The Consequences of Private Equity Investment in Accounting Firms

Tuan Doan
University of Connecticut
tuan.doan@uconn.edu

Steven Utke
University of Connecticut
(860) 486-2374
sutke@uconn.edu

Ying Zhou
University of Connecticut
(860) 486-3019
ying.2.zhou@uconn.edu

Youli Zou*
University of Connecticut
youli.zou@uconn.edu

July 2025

Prepared for Texas Audit Research Symposium 2025

Keywords: Private equity investment, audit firm growth, auditor merger and acquisition, accounting labor market, audit quality

JEL Codes: M41; M42; G10; G20; G24; J44; L10

---

* Corresponding author: youli.zou@uconn.edu
We appreciate the valuable comments from John Barrios, Frank Murphy, Sugata Roychoudhury, and workshop participants at the 5th Annual Labor and Accounting Group Conference and University of Connecticut. We gratefully acknowledge financial support from the University of Connecticut. Utke also acknowledges support from the Arthur Andersen, LLP Accounting Professorship. We thank an anonymous audit partner at an audit firm receiving private equity investment for helpful discussions. Acquisition of Revelio Labs data was supported by a grant from the Center for Private and Entrepreneurial Capital (CPEC) at the University of Connecticut.

The Consequences of Private Equity Investment in Accounting Firms

Abstract

With private equity (PE) funds actively buying into accounting firms, we examine how PE investment is shaping the accounting profession. First, we outline the scope of PE investment in accounting firms. Next, we conduct firm- and office-level analyses to assess accounting firms' operating changes around PE investment. Our preliminary evidence suggests that PE investment accelerates acquired firms' revenue growth in non-audit services but not in audit services, facilitates geographic expansion into new markets, drives rapid growth in employees, and increases both the number and size of acquisitions. We find mixed preliminary evidence of changes in job postings, suggesting that PE-backed accounting firms may prefer to obtain talent through firm acquisitions rather than traditional hiring. Finally, we analyze audit quality at the client level around their auditors' PE deals. We find weak but preliminary evidence of improved audit quality among clients of PE-backed auditors compared to those of non-PE-backed auditors. Overall, PE investment introduces a new set of opportunities and challenges for accounting firms and their clients. Our study provides the first in-depth analyses of this important emerging topic, which is of interest to regulators, academics, and practitioners.

1. Introduction

On February 5, 2024, private equity (PE) funds managed by Hellman & Friedman and Valeas Capital Partners made a significant investment in Baker Tilly, a top 10 accounting firm with $1.6 billion of revenue. A few weeks later, on March 15, 2024, Grant Thornton LLP announced its partnership with New Mountain, LLC, a growth-oriented PE firm. By the end of 2024—approximately three years after the first PE investment in an accounting firm—PE investors held stakes in 11 of the top 30 CPA firms (Dangor 2024).[1] Collectively, PE-backed accounting firms generated over $9.4 billion in total revenue, employed more than 41,000 people, and accounted for 33% of the non-Big 4 public issuer market (measured by audit fees) in 2023. In this study, we provide the first in-depth evidence on how PE investment is shaping the accounting profession.

PE funds cite several reasons for investing in accounting firms, including steady, recession-proof cash flows, opportunities to build scalable platforms in a highly fragmented market, and potential for value creation through technological investment. However, regulators and employees have raised concerns that the profit-driven incentives of PE investors may negatively affect accounting firms (e.g., AICPA 2025; Donahoo, Nielson, and Pickerd 2025). Furthermore, as we discuss in Section 2, PE investment may change partners' incentives. While traditional partnership structures can promote long-term value creation, PE investment may come with "triggers" that provide partners with additional payouts for meeting certain short-term targets or upon subsequent sale of the accounting firm, usually in a 5-7 year timeframe. PE also provides substantial financial

[1] In 2021, TowerBrook Capital Partners purchased an ownership interest in EisnerAmper LLP, the first deal between PE and a top 20 accounting firm. Of the accounting firms with PE-backing as of 2024, six firms regularly audit public issuers: EisnerAmper, Cherry Bekaert, Baker Tilly, Grant Thornton, UHY, and Armanino. In August 2023, private equity giant TPG approached EY about potential investment but was turned down. Industry experts predict that more significant deals will be completed in the near future. In an interview with middlemarketgrowth.org in February of 2024, Koltin Consulting Group CEO Allen Koltin expects in 2024 "no less than half a dozen PE firms enter the market, and probably three or four of those will be with top 20 CPA firms." See https://middlemarketgrowth.org/conversations-delivering-dividends-investing-accounting-firms/. Our results suggest this prediction was fairly accurate.

resources to investee firms (e.g., Wilson, Wright, Siegel, and Scholes 2012), which can affect their investment decisions. As such, these new incentives and funding structures may change accounting firms' strategies around growth, geographic expansion, acquisitions, and workforce management—changes that may ultimately affect audit production and audit quality. Prior studies in other industries find mixed effects of PE investment. On one hand, PE funds maximize investor value at the expense of other stakeholders in certain industries by, for example, cutting staffing (Eaton, Howell, and Yannelis 2020; Gupta, Howell, Yannelis, and Gupta 2024). On the other hand, PE funds provide benefits in other industries by, for example, improving products and expanding geographically (e.g., Fracassi, Previtero, and Sheen 2022). Thus, the effects of PE investment on accounting firms are open empirical questions.

To examine how PE investment reshapes the accounting industry, we start by providing details on the scope of PE investments, including the list of accounting firms selected by PE funds and the economic significance of these PE deals to the overall accounting market. We obtain data on accounting firm revenues for the top 100 accounting firms from *Accounting Today*, data on audit office locations from Form 2 (filed by all PCAOB-registered public accounting firms), obtain data on accounting firm mergers and acquisitions (M&A) activities from Audit Analytics, and employee and job posting data from Revelio Labs and the PCAOB website. While PE investment in accounting firms is relatively recent, giving us a limited time series of data, an advantage of these accounting firm- and labor-related data sources – especially relative to most PE research – is that they are relatively comprehensive and frequently used in other studies.[2]

From our initial analysis, we observe that PE funds invest in 21 accounting firms as of 2024. Of these 21 accounting firms, 19 conduct audits, 10 audit public firms, and six regularly

[2] Our Proposed Analyses anticipate extending our data through the end of 2025.

audit public firms (defined as averaging at least 10 public clients annually from 2018 to 2023). Two of these firms were ranked in *Accounting Today*'s top 10 accounting firms, with 13 more outside the top 10 but in the top 100. PE-backed accounting firms generate around $9.4 billion in total (audit and non-audit) fee revenue in 2023, while all other top-100 non-Big 4 firms generate $27.9 billion in fees. Thus, PE invests in a material portion of the accounting industry, highlighting the importance of understanding the consequences of these PE investments.

To examine the real economic consequences of PE investment in accounting firms and understand PE's strategies to create value in their investee accounting firms, we conduct accounting firm- and office-level examinations of four aspects of firm behavior.[3] First, we examine whether firms' revenue mix and growth change following PE investments. We find that PE-backed accounting firms grow at a faster rate than other non-Big 4 accounting firms, with our dynamic analysis indicating that this accelerated growth occurs only after the PE investment. Further, the additional growth stems from both tax and consulting services, rather than from audit fees. Consistent with the rapid growth in revenue, we find that PE-backed firms grow their operations by opening new offices and expanding geographically into new markets after PE investment. This rapid growth may have several causes and consequences related to the other aspects of firm behavior that we examine next.

The second behavior we study is M&A. We track PE-backed accounting firms' platform-building activities in the form of M&A following PE investments. Big 4 accounting firms dominate

[3] PE funds indicate a few specific strategies for adding value to accounting firms. For instance, Andre Moura, managing director at New Mountain Capital, said "we look forward to working with Grant Thornton to invest further in technology and automation, talent and new service line capabilities to achieve rapid growth…" (see https://www.grantthornton.com/insights/press-releases/2024/march/gt-accelerate-business-strategy-with-investment-from-new-mountain-capital). Blake Kleinman, partner at Hellman & Friedman, one of the funds purchasing Baker Tilly, stated "there is an opportunity to consolidate the industry" via what Baker Tilly CEO Jeff Ferro called an "extremely aggressive" acquisition strategy (see https://www.ft.com/content/ca7d9384-7255-4b43-a84e-01a8b48b232d).

the U.S. audit market, with smaller auditors fighting over a fraction of the market. Because PE-backing provides capital that can be used in accounting firm M&A, regulators, practitioners, investors, and researchers can benefit from understanding and monitoring such M&A activities, especially if this growth alters market dynamics.[4] We find that the number and size of acquisitions (measured by the number of employees acquired) increase following PE investment for PE-backed accounting firms relative to other non-Big 4 firms. This is consistent with accounting firms engaging in platform building with the support of their PE backers.

Third, we investigate how PE investment affects accounting firms' human capital and workforce dynamics. We begin by examining the overall growth pattern in human capital. A unique feature of our setting is that accounting firms receiving PE investment typically split the firm into two legally independent entities: a "CPA firm" that provides audit and attestation services, and a "non-attest service firm" that provides other services such as tax and advisory. Interestingly, we find that the *total number of employees* grows 41% to 72% following PE deals, but CPA firms experience sharp declines in the number of *audit* personnel. This aligns with the CPA firm establishing a service agreement that enables the non-attest service firm to supply professional staff, including CPAs, to the CPA firm for a fee.

We then turn to job postings and employee turnover. In contrast to traditional product-based industries, human capital is central in professional services. Prior studies suggest that PE investment in general creates jobs, improves workplace safety, and enhances employees' transferable human capital (e.g., Davis et al. 2014; Agrawal and Tambe 2016; Cohn, Nestoriak, and Wardlaw 2021), though these effects are often hotly debated and may vary across jobs and industries (e.g., Olsson and Tåg 2017). Notably, accounting firm employees and junior partners

[4] For example, PE-backed Grant Thornton's US and Irish practices announced a merger in 2024 (completed in 2025) in an effort to better serve global clients, which could lead to future attempts to more directly compete with the Big 4.

have expressed concerns over potential job losses, culture changes, and dilution of their ownership and control in the firm following PE deals. Furthermore, given the recent accountant supply shortage, it is important to understand whether and how PE investment transforms the demand for accounting professionals. Using Revelio Labs data, we find mixed evidence regarding job postings at PE-backed accounting firms compared to other non-Big 4 firms. PE-backed accounting firms appear to post more jobs in some cases, but also fill those positions more slowly. Despite the rapid growth in employees, we find only limited evidence of higher turnover at PE-backed accounting firms. Combined, the employment and job posting data suggests that fears that PE firms harm firm culture, or more generally cut staff to boost profits, do not appear applicable to accounting firms. Combined with our firm growth and merger results, this also suggests that PE-backed accounting firms prefer to obtain talent and grow by acquisition rather than hiring. In Proposed Analysis, we plan to examine whether the revenue, office, and geographic growth we observe is driven by M&A activity or arises organically (Section 5.2), as well as whether the demand for specific skills (e.g., tech-related talent) changes after PE investment and how employees' sentiment evolves as PE deals progress (Section 5.3).

Lastly, we examine client-level audit quality. We find some evidence that audit quality, measured by discretionary accruals, improves following PE investment in auditors of public firms. In Proposed Analysis, we plan to examine audit quality effects conditional on the real effects we examine earlier (e.g., revenue growth overall and by category, growth in office locations, geographic expansion, M&A, and changes in numbers of employees). On one hand, firm growth may enhance audit capabilities by enabling access to more resources and expertise (e.g., Jiang, Wang, and Wang 2019). On the other hand, it may cause "growing pains" or compromise auditor independence (e.g., Bills, Swanquist, and Whited 2016; Christensen, Smith, Wang, and Williams

2023). Thus, whether and how firms' growth, acquisition activity, and workforce dynamics influence audit quality is ultimately an open empirical question, which we address in our Proposed Analysis (Section 5.4).

It is possible that PE funds selectively target accounting firms with distinct operational characteristics, which could partially drive our results. To address this concern, we take several steps. First, we include accounting firm fixed effects to control for time-invariant firm characteristics that may influence both the likelihood of PE investment and accounting firms' operational outcomes. Second, we test the parallel trend assumption in our generalized difference-in-differences (DiD) analyses. The results indicate that PE-backed and control firms behave similarly in the pre-investment period, with accelerated growth emerging only after the PE investment. This helps mitigate concerns that our findings are merely the result of PE investors selecting already high-growth firms. Third, we carefully construct control samples to minimize selection bias and improve comparability between PE-backed and non-PE-backed firms.

Our study makes the following contributions. First, PE investment is changing the landscape of the accounting profession and "has reached the point of no return."[5] Our work contributes to the understanding of this emerging phenomenon, which is of interest to regulators, researchers, investors, and practitioners, and answers calls for research in this area (Borysoff, Mason, and Utke 2024, p. 35). Extant literature on the effects of PE investment in other industries documents mixed results. Several studies find that PE investment benefits target firms by reducing agency problems, improving productivity and innovation, and increasing workplace safety (e.g., Lerner, Sorensen, and Strömberg 2011; Edgerton 2012), while others find that PE ownership harms consumer and social welfare (e.g., Harrington, Olney, Carrillo, and Kang 2012; Eaton et al. 2020;

[5] See Accounting Influencer Roundtable's interview with Jim Bourke, a managing director at a top 30 firm https://www.youtube.com/watch?v=FmGmqDfX3-U&t=1248s&ab_channel=AccountingInfluencers

Ewens, Gupta, and Howell 2022; Gupta et al. 2024). Our study contributes to this literature by providing the first in-depth evidence on how PE shapes the accounting profession, providing preliminary evidence that PE investment benefits accounting firms with little evidence of harm. Our accounting firm- and office-level analyses provide insights into how accounting firms evolve and adapt after receiving capital from PE funds.[6]

Second, our study contributes to literature on audit firm independence and non-audit services. With the rise of consulting (e.g., the Big 4's combined consulting revenue nearly doubled since 2015), auditor independence and non-audit services once again draw great attention (e.g., Cowle, Kleppe, Moon, and Shipman 2022). In 2023, Ernst & Young even considered splitting its auditing and consulting practices to resolve concerns about keeping auditors independent. Separately, complex ownership structures in PE funds also raise concerns about maintaining independence across audits (SEC 2022). PE's interest in expanding the more lucrative non-attest service side of accounting firms and their potential influence on the attest service branch could introduce an entirely fresh array of challenges to audit firms, clients, and regulators. However, our preliminary evidence does not support these concerns. Also, the similarity of PE-backed auditors' structures to the structures proposed in splits such as EY's provides insight into potential economic consequences of any future splits of audit firms with a similar intent of increasing focus on consulting.

