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ACCEPTING NEW CLIENTS AND THE DOWNSTREAM EFFECTS OF AUDITOR DUE
DILIGENCE

A Dissertation
presented in partial fulfillment of requirements
for the degree of Doctor of Philosophy
in the Patterson School of Accountancy
The University of Mississippi

by

Garrison LaDuca

May 2023

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ABSTRACT

The auditor-client relationship begins during the client acceptance process. Before formal audit procedures occur, audit firms perform due diligence adding clients to their portfolio. Prior literature defines this due diligence phase as the auditor search period. Auditors utilize this time to increase the likelihood of a successful audit and continued relationship. The literature finds longer search periods are associated with higher engagement risks, which may be a precursor for more tumultuous relationships. However, I posit that auditors who spend more time, and thus expend more effort, engaged in this due diligence period will be more likely to identify and subsequently mitigate these engagement risks. I use the audit firm's abnormal search period to proxy the constrained/unconstrained effort that auditors expend in the search period. Consistent with my prediction, I find that auditors who engage clients after extended due diligence are more likely to avoid a future restatement. However, I also find evidence that clients may not be appreciative of high effort auditors as clients are more likely to dismiss their auditor when auditors increase their due diligence.

DEDICATION

To my family. I love you all.

ACKNOWLEDGMENTS

I want to thank my dissertation committee for their guidance and encouragement over the past two years. I am thoroughly appreciative of the time and effort you have invested in me. From the inception of my research idea to final presentation, I have felt nothing but constant support. My paper is significantly better due to each of your recommendations.

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INTRODUCTION

In December 2019, the PCAOB issued a concept release seeking public comment about proposed amendments to their quality control standards (PCAOB 2019). The Board believes that “effective quality control systems within an audit firm are crucial for consistent high-quality audits and other engagements under PCAOB standards (PCAOB 2019, p. 5).” Current PCAOB standards identify and address five quality control systems. One of these systems is the client acceptance process (PCAOB 2019, p. 7), where proposed amendments aim to expand the amount of information required before client acceptance. The amendments explicitly require firms to confirm appropriate (1) resource allocation and (2) access to necessary information before acceptance (PCAOB 2019). These considerations will require audit firms to expend additional effort (time) performing their due diligence before entering new client relationships. While prior literature has investigated the factors that drive client acceptance efforts (Khalil et al. 2011), research examining the outcomes of those efforts remains sparse. My paper evaluates how auditor effort during client acceptance affects post-acceptance audit quality and tenure.

Audit partners report that “client acceptance procedures are a means of learning about the audit characteristics and potential risks associated with the engagement” and “pre-engagement risk assessments are an important determinant in the engagement outcome” (Huss and Jacobs 1991, p. 18). During the acceptance process, audit partners make critical risk assessments that have long-

term consequences.¹ If auditors rush the process and fail to appropriately consider resource needs, whether they be quality (expertise) or quantity (hours), then any initial misallocation can severely impact the quality of subsequent audits. Much of the auditing literature presupposes the acceptance process and centers on decisions that occur after the auditor-client relationship is established. However, I believe that a deeper understanding of the factors surrounding the relationship’s genesis will better inform how we view the subsequent audit.

The winner’s curse theory informs my research. The winner’s curse describes an auction-type setting where new bidders face an information disadvantage (Blankley et al. 2021; Capen et al. 1971). Participants estimate the value of an asset and submit a bid. All else equal, the winner of the auction is the participant who most overvalues the asset. In the client acceptance setting, the “winner” may misprice the value of the audit by failing to appropriately gauge the client’s risks and the necessary inputs (resource allocation) needed to address those risks.² This mispricing increases the audit firm’s propensity to reduce effort (Hobson et al. 2019) and suffer engagement loss (Blankley et al. 2021). However, I believe that auditors who increase upfront due diligence will minimize this information disadvantage, reduce their likelihood of inappropriately assessing risks, and thus reduce their likelihood of suffering from the winner’s curse.

My study focuses on the due diligence that auditors expend during the client acceptance process. I capture due diligence using the auditor search period (“ASP” or “search period”) (Khalil et al. 2011; Mande et al. 2017). The search period is the number of days between the predecessor auditor’s termination date and the successor auditor’s engagement date as reported on the Form 8-

¹ Huss and Jacobs (1991) group these risks assessments into three categories: client business risk, audit risk, and auditor business risk.

² All else equal, the winner of an audit auction is the audit firm who makes the most price-competitive (low) bid (Blankley et al. 2021; Hobson et al. 2019).

K.³ This proxies the auditors' effort during the acceptance process and offers a real world setting to evaluate the effects of due diligence. In my paper, I examine a sample of non-zero search periods. Compared to auditor changes that report zero-day search periods (the predecessor's termination date and successor auditor's hire date is simultaneous), non-zero search periods are by their very nature less subject to measurement error. In theory and practice, there should be no auditor searches of zero days; therefore, my choice to use a sample of non-zero searches helps to mitigate the measurement error inherent in the reported search periods.⁴

In practice, the client acceptance process requires active participation from client management, its audit committee, and the prospective auditor(s). Not only does the process prepare all parties for a future relationship, but the search period itself acts as a nascent stage of this relationship. A Request for Proposal (RFP) initiates the process by notifying the auditor of the client's intention to field audit proposals. The RFP communicates services desired, as well as deadlines by which the auditor should respond to the request. The auditor can negotiate these deadlines; however, final dates are at the client's discretion, which can constrain timeframes and impose a time pressure on auditors.⁵

Once notified of the RFP, audit firms begin their investigative process, i.e., their due diligence. Their due diligence is multifaceted and encompasses both external client and internal audit firm considerations. As for client considerations, auditors perform financial analysis,

³ The Form 8-K's purpose is to notify shareholders of "major events" including changes in registrant's certifying accountant. See Appendix A for examples of the "Change in Registrant's Certifying Accountant" as reported in the Form 8-K.

⁴ Khalil et al. (2011) state that the true search period is "essentially unobservable." Using non-zero search periods addresses some of this concern.

⁵ Clients are not indifferent to lengthy search periods. Clients themselves face time pressures throughout the year, e.g., publishing quarterly reviewed financials. Therefore, even if an auditor change happens well before the fourth quarter, clients still desire efficient auditor turnaround to perform a quarterly review.

business structure review, management interviews, adverse data searches, etc.⁶ As it relates to the audit firm itself, they assess audit firm services, technical capabilities, staff competence, specialist requirements, compliance with independence, etc. Firms then draft a simplified audit plan for the purpose of assuring themselves that they have the appropriate resources and strategy to perform a satisfactory audit. Once comfortable that they can reliably execute the audit, the audit firm presents a proposal to the client, including overall audit strategy. The client typically sees presentations from a number of competing audit firms.

