

The Accounting Review Registered Report Proposal:

**Does Private Equity Investment in Accounting Firms
Affect Perceived and Actual Audit Quality?**

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Abstract

This paper examines the impact of private equity (PE) investment in accounting firms on the perceived and actual quality of their audits. We exploit recent high-profile announcements of major PE investments in the accounting industry. This provides a difference-in-differences design, whereby we define the treatment (control) firms to be clients of auditors receiving PE investment (clients of auditors not receiving PE investment). We conduct two primary analyses. The first examines investor perceptions of audit quality, using equity market reactions of client firms to PE investment announcements. The second examines actual audit quality outcomes, using commonly-examined measures of audit quality, including accruals and meeting/beating expectations. Additional analyses examine client firm responses to these PE investments, including the issuance of 8-Ks, changes in 10-K risk factor disclosures, and auditor switches. Combined, these analyses provide insights into whether PE investment in audit firms enhances or diminishes perceived and actual audit quality.

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1. Introduction

This paper examines the audit-quality consequences of private equity investment in accounting firms. There have been a number of notable private equity (PE) investments in accounting firms in recent years, with evidence suggesting this trend is expected to continue.¹ For example, Grant Thornton and Baker Tilly, both audit firms with clients within the S&P 500, announced strategic deals with PE firms in March and February of 2024, respectively.

The list of accounting firms that have accepted PE investment are as follows (listed in reverse chronological order):

Accounting Firm	Accounting Today 2023 Rank	Announcement of PE Investment	PE Firm	PE Firm Ownership Stake
Grant Thornton	7	Mar. 15, 2024	New Mountain Capital	Controlling
Baker Tilly	10	Feb. 5, 2024	Hellman & Friedman, and Valeas Capital Partners	Controlling
Smith and Howard	>100	Nov. 15, 2022	Broad Sky Partners	Undisclosed
Cherry Bekaert	29	Jun. 30, 2022	Parthenon Capital	Undisclosed
Citrin Cooperman	21	Apr. 11, 2022	New Mountain Capital	Controlling
Schellman and Co	49	Sep. 17, 2021	Lightyear Capital	Undisclosed
EisnerAmper	17	Aug. 2, 2021	Towerbrook Capital Partners	Controlling

This marks a transformative shift in both the ownership structure and legal structure of accounting firms. Historically, accounting firms have operated as partnerships because of regulatory requirements for CPAs to have majority ownership over audit and attestation services. With PE investment, not only are these firms introducing outside investors, but such investment requires legal restructuring of the firm. In effect, the accounting firm is split in two: the audit and attestation practice remains owned by CPAs, while the rest of the business moves to a new company, part of which is sold to the PE investors. Importantly, the CPA firm partners maintain an ownership interest in the new non-audit entity. This restructuring meets the regulatory requirement; however, the arrangement may not fully insulate the audit practice from the potential influence of the PE firm.

Our study explores the implications of this shift in ownership structure in two ways: (i) equity-market perceptions of audit clients of the targeted accounting firms, and (ii) actual effects of the PE investment on audit quality outcomes. From a PE viewpoint, the accounting industry is positioned for more growth: it already has a steady and profitable business model and is currently facing transformative changes. PE has experienced prior successes in professional service-based industries (e.g., wealth management, insurance distribution), and fund managers may view accounting as a similar opportunity. Accepting PE investment offers the accounting firms significant advantages in addressing their current challenges. Accounting firms are often capital-constrained as most profits are distributed to current and former partners. This restricts their ability to make investments in technology and acquisitions. New capital can allow the accounting firm to modernize and streamline its operations, expand into new service areas, and improve

¹ For example, <https://www.journalofaccountancy.com/issues/2023/feb/private-equity-eyes-accounting-firms-large-and-small.html> and <https://www.ft.com/content/cb6e7746-06f1-496e-81f7-1053773960f3>

compensation for talent acquisition and retention. Early anecdotal evidence indicates PE has indeed supported the growth of accounting firms. For example, Schellman and Co.'s ranking improved from 65th in 2021 (the year of PE investment) to 49th largest US accounting firm in 2023. Similarly, EisnerAmper completed ten mergers from mid-2022 to early-2023 (the year after PE investment). These examples suggest the potential consolidation that could occur within this industry.