Third, our study adds to the emerging literature on product market consequences of U.S. audit market consolidation (Jiang et al. 2019; Christensen et al. 2023; Kitto 2024; Mason and Utke 2024). One of the major goals of PE funds buying accounting firms is to establish platforms to

[6] Our focus on the first-order economic consequences of PE investment on accounting firms differentiates this study from Borysoff, Conaway, and Riedl (2024), who examine audit quality effects of PE investment in auditors. The changes in accounting firms' operations that we study could be one of the channels underlying changes in audit quality. We investigate this possibility in our Proposed Analysis (Section 5.4).

acquire more firms and achieve rapid growth. It is unclear to what extent PE-backed acquisitions differ from regular M&As between accounting firms, and how PE-backed expansions will alter the competitive dynamics of the audit market. We provide initial insight into how audit markets and accounting firm hiring evolve in the new era of PE investment.

2. Setting and Hypotheses

2.1 Setting

Per AICPA Professional Standards, SEC Rules 2-01 (c) (3), and state laws, a public accounting firm must be majority- or (in many states) solely-owned by licensed CPAs to maintain its independence. To remain in compliance with such regulations, firms receiving investment from PE funds may adopt an alternative practice structure (APS), which splits the firm into two legally independent entities. Under this structure, audit and attestation services remain with the original firm (attest service firm, or the 'CPA firm'), which is typically structured as a Limited Liability Partnership (LLP). Meanwhile, the rest of the business, such as tax and advisory services, moves to a new entity ('non-attest service firm'), which is partially owned by the PE fund and typically structured as a Limited Liability Company (LLC). The CPA firm retains the audit partners, but may not retain any other employees, and enters into a service agreement with the non-attest service firm, which provides professional staff (including CPAs), office space, equipment, and administrative support to the CPA firm for a fee.[7] The CPA firm is often structured to generate zero profits, as its fee revenue is offset by payments to the non-attest service firm for use of employees and space. The non-attest service firm's ownership includes the audit and non-audit partners of the original accounting firm, as well as the PE fund.

[7] Despite the use of separate legal entities, auditor independence concerns arise around PE fund investments both because of overlapping ownership of the CPA firm and the non-attest service firm and because PE funds have long lists of investors and investee firms themselves.

The payoff structure of firm partners changes significantly following a PE deal. In a traditional partnership structure, partners receive an annual distribution of that year's earnings based on their capital accounts and receive their contributed capital and profits over multiple years after retirement. This organizational form aligns the financial incentives of partners in a way that promotes long-term relationships with clients. In a PE deal, partners can receive immediate payouts, which are often followed by a second payment about three years after the deal closes if the firm hits certain milestones (e.g., growing EBITDA) and potentially another payment in 5-7 years if the PE successfully exits (i.e., sells) its investment in the accounting firm (Drew and Koltin 2022). Under this arrangement, partners may have incentives to boost short-term performance to maximize their exit payments. In addition, the profit-driven culture of PE funds could spill to the CPA firm and cause behavior changes. Further, because the non-attest service firm's clients may overlap with that of the CPA firm, regulators have expressed concerns and provided guidance on APS when PE funds are involved. In an August 2022 statement, Paul Munter, acting chief accountant of the SEC, stated that "Complex transactions with investors that are not traditional accounting firms and have not previously been subject to the same independence and ethical responsibilities elevate the risk to an auditor's independence" (SEC 2022).

Accounting firms often cite two main benefits of accepting PE investment. First, as noted above, partners accumulate capital balances over time which are paid out upon retirement. These balances are, effectively, liabilities for the partnership which can inhibit growth for these non-Big 4 firms.[8] A PE acquisition can buy out these liabilities for partners that are retiring or near-retirement. Second, PE investment provides growth capital for accounting firm investment. A

[8] A related advantage of a PE investment is that, unlike a partner, the PE fund will never "retire" from the accounting firm, so the PE fund's capital balance is not seen as a labiality that will ultimately be paid out upon retirement.

partner at a PE-backed accounting firm stated that the PE investment provided "dry powder" that allows their firm to make more attractive offers when acquiring other accounting firms.

2.2 Hypotheses

Prior studies provide mixed evidence regarding whether PE improves firm performance. Guo, Hotchkiss, and Song (2011) examine 94 U.S. public-to-private transactions and find insignificant gains in operating performance compared to benchmark companies. Leslie and Oyer (2008) find similar results examining 144 LBOs. In contrast, Lerner et al. (2011) use a sample of 495 buyouts and document that such transactions lead to significant increases in long-term innovation. Among studies that support value creation, channels of value creation include eased financial constraints (e.g., Boucly, Sraer, and Thesmar 2011), improved operational efficiency (e.g., Davis et al. 2014; Bernstein and Sheen 2016), and information technology advancement (Agrawal and Tambe 2016).

While PE funds may appreciate the steady cash flow arising from audit fees, PE funds may also see higher growth potential in non-audit services. Thus, productivity activity may focus on non-audit services. That said, PE-backed accounting firms may seek to expand their audit client base and its steady cash flows. Finally, given that some studies find that PE ownership harms service quality, revenue may decrease after PE investment if clients dislike the service provided by the newly PE-backed accounting firm. Because of these competing possibilities, we state our first hypothesis regarding changes in fees following PE investment in the null.

H1*: PE investment in accounting firms results in no change in revenue mix or growth rate.*

While the traditional agency issue concerning separation of ownership and management in public companies is a smaller concern in accounting firms, PE funds see value creation opportunities in improving productivity by providing funding and gaining market power in a

highly fragmented market by building a platform to facilitate expansion. Absent PE investment, smaller firms have limited resources to fund such initiatives. Thus, we predict that PE-backed auditors will undertake more acquisitions following the PE investment given the additional resources provided by the PE fund, and we state our second hypothesis regarding acquisition activity in the alternative form.[9]

H2*: PE investment in accounting firms increases acquisition activity.*

In addition to providing investment capital for M&A, PE funds also have an interest in accounting firms' human capital. On one hand, PE funds' profit maximization goal may be problematic for the labor force. Gupta et al. (2024) find that PE-backed nursing homes have more compliance violations, lower staffing levels, and higher mortality rates. Eaton et al. (2020) study PE's presence in the higher education setting and find that buyouts lead to lower education inputs. Kirti and Sarin (2024) find that PE investment in the life insurance industry increases profits but also increases firm risk. More broadly, there is a long-standing debate as to whether PE excessively cuts jobs to boost short-term profits (see Davis et al. 2014). On the other hand, these concerns may be less applicable in a service industry like accounting where human capital is a vital input (though the same is true of nursing homes). Notably, PE funds claim that labor force investment is one of their anticipated value drivers in accounting firms.

PE investments could have several other effects on accounting firm labor. First, PE funds could alter the accounting firm's compensation, either allowing higher compensation to attract employees (i.e., investment) or working to cut salaries or hire cheaper, less skilled employees to boost profits. Further, PE funds could provide investment capital to invest in automation, reducing

[9] M&A does not necessarily lead to revenue growth, allowing separate hypotheses. See Mason and Utke (2024).

labor needs. Finally, PE funds could alter firm culture, which could increase or decrease the accounting firm's ability to hire and retain employees.

We capture labor market effects using number of employees, job postings, and turnover. Ultimately, it is an open empirical question how the unique incentives of PE-backed accounting firms affect the labor market. As such, we state our third hypothesis in the null form as follows:

> ***H3****: PE investment in accounting firms results in no change in hiring, job postings, or employee turnover.*

In additional analyses, we examine how PE-backing affects audit quality. While we are interested in the overall effect of PE investment in audit quality, we are primarily interested in how the changes in firm behavior we investigate are linked to changes in audit quality. Because this makes our audit quality analysis contingent on the results of our prior analysis (e.g., changes in firm behaviors), we do not propose formal hypotheses. That said, various changes in firm growth in offices, employees, or size may enhance audit capabilities (e.g., Jiang et al. 2019). On the other hand, this growth may cause "growing pains" or distraction (e.g., Bills et al. 2016; Christensen et al. 2023). Thus, the effect of changes in firm behaviors, driven by PE-backing, on audit quality is an open empirical question.

3. Data and Sample

We obtain data on PE deals from Preqin by first collecting a list of all U.S. private equity portfolio companies.[10] We fuzzy match this list with the list of registered accounting firms from the PCAOB website and *Accounting Today*'s top 100 accounting firms by company name. We then manually check each accounting firm in the list to ensure the accuracy of the matching process. The matching process yields 16 accounting firms that received PE investments from 2021 to 2024. Manual search of news articles yielded five additional firms receiving PE investments over this

[10] We downloaded the list of private equity deals from Preqin on 02/03/2025.

time.[11]

Table 1, Panel A details PE investments in accounting firms. For each deal, we present the accounting firm involved, the accounting firm's rank in the year preceding the PE deal, whether the accounting firm conducts audits and audits of public firms, the PE investor, and the deal's announcement and completion dates.[12] As of December 2024, three deals were completed in 2021, two in 2022, three in 2023, and 13 completed or announced in 2024, including investments in two top 10 accounting firms: Baker Tilly and Grant Thornton. Figure 1 graphs the number of deals, and total revenue of accounting firms involved in the deals, by year.

Table 1, Panel B outlines the sample selection for the main hypotheses tests and related tables. The first PE deal in our sample took place in 2021, so we start our sample period in 2018 to have at least three years of pre-deal data. For the tests of H1 and H2, we start with firm-year observations for top-100 non-Big 4 accounting firms from 2018 to 2023, add firm-years for non-top 100 PE-backed accounting firms, and exclude firm-years for firms that received PE investment in 2023 or 2024. Thus, our treatment firms are the five accounting firms receiving PE investment in 2021 or 2022. The control group includes all top-100 non-Big 4 accounting firms, excluding both treatment firms and firms with PE investments completed or announced in 2023–2024. In our Proposed Analyses, we plan to extend the sample through 2025 and include the 2023–2024 PE-backed accounting firm as treatment firms. To test H1, we hand collect data on accounting firms' revenue mix and growth from *Accounting Today*'s annual reports from 2018 to 2023.[13] Due to missing coverage, we lose 15 observations, yielding a final sample of 589 firm-year observations

[11] We notified Preqin of these missing deals and they updated their database.
[12] Accounting firm ranking is based on *Accounting Today*'s annual report: "Top 100 Firms + Accounting's Regional Leaders."
[13] *Accounting Today* publishes its annual report of Top 100 Accounting Firms in March/April. The reports are publicly available to subscribers.

for the tests of H1.[14] For the M&A analyses, we obtain a list of all audit firm events from Audit Analytics, identifying 440 M&A deals where one accounting firm acquired another. This results in 604 firm-year observations for the tests of H2.

For H3, we first examine changes in total employees using hand-collected data from *Accounting Today* for the same 589 firm-year observations. Next, we analyze job postings and employment data from Revelio Labs. The data is sourced from multiple platforms including companies' websites, Indeed, and LinkedIn. Job posting data is available only after 2020, resulting in a final sample of 248,950 job postings and 4,708 firm-month observations for our job posting tests. Employment data, available from 2018, yields 7,192 firm-month observations for hiring and retention tests. Finally, our audit quality analyses use standard Compustat and Audit Analytics data. Overall, our current regression analyses cover 2018–2023, except for job posting tests (2020–2023 due to data constraints). In our Proposed Analyses, we plan to update data through 2025.

[INSERT TABLE 1 HERE]

[INSERT FIGURE 1 HERE]

4. Empirical Results

4.1 Revenue, revenue by category, and revenue growth (H1)

After identifying the PE-backed accounting firms, we examine changes in revenue following these deals (H1). Specifically, in Table 2, we examine total revenue, revenue by category (audit, tax, consulting), and revenue growth of PE-backed accounting firms during the period 2018-2023 and compare them to control firms. Panel A reports revenue and growth by category for the control group of top-100, non-Big 4 accounting firms that have not received any PE

[14] An accounting firm is classified as "Top 100" if it appears on the Top 100 list at least once between 2018 and 2024. For years when a firm falls off the list, we collect data from *Accounting Today*'s Regional Leaders reports whenever available. A firm is not covered in years when it is neither a top 100 firm nor a regional leader.

investment as well as for the PE-backed firms by year of investment. The control firms report total revenue of $27,946 million in 2023 and the growth rate has been relatively steady, both overall and by revenue category, ranging from 3% to 21% from 2018 to 2023. The PE-backed firms, regardless of investment timing, report total revenue of $9,425 million as of 2023 ($1,697m + $639m + $7,089m).

Examining PE-backed firms by deal year (highlighted in gray), which allows us to clearly delineate pre- and post-investment periods, we find that consulting service fees grow by 182% (46%) in the deal year and 8% (135%) in the following year, while tax service fees increase by 64% (68%) in the year after investment for the three (two) deals completed in 2021 (2022). As these firms shift focus toward tax and consulting services, audit and assurance services generally grow at a slower rate and become less prominent. For example, for the three firms acquired in 2021, audit and assurance fees account for over 50% of total revenue in 2020 ($412m/$820m) but drops to 29% in 2023 ($494m/$1,697m). The final part of Panel A combines the three deals completed in 2023 and the thirteen deals announced or completed in 2024. Since post-investment data is not yet available for these firms, we report them here but defer discussion to our Proposed Analyses.

We next estimate the following regression at the accounting firm-year level for 2018 to 2023 and report the results in Panels B and C of Table 2.

$$RevenueDEP_{it} = \beta_0 + \beta_1 POST_{it} + \lambda_i + \theta_t + \varepsilon_{it} \quad (1),$$

where the dependent variable is either the natural log of total revenue (or revenue by type) in millions, revenue growth (or growth by type) in percentages, or audit fees as a percentage of total revenue. The main independent variable $POST_{it}$ takes the value of one for PE-backed accounting firms (i.e., treatment firms) in the years on and after receiving PE investments – equivalent to a "treat x post" indicator – and zero otherwise (i.e., for years before the deal and for all control firms

in all years). Treatment firms include deals completed in 2021 and 2022. Control firms exclude firms with deals completed or announced in 2023 or 2024. The inclusion of firm fixed effects (λ_i) and year fixed effects (θ_t) makes this specification a staggered difference-in-differences model, with firm fixed effects absorbing the treatment indicator. In Panel B column (1), *POST* has a positive and significant coefficient of 0.232 ($p<0.01$), suggesting that PE-backed accounting firms report higher revenue in post-deal years compared to control firms. We observe a similar pattern in column (2) where the dependent variable is revenue growth. In column (3), *POST* is significantly negative when the dependent variable is audit fees as a percentage of total revenue. This is consistent with the univariate results in Panel A, with growth coming primarily from non-audit services and revenue shifting away from audit fees.