Client acceptance is a complex process that requires robust risk assessment across many dimensions. Extended acceptance processes, as reflected by lengthier search periods, indicate greater due diligence by audit firms. In contrast, a client's insistence on a speedy acceptance decision may constrain the audit firm's ability to identify and mitigate risks. Using a sample of auditor changes, my study examines the effects of a low effort (constrained) vs. high effort (unconstrained) search process.⁷ I utilize Khalil et al. (2011)'s search period model as the base model for my research. I calculate the expected search period a given auditor should take to perform their due diligence, given a client with a set risk profile. Using the search period residuals, I identify those firms engaged in a low effort (constrained) vs. high effort (unconstrained) acceptance process. Auditors more methodical in their due diligence should be beneficiaries of favorable subsequent outcomes. Conversely, auditors who constrain their due diligence are more

⁶ Adverse data searches are extensive background checks that further identify negative publicity and derogatory information.

⁷ A constrained (unconstrained) search is akin to operating in an environment with high (low) time pressure as auditors perform their due diligence in a reduced (extended) window.

susceptible to unforeseen outcomes. The auditing literature well documents the harmful effects that time constraints impose on decision making and concurrent auditor performance.⁸

The auditor search period is a unique measure which tests the effect of due diligence during client acceptance. The impact of acceptance effort may not manifest until the long-term, if at all. Because the acceptance process is not a part of the audit engagement itself, it is possible to have a “poor quality” acceptance process and a subsequent “high quality” audit. However, I argue that the client acceptance process faces increased susceptibility to the negative impacts of time constraints. First, unlike a recurring audit, prior workpapers are not available to facilitate and expedite understanding. Second, without access to all the client’s proprietary data, auditors evaluate clients based on a limited amount of information (Blankley et al. 2021). Third, auditors cannot access certain time constraint remedies as they do in other audit processes. For example, auditors cannot shift the workload to the interim. Finally, it is more difficult for auditors to deploy last-minute resources to assist in the client acceptance process.⁹

I expect that auditors with extended search periods will benefit from the increased due diligence by gaining a better understanding of their client’s engagement risks. This should lead to more positive outcomes for the future relationship. First, I predict that auditors who conduct higher (lower) effort searches are more (less) likely to prevent subsequent audit failure, e.g., a restatement being issued. Second, I predict that auditors who conduct higher (lower) effort searches are less (more) likely to experience future relationship turnover, i.e., the relationship will discontinue. My expectations counter current search period conventional wisdom that finds shorter searches are

⁸ See Blankley et al. (2014), Braun (2000), Choo (1995), DeZoort and Lord (1997), Margheim et al. (2005), McDaniel (1990), and Robertson (2007).

⁹ Unlike other audit processes where staff are interchangeable and their schedules flexible, partners and senior managers are the primary resources in client acceptance. Partner schedules are set well in advance, and replacing their expertise is not an easy task.

associated lower engagement risks (Kahlil et al 2011; Mande et al. 2017). However, I believe that a more robust (longer) client acceptance process benefits the subsequent auditor-client relationship by reducing these engagement risks.

My results support my first hypothesis. I predict and find that additional search period effort improves subsequent audit quality. I find that for each additional day that auditors engage the client in the acceptance process, they reduce the likelihood of a future restatement by 1%. However, in contrast to my second expectation, my results do not support my second hypothesis. I find that auditors who exert additional due diligence during the search are not able to prevent future relationship turnover. In fact, auditors who exert more effort during the acceptance process increase their likelihood of turnover by 1% for every additional day they spend in the acceptance process. I find that clients primarily drive this turnover by dismissing their auditors, suggesting that clients may feel overburdened by higher quality auditors.

My research offers several contributions. First, I continue to develop the search period literature, which is scant. My paper is the first and only study to evaluate the abnormal search period of an auditor switch. I challenge the current view that additional time spent during the acceptance process should be associated solely with increased risk. My research further reveals the auditor's ability to effectively mitigate risk. Likewise, my research contributes to the audit literature on how actions taken prior to an audit's planning phase can critically impact audit quality. Finally, my research suggests to policy makers a potential need for a mandatory minimum search period. Implementing a mandatory minimum search period would aid audit firms' abilities to thoroughly research and provide key information to prospective clients, thus allowing for a more robust acceptance process. It would also give audit firms more power to resist acceptance deadlines pressured by clients.

PRIOR RESEARCH AND HYPOTHESIS DEVELOPMENT

Client Acceptance

Audit partners report a significant amount of risk assessment prior to client acceptance (Huss and Jacobs 1991). This process represents the unofficial start of the auditor-client relationship, a relationship that both parties hope to prove lasting because switching costs can be substantial (DeAngelo 1981; DeFond et al. 1997; Shu 2000).¹⁰ The process begins when a client submits a Request for Proposal (RFP) to prospective auditors (Pacheco-Paredes et al. 2017). This RFP notifies auditors of the client's willingness to change auditors. The change can either be voluntary, i.e., the client initiates the search, or involuntary, i.e., the incumbent auditor resigns, forcing the client to seek out a new auditor. Once audit firms receive the RFP, they begin their due diligence by considering a myriad of factors as to whether they should submit a bid (Asare et al. 1994; Huss and Jacobs 1991; Johnstone 2000; Johnstone and Bedard 2003).¹¹

During this time, prospective auditors find themselves largely limited to publicly available information (Blankley et al. 2021). They review the company's financials as well as other SEC related information. However, auditors also request access to proprietary information to gain a better understanding of the client. This includes reviewing business operations, performing

¹⁰ DeAngelo (1981) notes that auditors are likely to low-ball fees and take a loss in first-year audits with the intentions of making up the lost profit in subsequent years. That said, if clients early terminate the relationship, auditors will suffer and forgo these profits. In contrast, if auditors terminate the relationship, clients will suffer when the market responds negatively (DeFond et al. 1997; Shu 2000).

¹¹ Asare et al. (1994) note seven key factors to consider before client acceptance: firm expertise and staffing, firm independence, client effect on firm reputation and image, client integrity, anticipated profitability of engagement, client financial status, and client accounting practices and control.

interviews of top management, and requesting access to the incumbent auditor's workpapers.¹² In fact, while interviewing audit partners, Asare et al. (1994) suggest non-public information may have the largest impact on client acceptance decision making. Partners cite management integrity as a chief concern of client acceptance, which they glean from private communication with management as well as those familiar with management.¹³ Auditors are incentivized to gather as much information during this process to prevent them from suffering the "winner's curse" (Blankley et al. 2021).¹⁴ Furthermore, the greater amount of information that auditors assess during due diligence, the more efficient and effective an audit should be on the back end.