The potential for PE's influence to spill over to the audit business is significant. On the one hand, accounting firms accept PE investment because they believe the capital infusion will enhance the firm's offerings, improve capability and operations, and support growth, all of which may improve audit quality. On the other hand, if the shorter-term investment objectives of PE investors create incentives that conflict with auditors' gatekeeper role, such as maximizing return at all costs, this may affect both the perceived and actual quality of work produced by the audit firm. The SEC is particularly concerned about maintaining the trust of investors given that auditor independence concerns, in fact or in appearance, may threaten the auditor's objectivity in providing audit opinions (Munter 2022).

Our first analysis explores investor *perception* of PE investment in accounting firms. Using an event study method, we will identify audit clients of accounting firms with PE investors and assess their stock market returns to announcement of the PE deal. Our second analysis explores whether *actual* audit quality consequences exist for clients of auditors with PE investors. Given the news reporting on these restructurings and public statements from regulators on the issue, we expect accounting firms to be cognizant of and seek to avoid obvious independence conflicts. Rather, our analyses consider more nuanced forms of PE influence on audit quality that can occur due to concomitant pressures arising from the PE investment.

To our knowledge, this is the first study to explore the effects of PE investments on accounting firms. We believe the results of our analysis will have policy implications as US regulators are already closely monitoring this trend to ensure investor protection and high-quality audits. We believe these results will also be of considerable interest to audit firms, their audit clients, and investors—all of which likely wish to better understand the implications of current and future PE investments on the structure of the audit market.

2. Background

To meet regulatory requirements, accounting firms must go through restructuring and separate the audit and attestation practice from tax and consulting. The audit and attestation practice remains owned by CPAs, while the rest of the business moves to a new company, part of which is sold to the PE investors. The CPA firm partners maintain an ownership interest in the new non-audit entity.

From an outside perspective, not much appears to have changed. For example, a Cherry Bekaert press release described their restructuring as:

“Cherry Bekaert” is the brand name under which Cherry Bekaert LLP and Cherry Bekaert Advisory LLC, independently owned entities, provide professional services in an alternative practice structure in accordance with applicable professional standards. Cherry Bekaert LLP is a licensed CPA firm that provides attest services, and Cherry

Bekaert Advisory LLC and its subsidiary entities provide business advisory and non-attest services [...].

The two entities share a website and overarching brand. The alternate practice structures at the other accounting firms mirror this approach. If the accounting firm restructuring is more legalistic (in appearance) rather than in fact, and the ownership of accounting partners in both entities creates incentive structures linking to two, then we expect PE investment to be able to influence the audit practice.

3. Research Design

Hypotheses

Prior research on PE outcomes yields mixed results on whether PE investment positively or negatively impacts the performance of the target firm. On the one hand, there is evidence of positive effects of PE investment on target firms. For example, investment by PE firms can improve operational performance (Kaplan and Strömberg 2009) and productivity (Davis et al. 2021), and increase investments in technology and innovation (Lerner et al. 2011). On the other hand, PE investors can lead to net job losses (Baker et al. 2019), a decline in average earnings per employee (Davis et al. 2021), and negative impacts on worker benefits and job security (Gornall et al. 2021).

A relevant setting is the healthcare sector. PE firms have been particularly active in this sector, where declines in staffing and compliance with care standards have led to increased mortality rates in nursing homes (Gupta et al. 2023) and increased complications in hospitals (Kannan et al. 2023). Of note, the healthcare sector has a number of features that appear relevant to the public accounting setting, such as its general ownership structure (i.e., regulatory requirements limit the ownership of medical practices to licensed doctors) and particularly the commitment to safeguarding the public. Thus, evidence that PE investment in healthcare settings leads to lower quality outcomes is suggestive of potentially negative effects within the auditing setting. Overall, the existing evidence highlights the nuanced impact of PE stakeholder investment on target companies.

From a regulatory perspective, the Office of the Chief Accountant (OCA) at the SEC has expressed concerns about accounting firms' exploration of alternative practice structures and the increase in new business arrangements between firms and entities not engaged in public accounting (SEC 2000). In the view of the OCA, “complex transactions with investors that are not traditional accounting firms [...] elevate the risk to an auditor’s independence with respect to its audit clients” and would require “vigilant ongoing monitoring of [...] audit quality” (Munter 2022).