In Panel C, we separately examine the amounts and growth of audit, tax, and consulting service fees around PE deals, as well as whether these patterns differ between large and small firms. We classify an accounting firm as large if its average *Accounting Today* ranking in 2018-2023 is higher than 50. For audit and assurance services, both the dollar amount and growth rate of revenue remain stable following PE investment. In contrast, both tax and consulting services experience significant growth after PE deals, primarily driven by larger firms.[15] Overall, we reject the null for H1 and find evidence that PE investment in accounting firms is associated with increased tax and consulting fee growth.

[INSERT TABLE 2 HERE]

While the results in Table 2 suggest that PE investment accelerates accounting firms' revenue growth, an alternative explanation could be that PE funds select high-growth accounting

[15] The no results in the test of consulting revenue growth rate are mainly driven by outliers. In a untabulated test, we truncate observations at the 1st and 99th percentiles to reduce the impact of outliers and find that the coefficient on *POST* is significantly positive for full sample (coefficient=44.462, $p<0.05$), subsample of large firms (coefficient=44.370, $p<0.10$), and subsample of small firms (coefficient=39.474, $p<0.01$).

firms. To address this concern, we test the parallel trends assumption in our generalized DiD analyses by including indicator variables for each year around the PE investment (i.e., *PRE4*, *PRE3*, *PRE2*, *PRE1*, *POST0*, *POST1*, and *POST2*). Our dynamic analyses show that PE-backed and control firms have similar growth patterns in each of the years leading up to the PE investment; however, accelerated revenue growth emerges immediately after the PE investment and persists for years. These results suggest that our findings capture the impact of PE investment rather than the selection of PE investors.

4.2 Growth in number of offices and geographic expansion

To better understand the sources of revenue growth documented in the prior section, we now examine the office-level and geographic expansion of PE-backed accounting firms. Table 3, Panel A reports the number of offices over time. Non-Big 4, non-PE-backed accounting firms maintain a steady growth rate of 2%, adding an average of one new office per year per firm (untabulated). In contrast, PE-backed accounting firms experience substantial growth in new office openings during the post-investment period (with the deal year highlighted in gray). Before PE deals, these firms experience modest increases (and some decreases) in the number of offices, comparable to the growth rate of non-Big 4 non-PE-backed accounting firms during the sample period. However, for deals completed in 2021 (2022), we find significant increases in the number of offices following PE investments – reaching 28% (46%) two (one) years after the PE investment.

In Panel B, we present results from the following accounting firm-year level regression from 2018 to 2023:

$$OfficeDEP_{it} = \beta_0 + \beta_1 POST_{it} + \lambda_i + \theta_t + \varepsilon_{it} \quad (2),$$

where the dependent variable is either the change in the number of offices or an indicator for the direction of the change (1 if positive, 0 if no change, -1 if negative). *POST* is defined previously,

capturing our treatment firms in the post-treatment years. For the full sample, *POST* is significant for both specifications. When we split the sample into large versus small firms (as previously defined; split on average *Accounting Today* rank by 50), large firms experience significant increase in the number of offices, but small firms do not, consistent with the findings in Table 2 that larger firms are generally growing non-audit revenue more rapidly than small firms. This could also suggest that PE investors have different strategies for large vs. small accounting firms.

In addition to overall office growth, firms may open new offices either within their existing metropolitan area/market to meet growing demand in that market or in new markets as a way of entering and servicing new geographic markets. In Panel C, we examine the locations of newly opened offices (existing versus new markets). Before receiving PE investment, PE-backed firms expand within both existing and new markets at a rate similar to control firms. However, post-PE investment, these firms primarily enter new markets. For example, among firms with deals completed in 2021, 24 out of 33 new offices opened in 2022 and 2023 (73%) are in metropolitan statistical areas (MSAs) where the firm previously had no presence. Similarly, for deals completed in 2022, 79% of the new offices are in previously unserved MSAs. Overall, PE-backed firms appear to expand more aggressively into new markets following PE investment.

In Panel D, we present the results of regression model (2), where the dependent variable is either the number of new offices in new markets or an indicator for entering a new market in a given year. *POST* is significant in both specifications ($p<0.1$ and $p<0.01$) for the full sample. When we split the sample into large versus small firms, the effect is more pronounced for large firms, consistent with the univariate results in Panel C.[16]

[16] While PE-backed firms actively open new offices and expand geographically, many control firms do not. As a robustness test, we limit the control group to firms that also expand during 2018–2023 (i.e., opened at least one new office). Among these expanding firms, the results (untabulated) remain consistent, reinforcing the finding that PE investment significantly impacts accounting firms' expansion decisions and market entry strategies.

[INSERT TABLE 3 HERE]

4.3 Mergers and Acquisitions (H2)

PE investors use the term "platform building" as one of their strategies to grow businesses. That is, they invest in one firm and use this firm to acquire generally smaller firms to grow in existing markets or expand into new ones. In this section, we focus on PE-backed firms' M&A activities during 2018-2023 and compare them to that of control firms. Table 4, Panel A shows that control firms' M&A activities have been stable over the years, with an average control firm completing fewer than one M&A deal per year. In terms of deal size—measured as the number of employees acquired per deal (limited to deals with available employee data)—control firms acquire an average of 61 employees per deal, with annual averages ranging from 33 to 126 employees over our sample period.

We then focus on the three (two) accounting firms obtaining PE investment in 2021 (2022). Columns shaded in gray are PE investment years. Prior to the PE deals, these firms' M&A activity is very similar to control firms (though Cherry Bekaert did one larger M&A). However, after PE investment, M&A activity increases substantially across all five treatment firms, in terms of both the number and size of M&A (though Schellman has relatively low activity). This suggests that the results are not driven by any particular PE deal, but rather align with PE funds' platform-building strategy. Again, we report data for PE deals completed or announced in 2023 and 2024 but defer further analysis to our Proposed Analyses.

In Panel B we further explore the above univariate results by estimating the following accounting firm-year level regression for 2018 to 2023:

$$M\&ADEP_{it} = \beta_0 + \beta_1 POST_{it} + \lambda_i + \theta_t + \varepsilon_{it} \quad (3),$$

where the dependent variable is the number of M&A deals by firm *i* in year *t* or the number of employees acquired through all M&A deals by firm *i* in year *t*. *POST* is significantly positive in both columns, suggesting that PE-backed firms have more and larger M&A deals following PE investment compared to control firms. We observe this pattern for both the large and the small firm subsamples (untabulated). We also conduct a deal-level analysis and observe that the number of employees per deal increases after PE investment (untabulated). That is, the increase in the number of employees acquired is not solely driven by the increase in the number of deals. Overall, results in this section support H2, with PE-backed accounting firms completing more and larger M&A deals after PE investment.

[INSERT TABLE 4 HERE]

4.4 Change in accounting firms' human capital (H3)

We next examine how PE investment affects accounting firms' subsequent investments in human capital. As we discuss earlier, to comply with professional standards and regulations, accounting firms receiving PE investment typically adopt an APS that splits the firm into two legally independent entities: a CPA-owned attestation firm ('CPA firm') that provides audit and attestation services, and a 'non-attest service firm' that provides other services such as tax and consulting. Under the APS, the CPA firm may enter into a service agreement with the non-attest service firm, which allows the latter to provide professional staff (including CPAs) to the attest service firm for a fee. Thus, PE investments in accounting firms are unique in the sense that these PE deals may not only change the overall human capital (i.e., the total number of employees) but also the internal arrangement of human capital (i.e., to what extent are these employees hired by the attest vs. non-attest service firm).

In Table 5 Panels A we present the *total* number of employees and the growth in these employees obtained from *Accounting Today* annual reports.[17] The annual employee growth rate for non-Big 4 non-PE-backed accounting firms ranges from 4% to 14%, with an average of 7% over 2018-2023. Consistent with their office and geographic expansion, PE-backed firms also experience rapid growth in human capital, whereas their pre-PE growth rates mirrored those of non-PE-backed firms. Specifically, for the five firms that received PE investments in 2021 and 2022, employee growth accelerates significantly in the post-PE investment period, with growth rates for total number of employees ranging from 41% to 72%.

In Table 5 Panel B, we present the number of *audit personnel* (i.e., CPA firm employees) obtained from Form 2—the annual report that all registered public accounting firms file with the PCAOB—and analyze the changes over the same sample period.[18] In stark contrast to the findings reported in Panel A, we find significant declines in the number of audit personnel following PE investments, consistent with APS splitting CPA and advisory employees into separate firms. Figure 2 plots changes in the number of employees for PE-backed firms, distinguishing between those that received PE investments in 2021 (Panel A) and 2022 (Panel B). For both panels, we also include workforce trends for control firms as benchmarks. Clearly, the five PE-backed firms experience significant growth in total employees after PE investments (the red solid lines), but the growth is driven by the non-attest service firms. As a result, the number of audit personnel

[17] A firm's number of total employees in *Accounting Today*'s annual reports comprises owners and partners (both equity and nonequity), professionals and all other personnel. The reported number represents the total for the firm even if the attestation and advisory practices are separated. For example, the employee of Eisner includes the combined total of EisnerAmper LLP and Eisner Advisory Group LLC.

[18] We manually collected data on audit firms' personnel from Form 2 Part VI. This information is publicly available on the PCAOB's website. The reported employee count represents only the CPA firm's personnel if the CPA and advisory practices are separated. For example, the employee count for EisnerAmper reflects only the employees of EisnerAmper LLP and excludes those of Eisner Advisory Group LLC. However, if the advisory function is housed in the attestation firm (i.e., one firm), Form 2 includes all employees of the firm.

employed by CPA firms drops significantly in the post-investment period (the black dashed lines), reflecting the workforce shift under the APS.

In Table 5 Panel C, we further explore the above univariate results by estimating the following accounting firm-year level regression for 2018 to 2023:

$$PersonnelDEP_{it} = \beta_0 + \beta_1 POST_{it} + \lambda_i + \theta_t + \varepsilon_{it} \quad (4),$$

where the dependent variable is the natural log of the number of employees and the growth rate of employee counts by firm *i* in year *t*. *POST* is significantly positive in Columns (1) and (2), which examine the total number of employees, suggesting that PE-backed firms experience significant growth in human capital following PE investment compared to control firms. However, *POST* is insignificant in the test of audit personnel, as reported in Column (3) and (4). Overall, these results suggest that PE investment in accounting firms is associated with significant growth in human capital, but the growth is primarily driven by the non-attest service firms.

[INSERT TABLE 5 HERE]

[INSERT FIGURE 2 HERE]

The change in human resources for PE-backed accounting firms that we document in Table 5 can stem from M&A activities as well as traditional hiring. In Table 4, we find that M&A deals bring in a significant number of new employees. Next, we examine the organic growth by comparing job postings for PE-backed vs. control firms from 2020 to 2023. Table 6 presents job posting data from Revelio Labs, with Panel A showing trends for control firms and Panels B and C reporting data for treatment firms. Following Aobdia, Li, Na, and Wu (2024), we classify job postings into audit-, tax-, and consulting-related positions based on job titles.[19] Of 319,043 jobs

[19] We export all the job postings of top 100 non-Big 4 accounting firms and manually examine a sample of the job titles used in their job postings to decide the keywords to use in classifying postings. We define a job posting as an audit-related position if the job title contains keywords in the job title such as "audit", "auditing", "assurance", "attest", or "a&a". A tax-related job posting contains keywords in the job title such as "tax", "transfer pricing", or "state and

posted by top 100 non-Big 4 accounting firms and non-Top 100 PE-backed accounting firms from 2020 to 2023, we categorize 19% as audit, 24% as tax, and 32% as consulting, with the remaining 25% unclassified (untabulated). Panel A reports overall growth in job postings for control firms of 310%, 69%, and -14% in 2021, 2022, and 2023, respectively.

Panel B reports the related figures for the three (two) accounting firms receiving PE investments in 2021 (2022), highlighting deal years in gray. The 2021 investments have higher growth than control firms with growth of 469% and 123% in 2021 and 2022, however, they have a larger decline in postings in 2023 (noting that this decline comes from a much higher base after the prior years' growth). The 2022 investments have larger growth in postings than control firms in both 2022 (118%) and 2023 (2%). We also note that the five treatment firms post a smaller percentage of audit jobs (10 to 16%) after PE investment than compared to either themselves before PE investment or to control firms (which range from 19% to 22% with one exception). We present statistics for accounting firms with PE investments completed or announced in 2023 and 2024 but defer analysis to our Proposed Analyses.

In Panel C, we separately tabulate job postings for each of the five PE-backed accounting firms, highlighting deal years in gray. For the three accounting firms receiving PE investment in 2021, Citrin Cooperman experienced the highest growth in job posting in 2021 and 2022 (1,588% and 275%, respectively), followed by EisnerAmper (422% in 2021 and 76% in 2022), with Schellman reporting 105% and 128% in 2021 and 2022, respectively. From 2022 to 2023, Schellman experienced the sharpest decline in job postings (-84%), followed by Citrin Cooperman (-65%) and EisnerAmper (-24%). These numbers, combined with results from Table 4, suggest that EisnerAmper and Citrin Cooperman expand relatively fast after PE investment, while

local tax". Similarly, the job title of a consulting-related posting commonly contains keywords: "advisory", "consulting", or "analyst". A complete list of keywords used in our search is available upon request.

Schellman has kept its pace. For the two firms receiving PE investment in 2022, their job posting pattern in the year following the deal (2023) deviates from that of control firms. For control firms (and the three 2021-deal treatment firms), job postings decrease in 2023. Yet for the 2022-deal treatment firms, job postings increase. This suggests that in the year of and the year after PE investment, accounting firms hire aggressively, but the long-term trend indicates some mean reversion as the *number* of job postings moves back to the pre-investment level. When comparing the growth rate by job function for treatment versus control firms in post-PE investment years, treatment firms generally experience higher growth in all three service areas, with consulting seeing the highest growth.