The information that auditors gather during the acceptance process helps them to better understand the risks associated with accepting the new audit.¹⁵ The client acceptance literature classifies these potential risks into three categories: client business risk, audit risk, and auditor business risk.¹⁶ First, client business risk concerns the financial viability of the client. Second, audit risk is the potential the firm will fail to modify their opinion when the financial statements are materially misstated. Third, auditor business risk assesses the firm's potential to suffer a loss from either litigation, reputation, or engagement profitability. These risk categories can overlap and are not necessarily independent from one another (Huss and Jacobs 1991; O'Keefe et al. 1994). For

¹² Prospective auditors perform workpaper reviews at the discretion of the incumbent auditor.

¹³ In a subsequent experiment, Asare et al. (2005) confirm that issues concerning management integrity increased perceived risk and decrease likelihood of client acceptance. Beaulieu (2001) and Ethridge et al. (2007) find similar concerns over management integrity.

¹⁴ Blankley et al. (2021) define the "winner's curse" in the context of auditing as "winning a new client engagement with the end result leaving the auditor worse off: earnings lower than expected profits, experiencing a loss on the engagement, or, even worse, facing reputational damage."

¹⁵ The level of risk understanding will only be so sufficient during the due diligence phase. Per my discussions with audit partners, the audit firms will only gain true understanding of audit related risks through the normal performance of an audit.

¹⁶ See Colbert et al. (1996), Huss and Jacobs (1991), Johnstone (2000), Johnstone and Bedard (2003), and Khalil et al. (2011)

instance, as potential client failure increases so does potential auditor litigation cost (Palmrose 1987; Pratt and Stice 1994).

When auditors review potential relationships, they start by screening clients based on both client business risk and auditor business risk evaluations (Johnstone 2000).¹⁷ If these risks are acceptable, the auditor will propose a fee that yields a return over current and future engagement costs (Houston et al. 2005; Johnstone and Bedard 2003; Johnstone and Bedard 2004; Simunic 1980). However, if the risks are high, auditors may engage in risk-management strategies to increase the likelihood of acceptance (Asare and Knechel 1995; Bell et al. 2002; Johnstone and Bedard 2001; Johnstone and Bedard 2003). These strategies include adjusting effort (hours), personnel assignment, and adjusting the extent of audit procedures, testing, and review.

When auditors do apply these risk management strategies, responses are not uniform across the board. For instance, Johnstone and Bedard (2001) find that auditors meet risks related to increased fraud with additional review, while risks related to increased error are associated with more intensive testing. In a subsequent paper, Johnstone and Bedard (2003) find that auditors respond to going concern risks with higher fees, while responding to fraud and error risks by assigning specialist personnel. That said, while risk-management strategies are always an option, Johnstone (2000) finds that auditor preference is for risk avoidance, i.e., rejecting a client outright, rather than engaging in risk adaptation.

Research also shows that audit firms require additional partner sign off in response to approving higher risk clients (Ayers and Kaplan 1998; Bell et al. 2002; Gendron 2001; Huss and Jacobs 1991). Furthermore, acceptability is not solely dependent on the profile of the client itself.

¹⁷ Johnstone (2000) finds that audit risk affects auditor business risk. And auditor business risk mediates audit risk's impact on client acceptance.

Auditors also consider the risk profile of the client in relation to their existing client portfolio (Johnstone and Bedard 2004; Simunic and Stein 1990). Using proprietary data, Johnstone and Bedard (2004) find that their sample audit firm showed a preference against adding clients that increased the audit firm's overall portfolio risk and thus were more likely to accept first year clients with a lower risk profile than its continuing clients.

Once audit firms are comfortable acquiring the client, they submit a proposal detailing the fees and services they will provide.¹⁸ Again, they do not make these decisions in isolation. Johnstone et al. (2004) find that the levels of proposed effort and fees are subject to factors beyond the engagement's direct relationship. They indicate that audit firms account for competing auditors' bids and thus make competitive bids relative to the market. For example, auditors will propose a higher effort audit with reduced fees to make the bid more attractive.

Another factor that makes client acceptance an interesting area of research is the amount of variation present in the process. Standards currently permit firms to set their own internal guidance surrounding client acceptance (AICPA 2021a; PCAOB 2022).¹⁹ However, Johnstone (2001) finds that within-firm variability still exists in the process. She finds that partner experience contributes to their view of engagement risks.²⁰ For example, when partners consider audit risk factors, highly experienced partners are more concerned with management attitude toward internal controls, while less experienced partners are more concerned with the client's relationship with their prior auditor. Gendron (2001) echoes these differences, finding client acceptance is a flexible

¹⁸ The presence of just one risk indicator can be associated with higher proposed audit fees (Johnstone and Bedard 2001).

¹⁹ AICPA Statements on Quality Control Standards states that firms should establish their own policies and procedures surrounding acceptance of client relationships. These policies should address firm competence, legal and ethical requirements, and client's integrity (AICPA QC 10.27).

²⁰ Engagement risks comprise client business risk, audit risk, and auditor business risk.

process. Regardless of the firm's acceptance policies and procedures, final acceptance is a product of organic adaptability rather than rigid exercise.

Client Acceptance Standards

Auditors should only accept engagements after confirming they have (1) the appropriate resources and (2) access to the information necessary to perform the audit (PCAOB 2019). During an auditor change, auditing standards require the successor auditor to seek the client's permission to inquire with the predecessor auditor (AICPA 2021b; PCAOB 2020a). If the client grants permission, the successor must then initiate contact (PCAOB AS 2610.03). Standards describe these communications as "a necessary procedure because the predecessor auditor may be able to provide information that will assist the successor auditor in determining whether to accept the engagement" (PCAOB AS 2610.07). Questions (written or oral) should inquire of management's integrity, disagreements as to accounting principles, fraud and illegal acts, internal controls, reasons for auditor change, as well as related party and unusual transactions (PCAOB AS 2610.09).²¹ After the successor appropriately communicates with the predecessor auditor, the successor auditor may finalize acceptance of the client. This includes drafting an engagement letter that details the auditor's understanding of the engagement scope (Johnstone et al. 2014; PCAOB AS 1301.01). The understanding should establish the objectives of the audit, the responsibilities of the auditor, and the responsibilities of management (PCAOB AS 1301.05). If the parties cannot reach an understanding of terms, the auditor must decline to accept the client (PCAOB AS 1301.07).

