.014***	-0.008	-0.010*
	(-6.555)	(-5.423)	(-2.718)	(-3.053)	(-1.101)	(-1.773)
Unemp	-0.891	-0.748	-2.642	-2.382	1.751	1.634
	(-1.700)	(-1.514)	(-1.549)	(-1.480)	(1.196)	(1.176)
Big4	0.015		-0.003		0.019	
	(0.429)		(-0.058)		(0.533)	
Firm Fixed Effects	No	Yes	No	Yes	No	Yes
MSA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
FQtr Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	37,423	37,423	37,423	37,423	37,423	37,423
Adjusted R-squared	0.0278	0.0440	0.136	0.189	0.0935	0.107

Table 6, continued

**Panel C: Robustness tests**

	Early Promotion			
	2020 Fiscal Q2 Entrants Removed	2020 Fiscal Q2 Entrants Removed	Fiscal Q1 Entrants Only	Fiscal Q1 Entrants Only
	(1)	(2)	(3)	(4)
Cohort2020	0.289*	0.275**	0.384**	0.352**
	(2.051)	(2.095)	(2.132)	(2.178)
Grad. Degree	0.017**	0.018**	0.020**	0.019**
	(2.167)	(2.108)	(2.472)	(2.292)
Acct Degree	0.011	0.008	-0.002	-0.005
	(1.253)	(0.804)	(-0.266)	(-1.110)
Miss Acct Degree	-0.017***	-0.016***	-0.018***	-0.017***
	(-10.030)	(-9.276)	(-4.635)	(-4.754)
TargetAcctU	0.021**	0.022***	0.018*	0.018**
	(2.457)	(2.833)	(1.880)	(2.135)
Female	0.014***	0.011***	0.011	0.006
	(2.958)	(2.831)	(1.677)	(1.379)
Minority	-0.016*	-0.012**	-0.016*	-0.009**
	(-2.013)	(-2.174)	(-1.787)	(-2.077)
Unemp	-2.970	-2.696	-4.619*	-4.103*
	(-1.372)	(-1.299)	(-1.726)	(-1.721)
Big4	-0.027		0.039	
	(-0.507)		(0.776)	
Firm Fixed Effects	No	Yes	No	Yes
MSA Fixed Effects	Yes	Yes	Yes	Yes
FQtr Fixed Effects	Yes	Yes	Yes	Yes
Observations	33,803	33,803	21,528	21,528
Adjusted R-squared	0.0864	0.146	0.0582	0.162

**Table 7. Promotion Timing and Auditor Exit Risk During Periods of Elevated Turnover**

Table 7 presents Cox proportional hazard estimates of junior auditors' exit risk following promotion, allowing the effects of promotion to vary depending on whether it occurred during a period of elevated turnover. *Promo\_GR* is an indicator variable equal to 1 if an associate auditor is promoted to senior associate between July 2021 and June 2022—a period when firms accelerated junior auditor's promotion—and 0 otherwise. The final column includes cohort-by-starting-quarter fixed effects to account for differences in auditors' calendar start dates, enabling comparisons among auditors who were equally eligible for promotion based on tenure. All models stratify the baseline hazard by the top 10 MSAs (based on BLS population rankings). Standard errors are clustered at the auditor (individual) level, with standard errors reported in parentheses.

	Hazard Model: Exit Risk		
	(1)	(2)	(3)
Early Promo (a)	-0.350*** (0.023)	-0.360*** (0.023)	-0.361*** (0.025)
Early Promo × Promo_GR (b)	-0.070* (0.038)	-0.047 (0.038)	-0.030 (0.040)
Regular Promo (c)	-0.313*** (0.020)	-0.305*** (0.020)	-0.283*** (0.021)
Regular Promo × Promo_GR (d)	-0.023 (0.033)	-0.028 (0.033)	-0.053 (0.034)
Grad. Degree		0.074*** (0.015)	0.068*** (0.015)
Acct Degree		-0.046*** (0.017)	-0.039** (0.017)
Miss Acct Degree		0.046* (0.026)	0.047* (0.026)
TargetAcctU		-0.063*** (0.017)	-0.062*** (0.017)
Female		-0.170*** (0.013)	-0.168*** (0.013)
Minority		0.010 (0.017)	0.005 (0.017)
Unemp		0.073 (0.753)	0.450 (0.759)
Big4		-0.132*** (0.015)	
Firm Fixed Effects	No	No	Yes
Cohort Fixed Effects	Yes	Yes	No
Cohort by Starting Quarter Fixed Effects	No	No	Yes
Observations	416,071	416,071	416,071
P-value for Wald $\chi^2$	0.000	0.000	0.000
P-value of a - c			0.001
P-value of b - d			0.667
P-value of (a + b) - (c + d)			0.231

**Table 8. The Moderating Role of Labor Market Concentration**

Table 8 examines the role of labor market concentration in shaping junior auditors' exit risk using a Cox proportional hazards framework. We use two measures of labor market concentration.  $HHI_A$  is the decile ranking of the Herfindahl-Hirschman Index for each MSA-year, based on all the accounting firms.  $HHI_S$  is the decile ranking of the Herfindahl-Hirschman Index for each MSA-year, based on the top 25 accounting firms in our sample.  $GR$  is a binary indicator equal to one for quarters occurring in calendar year 2021. All variables are defined in Appendix A. Statistical significance is denoted by \*, \*\*, and \*\*\* at the 10%, 5%, and 1% levels. Standard errors are clustered at the auditor (individual) level, with standard errors reported in parentheses.

	Hazard Model: Exit Risk			
	(1)	(2)	(3)	(4)
GR	0.516*** (0.021)	0.516*** (0.021)	0.520*** (0.022)	0.519*** (0.022)
$HHI_A$	-0.162*** (0.029)	-0.168*** (0.030)		
$GR \times HHI_A$	-0.148*** (0.054)	-0.147*** (0.054)		
$HHI_S$			-0.152*** (0.030)	-0.159*** (0.030)
$GR \times HHI_S$			-0.158*** (0.055)	-0.155*** (0.055)
Controls	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Cohort Fixed Effects	Yes	Yes	Yes	Yes
Observations	382,553	382,553	369,653	369,653
P-value for Wald $\chi^2$	0.000	0.000	0.000	0.000