To formally compare changes in job postings from before to after PE investment, we perform the following accounting firm-month level regression from 2020 to 2023:

$$PostingDEP_{im} = \beta_0 + \beta_1 POST_{im} + \lambda_i + \theta_m + \varepsilon_{im} \quad (5),$$

where the dependent variable is the natural log of number of total, audit, tax, and consulting job postings by firm i in month m. The independent variable $POST_{im}$ takes the value of one for accounting firms in the months on and after receiving PE investments and zero otherwise (i.e., for months before the deal and for all control firms for all months). We include accounting firm fixed effects and year-month fixed effects to control for time-invariant firm-level determinants and any time trend. Table 6, Panel D reports results. *POST* is significantly positive when the dependent variable is consulting-related postings. The coefficient on *POST* is significantly positive at the 10% level (one-tailed) when the dependent variable are total postings, audit-related postings, and tax-related postings. Collectively, there is strong demand for talent overall and from each separate field from PE-backed firms, compared to control firms, after receiving PE investment. This provides evidence rejecting the null H3 for job postings.

[INSERT TABLE 6 HERE]

Next, we examine the average time to fill job vacancies (measured as the number of days from job posting to removal), to gain insights into the labor market's perception of PE-backed firms. In Panel A of Table 7, we observe that control firms take longer to fill audit and tax jobs than other jobs, with the time to fill other jobs (i.e., consulting and unclassified) decreasing over time. For the three firms receiving PE investment in 2021, these firms fill job vacancies more quickly than control firms in the pre-investment year (2020) . However, this pattern reversed in the event year and persisted into post-PE years (2022 and 2023), with treatment firms taking longer to fill jobs than control firms in these years. Breaking this down by job type, we notice that while it is harder to fill audit and tax jobs for treatment firms, it is less of the case for consulting jobs. The 2022 PE investee firms generally appear more similar to control firms before and after the deal, except that they fill tax roles more slowly.

We formally test the association between PE investment and days needed to fill jobs by estimating the following job posting-level regression from 2020 to 2023:

$$FilltimeDEP_{ijm} = \beta_0 + \beta_1 POST_{ijm} + \lambda_i + \theta_m + \varepsilon_{ijm} \quad (6),$$

where the dependent variable is the number of days between the job posting date and the removal date. $POST_{ijm}$ takes the value of 1 for posting j by firm i in month m for months on or after the PE deal, and zero otherwise. *POST* is significantly positive in all columns except for audit roles (column 2), suggesting that it takes longer to fill job vacancies in tax and consulting but not for audit for PE-backed firms after the deal compared to control firms. These observations reject the null H3 for job postings and are consistent with the voiced concern of potential negative impact of PE investments on the audit labor market, especially for the fast-expanding non-audit services by PE investee firms.

[INSERT TABLE 7 HERE]

For our final tests related to H3, we examine the hiring of new employees and the turnover of existing employees. In contrast to our prior analyses examining annual numbers of employees in total or by audit vs. non-audit personnel reported by the firm (from *Accounting Today* and Form 2), in this analysis we use employees' self-reported employment information (from Revelio Labs) to conduct more granular analyses. Notably, in addition to examining employees in total, we can examine employees by service lines (audit, tax, consulting), by level (partner, manager, etc.) and by the employees prior/next workplace. We aggregate employee-level information to the firm-month level. Table 8 examines new hires while Table 9 examines turnover.

We formally test the association between PE investment and the hiring or turnover at firms by estimating the following accounting firm month-level regression from 2018 to 2023:

$$Hire\_LeaveDEP_{im} = \beta_0 + \beta_1 POST_{im} + \lambda_i + \theta_m + \varepsilon_{ijm} \quad (7),$$

where the dependent variable is the number of employees hired by (or leaving) firm i in month m scaled by the beginning of month employment (per Revelio Labs). We also calculate these variables by service line (audit, tax, consulting), position (partner, manager, senior, associate), and by past/future employer (Big 4, Top 100, none, other). $POST_{im}$ takes the value of 1 for firm i in month m for months on or after the PE deal, and zero otherwise.

Table 8, Panel A reports results for overall hiring. *POST* is significantly positive in column (1), suggesting that PE-backed accounting firms hire more after PE investment. We split the sample into large versus small firms and find that the results are similar across large and small firms. Panel B reports that hiring increases across all service lines. Panel C reports hiring by position. We find that hiring increases for partners, managers, and associates (columns 1, 2, and 4) but not for seniors (column 3). This may be a result of acquired firms typically hiring experienced seniors so that PE

investment does not change much in that area. Panel D reports hiring by prior employer. Post-PE-investment, new employees primarily come from other Top 100 firms, college, or other employers (columns 2-4) but not from Big 4 (column 1). Overall, these observations reject the null H3 for hiring, but generally do not support the voiced concern of potential negative impact of PE investments on the audit labor market.

[INSERT TABLE 8 HERE]

Table 9, Panel A reports results for employee turnover, also split by large and small firms. *POST* is insignificant, and the results are similar across large and small firms, suggesting no evidence that PE-backed accounting firms experience different turnover after PE investment. Panel B reports that turnover only increases in consulting services (column 3). Notably, consulting positions appear to be the easiest to fill based on our prior analysis (i.e., shortest time to fill job postings in this category). Panel C reports turnover by position and finds that turnover increases only for partners and associates (column 1 and 4). These results may be driven by the substantial increase in the number of employees following PE investment, leading to a larger share of employees choosing to leave. Panel D reports where the departing employees choose to work next. We find a decrease in the number of employees that move to other top 100 firms (columns 2), suggesting that PE investment may help retain talent and reduce employees moving to competitors. Overall, we find limited evidence that PE investment in accounting firms changes employee turnover.

[INSERT TABLE 9 HERE]

Given our separate analysis of hiring and turnover, a question arises as to which dominates (though our results so far suggest hiring increases with less consistent effects for turnover). In untabulated analysis, we examine the net hiring rate (hires less turnover). Consistent with the prior

results, we find that net hiring increases after PE investment for PE-backed accounting firms. Again, this suggests that PE investment in the accounting industry does not lead to widespread cost cutting through layoffs.

4.5 Audit quality

As our final analysis, we examine audit quality changes around PE investment in auditors of public firms. We measure audit quality using discretionary accruals. We explore the change in audit quality by estimating the following accounting client-year level regression for 2018 to 2023:

$$AQ\_DEP_{ct} = \beta_0 + \beta_1 POST_{ct} + X + \lambda_c + \theta_t + \varepsilon_{ct} \quad (8),$$

where the dependent variable is a measure of discretionary accruals (absolute, positive, or raw) for client *c* in year *t*. *POST* is set equal to one for client *c* of PE-backed accounting firms in the year in or after the PE investment, and 0 otherwise. *X* represents a vector of control variables commonly used in audit quality research. We include year and client firm fixed effects.

Table 10, Panel A reports descriptive statistics for companies audited by non-Big 4 auditors. As expected, these companies are notably smaller than the broader sample of Big 4 audited clients typically examined, and have larger accruals and more losses. Panel B reports the results only for the clients of PE-backed auditors before and after the PE investment. As with mergers of financial institutions being exogenous to the financial institution's investment portfolios (He and Huang 2017), we expect that PE investment in auditors is exogenous to the auditor's clients and clients' choices to use an auditor. Consistent with this, we find that clients of PE-backed auditors are largely similar before and after PE investment. However, we find accruals decrease, consistent with improved audit quality following PE investment.

Table 10, Panel C reports regression results. We find evidence of improved audit quality after PE investment. Absolute, positive, and raw discretionary accruals decrease by 3 to 5% of

assets. Though statistically weak in columns 1 and 2, these are economically large effects. The statistically weak results may be a function of limited statistical power. In Proposed Analyses, we examine firm behaviors that we previously examined as mechanisms for these changes in audit quality.

[INSERT TABLE 10 HERE]

5. Proposed Analyses

5.1 Extend time period

Our current analysis includes five PE deals completed between 2021 and 2022, with the sample period extending from 2018 to 2023. Additionally, we observe PE deals from 2023 to 2024 and provide descriptive statistics on these transactions. In our first proposed analysis, we plan to acquire updated employment and job posting data in January of 2026, covering the period through 2025. We also plan to update our data from standard data sources (Audit Analytics, Compustat) through 2025. We will update all of our analyses in the study with this data, extending the study period to 2018-2025 and incorporating all PE-backed deals occurring between 2021 and 2024. We will provide descriptive statistics on the 2025 PE investments. Overall, our methodology and presentation of results will follow that of the current analysis, though we may have to limit presentation of data on individual deals due to the increased number of deals—five in the current analysis compared to 16 additional deals in 2023 and 2024.

In addition, Donahoo et al. (2025) employ the metaphor of marriage to characterize the relationship between PE firms and accounting firms, suggesting that the economic motivations, resource sharing, and power dynamics may evolve across the dating, marriage, and marriage dissolution phases of the relationship. Our current dynamic analyses, discussed in Section 4.1, primarily focus on testing the parallel trends assumption during the pre-investment period. With

the extended sample period, the dynamic analyses will also enable us to examine how firm behavior changes over time following PE investment, particularly as firms approach the end of the PE-accounting firm relationship during the exit phase.

5.2 Examine whether growth arises from M&A or organically

In our current analysis, we find that PE-backed accounting firms grow their revenue, offices, and geographic footprint. We also find that they increase M&A activity but we find less evidence of an increase in hiring. This raises the question as to whether the growth we observe is driven by M&A activity or arises organically. In these analyses, we will conduct cross-sectional tests that work to identify the source of growth. For example, we will identify the amount of fees acquired (based on pre-acquisition data) relative to total fee growth. We will identify which office locations appear to relate to acquired firms.

5.3 Examine changes in more detailed employee attributes

In our current analysis, we examine overall changes in employment, job postings, and turnover. In this Proposed Analysis, we plan to examine changes in the demand for specific skills (e.g., tech-related talent) changes after PE investment. This will provide evidence on PE funds' claims that they will invest in and upskill talent. We also plan to examine how employees' sentiment evolves as PE deals progress. This addresses widespread concerns that PE firms harm employees and firm culture.

5.4 Examine mechanisms underlying changes in audit quality

In our current analysis, we find some evidence that PE investments improve audit quality. We propose exploring mechanisms underlying this increase. Specifically, we plan to examine audit quality effects conditional on the real effects we examine earlier (e.g., revenue growth overall and by category, growth in office locations, geographic expansion, M&A, and changes in numbers of

employees). On one hand, growth may enhance audit capabilities (e.g., Jiang et al. 2019). On the other hand, it may cause "growing pains" or distraction (e.g., Bills et al. 2016; Christensen et al. 2023). This proposed analysis addresses this empirical question. We acknowledge that PE-backed accounting firms audit a somewhat small set of public firms; thus, we caution that there may not be much cross-sectional variation for this Proposed Analysis. However, the amount of variation we are able to identify is contingent on the extended data that we plan to gather in Section 5.1.

6. Conclusion

Our study provides initial insight into the economic consequences of PE investment in accounting firms. By conducting firm- and office level analyses of PE-backed accounting firms and comparing them to non-Big 4, non-PE Top 100 firms, we find that PE-backed accounting firms appear to grow at a faster rate than other non-Big 4 firms, and that this is only true after PE investment. Further, the additional growth stems from non-audit services. Consistent with the rapid growth in revenue, we find that PE-backed firms grow their operations by opening new offices and expanding geographically into new markets after PE investment. The rapid revenue growth is also reflected in the significant increase in the *total number of employees* (from 41% to 72% following PE deals), and the sharp decline in the number of *audit personnel* at CPA firms. Given the rapid growth in human capital, we next investigate the sources of growth, including (1) growth through acquisitions and (2) organic growth through direct hiring. Results provide initial support that the personnel growth of PE-backed accounting firms is mainly through increased M&A activities instead of new hires. In fact, we find that it takes longer for PE-backed accounting firms to fill their job vacancies after PE deals, providing initial evidence of potential employees' negative impression of PE investment in the industry. Our findings are consistent with PE investors' aggressive platform building strategy to expand into new markets and we expect our future in-

depth examination of more recent deals to provide more insight into the far-reaching impact of PE investment in the industry. Our findings should be of particular interest to regulators, standard setters, researchers, accounting practitioners, and investors.

References:

Agrawal, A., and P. Tambe. 2016. Private equity and workers' career paths: The role of technological change. *The Review of Financial Studies* 29 (9): 2454-2489.

American Institute of Certified Public Accountants (AICPA). 2025. Professional ethics division discussion memorandum: Potential Revisions to the AICPA Code of Professional Conduct and guidance related to independence in alternative practice structures. Available at: https://www.aicpa-cima.com/resources/download/ethics-discussion-memo-APS

Aobdia, D., Q. Li, K. Na, and H. Wu. 2024. The influence of labor market power in the audit profession. *The Accounting Review* 99 (5): 65-95.

Bernstein, S., and A. Sheen. 2016. The operational consequences of private equity buyouts: Evidence from the restaurant industry. *The Review of Financial Studies* 29 (9): 2387-2418.

Bills, K. L., Q. T. Swanquist, and R. L. Whited. 2016. Growing pains: Audit quality and office growth. *Contemporary Accounting Research* 33 (1): 288-313.

Borysoff, M. N., J. K. Conaway, and E. J. Riedl. 2024. Does private equity investment in accounting firms affect perceived and actual audit quality? Working paper.

Borysoff, M. N., P. Mason, and S. Utke. 2024. Understanding private equity funds: A guide to private equity research in accounting. *Journal of Financial Reporting* 9 (1): 21-49.

Boucly, Q., D. Sraer, and D. Thesmar. 2011. Growth LBOs. *Journal of Financial Economics* 102 (2): 432-453.

Christensen, B., K. W. Smith, D. Wang, and D. Williams. 2023. The audit quality effects of small audit firm mergers in the United States. *Auditing: A Journal of Practice & Theory* 42 (2): 75-99.

Cohn, J., N. Nestoriak, and M. Wardlaw. 2021. Private equity buyouts and workplace safety. *The Review of Financial Studies* 34 (10): 4832-4875.

Cowle, E. N., T. J. Kleppe, J. R. Moon, Jr., and J. E. Shipman. 2022. Client consulting opportunities and the reemergence of Big 4 consulting practices: Implications for the audit market. *The Accounting Review* 97 (7): 135-168.

Dangor, G. 2024. Private equity now has a stake in 10 of the top 30 CPA firms. *CFO Brew*. https://www.cfobrew.com/stories/2024/11/20/private-equity-now-has-a-stake-in-10-of-the-top-30-cpa-firms

Davis, S. J., H. Haltiwanger, K. Handley, R. Jarmin, J. Lerner, and J. Miranda. 2014. Private equity, jobs, and productivity. *American Economic Review* 104 (2): 3956-3990.

Donahoo, N., C. Nielson, and J. Pickerd. 2025. Marital bliss? Private Equity and the Attest Industry. Working paper.