²¹ Per AS 2610, paragraph 10, predecessor auditors should respond promptly and fully to these inquiries. However, unusual circumstances such as litigation may prevent the predecessor auditor from disclosing information. Limited responses should factor into the successor auditor's acceptance decision making.

Auditor Search Period

The number of days from the predecessor auditor's termination date to the successor auditor's engagement date, as reported in the client's Form 8-K filing, defines the auditor search period. Although the amount of time that auditors truly spend researching the potential client is unobservable, this period proxies the timeline which auditors can engage the client in the proposal process (Khalil et al. 2011; Mande et al. 2017). Increases to the search period may be client, auditor, or even regulatory driven (Mande et al. 2017);²² however, current literature only investigates how auditor responses toward engagement risks drives the search period (Khalil et al. 2011; Mande et al. 2017). In extreme cases, clients can lengthen the reported search period by failing to secure an auditor on their first pass, therefore requiring a second round of auditor searching (Mande et al. 2017).

Khalil et al. (2011) note significant differences in search period lengths by classification, specifically when auditor resignations are the drivers of change. Their sample of resignation firms were associated with a mean search period of 38 days, while their sample of dismissal firms were associated with a mean search of less than two days. They suggest that lengthier searches after resignation are due to auditors informing their clients of their decision to withdraw at, or just before, the resignation date.²³

In contrast, clients normally plan auditor dismissals well in advance. In practice, it is common for clients who plan to dismiss their auditor, or go out for bid, to solicit new auditors

²² Explanations as to the differences in and drivers of search period length are not publicly available. An example of regulatory delays may include independence issues from the Securities and Exchange Commission.

²³ Her et al. (2019) define an abrupt termination as an unplanned auditor change in the late fiscal year. They find that an abrupt change is more likely to be from a resignation (versus dismissal) and this abrupt change is associated with higher risk factors.

while the departing auditor is still engaged. Therefore, at the dismissal date, the client will already have a new auditor in place which results in a reported search period of zero days. Supporting this notion, Khalil et al. (2011) report 80% of auditor dismissals are associated with a search period of zero days. Mande et al. (2017), however, find that dismissals with positive search periods may be de-facto resignations.²⁴ Similarly, Pacheco-Parades et al. (2017) note the uniqueness of positive search period dismissals as these changes may be indicative of a client who has lost control of the switching process.

Khalil et al. (2011) were also the first to model the search period timeline. Their model draws on Johnstone and Bedard (2003)'s client acceptance framework and regresses the auditor search period on client business risk, audit risk, and auditor business risk. They posit and find that each of these risks significantly predicts the length of the search period by requiring firms to expend differential time to acquire additional risk assessment data (Asare et al. 1994) and additional partner sign-off (Ayers & Kaplan 1998; Bell et al. 2002; Huss and Jacobs 1991).²⁵

Research also shows that search periods may proxy for unreported risk factors. Mande et al. (2017) note that longer search periods can provide supplementary insight into auditor change. For example, when clients do not publicly disclose the reason for such change, longer searches can proxy for risk not provided in the Form 8-K. Their findings show that clients with longer searches are more likely to have higher initial audit fees and less likely to acquire a successor Big N audit firm. Pacheco-Paredes et al. (2017) find comparable results with non-zero searches associated with

²⁴ Mande et al. (2017) offer support that dismissals with non-zero search periods carry similar risk factors associated with resignation firms. Since clients are the ones responsible for the filing, they may mask resignations as dismissals to avoid a negative market response (Griffin and Lont 2010).

²⁵ More specifically, Khalil et al. (2001) find financial distress (client business risk), management integrity issues (audit risk), and internal control weaknesses (audit risk) significantly increase the search period, while auditor specialization (auditor business risk) significantly decreases the search.

higher audit fees and longer audit report lags. They reason that under low-risk changes, the reported search period should ideally be zero days. If no underlying auditor-client issues exists, the client should be able to maintain control of changing process and thus report the new engagement date in tandem with the termination date.²⁶

The quality and degree to which communication with the predecessor auditor takes place can also affect the search period length. After a predecessor auditor resigns, auditing standards require the successor auditor to first inquire with the predecessor auditor as to their reason(s) for such resignation (PCAOB 2020a). Predecessor responses contain considerable variation as responses are firm and engagement specific. If the predecessor provides a limited response, there is no obvious remediation for the successor to engage. While this type of response should raise concern, this may serve to reduce the search period.

In contrast, if the predecessor auditor provides a detailed response, this additional information will provide key risks for the successor auditor to consider. These considerations should increase the search period as the successor examines its ability to implement appropriate mitigation strategies to ensure a successful engagement. Therefore, while a detailed response carries cautionary news, these revelations serve the successor auditor by making known potential pitfalls. A successor's response to the information should address and mitigate the potential risks, thus increasing the search period.

²⁶ They argue that the presence of any non-zero search period is indicative of the client losing control of the changing process. Thus, raising concerns.

Time Constraints

When clients inform auditors of their desire to go out for bid, they set a proposed timeline. This includes meetings and expected presentation dates. However, unlike other audit deadlines, which may be hard capped by regulators, proposal deadlines are not under such authority. Therefore, there is no standard proposal length. Given the above, proposal deadlines are flexible. Audit firms can push back on these deadlines when they feel they lack sufficient time to perform effective due diligence. However, as it relates to the client, their initial proposed timeline was not likely to be haphazard. The client's own reporting requirements drive their timeline. For example, even if auditor change occurs early in the fiscal year, clients still require auditor review of their quarterly financials. This puts a constraining pressure to quicken the search period. Clients would prefer to have an auditor in place sooner rather than later so as not to delay the required review.

The presence of a proposal deadline means time is a limited resource during the search process. Given the number of risk evaluations, multiple signoffs etc., this time deadline can pressure auditors to rush their due diligence, thus hindering their evaluations (DeZoort and Lord 1997).²⁷ This pressure can increase the levels of stress felt by auditors (DeZoort and Lord 1997; Margheim et al. 2005). Choo (1995) finds that a tipping point exists where too much stress can cause auditors to ignore relevant cues, thus reducing performance. In contrast, he also shows that low amounts of stress can improve auditor performance by reducing the amount of attention they pay to irrelevant cues.²⁸ Similarly, Glover (1997) finds time pressure reduces the number of irrelevant cues auditors pay attention to, thus increasing efficiency.