The overarching objective of PE firms is to improve performance of target firms to maximize return on investment, with a general intent to divest within a horizon of 3-6 years. This shorter-term horizon places pressure on the PE firm to quickly implement changes at the target firm to realize value within the relatively brief investment period. These changes are typically achieved through operational and financing strategies. For example, if PE capital is used to invest in technology, acquisitions, and talent, this could create efficiencies and a better-skilled workforce: this would lead to similar or improved quality in audit outcomes by the accounting firm. Alternatively, if PE investors implement workforce reductions and other cost-cutting measures without offsetting improvements in operations, this can degrade the quality of work produced by

the accounting firm. The emphasis on short-term returns could similarly create pressure to reduce audit hours or accept more clients, which could also compromise audit quality. The introduction of PE ownership also has unique considerations for auditor independence. Of note, two of the accounting firms share a PE investor, potentially creating a three-way link for independence concerns. Combined, this suggests that the impact of PE investment on audit quality is uncertain.

We explore the audit-related consequences of PE investment from two perspectives: investor perception (i.e., the *ex ante* perception of impact on audit quality) and audit quality (i.e., actual *ex post* measures of audit quality). Our first set of analyses explores perceived audit quality. If equity investors expect PE ownership to have a net detrimental effect on audit quality, then we would expect a negative equity market response, on average, to announcements of PE investment in their auditor's firm. Alternatively, if equity investors expect PE ownership to lead to a net beneficial effect on audit quality and/or to achieve similar audit quality at lower cost, then we expect a positive equity market response, on average, to announcements of PE investment in their auditor's firm. Thus, we state our first hypothesis in a null form:

H1: PE investment does not have an impact on *perceived* audit quality.

Our second set of analyses explores actual outcomes for audit clients of accounting firms targeted by PE. On the one hand, PE investment may positively affect accounting firm operations, resulting in improved audit quality of their clients. On the other hand, in line with the OCA staff concerns, accounting firms may experience a decrease in quality after partnering with a PE firm due to cost reduction strategies that impede audit quality of their clients. Thus, we also state our second hypothesis in a null form:

H2: PE investment does not have an impact on *actual* audit quality.

Methodological Framework / Identification Strategy

We will employ a difference-in-differences design. In particular, we will use archival data to test whether the difference in perceived and actual audit quality between the treatment and control groups changes when the auditors of treatment client firms accept PE investment. Our treatment group consists of client firms whose auditing firm has accepted PE investment; our control group consists of client firms whose auditing firm does not have any PE investment.

We highlight that the announcements of the PE investments are exogenous to the client firms and are staggered over the sample period. Further, we will have a strong ability to identify both treatment and control client firms, including a range of control firms to facilitate alternative matching techniques. Overall, we believe this provides quite strong identification to assess any impact on perceived and actual audit quality due to the announced PE investments in the audit firms.

We will estimate the following models of abnormal returns and audit quality using OLS regression:

$$CAR_{it} = \beta_0 + \beta_1 Treat_i + \beta_2 Treat_i \times AnnouncePE_t + \beta_3 AnnouncePE_t + Controls_{it} + \varepsilon_{it} \quad (1)$$

$$AQ_{it} = \beta_0 + \beta_1 Treat_i + \beta_2 Treat_i \times PostPE_t + \beta_3 PostPE_t + Controls_{it} + \varepsilon_{it} \quad (2)$$

Equity Returns Analysis

Our first set of analyses explore the investor perception of PE investment in the accounting profession. Specifically, we evaluate how the stock market reacts to announcements of PE investments by examining the equity market response of audit clients of the targeted accounting firms.

There are currently seven accounting firms with PE deals (see Intro): these announcements start in August 2021 and are staggered through March 2024. Our analysis will examine audit clients of the affected accounting firms, with our unit of observation being the client-firm daily returns.

Following standard event study methodology, we will compare abnormal returns of treatment and control clients on the dates the PE deals are announced (i.e., the event dates), relative to non-announcement days. Controls will include common measures used in market studies to control for factors known to affect returns: market capitalization, share turnover, and return variability (see Hail et al. 2021).

Audit Quality Analysis

Our second set of analyses explore actual consequences of PE ownership on audits. Specifically, we evaluate whether audit quality exhibits changes following PE investment for audit clients of the targeted accounting firms. We will analyze all available years post-PE investment, which currently spans three years for the earliest firms that accepted PE investment in 2021. We will match the length of the pre-period to the available post-period, leading to up to three years of pre- and post-PE deal data. Importantly, the PE investments are not aligned in time: they are announced in various months over multiple years. Thus, we will have a staggered DID design. Our analysis will examine audit clients of the affected accounting firms, with our unit of observation being client firm-years.