Drew, J., and A. D. Koltin. 2022. Private equity's push into accounting. *Journal of Accountancy*. https://www.journalofaccountancy.com/news/2022/jun/cherry-bekaert-private-equity-investment.html

Eaton, C., S. T. Howell, and C. Yannelis. 2020. When investor incentives and consumer interests diverge: Private equity in higher education. *The Review of Financial Studies* 33 (9): 4024-4060.

Ecker, F., J. Francis, P. Olsson, and K. Schipper. 2013. Estimation sample selection for discretionary accruals models. *Journal of Accounting and Economics* 56: 190-211.

Edgerton, J. 2012. Agency problems in public firms: Evidence from corporate jets in leveraged buyouts. *Journal of Finance* 67 (6): 2187-2213.

Ewens, M., A. Gupta, and S. T. Howell. 2022. Local journalism under private equity ownership. Working paper, National Bureau of Economic Research.

Fracassi, C., A. Previtero, and A. Sheen. 2022. Barbarians at the store? Private equity, products, and consumers. *The Journal of Finance 77* (3): 1439-1488.
Gaver, J. J., and S. Utke. 2019. Audit quality and specialist tenure. *The Accounting Review* 94 (3): 113-147.
Gow, I. D., D. F. Larcker, and P. C. Reiss. 2016. Causal inference in accounting research. *Journal of Accounting Research* 54 (2): 477-523.
Guo, S., E. S. Hotchkiss, and W. Song. 2011. Do buyouts (still) create value? *The Journal of Finance* 66 (2): 479-517.
Gupta, A., S. T. Howell, C. Yannelis, and A. Gupta. 2024. Owner incentives and performance in healthcare: Private equity investment in nursing homes. *The Review of Financial Studies* 37 (4): 1029-1077.
Harrington, C., B. Olney, H. Carrillo, and T. Kang. 2012. Nurse staffing and deficiencies in the largest for-profit nursing home chains and chains owned by private equity companies. *Health Services Research* 47 (1): 106-128.
He and Huang. 2017. Product market competition in a world of cross-ownership: Evidence from institutional blockholdings. *Review of Financial Studies* 30 (8): 2674-2718.
Jiang, J., I. Y. Wang, and K. P. Wang. 2019. Big N auditors and audit quality: New evidence from quasi-experiments. *The Accounting Review* 94 (1): 205-227.
Kirti, D., and N. Sarin. 2024. What private equity does differently: Evidence from life insurance. *Review of Financial Studies* 37 (1): 201-230.
Kitto, A. R. 2024. The effects of non-Big 4 mergers on audit efficiency and audit market competition. *Journal of Accounting and Economics* 77 (1): 101618.
Kothari, S. P., A. J. Leone, and C. E. Wasley. 2005. Performance matched discretionary accruals. *Journal of Accounting and Economics* 39: 163-197.
Lerner, J., M. Sorensen, and P. Strömberg. 2011. Private equity and long-run investment: The case of innovation. *The Journal of Finance* 66 (2): 445-477.
Leslie, P., and P. Oyer. 2008. Managerial incentives and value creation: Evidence from private equity. Working paper, National Bureau of Economic Research.
Mason, P., and S. Utke. 2024. Can audit industry market share be bought? Evidence from the private equity and hedge fund industry. Working paper.
Olsson, M., and J. Tåg. 2017. Private equity, layoffs, and job polarization. *Journal of Labor Economics* 35 (3): 697-754.
SEC. 2022. Auditor independence and ethical responsibilities: Critical points to consider when contemplating an audit firm restructuring. https://www.sec.gov/news/statement/munter-statement-auditor-independence-and-ethical-responsibilities-082922
Wilson, N., M. Wright, D. S. Siegel, and L. Scholes. 2012. Private equity portfolio company performance during the global recession. *Journal of Corporate Finance* 18: 193-205.
Zhou, Y., D. P. Weber, and C. Wen. 2024. Selection bias in audit firm tenure research. *Review of Accounting Studies* 29: 3085-3129.

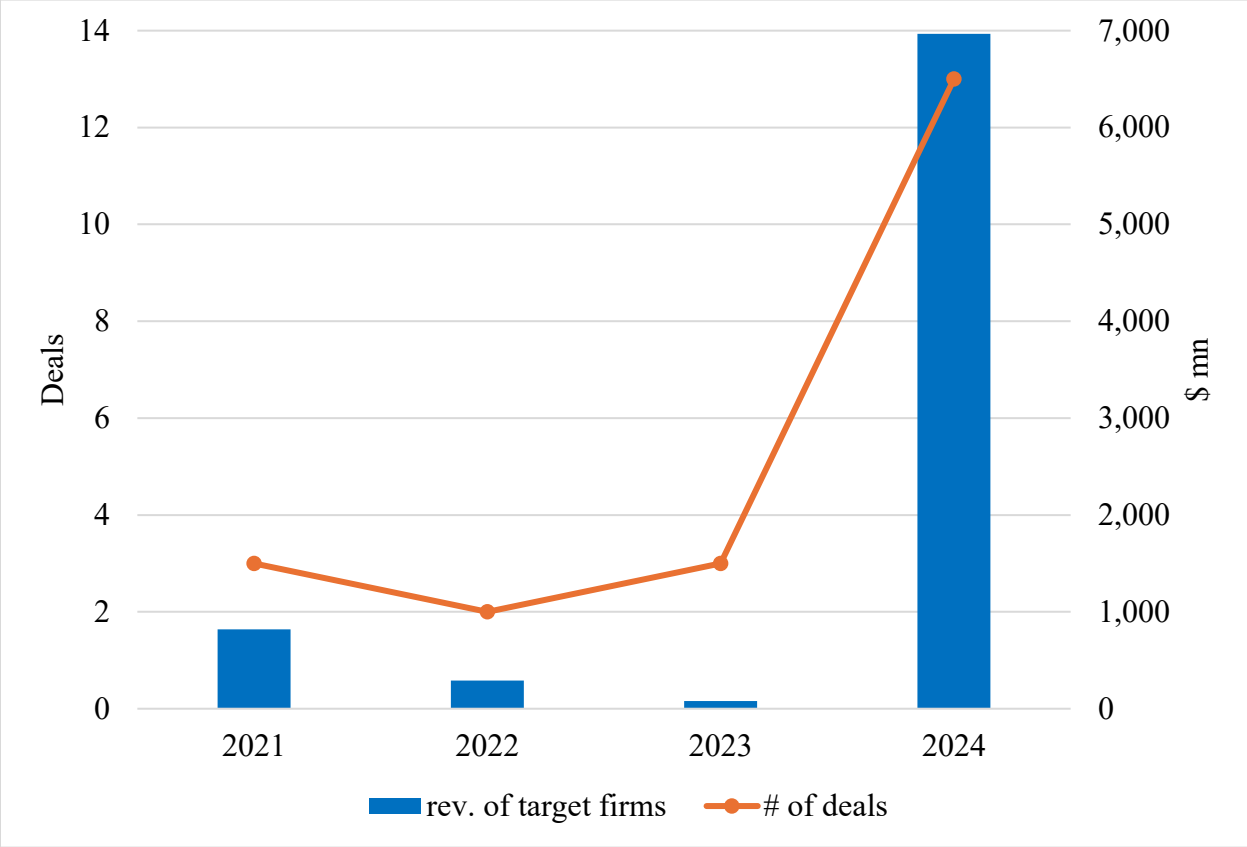
Appendix A: Variable Definition

Variables	Definition	Sources
Variables of interest		
$POST_{i,t}$	= 1 for PE-backed firm *i* in year *t* on or after the completion date of the PE deal, otherwise 0.	Preqin
$POST_{im}$	= 1 for PE-backed firm *i* in month *m* on or after the completion date of the PE deal, otherwise 0.	Preqin
$POST_{ijm}$	= 1 for job posting *j* by PE-backed firm *i* in month *m* on or after the completion date of the PE deal, otherwise 0.	Preqin
$POST_{ct}$	= 1 for client firm *c* of PE-backed firms in year *t* on or after the completion date of the PE deal, otherwise 0.	Preqin
Accounting firm level variables		
REVENUE	The logarithm of an accounting firm's total annual revenue in millions. The total revenue is split to revenue from audit and assurance services (*A&A_REVENUE*), revenue from tax services (*TAX_REVENUE*), and revenue from management advisory and other fees (*CONSULTING_REVENUE*).	Accounting Today
REVENUE_GROWTH (%)	The change in total revenue scaled by the total revenue in previous year. The growth rate is also reported separately for revenues from audit and assurance services (*A&A_REVENUE_GROWTH*), revenue from tax services (*TAX_REVENUE_GROWTH*), and revenue from management advisory and other fees (*CONSULTING_REVENUE_GROWTH*).	Accounting Today
A&A_REV_PCT (%)	The percentage of an accounting firm's revenue from audit and assurance services in its total revenue.	Accounting Today
#OFFICES	The number of an accounting firm's offices at the end of the fiscal year.	Form 2
Δ#OFFICES	= Accounting firm's number of offices at the end of current year – Number of offices at the end of previous year.	Form 2
Sign(Δ#OFFICES)	= +1 if an accounting firm's number of offices change is positive (*Δ#OFFICES > 0*), 0 if no change (*Δ#OFFICES = 0*), -1 if number of offices change is negative (*Δ#OFFICES < 0*)	Form 2
#OFFICES_IN_NEW_MSA	= Accounting firm's number of new offices opened in new MSAs in a year.	Form 2
ENTERING_NEW_MSA_IND	= 1 if an accounting firm opens at least one new office in new MSAs in a year, otherwise 0.	Form 2
#M&A_DEALS	The number of an accounting firm's M&A deals in a year.	Audit Analytics
M&A_PERSONNEL	The total number of employees that an accounting firm acquired through all M&A deals in a year.	Hand-collected

Variables	Definition	Sources
LN_#EMP	The natural logarithm of an accounting firm's total number of employees.	Accounting Today
EMP_GROWTH (%)	The change in total number of employees scaled by the total number of employees in previous year.	Accounting Today
LN_#AUD_EMP	The natural logarithm of an accounting firm's total number of audit employees.	Form 2
AUD_EMP_GROWTH (%)	The change in total number of audit employees scaled by the total number of audit employees in previous year.	Form 2
MONTHLY_POSTING	The logarithm of an accounting firm's number of job postings in a month	Revelio Labs
FILLING_TIME	The number of days to fill a job vacancy computed as the time difference between posting date and removing date of the job posting.	Revelio Labs
MONTHLY_JOINED	The number of an accounting firm's new employees in a month scaled by the number of employees at the beginning of the month	Revelio Labs
MONTHLY_JOINED _(CONDITION)	The number of employees who joined an accounting firm in the months who meet a specific condition scaled by the number of employees at the beginning of the month. Conditions include employees' positions (partner, manager, senior, associate), employees' service line (audit, tax, consulting), and employees' previous workplace (from Big 4, from Top 100 accounting firms, college, and from others)	Revelio Labs
MONTHLY_TURNOVER	The number of employees leaving the firm during a month scaled by the total number of employees at the beginning of the month	Revelio Labs
MONTHLY_TURNOVER _(CONDITION)	The monthly turnover of employees who meet a specific condition. Conditions include employees' position (partner, manager, senior, associate), employees' service lines (audit, tax, consulting), and employees' next workplaces after leaving the accounting firm (to Big 4, to Top 100 accounting firms, to other, and off labor market).	Revelio Labs
Audit engagement level variables		
DA	The signed value of the discretionary accruals for client firm *i* in year *t*. We estimate discretionary accrual using the cross-sectional modified Jones model based on Kothari, Leone, and Wasley (2005). For each year and two-digit SIC industry, we estimate the following models using all firms that have the necessary data on Compustat:	Compustat

Variables	Definition	Sources
	$\frac{\text{Total Accruals}_{i,t}}{\text{Total Assets}_{i,t-1}} = \alpha_1 \frac{1}{\text{Total Assets}_{i,t-1}} + \alpha_2 \frac{\Delta Sales_{i,t}}{\text{Total Assets}_{i,t-1}} + \alpha_3 \frac{Net\ PPE_{i,t}}{\text{Total Assets}_{i,t-1}} + \alpha_3 ROA_{i,t-1} + Discretionary\ Accurals_{i,t}$ Following prior literature, we require each 2-digit SIC group to have at least 10 firms to estimate each cross-sectional discretionary accruals model (e.g., Kothari et al. 2005; Ecker, Francis, Olsson, and Schipper 2013). Total accruals for client firm *i* in year *t*, defined as net income from continuing operations minus operating cash flow scaled by total assets at the end of year *t-1*. (Kothari et al. 2005; Gaver and Utke 2019; Zhou, Weber, and Wen 2024).	
ABSOLUTE_DA	The absolute value of the discretionary accruals.	Compustat
POSTIVE_DA	The value of the discretionary accruals when we limit our sample to client firms with income-increasing discretionary accruals (*DA > 0*).	Compustat
FOREIGN	A client firm's foreign sales scaled by total sales.	Compustat
LEVERAGE	A client firm's total liabilities scaled by total assets (LEVERAGE = LT/AT).	Compustat
LOSS	= 1 if a client firm's net income is below zero, and 0 otherwise.	Compustat
MB	A client firm's total market capitalization scaled by book value (MB = (PRCC_F * CSHO)/AT).	Compustat
ASSETS	A client firm's total assets.	Compustat
SIZE	The natural logarithm of a client firm's total assets.	Compustat
MW	= 1 if a client firm has internal control material weakness in year t.	Audit Analytics
BUSY	= 1 if the client's fiscal year-end in year t is in December and 0 otherwise.	Compustat
TENURE	The length of auditor tenure in years.	Audit Analytics
NAS	The proportion of non-audit services fees to total fees a client firm paid to its auditor.	Audit Analytics