²⁷ Margheim et al. (2005) state "Time deadline pressure occurs when auditors are pressured to complete audit tasks in the total available time before a deadline for completion of the task is reached."

²⁸ Easterbrook (1959) documents stresses inverted U-shape relationship with performance.

Although efficiency may increase, findings also show that time pressure can cause effectiveness (auditor processing accuracy) to decrease (McDaniel 1990). Research shows auditors are more likely to respond by engaging in reduced audit quality acts, such as accepting doubtful audit evidence (Coram et al. 2004). Furthermore, auditors are more likely to lock in on quantitative measures and forego qualitative signals, such as potential fraud (Braun 2000). This is unfortunate as qualitative signals, such as those picked up during time laden discussions with management and ethical evaluations, can be the most significant factors to partners during the client acceptance process (Asare et al. 1994; Asare et al. 2005; Johnstone 2003). Time pressure also affects auditor's materiality judgments (Bennett and Hatfield (2017). However, the source of the pressure moderates this effect. Specifically, if the pressure arises due to auditor (client) actions, auditors will subsequently view identified errors as less (more) material.

While most time pressure studies are experimental, the literature does provide archival evidence as well. Glover et al. (2016) find that firms under heightened pressure from filing deadlines are associated with reduced audit quality. Lambert et al. (2017) find that the Securities and Exchange Commission's ruling to accelerate reporting deadlines in 2003 resulted in a reduction of earnings quality for smaller firms. They interpreted this as lower audit quality due to time pressure. Cassell et al. (2020) find that time pressure imposed by late fiscal year auditor change compromises audit quality. They suggest that a late auditor change reduces the amount of time that an auditor has available to understand their new client, thus jeopardizing the auditor's learning curve. Lopez and Peters (2012) note that increased time pressure brought about by compressed workload (busy season) reduces auditor quality. I find this particularly notable for my study as partners engage in RFPs alongside their pre-existing workload. Therefore, adding excess work to a partner's schedule should amplify the effects of any time pressure.

Research also notes that the detrimental effects of time constraints can decrease if auditors receive early warnings (Low and Tan 2011; Solomon and Brown 1992).²⁹ However, Low and Tan (2011) note this relief may not hold if auditors do not possess the requisite expertise for the task at hand. Similarly, Spilker and Prawitt (1997) note experience improves performance under time pressure. As it relates to new client acceptance, it is unclear how partners (high expertise) would respond in a scenario when they have low direct expertise (new client). That said, partners are keenly aware of how the negative effects of time pressure reduce audit quality (Christensen et al. 2016) and may adapt accordingly.

To my knowledge, there is no research investigating the impact of time constraints during the client acceptance process. Cassell et al. (2017) and Pacheco-Parades et al. (2017) do investigate the fiscal year timing of auditor changes on subsequent audit quality. These studies suggest that constraining the timeline within which auditors plan and execute an audit will negatively affect audit quality. However, they only investigate the time constraining effect imposed *after* client acceptance. My study investigates the time constraining effect imposed *during* client acceptance.

Restatements

Financial restatements are indicative of audit failures. This failure occurs when auditors fail to modify their opinion for their client's materially misstated financials (Romanus et al. 2008; Schmidt 2012; Stanley and DeZoort 2007). In a recent survey, Christensen et al. (2016) find that investors and auditors believe that restatements are the most readily available signal of low audit quality. Restatements are positively associated with material weaknesses and transpire when

²⁹ Low and Tan (2011) find auditors employ more effective, i.e., prioritizing, audit responses to address the imposed constraint. However, modifying plans may not be a less viable option in the proposal process as the proposal process requires multiple signoffs and coordination from higher up personnel.

auditors apply low effort (proxied by low abnormal audit fees) and fail to appropriately assess the audit risk (Blankley et al. 2012). Both auditors and clients have a personal stake in avoiding restatements. For instance, when a restatement occurs, auditors are subject to reputational damage, negative shareholder ratification (Liu et al. 2009) and litigation (Demirkan and Fuerman 2014), while clients can suffer from negative market reactions and increased litigation (Palmrose and Scholz 2004).

Two recent archival studies examine audit quality relative to the time constraints imposed by auditor change. Pacheco-Paredes et al. (2017) find no association between the timing of the successor auditor's engagement date and subsequent restatements. In contrast, Cassell et al. (2020) find that auditors hired later in the fiscal year are positively associated with subsequent restatement.³⁰ Cassell et al. (2020) cite late year time constraints as an explanation for these findings. A late fiscal year change limits the auditor's ability to appropriately assess the new client's business and hinders effective coordination of the audit. Furthermore, failing to appropriately price the audit's needs may reduce the level of resources auditors are willing to deploy (Hobson et al. 2019), thus increasing the likelihood of a restatement. Given the above, I argue that extending the search period will decrease the likelihood an auditor fails to accurately assess audit risks. Therefore, I predict the following:

H1: Increased client acceptance effort is negatively associated with future restatements.

³⁰ Differences may be a product of the studies' chosen proxy for measurements of timing. Pacheco-Paredes et al. (2017) measure timing using a continuous variable defined as the square root of the number of days from the engagement of the successor auditor to the fiscal year-end. They find no relationship between their timing proxy and restatements. Cassell et al. (2020) measure timing using an indicator variable set equal to one if the new auditor was engaged during or after the fourth fiscal quarter, and zero otherwise. They do find a positive relationship between their timing proxy and restatements.

Auditor Tenure and Termination

Prior research details the benefits of a tenured auditor-client relationship. Audit quality improves with firm tenure (Bell et al. 2015; Geiger and Raghunandan 2002; Myers et al. 2003), as well as audit partner tenure (Manry et al. 2008). This is consistent with audit firms facing and overcoming initial learning curves to provide their clients more effective audits in the future. Studies also report on the drawbacks of terminating the relationship. Clients are subject to significant negative reactions in the market after an auditor change (Griffin and Lont 2010; Knechel et al. 2007; Shu 2000; Whisenant et al. 2003) and this reaction is more pronounced when the incumbent auditor resigns (Griffin and Lont 2010). Furthermore, if resignation is the cause of the change, clients may find it more difficult to secure a successor Big N firm (Catanach et al. 2011; Raghunandan and Rama 1999), while paying significantly higher premiums in the case they do secure a successor Big N firm (Elliott et al. 2013). Auditors also suffer as they forfeit future quasi-rents earned after investing significant startup costs (DeAngelo 1981).