We will employ output measures of audit quality used widely in the literature: discretionary accruals (signed and unsigned), total accruals, and meeting or beating expectations (zero earnings and prior year's earnings). We will likely not be able to use certain output measures such as going concern errors and restatements, as there is a generally insufficient post-PE investment period to test for such effects. We will also employ input measures of audit quality: audit fees, change in audit fees, audit hours (if available from the PCAOB), and first-year engagements. These audit quality measures have been shown in prior research to be associated with both regulatory (i.e., PCAOB Part I inspection findings) and practitioner views of audit quality (Aobdia 2019).

Control variables will include common measures used in the audit literature to control for factors known to affect audit quality, such as client size, profitability, growth, business complexity (foreign income, business segments), and risk (leverage, cash flow from operations) (see DeFond and Zhang 2014, Aobdia 2019).

Endogeneity

The decision for an accounting firm to accept PE investment is not random. To address endogeneity, we propose the following three approaches.

First, given the large potential control sample in both sets of analyses—that is, all audit clients of accounting firms without PE investment—we will be able to employ balancing techniques to

improve the covariate balance between treatment and control groups. Entropy balancing, for example, would allow us to eliminate covariate imbalance by reweighting the sample without discarding any treatment observations, which is incredibly beneficial given our relatively small sample. This approach should control for other (known) factors that could drive differences in observed stock returns and audit quality.

Second, PE is likely interested in the gap between non-Big4 and Big4 firms, and views this as a growth opportunity. Thus, in robustness analyses we will limit the control sample to non-Big4 firms, which should increase the likelihood of the control sample being potential targets of PE firms.

Third, RSM announced the sale of its wealth management practice to PE firm Parthenon in January of 2022. While this is an example of PE investment in the accounting industry, it is distinct in that the entire wealth management practice was sold (accounting partners did not retain any ownership), and it was completely rebranded under the new name Choreo. Thus, we may be able to use RSM audit clients as a benchmark group where PE is not expected to affect audit quality.²

Additional Analyses

We will also examine other *ex post* measures to assess client firm responses to the PE investment announcements of their audit firms. We propose three additional analyses. First, we will examine the issuance (and non-issuance) of 8-K filings by client firms following the announcement of the PE investment. Second, we will examine whether treatment client firms change their risk factor disclosures in the 10-K filings following the announcement. Both proxies should serve to indicate management perceptions of increased (or unchanged) risk surrounding their audits. Third, we will examine whether client firms of auditors receiving PE investment exhibit higher probabilities of switching their auditor.

Limitations

There are two primary limitations to this setting:

- (1) *Sample size*. Our sample of affected accounting firms is relatively small and comprised of non-Big 4 firms: this can limit the generalizability of the results. Related, in the actual audit quality analysis, the post-period for the more recent PE investments is limited to the first year of PE investment (2024). This shorter period could reduce the possibility of the change in ownership having an influence on audit quality so quickly. However, private equity firms operate on short time horizons, on average divesting within 3-6 years. Thus, they tend to *hit the ground running* and begin to implement their strategies near-immediately.
- (2) *COVID-19*. The earliest PE investments occur in 2021, which can create confounds in structuring the pre-period observations due to the COVID-19 pandemic; robustness analyses adjusting the pre-announcement period can help to address such concerns.

The proposed flow of tables is as follows:

Table 1: Sample Identification

Table 2: Descriptive Statistics and Correlations

Table 3: Univariate Partitions Comparing Treatment to Control Firms

Table 4: Main Results – Equity Returns Analysis

² RSM has approximately 120 audit clients with the necessary data during our sample period.

Table 5: Main Results – Audit Quality Analysis

Table 6: Cross-sectional Tests

Table 7: Alternative Outcome Measures: 8-K filings, Risk Factor Disclosures, and Probability of Auditor Switches

Table 8: Sensitivity Analyses

Heterogeneous Effects / Cross-sectional Tests

Our analyses will exploit three dimensions of cross-sectional variation. First, we will exploit characteristics of the PE investment firms. This will include general partner characteristics (such as prior experience), as well as fund characteristics like industry specialization (suggesting expertise that could pass onto client firms of the auditor) and age.

Second, we will exploit characteristics of the accounting firms accepting PE investment. This will include the market share (including for particular industries), audit partner characteristics, and engagement lengths.

Third, we will exploit characteristics of the client firms, whose auditor has accepted a PE investment. This will include risk, reporting transparency, and governance (as a mitigating factor for any reduced audit quality).