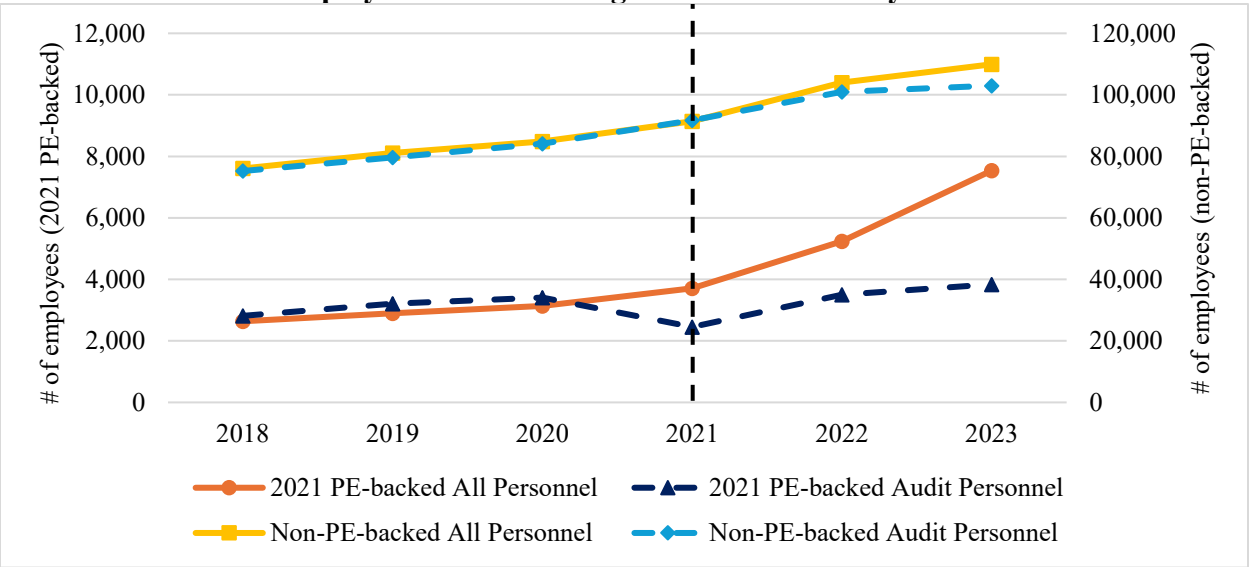
Figure 1: PE Investments into Accounting Firms from 2021 to 2024



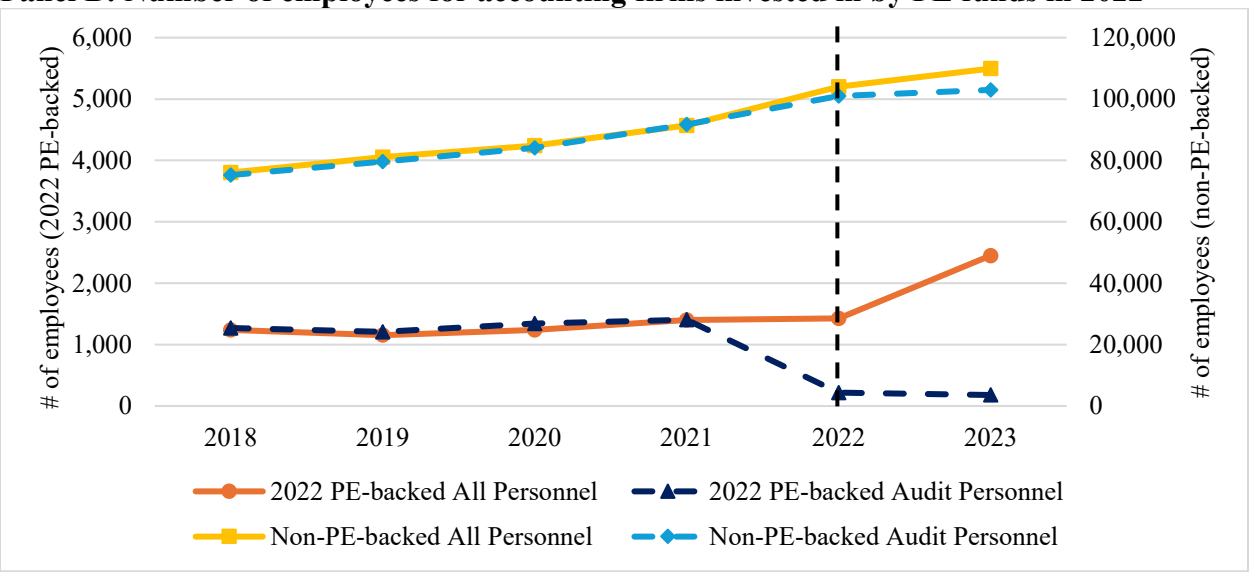
This figure reports the number of accounting firms receiving PE investment and the aggregate total revenue of those firms by deal announcement year. Revenues are amounts reported in the year prior to the PE deal, obtained from *Accounting Today*.

Figure 2: Number of Employees for PE-backed Accounting Firms

Panel A: Number of employees for accounting firms invested in by PE funds in 2021



Panel B: Number of employees for accounting firms invested in by PE funds in 2022



Panel A (B) of this figure presents the number of employees over time, from 2018 to 2023, for accounting firms obtaining PE investment in 2021 (2022) and for accounting firms that do not receive PE investments. "All Personnel" includes the total number of employees for the entire firm, even if attestation and advisory practices are separate. In contrast, "Audit Personnel" includes only employees of the attestation firm. For example, "All Personnel" for EisnerAmper 2023 combines the totals from EisnerAmper LLP and Eisner Advisory Group LLC as of accounting firm's fiscal year end date 7/31/2023, while "Audit Personnel" reflects only the employees of EisnerAmper LLP LLP as of Form 2 report date 3/31/2024. We obtain the "All Personnel" data from Accounting Today's annual reports and the "Audit Personnel" data from PCAOB's Form 2. We require accounting firms to have number of employees for both "All Personnel" and "Audit Personnel" to be included in the figure.

Table 1: List of Private Equity Investments in Accounting Firms and Sample Selection

Panel A: List of private equity investments in accounting firms

Rank (year before PE deal)	Accounting Firm	Conducted Audits (of Public Firms)	Private Equity Investor	Annce. Date	Completion Date
18	EisnerAmper LLP	Yes (Yes)	TowerBrook	8/2/2021	8/2/2021
65	Schellman & Company, LLC	Yes (No)	Lightyear Capital	9/17/2021	10/1/2021
23	Citrin Cooperman & Company, LLP	Yes (Yes)	New Mountain Capital	10/1/2021	10/1/2021
25	Cherry Bekaert LLP	Yes (Yes)	Parthenon Capital	6/30/2022	6/30/2022
>100	Smith & Howard PC	Yes (No)	Broad Sky Partners	11/15/2022	11/15/2022
N/A	Ascend Partner Services LLC	Yes (No)	Alpine Investors	1/30/2023	1/30/2023
>100	NDH LLP	No (No)	Unity Partners	4/1/2023	4/1/2023
75	Your Part-Time Controller LLC	No (No)	Pamlico Capital	11/15/2023	11/15/2023
>100	Harris CPAs P.C.	Yes (No)	DFW Capital Partners	1/16/2024	1/16/2024
N/A	Springline Advisory, Inc.	Yes (No)	Trinity Hunt Partners	1/18/2024	1/18/2024
10	Baker Tilly US, LLP	Yes (Yes)	Hellman & Friedman; Valeas Capital Partners	2/5/2024	6/11/2024
7	Grant Thornton LLP	Yes (Yes)	New Mountain Capital; OA Private Capital; CDPQ	3/15/2024	5/31/2024
N/A	Crete Professionals Alliance	Yes (No)	Bessemer Venture Partners; Thrive Capital	5/2/2024	5/2/2024
27	Sikich CPA LLC	Yes (No)	Bain Capital	5/9/2024	5/9/2024
25	Aprio, LLP	Yes (No)	Charlesbank Capital Partners	7/11/2024	Incomplete
53	Doeren Mayhew Assurance	Yes (No)	Audax Private Equity	8/23/2024	Incomplete
19	Armanino	Yes (Yes)	Further Global Capital Management	10/11/2024	10/18/2024
46	Cohen & Company, Ltd.	Yes (Yes)	Lovell Minnick Partners	10/25/2024	Incomplete
24	Carr, Riggs & Ingram LLC	Yes (Yes)	Centerbridge Partners, Bessemer Venture Partners	11/18/2024	11/18/2024
26	PKF O'Connor Davies, LLP	Yes (Yes)	Investcorp, Public Sector Pension Investment Board	11/18/2024	Incomplete
29	UHY Advisors	Yes (Yes)	Lovell Minnick Partners	12/3/2024	12/3/2024

Panel B: Sample selection

	#firm-year
Total firm-years for top-100 non-Big 4 accounting firms from 2018 to 2023	665
Add: Firm-years for other PE-backed accounting firms (i.e., non-top 100)	18
Less: Firm-years for firms that received PE investment in 2023 and 2024	(79)
Total sample available for H1 Office Expansion Tests (Table 3) and H2 M&A Tests (Table 4)	**604**
Less: Firm-years without coverage in *Accounting Today*	(15)
Total sample available for H1 Revenue Growth Tests (Table 2) and H3 Human Capital Growth Tests (Table 5)	**589**

	#posting	#firm-month
Total job postings by top-100 non-Big 4 accounting firms from 2020 to 2023	318,632	5,200
Add: Job postings by other PE-backed accounting firms (i.e., non-top 100)	411	144
Less: Job postings by firms that received PE investments in 2023 - 2024	(70,093)	(636)
Total sample available for H3 Job Posting Tests (Tables 6 and 7)	**248,950**	**4,708**

	#firm-month
Total firm-months for top-100 non-Big 4 accounting firms from 2018 to 2023	7,923
Add: Firm-months for other PE-backed accounting firms (i.e., non-top 100)	216
Less: Firm-months for firms that received PE investments in 2023 and 2024	(947)
Total sample available for H3 Employee Hiring and Turnover Tests (Tables 8 and 9)	**7,192**

	#client-year
Total client-year observations available in Compustat from 2018 to 2023	72,018
Less: Client-years with missing financial data to calculate DA	(37,332)
Less: Client-years with missing auditor data	(10,707)
Less: Client-years with missing control variables	(5,137)
Less: Utilities and Financial companies	(1,130)
Less: Client-years audited by Big 4	(11,042)
Less: Client-years audited by firms that received PE investments in 2023 and 2024	(1,160)
Total sample available for ABSOLUTE_DA and DA Tests (Table 10)	**5,510**
Less: Client-years with non-positive DA	(2,478)
Total sample available for POSTIVE_DA Test (Table 10)	**3,032**

Note: This table reports the list of PE investments in accounting firms and our sample selection. Panel A lists the PE acquisitions of accounting firms, including acquisition dates that we identified from Preqin and news articles. We also identify whether the acquired accounting firm conducted any audits, or audits of public firms, at any point during our sample period. Accounting firm rank comes from *Accounting Today*'s annual reports. Three PE-backed firms (Ascend Partner Services, Springline Advisory, and Crete Professionals Alliance) operate as platforms by partnering with accounting firms. They received PE investments around the same time the firms were founded, so no ranking is available for the year prior to the PE deal. Panel B displays the sample composition for the main hypothesis tests and related tables. We start our sample period in 2018 for all analyses, except for job posting tests, which are limited to 2020-2023 due to data constraints. For the tests of M&A, job postings, employees hiring and retention, if an accounting firm does not have any transaction in a given period, we replace the missing value with 0.

Table 2: Revenue, Revenue by Category, and Revenue Growth

Panel A: PE-backed (by deal year) versus non-PE-backed accounting firms

	2018	2019	2020	2021	2022	2023
All Top 100 non-Big 4 non-PE-backed accounting firms						
Number of firms	**101**	**97**	**95**	**93**	**88**	**85**
Revenue ($mn.)	**16,832**	**18,305**	**19,345**	**21,690**	**25,186**	**27,946**
Revenue by category:						
Audit	6,411	6,750	6,945	7,337	8,316	9,481
Tax	5,739	6,299	6,681	7,474	8,548	9,786
Consulting	4,682	5,258	5,722	6,882	8,323	8,680
Revenue growth rate	8%	9%	6%	12%	16%	11%
Revenue growth by category						
Audit	6%	5%	3%	6%	13%	14%
Tax	8%	10%	6%	12%	14%	14%
Consulting	11%	12%	9%	20%	21%	4%
PE-backed accounting firms – 3 deals in 2021						
Revenue ($mn.)	689	752	820	941	1,225	1,697
Revenue by category:						
Audit	341	375	412	337	384	494
Tax	277	294	319	352	575	818
Consulting	71	83	89	252	272	377
Revenue growth rate	7%	9%	9%	15%	30%	39%
Revenue growth by category						
Audit	3%	10%	10%	-18%	14%	28%
Tax	15%	6%	8%	10%	64%	42%
Consulting	5%	17%	8%	182%	8%	39%
PE-backed accounting firms – 2 deals in 2022						
Revenue ($mn.)	224	251	261	290	342	639
Revenue by category:						
Audit	88	93	87	96	100	159
Tax	95	107	118	119	132	222
Consulting	41	51	56	75	110	258
Revenue growth rate	12%	12%	4%	11%	18%	87%
Revenue growth by category:						
Audit	8%	6%	-7%	11%	4%	60%
Tax	12%	12%	11%	0%	12%	68%
Consulting	21%	26%	9%	34%	46%	135%
PE-backed accounting firms – 3 deals in 2023 & 13 deals in 2024 – for Proposed Analysis						
Revenue ($mn.)	3,761	4,175	4,271	5,114	6,329	7,089
Revenue by category:						
Audit	1,306	1,417	1,453	1,705	2,042	2,356
Tax	1,142	1,258	1,318	1,572	2,000	2,371
Consulting	1,314	1,500	1,500	1,837	2,288	2,362
Revenue growth rate	8%	11%	2%	20%	24%	12%
Revenue growth by category:						
Audit	1%	8%	3%	17%	20%	15%
Tax	9%	10%	5%	19%	27%	19%
Consulting	13%	14%	0%	22%	25%	3%

Panel B: Regression analysis of total revenue and revenue growth

	(1) *REVENUE*	(2) *REVENUE_GROWTH (%)*	(3) *A&A_REV_PCT* (%)
$POST_{it}$	0.232 ***	16.753 **	-9.036 **
	(3.97)	(2.46)	(-2.34)
Accounting Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	589	585	589
Adj. R^2	0.985	0.240	0.909

Panel C: Regression analysis of fee split by service and firm size

	A&A_REVENUE			*A&A_REVENUE_GROWTH* (%)		
	Full sample (n=589)	Large firms (n=212)	Small firms (n=377)	Full sample (n=585)	Large firms (n=212)	Small firms (n=373)
$POST_{i,t}$	-0.076	-0.243	0.123	8.390	17.650	-3.559
	(-0.49)	(-1.40)	(0.67)	(1.14)	(1.54)	(-1.24)
p-value: Test Large firms = Small firms		0.148			0.073*	
Accounting Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.984	0.976	0.949	0.192	0.231	0.180
	TAX_REVENUE			*TAX_REVENUE_GROWTH (%)*		
	Full sample (n=589)	Large firms (n=212)	Small firms (n=377)	Full sample (n=573)	Large firms (n=206)	Small firms (n=367)
$POST_{it}$	0.077	0.218***	-0.143	18.208***	23.397***	3.769**
	(0.69)	(3.00)	(-1.03)	(4.22)	(9.70)	(2.12)
p-value: Test Large firms = Small firms		<0.000***			0.002***	
Accounting Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.986	0.987	0.954	0.146	0.129	0.161
	CONSULTING_REVENUE			*CONSULTING_REVENUE_GROWTH*		
	Full sample (n=589)	Large firms (n=212)	Small firms (n=377)	Full sample (n=575)	Large firms (n=212)	Small firms (n=363)
$POST_{it}$	0.475*	0.660***	0.186	21.276	26.486	0.288
	(1.94)	(6.71)	(0.40)	(0.85)	(0.75)	(0.08)
p-value: Test Large firms = Small firms		0.316			0.455	
Accounting Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.953	0.958	0.892	0.028	0.018	0.018