There are several factors that may cause an auditor-client relationship to end. To begin, clients may terminate their auditor due to discovering subsequent independence issues, poor interpersonal relationships, low satisfaction with the levels of service (Stefaniak et al. 2009), or disagreements over accounting treatments or auditing scope (Dhaliwal et al. 1993). Clients may also feel squeezed due to high audit fees (Ettredge et al. 2007; Johnson and Lys 1990; Stefaniak et al. 2009) or seek to engage in opinion shopping (Lennox 2000). As for auditors, they may terminate the relationship when they face increased client business risk (Ghosh and Tang 2015), audit risk (Elder et al. 2009; Ghosh and Tang 2015) and/or litigation risk (Ghosh and Tang 2015; Jones and Raghunandan 1998; Krishnan and Krishnan 1997; Shu 2000). Furthermore, if auditors are unable

to increase fees enough to justify the relationship, they will walk away (Hackenbrack and Hogan 2005).

That said, auditors do not initiate these relationships with the expectation of failure. Levinthal and Fichman (1988) refer to a “honeymoon period” where these relationships start with an initial capital of favorable beliefs, trust, and/or goodwill. However, if either party violates these prior beliefs, the likelihood of terminating the relationship increases (Bhaskar et al. 2017). I believe that auditors who take more time to assess their client’s risks will be more likely to avoid risk surprises, thus reducing the likelihood of early termination. Therefore, I predict the following:

H2: Increased client acceptance effort is negatively associated with auditor-client termination.

METHODOLOGY

Sample Selection

My sample contains all NYSE, AMEX, and NASDAQ auditor changes from 2003-2021. I obtain auditor specific data from Audit Analytics and the respective client information from Compustat. I remove observations in the financial service industry and those appointing the same auditor following an audit merger or change in legal status (Khalil et al. 2011). I remove observations with extreme search periods greater than 365 days (Mande et al. 2017). Finally, I remove observations with missing Audit Analytics or Compustat data.

Analysis

To test my hypotheses, I first extract the abnormal search period for each auditor change in my sample. The residuals of the search period model (Model 1), below, construct the abnormal search period variable. This is my variable of interest for testing my two hypotheses. I use each observation's abnormal search period as the predictor variable in my restatement model (Model 2; H1) and termination model (Model 3; H2). My main analysis for Model 1 is run using ordinary least-squares regression (OLS) with robust standard errors clustered by firm. I code the dependent variable as the number of days in the auditor search period. Variables are winsorized at the 5 and 95 percentiles.³¹

³¹ I winsorize at the 5 and 95 percentiles as I chose not to scale my independent variables to allow for easier economic interpretation. For example, scaling total assets by the natural logarithm would remove the economic interpretation that could be derived from the coefficient's effect.

I run two additional iterations of Model 1 as robustness checks. In my first robustness test, I again model the search period (OLS) with robust standard errors clustered by firm. However, consistent with prior literature (Khalil et al. 2011; Pacheco-Parades et al. 2017), I transform the dependent variable into the square-root of the auditor search period.³² In my second robustness test, I model the search period using quantile regression keeping the dependent variable the untransformed number of days in the auditor search period.³³

Auditor Search Period Model

To test my hypotheses, I obtain the abnormal search period (residual) from each auditor change in my sample. For this, I build on Khalil et al. (2011)'s search period model:

$$\begin{aligned}
 ASP = & \beta_0 + \beta_1 WILLRESTATE_{it} + \beta_2 PYRESTATED_{it} + \beta_3 RESIGNED_{it} + \beta_4 FINDIST_{it} \\
 & + \beta_5 LOSS_{it} + \beta_6 AT_{it} + \beta_7 INTCTR_{it} + \beta_8 INTEG_{it} + \beta_9 YREND_{it} \\
 & + \beta_{10} SPECIAL_{it} + \beta CONTROLS_{it} + \varepsilon_{it}
 \end{aligned} \tag{1}$$

I define the variables for all models in Appendix B. I first include two restatement variables that prior literature has yet to examine. The first restatement variable (WILLRESTATE) indicates whether the successor auditor (once engaged) will subsequently restate the predecessor's audited financials. I expect auditors to use the search process to not only evaluate whether they have the requisite resources to audit a client's financials, but also to evaluate the veracity of the predecessor's financials on which they are relying for this decision. If successor auditors anticipate

³² I provide this robustness test as prior literature uses the square-root of the auditor search period in their tests of analyses (Khalil et al. 2011; Pacheco-Parades et al. 2017).

³³ Quantile regression measures how the dependent variable changes at the conditional *median* given a change in the predictor variables, while OLS regression measures the change in the dependent variable at the conditional *mean* given a change in the predictor variables. When I run Model 1 using this iteration, I do not winsorize my independent variables. Since quantile regression examines the effect at the median, the impact of outliers is already significantly reduced compared to OLS.

the need for a restatement, I expect them to extend their search period. The second restatement variable (PYRESTATED) indicates whether a restatement has already occurred in the year prior to the auditor change. While this represents poor audit quality on behalf of the predecessor auditor (Christensen et al. 2016), it also serves as a signal for a poor financial reporting environment. When a restatement has already occurred, I expect successor auditors to respond by increasing their due diligence.

The rest of the model controls for the three client acceptance risk factors, along with their respective variables that prior literature has identified: 1) client business risk (financial position), 2) audit risk (internal control weakness, management integrity issues, and engagement timing), and 3) auditor business risk (industry specialists). When risk increases, I expect the search period to increase as well. Financial distress (FINDIST), loss (LOSS), and firm size (AT) are all expected to be positively associated with increased litigation risk (Palmrose 1987; Pratt and Stice 1994; Stice 1991). Auditor partners are responsive to conditions of internal control (INTCTR) as well as management ethics during acceptance (Johnstone 2001), therefore I expect a positive association between the presence of these risks and length of the search period. Busy season audits (YREND) are a source of workload compression which can hinder audit quality, thus increasing risk (Lopez and Peters 2012). I expect auditor specialization (SPECIAL) to be negatively associated with the search period as industry expertise should reduce auditor business risk as well as increase efficiencies in the acceptance process (Khalil et al. 2011; Johnstone 2001).

I include additional control variables utilized by Khalil et al. (2011). These variables include the presence of foreign operations (FORG), inconsistencies between the auditor's exhibit letter and the client's Form 8-K (INCONS), the number of days until filing (DFILE), the direction of the auditor change (B4B4; B4NB4; NB4NB4; NB4B4), whether the client is in the technology

industry (TECH), and opinion type (QUALGC). Next, I include an indicator variable (RESIGNED) controlling for whether the change is due to the client (dismissal) or the auditor (resigned).³⁴ Lastly, I control for the fiscal year of the switch as well as industry fixed effects.