4. Data

Data Collection and Processing

We will identify clients of affected audit firms using the publicly-available Form AP disclosures. Financial and market data for US-issuers will be obtained from Compustat and CRSP, respectively. Data on audit engagements will be obtained from Audit Analytics.

Cross-sectional data on PE firm characteristics are available to one of the authors through a contract with StepStone Group. StepStone is a global private markets firm with more than \$500 billion of total capital under advisement, including over \$125 billion in assets under management. StepStone obtained its PE data directly from general partners (GPs, i.e., the fund managers) as a part of its due diligence process.³ GPs that sought capital from StepStone or one or more of its clients were required to provide information about all prior funds and investments. The richness of GP-, fund- and deal-level characteristics within the dataset represent a major advantage over existing commercial PE datasets. Access to this PE data requires a non-disclosure agreement, thus, any StepStone data used in this study cannot be made publicly accessible. Cross-sectional data on auditor and client characteristics are available from public datasets (e.g., Audit Analytics, Compustat, and CRSP).

³ This feature is important because it insures against breaks in voluntary reporting by GPs and certain selection biases in other datasets (e.g., those relying on disclosures from public records and Freedom of Information Act requests).

Preliminary investigation of the intersection of Form AP, Compustat, and CRSP data reveals the PE-infused accounting firms audited more than 300 US public issuers each year from 2017 to present.

For equity market tests, the estimated treatment sample (public clients of affected auditors) is N of 338 when the PE deal is announced. The estimated control sample is all other US-firms in Compustat and CRSP, leading to a potential control sample of more than 5,000 public companies not affected by the announcement of PE investment.

Accounting Firm	Announcement of PE Investment	N Client-Firm Observations
Grant Thornton	Mar. 15, 2024	223
Baker Tilly	Feb. 5, 2024	66
Smith and Howard	Nov. 15, 2022	0
Cherry Bekaert	Jun. 30, 2022	15
Citrin Cooperman	Apr. 11, 2022	2
Schellman and Co	Sep. 17, 2021	0
EisnerAmper	Aug. 2, 2021	32
Total N =		338

For audit quality tests, the estimated treatment sample in the pre-period is N of 528 firm-years (up to three firm-years prior to PE deal) and post-period is N of 361 firm-years (up to three firm-years post-PE deal, through 2024). The estimated control sample is all other firms in Compustat, leading to a potential control sample of approximately 34,000 firm-years across all sample years.

Accounting Firm	Announcement of PE Investment	N Client-Firm Observations	
		Pre-PE	Post-PE
Grant Thornton	Mar. 15, 2024	399	139
Baker Tilly	Feb. 5, 2024	64	22
Smith and Howard	Nov. 15, 2022	0	0
Cherry Bekaert	Jun. 30, 2022	33	57
Citrin Cooperman	Apr. 11, 2022	3	4
Schellman and Co	Sep. 17, 2021	0	0
EisnerAmper	Aug. 2, 2021	29	139
Total N =		528	361

Overall, we believe this to be a sufficient treatment sample size to perform the proposed analyses. The data collection process is straightforward, and the authors already have access to the primary datasets.

Pilot Data

A pilot study has not been completed.

5. Interpreting Results

We believe the results of these analyses will provide useful insights into perceptions and actual changes in audit quality.

For the equity return analyses, an observed positive average market return for clients of auditors receiving PE investment would be consistent with equity markets expecting net improvements in audit quality and/or cost savings being passed on through lower audit fees. An observed negative average market return for clients of auditors receiving PE investment would be consistent with equity markets expecting net reductions in audit quality, leading to either high costs and/or higher risk.

For the audit quality analyses, a finding of improved audit quality measures (e.g., lower accruals or probability of meeting/beating an expectation measure) would suggest PE investment in audit firms leads to improvements in auditor operational performance. A finding of reduced audit quality measures (e.g., higher accruals) would suggest PE investment in audit firms leads to degraded audit quality, consistent with critiques of PE investment expressed by regulators.

Overall, these analyses will provide the first data-driven evidence on the perceived and real effects of PE investment in accounting firms. Given the recent and growing trend of such investments within accounting firms, we believe our results will be of high interest to:

- regulators, trying to understand the implications of alternative audit firm ownership structures on capital market-relevant outcomes (such as audit quality)
- accounting firms, which may be anticipating ownership changes to remain competitive in the market
- client firms and their investors, which wish to understand the implications for these new ownership structures on key indicators needed to report on and assess the financial health of the firm.

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