This table reports analyses of accounting firms' total revenue, revenue by category, and revenue growth from 2018 to 2023. Panel A reports descriptive statistics for control firms and for PE-backed accounting firms by year of investment. Panel B reports results from regressing *REVENUE*, *REVENUE_GROWTH* and *A&A_REV_PCT* on an indicator for PE-backed accounting firm-years in and after the investment (*POST*) and accounting firm and year fixed effects. Treatment firms include the five firms receiving PE investment in 2021 and 2022. Panel C reports disaggregated results by revenue type (audit vs. tax vs. consulting) and firm size (large vs. small firms). Large (small) firms are firms whose average *Accounting Today* ranking is above (below) 50. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 3: Number of Offices and Geographic Expansion

Panel A: Offices for PE-backed (by deal year) versus non-PE-backed accounting firms

	2018	2019	2020	2021	2022	2023
All Top 100 non-Big4 non-PE accounting firms						
#Offices	1,134	1,157	1,172	1,235	1,194	1,202
#Offices increase/decrease	45	23	15	63	-41	8
Growth rate	4%	2%	1%	5%	-3%	1%
PE-backed accounting firms – 3 deals in 2021						
#Offices	28	37	44	47	53	68
#Offices increase/decrease	0	9	7	3	6	15
Growth rate	0%	32%	19%	7%	13%	28%
PE-backed accounting firms – 2 deals in 2022						
#Offices	29	27	25	25	28	41
#Offices increase/decrease	0	-2	-2	0	3	13
Growth rate	0%	-7%	-7%	0%	12%	46%
PE-backed accounting firms – 3 deal in 2023 & 13 deals in 2024 – for Proposed Analysis						
#Offices	240	260	268	290	300	335
#Offices increase/decrease	23	20	8	22	10	35
Growth rate	11%	8%	3%	8%	3%	12%

Panel B: Regression analysis of changes in number of offices

	Δ#OFFICES			*Sign(Δ#OFFICES)*		
	Full sample	Large firms	Small firms	Full sample	Large firms	Small firms
$POST_{it}$	2.109*	3.604**	-0.213	0.617***	0.772**	0.425***
	(1.68)	(2.25)	(-0.38)	(3.07)	(2.38)	(5.20)
p-value: Test Large firms = Small firms		0.025**			0.298	
Accounting Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	604	214	390	604	214	390
Adj. R^2	0.003	0.004	-0.046	0.009	0.025	-0.025

Panel C: Geographic expansion following PE investments

	Total No. of New Offices	Expanding in the Existing Market	Entering New Markets
All Top 100 non-Big4 non-PE accounting firms	610	252	358
	100%	41%	59%
PE-backed accounting firms – 3 deals in 2021			
Pre-PE period	20	10	10
	100%	50%	50%
Post-PE period	33	9	24
	100%	27%	73%
PE-backed accounting firms – 2 deals in 2022			
Pre-PE period	4	2	2
	100%	50%	50%
Post-PE period	14	3	11
	100%	21%	79%
PE-backed accounting firms – 3 deal in 2023 & 13 deals in 2024 – for Proposed Analysis			
Pre-PE period	192	61	131
	100%	32%	68%

Panel D: Regression analysis of geographic expansion following PE investments

	#OFFICES_IN_NEW_MSA			*ENTERING_NEW_MSA_IND*		
	Full sample	Large firms	Small firms	Full sample	Large firms	Small firms
$POST_{it}$	1.786*	3.207***	-0.314	0.523***	0.568***	0.420***
	(1.87)	(3.42)	(-0.57)	(7.87)	(7.28)	(5.67)
p-value: Test Large firms = Small firms		0.001***			0.169	
Accounting Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	604	214	390	604	214	390
Adj. R^2	0.278	0.315	0.090	0.245	0.313	0.072

Note: This table reports the change, from 2018 to 2023, in number of offices for control firms and PE-backed firms by deal year (Panel A). Panel B reports results from regressing the change in the number of offices on an indicator for PE-backed accounting firm-years in and after the investment (*POST*) and accounting firm and year fixed effects. Treatment firms include the five firms receiving PE investment in 2021 and 2022. Panel C reports new office location by existing versus new markets. Panel D reports results from the regressing of the geographic expansion of accounting firms' market, proxied by the total number of new offices in new MSAs (*#OFFICES_IN_NEW_MSA*), and indicator (*ENTERING_NEW_MSA_IND*) of having at least one new office in a new MSA. The number and locations of offices are based on audit firms' Form 2, in which firms provide information that is current as of the last day of the reporting period (March 31). If the accounting firm is not a PCAOB registered accounting firm, we use Internet Archive to collect office information. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 4: Mergers & Acquisitions

Panel A: Overall mergers & acquisitions of PE-backed (by deal year and individually) vs. non-PE-backed accounting firms

	2018	2019	2020	2021	2022	2023
All Top 100 non-Big4 non-PE accounting firms						
#M&A deals (with and without employee data)	59	68	40	39	52	36
Average #M&A deals per firm	*0.73*	*0.84*	*0.49*	*0.48*	*0.64*	*0.44*
Average number of employees acquired in the M&A deal	46	40	33	56	126	74
Total number of employees acquired by M&A	2,088	2,442	1,052	1,954	5,059	2,293
3 accounting firms invested by PE in 2021						
#M&A deals	3	3	3	4	11	6
Average number of employees acquired by the M&A deal	3	26	33	63	45	132
Total number of employees acquired by M&A	10	79	98	250	496	789
EisnerAmper						
#M&A deals	0	1	1	3	5	3
Average number of employees acquired by the M&A deal	0	47	12	74	32	192
Total number of employees acquired by M&A	0	47	12	223	160	575
Schellman						
#M&A deals	0	0	0	0	1	0
Average number of employees acquired by the M&A deal	0	0	0	0	2	0
Total number of employees acquired by M&A	0	0	0	0	2	0
Citrin Cooperman						
#M&A deals	3	2	2	1	5	3
Average number of employees acquired by the M&A deal	3	16	43	27	67	71
Total number of employees acquired by M&A	10	32	86	27	334	214
2 accounting firms invested by PE in 2022						
#M&A deals	1	1	2	0	0	3
Average number of employees acquired by the M&A deal	28	46	82	0	0	201
Total number of employees acquired by M&A	28	46	163	0	0	603
Cherry Bekaert						
#M&A deals	1	1	2	0	0	2
Average number of employees acquired by the M&A deal	28	46	82	0	0	284
Total number of employees acquired by M&A	28	46	163	0	0	568
Smith & Howard						
#M&A deals	0	0	0	0	0	1
Average number of employees acquired by the M&A deal	0	0	0	0	0	35
Total number of employees acquired by M&A	0	0	0	0	0	35
16 accounting firms invested by PE in 2023 & 2024 (for Proposed Analysis)						
#M&A deals	13	16	13	16	29	22
Average number of employees acquired by the M&A deal	29	56	118	98	54	58
Total number of employees acquired by M&A	205	781	824	1,277	1,242	1,042

Panel B: Regression analysis of mergers & acquisitions

	(1) *#M&A_DEALS*	(2) *M&A_PERSONNEL*
$POST_{it}$	0.979*	121.020**
	(1.92)	(2.24)
Accounting firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	604	604
Adj. R^2	0.390	0.167

This table reports analyses if the number of M&A deals (from Audit Analytics) and the number of employees involved in the deals from 2018 to 2023. Panel A reports descriptive statistics for control firms, PE-backed firms by deal year, and individual PE-backed firms. For control firms, not all deals have employee data. The number of deals includes all deals; statistics for numbers of employees relate only to deals with employee data. For treatment firm deals, decimals are not shown so the number of deals times the average number of employees per deal may not exactly equal the total number of employees. Panel B reports regression results from regressing the number deals by a firm in year *t* (column 1) and the employees acquired in the all of a firm's deals in year *t* (column 2) on an indicator for PE-backed accounting firm-years in and after the investment (*POST*) and accounting firm and year fixed effects. Treatment firms include the five firms receiving PE investment in 2021 and 2022. We hand collect data on the number of employees acquired in each deal, primarily using the numbers reported by audit firms in Form 2, Part 8.1(d). If this information is unavailable, we supplement it with data from Accounting Today and local media outlets. Out of 440 M&A deals in total, we obtain employee acquisition numbers for 363 deals, achieving a coverage rate of 82%. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 5: Growth in Human Capital

Panel A: The total number of employees for PE-backed (by deal year) versus non-PE-backed accounting firms (from *Accounting Today*)

	2018	2019	2020	2021	2022	2023
All Top 100 non-Big4 non-PE-backed accounting firms						
Total number of employees	81,865	87,197	91,019	98,222	111,541	118,346
Change in total number of employees	2,792	5,332	3,822	7,203	13,319	6,805
Growth rate	4%	7%	4%	8%	14%	6%
PE-backed accounting firms – 3 deals in 2021						
Total number of employees	2,638	2,901	3,138	3,710	5,236	7,538
Change in total number of employees	168	263	237	572	1,526	2,302
Growth rate	7%	10%	8%	18%	**41%**	**44%**
PE-backed accounting firms – 2 deals in 2022						
Total number of employees	1,239	1,154	1,239	1,403	1,427	2,451
Change in total number of employees	181	-85	85	164	24	1,024
Growth rate	17%	-7%	7%	13%	2%	**72%**
PE-backed accounting firms – 3 deal in 2023 & 13 deals in 2024 – for Proposed Analysis						
Total number of employees	18,370	20,009	20,020	23,433	29,783	31,502
Change in total number of employees	1037	1,639	11	3,413	6,350	1,719
Growth rate	6%	9%	0%	17%	27%	6%

Panel B: The total number of the CPA firm's personnel (from Form 2)

	2018	2019	2020	2021	2022	2023
All Top 100 non-Big4 non-PE-backed accounting firms						
Total number of audit personnel	75,233	79,667	84,086	91,675	100,966	102,968
Change in total number of employees	4,802	4434	4419	7589	9291	2,002
Growth rate	7%	6%	6%	9%	10%	2%
PE-backed accounting firms – 3 deals in 2021						
Total number of audit personnel	2,816	3,209	3,412	2,454	3,497	3,839
Change in total number of employees	154	393	203	-958	1,043	342
Growth rate	6%	14%	6%	-28%	43%	10%
PE-backed accounting firms – 2 deals in 2022						
Total number of audit personnel	1,272	1,207	1,343	1,405	217	180
Change in total number of employees	97	-65	136	62	-1,188	-37
Growth rate	8%	-5%	11%	5%	-85%	-17%
PE-backed accounting firms – 3 deal in 2023 & 13 deals in 2024 – for Proposed Analysis						
Total number of audit personnel	18,553	19,793	20,781	23,782	26,063	27,167
Change in total number of employees	1,616	1,240	988	3001	2,281	1,104
Growth rate	10%	7%	5%	14%	10%	4%

Panel C: Regression analysis of human capital

	(1) *LN_#EMP*	(2) *EMP_GROWTH (%)*	(3) *LN_#AUD_EMP*	(4) *AUD_EMP_GROWTH (%)*
$POST_{it}$	0.316***	21.050***	-0.724	3.959
	(4.37)	(3.99)	(-1.37)	(0.54)
Accounting firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	589	585	456	451
Adj. R^2	0.983	0.125	0.942	0.045

Note: This table reports the number of employees for accounting firms in total (Panel A) or for only the CPA firm (Panel B) from 2018 to 2023. Panel A and B report information for control firms and PE-backed accounting firms by deal year. Panel C presents the results of regressing the natural logarithm of number of employees (Column 1), employee growth rate (Colum 2), the natural logarithm of number of audit employees (Column 3), audit employee growth rate (Column 4) on an indicator for PE-backed accounting firm-years in and after the investment (*POST*) and accounting firm and year fixed effects. Treatment firms include the five firms receiving PE investment in 2021 and 2022. The sample size for the audit personnel test is smaller because the analysis is limited to PCAOB-registered accounting firms. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 6: Job Postings

Panel A: Job postings by top 100 non-Big 4 non-PE-backed accounting firms

	Top 100 non-Big 4 accounting firms (excluding all 21 PE-backed firms)				Average per firm (excluding all 21 PE-backed firms)			
	2020	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**
# job postings	**12,576**	**51,526**	**87,151**	**75,072**	**127**	**520**	**880**	**758**
Audit	2,820	10,273	16,614	15,245	28	104	168	154
Tax	3,074	11,424	21,629	21,002	31	115	218	212
Consulting	3,937	17,825	26,419	20,774	40	180	267	210
Unclassified	2,745	12,004	22,489	18,051	28	121	227	182
% by services								
Audit	22%	20%	19%	20%	22%	20%	19%	20%
Tax	24%	22%	25%	28%	24%	22%	25%	28%
Consulting	31%	35%	30%	28%	31%	35%	30%	28%
Unclassified	22%	23%	26%	24%	22%	23%	26%	24%
Growth rate		**310%**	**69%**	**-14%**		**310%**	**69%**	**-14%**
Audit		264%	62%	-8%		264%	62%	-8%
Tax		272%	89%	-3%		272%	89%	-3%
Consulting		353%	48%	-21%		353%	48%	-21%