Effects of the Abnormal Audit Search Period

Restatement Model

To test the impact of the abnormal audit search period on subsequent audit quality, I use the following logistic model:

$$\begin{aligned}
 RESTATE = & \beta_0 + \beta_1 ABNASP_{it} + \beta_2 AT_{it} + \beta_3 DT_{it} + \beta_4 MTB_{it} + \beta_5 FINANCE_{it} \\
 & + \beta_6 EPR_{it} + \beta_7 FREE_{it} + \beta_8 MATWEAK_{it} + \beta_9 DAYS_{it} + \beta_{10} SPECIAL_{it} \\
 & + \varepsilon_{it}
 \end{aligned} \tag{2}$$

I code my dependent variable RESTATE as 1 if the firm issues a restatement during the first fiscal year of the new relationship, 0 otherwise. I control for several variables. First, I include firm size (AT) as larger firms are less likely to restate (Blankley et al. 2012; Cassell et al. 2020; Romanus et al. 2008). However, auditors have greater learning curves to overcome in the first-year audit of larger firms (Pacheco-Parades et al. 2017). I control for debt (DT) as firms with higher debt may feel more pressure to manage earnings to avoid violations (Dichev and Skinner 2002). I include market-to-book (MTB) and earnings-to-price (EPR) ratios as capital market pressure may also influence aggressive accounting policies (Richardson et al. 2002). Likewise, I include finances raised (FINANCE) and free cash flow (FREE) to capture a firm's demand for external financing.

³⁴ Resignation firms are a signal of increased risk (Krishnan and Krishnan 1997), and Khalil et al. (2011) finds resignations are associated with longer search periods than dismissals.

Prior research also shows a positive association between restatements and internal control weaknesses (MATWEAK) (Blankley et al. 2012; Cassell et al. 2020).

I control for the timing of the auditor change (DAYS), as Cassell et al. (2020) demonstrate the negative impact of a fourth quarter auditor change. I include auditor specialization (SPECIAL) as Romanus et al. (2008) find employing an industry specialist audit firm reduces the likelihood of restatement. Lastly, I account for industry and year fixed effects. As for my variable of interest, I predict a significant and negative coefficient on ABNASP. This would indicate that audit firms who expend more effort in the acceptance process decrease their probability of a future restatement.

Auditor Termination Model

To test the impact of the abnormal search period on the auditor-client's subsequent tenure, I use the following logistic model:

$$\begin{aligned}
 TERM = & \beta_0 + \beta_1 ABNASP_{it} + \beta_2 FINDIST_{it} + \beta_3 AT_{it} + \beta_4 INTEG_{it} + \beta_5 INTCTR_{it} \\
 & + \beta_6 SPECIAL_{it} + \beta_7 QUALGC_{it} + \beta_8 NEWEXEC_{it} + \beta_9 WILLRESTATE_{it} \\
 & + \beta_{10} SELFRESTATE_{it} + \varepsilon_{it}
 \end{aligned} \tag{3}$$

My tenure model utilizes similar variables from my search period model.³⁵ I make a few changes of note. First, I include my abnormal search period (ABNASP) variable of interest as a new predictor variable. Second, my dependent variable (TERM) takes the value of 1 if the new relationship ends before a four-year period, 0 otherwise. Speaking to audit partners regarding the

³⁵ When analyzing the characteristics between new, continued, and discontinued clients, Johnstone and Bedard (2004) utilize the same model across their three logistic regressions. It reasons that those factors (independent variables) affecting acceptance will also affect continuance/discontinuance. Therefore, I use the same model (excluding auditor change controls) predicting acceptance to predict continuance/discontinuance (tenure).

proposal process, they indicate that initial proposals are typically under three-year terms. Therefore, I use a four-year window as a measure of relationship success. By the end of the proposed three-year term, re-negotiations occur and both parties will have had ample time to evaluate whether the relationship is worth pursuing. I predict a significant and negative coefficient on ABNASP. This would indicate that those audit firms who spend more time than expected in the acceptance process will decrease their probability of future termination. I interpret this as a sign that the additional effort expended in the search process was beneficial to the success of the relationship. I control for whether the client had a change in the executive level (NEWEXEC) during the audit tenure. New executives may feel more comfortable with other audit firms from prior relationships and thus seek a change (Pacheco-Parades et al. 2017). I also control for whether the successor auditor restates the prior auditor's work (WILLRESTATE) and whether a restatement involving the work of the successor auditor occurs (SELFRESTATE). Restatements provide compelling reasons for both parties to withdraw from the relationship (Demirkan and Fuerman 2014; Palmrose and Scholz 2004).

RESULTS

Sample and Descriptive Statistics

As reported in Table 1, Panel A, I use Audit Analytics and Compustat to collect an initial sample of 5,796 auditor changes for companies traded on the NYSE or NASDAQ with corresponding industry sic codes from 2003-2021. Following prior literature,³⁶ I eliminate 1,528 observations from the financial services industry, 321 observations due to audit firm mergers, 26 observations due to PCAOB registration issues, and 251 observations of benefit plans. Next, I eliminate 2,727 observations with search periods of less than one day and five observations with search periods greater than 365 days.³⁷ Finally, I remove 212 observations with missing data yielding a final search period sample of 731 observations.

My sample has a higher number of observations in the initial post-SOX era followed by a decline in changes coinciding with the 2008 recession (Panel B).³⁸ Fifty-five percent of my sample is in the manufacturing industry (Panel C).³⁹ The majority of my sample has a reported search period between one and five days (Panel D).

³⁶ Khalil et al. (2011) utilize a sample of auditor change resignations, while Pacheco-Parades et al. (2017) utilize a sample of auditor change dismissals. My study utilizes both auditor resignations and dismissals with positive search periods.

³⁷ Consistent with prior literature (Khalil et al. 2011; Pacheco-Parades et al. 2017), I find most auditor changes have a measurable search period of zero days.

³⁸ High auditor-client realignment post-SOX may be due to large audit firms shedding riskier clients (Johnstone and Bedard 2004), smaller firms failing to have sufficient resources for a full integrated audit (Khalil et al. 2011), or clients searching out more economical audits as reporting requirements increase.

³⁹ These results are consistent with prior literature. See Khalil et al. (2011) and Pacheco-Parades et al. (2017).