Panel B: Job Postings by PE-backed accounting firms: by deal year

	3 accounting firms invested by PE in 2021				2 accounting firms invested by PE in 2022				16 accounting firms invested by PE in 2023 & 2024 – For Proposed Analysis			
	2020	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**
# job postings	**436**	**2,481**	**5,533**	**3,207**	**350**	**1,970**	**4,285**	**4,363**	**6,696**	**14,904**	**29,454**	**19,039**
Audit	82	368	578	524	39	371	451	623	1,518	2,866	4,925	3,339
Tax	135	647	1,505	1,111	71	347	843	1,066	1,463	3,416	5,237	4,005
Consulting	137	1,041	1,905	1,044	120	680	2,038	1,615	2,422	5,602	9,595	6,298
Unclassified	82	425	1,545	528	120	572	953	1,059	1,293	3,020	9,697	5,397
% postings by services												
Audit	19%	15%	10%	16%	11%	19%	11%	14%	23%	19%	17%	18%
Tax	31%	26%	27%	35%	20%	18%	20%	24%	22%	23%	18%	21%
Consulting	31%	42%	34%	33%	34%	35%	48%	37%	36%	38%	33%	33%
Unclassified	19%	17%	28%	16%	34%	29%	22%	24%	19%	20%	33%	28%
Job postings growth		**469%**	**123%**	**-42%**		**463%**	**118%**	**2%**		**123%**	**98%**	**-35%**
Audit		349%	57%	-9%		851%	22%	38%		89%	72%	-32%
Tax		379%	133%	-26%		389%	143%	26%		133%	53%	-24%
Consulting		660%	83%	-45%		467%	200%	-21%		131%	71%	-34%

Panel C: Job Postings by PE-backed accounting firms: by investee firm

3 accounting firms invested by PE in 2021	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
	EisnerAmper				Schellman				Citrin Cooperman			
# job postings	**346**	**1,807**	**3,179**	**2,431**	**57**	**117**	**267**	**44**	**33**	**557**	**2,087**	**732**
Audit	50	220	272	382	28	78	110	13	4	70	196	129
Tax	122	499	1,057	789	0	1	0	0	13	147	448	322
Consulting	126	824	1,227	855	2	11	45	8	9	206	633	181
Unclassified	48	264	623	405	27	27	112	23	7	134	810	100
% postings by services												
Audit	14%	12%	9%	16%	49%	67%	41%	30%	12%	13%	9%	18%
Tax	35%	28%	33%	32%	0%	1%	0%	0%	39%	26%	21%	44%
Consulting	36%	46%	39%	35%	4%	9%	17%	18%	27%	37%	30%	25%
Unclassified	14%	15%	20%	17%	47%	23%	42%	52%	21%	24%	39%	14%
Job postings growth		**422%**	**76%**	**-24%**		**105%**	**128%**	**-84%**		**1,588%**	**275%**	**-65%**
Audit		340%	24%	40%		179%	41%	-88%		1,650%	180%	-34%
Tax		309%	112%	-25%		n/a	-100%	n/a		1,031%	205%	-28%
Consulting		554%	49%	-30%		450%	309%	-82%		2,189%	207%	-71%
2 accounting firms invested by PE in 2022	**Cherry Bekaert**				**Smith & Howard**							
# job postings	**345**	**1,924**	**4,242**	**4,299**	**5**	**46**	**43**	**64**				
Audit	36	359	446	604	3	12	5	19				
Tax	70	326	822	1,042	1	21	21	24				
Consulting	119	677	2,028	1,600	1	3	10	15				
Unclassified	120	562	946	1,053	0	10	7	6				
% postings by services												
Audit	10%	19%	11%	14%	60%	26%	12%	30%				
Tax	20%	17%	19%	24%	20%	46%	49%	38%				
Consulting	34%	35%	48%	37%	20%	7%	23%	23%				
Unclassified	35%	29%	22%	24%	0%	22%	16%	9%				
Job postings growth		**458%**	**120%**	**1%**		**820%**	**-7%**	**49%**				
Audit		897%	24%	35%		300%	-58%	280%				
Tax		366%	152%	27%		2,000%	0%	14%				
Consulting		469%	200%	-21%		200%	233%	50%				

Panel D: Regression analysis of number of job postings

	(1) *MONTHLY_POSTING*	(2) *MONTHLY_POSTING_ AUDIT*	(3) *MONTHLY_POSTING_ TAX*	(4) *MONTHLY_POSTING_ CONSULTING*
$POST_{im}$	0.438	0.405	0.441	0.528**
	(1.48)	(1.64)	(1.23)	(2.03)
Accounting Firm FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	4,708	4,708	4,708	4,708
Adj. R^2	0.755	0.641	0.661	0.718

Note: This table presents job postings by category (audit, tax, consulting, and unclassified) from 2020 to 2023. Panel A reports results for control firms in aggregate and as a per-firm average. Panel B presents results for PE-backed firms, in aggregate, by deal year. Panel C presents results for each individual PE-backed accounting firm. Panel D reports results of regressing monthly job postings (column 1) or job postings by type (columns 2 to 4) on an indicator for PE-backed accounting firm-months in and after the investment (*POST*) and accounting firm and year-month fixed effects. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 7: Job Vacancy Filling Time (days)

Panel A: Comparison of job vacancy filling time for PE-backed vs. non-PE-backed accounting firms over 2020-2023

	All Top 100 non-Big4 non-PE-backed accounting firms				3 accounting firms invested by PE in 2021				2 accounting firms invested by PE in 2022				16 accounting firms invested by PE in 2023 & 2024 – for Prop. Analysis			
	2020	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**
All job postings	**63**	**51**	**51**	**50**	**50**	**57**	**68**	**74**	**52**	**49**	**56**	**50**	**41**	**47**	**47**	**50**
Audit	66	56	61	61	48	64	76	93	86	42	53	42	44	53	58	69
Tax	65	54	57	60	59	52	88	94	71	78	75	78	45	53	65	78
Consulting	60	49	47	43	44	57	66	53	44	48	57	46	40	44	43	37
Unclassified	61	44	42	39	44	57	49	57	36	38	40	35	35	41	35	31

Panel B: Regression analysis of job vacancies filling time

	(1) *FILLING_TIME*	(2) *FILLING_TIME_AUDIT*	(3) *FILLING_TIME_TAX*	(4) *FILLING_TIME_CONSULTING*
$POST_{ijm}$	9.735***	6.701	17.016***	8.698*
	(2.74)	(1.01)	(2.63)	(1.74)
Accounting Firm FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	248,950	47,988	62,965	77,424
Adj. R^2	0.087	0.123	0.139	0.091

Note: This table reports the average time taken to fill job vacancies from 2020 to 2023. Panel A reports descriptive statistics for control firms and PE-backed accounting firms. Panel B reports results of regressing monthly time required to fill job postings overall (column 1) or by job type (columns 2 to 4) on an indicator for PE-backed accounting firm-months in and after the investment (*POST*) and accounting firm and year-month fixed effects. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 8: New Hires

Panel A: Regression analysis of monthly new hires

	(1)	(2)	(3)
		MONTHLY_JOINED	
	Full sample	**Large firms**	**Small firms**
$POST_{im}$	0.009***	0.009	0.005
	(2.76)	(1.61)	(1.21)
p-value: Test Large firms = Small firms		0.617	
Accounting Firm FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes
Observations	7,192	2,486	4,706
Adj. R^2	0.166	0.097	0.442

Panel B: Regression analysis of monthly new hires by services

	(1)	(2)	(3)
		MONTHLY_JOINED	
	AUDIT	***TAX***	***CONSULTING***
$POST_{im}$	0.003***	0.002***	0.003***
	(4.03)	(2.65)	(4.68)
Accounting Firm FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes
Observations	7,192	7,192	7,192
Adj. R^2	0.169	0.327	0.129

Panel C: Regression analysis of monthly new hires by positions

	(1)	(2)	(3)	(4)
			MONTHLY_JOINED	
	PARTNER	***MANAGER***	***SENIOR***	***ASSOCIATE***
$POST_{im}$	0.002***	0.002***	-0.000	0.005***
	(3.37)	(3.94)	(-0.15)	(3.79)
Accounting Firm FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	7,192	7,192	7,192	7,192
Adj. R^2	0.016	0.031	0.073	0.354

Panel D: Regression analysis monthly new hires by previous workplace

	(1)	(2)	(3)	(4)
			MONTHLY_JOINED	
	FROM BIG 4	***FROM TOP 100***	***FROM COLLEGE***	***FROM OTHER***
$POST_{im}$	-0.001	0.002*	0.001**	0.007***
	(-0.91)	(1.84)	(2.14)	(3.64)
Accounting Firm FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	7,192	7,192	7,192	7,192
Adj. R^2	0.176	0.023	0.323	0.189

Note: This table reports results of regressing monthly hires on an indicator for PE-backed accounting firm-months in and after the investment (*POST*) and accounting firm and year-month fixed effects. We break down the number of new hires by services, by positions, and by previous workplace, and report results on Panel B, C, and D, respectively. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 9: Employee Turnover

Panel A: Regression analysis of monthly turnover

	(1)	(2)	(3)
		MONTHLY_TURNOVER	
	Full sample	**Large firms**	**Small firms**
$POST_{im}$	0.0008	0.0013	-0.0002
	(0.90)	(1.33)	(-0.18)
p-value: Test Large firms = Small firms		0.603	
Accounting Firm FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes
Observations	7,192	3,312	4,547
Adj. R^2	0.224	0.317	0.187

Panel B: Regression analysis of monthly turnover by services

	(1)	(2)	(3)
		MONTHLY_TURNOVER	
	AUDIT	***TAX***	***CONSULTING***
$POST_{im}$	0.0004	-0.0001	0.0009***
	(0.95)	(-0.11)	(2.64)
Accounting Firm FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes
Observations	7,192	7,192	7,192
Adj. R^2	0.241	0.244	0.211

Panel C: Regression analysis of monthly turnover by positions

	(1)	(2)	(3)	(4)
			MONTHLY_TURNOVER	
	PARTNER	***MANAGER***	***SENIOR***	***ASSOCIATE***
$POST_{im}$	0.0002*	-0.0001	-0.0002	0.0008*
	(1.66)	(-0.30)	(-0.61)	(1.84)
Accounting Firm FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	7,192	7,192	7,192	7,192
Adj. R^2	0.037	0.081	0.132	0.356

Panel D: Regression analysis of monthly turnover by next workplace

	(1)	(2)	(3)	(4)
			MONTHLY_TURNOVER	
	TO BIG 4	***TO TOP 100***	***OFF MARKET***	***TO OTHER***
$POST_{im}$	0.0001	-0.0007*	0.0004	0.0010
	(1.02)	(-1.82)	(0.98)	(1.24)
Accounting Firm FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	7,192	7,192	7,192	7,192
Adj. R^2	0.193	0.047	0.295	0.272

Note: This table reports results of regressing monthly turnover on an indicator for PE-backed accounting firm-months in and after the investment (POST) and accounting firm and year-month fixed effects. We break down the number of new hires by services, by positions, and by following workplace, and report results on Panel B, C, and D, respectively. Standard errors are clustered at the accounting firm level. We present *t*-statistics in parentheses under the coefficient estimates. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for all other variable definitions.

Table 10: Audit Quality

Panel A: Descriptive Statistics

	Count	Mean	S.D.	P25	P50	P75
ABSOLUTE_DA	5,510	0.108	0.173	0.010	0.035	0.112
POSITIVE_DA	3,032	0.112	0.036	0.010	0.034	0.096
DA	5,510	0.015	0.204	-0.031	0.003	0.038
POST	5,510	0.022	0.147	0.000	0.000	0.000
FOREIGN	5,510	0.095	0.219	0.000	0.000	0.032
LEVERAGE	5,510	1.984	5.393	0.239	0.482	0.831
LOSS	5,510	0.721	0.449	0.000	1.000	1.000
MB	5,510	7.544	22.296	0.625	1.291	3.352
ASSETS ($m)	5,510	198.241	643.775	9.248	34.440	121.880
SIZE	5,510	3.356	2.253	2.224	3.539	4.803
MW	5,510	0.042	0.200	0.000	0.000	0.000
BUSY	5,510	0.742	0.438	0.000	1.000	1.000
TENURE	5,510	7.173	6.085	3.000	5.000	10.000
LN_TENURE	5,510	1.617	0.884	1.099	1.609	2.303
NAS	5,510	0.094	0.125	0.000	0.038	0.150

Panel B: Pre-PE vs. Post-PE

	pre-PE		**post-PE**		**post-PE minus**
	Count	Mean	Count	Mean	**pre-PE**
ABSOLUTE_DA	146	0.168	121	0.060	-0.108 ***
POSTIVE_DA	91	0.179	61	0.056	-0.123 ***
DA	146	0.055	121	-0.003	-0.058 **
FOREIGN	146	0.049	121	0.035	-0.014
LEVERAGE	146	1.998	121	0.913	-1.085 *
LOSS	146	0.815	121	0.885	0.070
MB	146	9.630	121	4.250	-5.380 **
ASSETS	146	66.204	121	95.558	29.354
MW	146	0.041	121	0.033	-0.008
BUSY	146	0.808	121	0.777	-0.031
TENURE	146	7.719	121	7.636	-0.083
NAS	146	0.069	121	0.060	-0.009

Panel C: Regression results

	(1)	(2)	(3)
DV =	***ABSOLUTE_DA***	***POSITIVE_DA***	***DA***
POST	-0.031	-0.050	-0.052***
	(-1.55)	(-1.59)	(-3.34)
FOREIGN	0.006	0.014	0.014
	(0.25)	(0.43)	(0.53)
LEVERAGE	0.003*	0.005	0.001
	(1.80)	(1.64)	(0.33)
LOSS	-0.020***	-0.037***	-0.066***
	(-2.74)	(-3.61)	(-5.91)
MB	0.001**	0.001	-0.001
	(2.12)	(1.20)	(-0.89)
SIZE	0.012**	0.015*	-0.010
	(2.37)	(1.77)	(-1.41)
MW	0.014	0.030*	0.021
	(1.23)	(1.80)	(1.47)
BUSY	0.016	0.015	0.107
	(0.24)	(0.08)	(1.21)
LN_TENURE	-0.009*	-0.016**	-0.002
	(-1.96)	(-2.01)	(-0.31)
NAS	-0.030	-0.039	0.031
	(-1.16)	(-0.97)	(0.91)
Client Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	5,510	3,032	5,510
Adjusted R^2	0.423	0.466	0.056

Note: This table reports analyses of audit quality from 2018 to 2023. Panel A reports descriptive statistics for companies audited by non-Big 4 auditors. Panel B reports the results only for the clients of PE-backed auditors before and after PE investment. Panel C presents the OLS regression results for equation (8) for absolute discretionary accruals (*ABSOLUTE_DA*), income increasing accruals (*POSITIVE_DA*), and signed accruals (*DA*) in Column (1), (2), and (3), respectively. Standard errors are clustered at the client firm level. We present *t*-statistics in parentheses under the coefficient estimate for test variables. *, **, and *** denote two-tailed significance level at 10%, 5%, and 1%. See Appendix A for variable definitions.