TABLE 1**Sample**

Panel A: Sample Selection	
Initial Auditor Change Sample ^a	5,796
Less:	
Financial services firms	1,528
	<u>4,268</u>
Audit firm mergers	321
	<u>3,947</u>
PCAOB registration issues	26
	<u>3,921</u>
Benefit plans	251
	<u>3,670</u>
ASP less than 1 or greater than 365 days	2,727
	<u>943</u>
Missing Data	212
	<u>731</u>
Final Auditor Change Sample	731

a Initial Sample includes those firms with a listed industry per Compustat, as well as traded on the NYSE or NASDAQ.

Panel B: Sample by Year

<u>Year</u>	<u>n</u>	<u>Year</u>	<u>n</u>	<u>Year</u>	<u>n</u>	<u>Year</u>	<u>n</u>
2003	48	2009	26	2015	38	2021	29
2004	83	2010	27	2016	35		
2005	81	2011	21	2017	21		
2006	63	2012	13	2018	32		
2007	44	2013	31	2019	31		
2008	27	2014	48	2020	33		

Panel C: Sample By Industry

<u>Industry</u>	<u>n</u>	<u>Percent</u>
Agriculture, Mining and Construction (1000-1999)	28	4%
Manufacturing (2000-3999)	399	55%
Transportation and Utilities (4000-4999)	46	6%
Wholesale and Retail (5000-5999)	68	9%
Services (7000-9999)	190	26%

Panel D: Sample By Auditor Search Period

<u>Days</u>	<u>n</u>	<u>Percent</u>
1-5	307	42%
6-10	106	15%
11-20	79	11%
21-30	59	8%
31-40	49	7%
41-50	49	7%
51-70	40	5%
71-90	19	3%
91+	23	3%
	<u>731</u>	

Table 2 and Table 3 report the descriptive statistics and the Spearman correlation coefficients, respectively. The mean (median) search period is 19 (7) days. In 37% of my sample, the successor auditor will restate the predecessor's work once hired (WILLRESTATE), while 16 percent of switches have already undergone a restatement prior year (PYRESTATED). Auditor resignations (dismissals) account for 39 (61) percent of my sample. My sample has a mean probability of bankruptcy (FINDIST) of 12% while the median firm has a probability of less than one percent. Forty-three percent of my firms incur a loss (LOSS) in the year preceding the change, while 32% have issues related to internal control (INTCTR). Issues with management integrity (INTEG) occur during three percent of changes. Seventy-seven percent of changes have fiscal year-ends that coincide with a normal busy season (YREND). Specialist auditors (SPECIAL) are the successor in 16 percent of my sample. The predecessor auditor disagrees (INCONS) with the client's filing of the Form 8-K in two percent of my sample. The mean (median) search period begins 231 (252) days from the client's filing deadline (DFILE). Fifteen percent of changes have a qualified or going concern opinion (QUALGC).

TABLE 2
Descriptive Statistics
Sample of 731 of audit change observations between 2003 and 2021

Variable	Mean	Median	SD	25%	50%	75%
ASP	18.69	7.00	21.69	3.00	7.00	30.00
WILLRESTATE	0.37	0.00	0.48	0.00	0.00	1.00
PYRESTATED	0.16	0.00	0.37	0.00	0.00	0.00
RESIGNED	0.39	0.00	0.49	0.00	0.00	1.00
FINDIST	0.12	0.00	0.28	0.00	0.00	0.03
LOSS	0.43	0.00	0.49	0.00	0.00	1.00
AT	346.98	127.51	511.68	38.69	127.51	387.68
INTCTR	0.32	0.00	0.47	0.00	0.00	1.00
INTEG	0.03	0.00	0.17	0.00	0.00	0.00
YREND	0.77	1.00	0.42	1.00	1.00	1.00
SPECIAL	0.16	0.00	0.36	0.00	0.00	0.00
FORG	0.41	0.00	0.49	0.00	0.00	1.00
INCONS	0.02	0.00	0.13	0.00	0.00	0.00
DFILE	230.90	252.00	102.22	155.00	252.00	324.00
B4B4	0.26	0.00	0.44	0.00	0.00	1.00
B4NB4	0.32	0.00	0.47	0.00	0.00	1.00
NB4NB4	0.34	0.00	0.47	0.00	0.00	1.00
NB4B4	0.09	0.00	0.28	0.00	0.00	0.00
TECH	0.37	0.00	0.48	0.00	0.00	1.00
QUALGC	0.15	0.00	0.36	0.00	0.00	0.00

Variables are as follows: (ASP) Number of calendar days between the engagement date of the successor auditor and the resignation date of the predecessor auditor. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise. (PYRESTATED) 1 if the client's financial statements were restated in the year prior to the audit change, 0 otherwise. (RESIGNED) 1 if the predecessor auditor resigned, 0 if the predecessor auditor was dismissed. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (YREND) 1 if a firm did not have a June 30 or December 31 year end, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (FORG) 1 if a firm reported foreign income, 0 otherwise. (INCONS) 1 if the exhibit letter filed by the incumbent auditor following auditor resignation disagrees with the Form 8-K filed by the firm, 0 otherwise. (DFILE) Fiscal year end plus 60 days minus the auditor resignation date for accelerated filers, or the fiscal year end plus 90 days for non-accelerated filers. (B4B4) 1 if a firm switched from a Big 4 to a Big 4 auditor, 0 otherwise. (B4NB4) 1 if a firm switched from a Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4NB4) 1 if a firm switched from a non-Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4B4) 1 if a firm switched from a non-Big 4 to a Big 4 auditor, 0 otherwise. (TECH) Firms with the following SIC codes: 2833–2836, 3570–3577, 3600–3674, 7371–7379, and 8731–8734. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise.

TABLE 3

Spearman Correlation Coefficients

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 ASP	1.00																				
2 ABNASP	0.63	1.00																			
3 WILLRESTATE	0.08	(0.04)	1.00																		
4 PYRESTATED	0.09	(0.02)	0.08	1.00																	
5 RESIGNED	0.52	(0.03)	0.04	0.08	1.00																
6 FINDIST	0.02	0.03	0.05	0.01	(0.01)	1.00															
7 LOSS	(0.00)	(0.01)	(0.03)	(0.05)	(0.01)	0.35	1.00														
8 AT	(0.05)	0.01	0.09	0.13	(0.11)	(0.15)	(0.24)	1.00													
9 INTCTR	0.04	0.01	0.08	0.27	0.11	0.05	0.08	0.12	1.00												
10 INTEG	0.18	(0.01)	(0.00)	0.12	0.12	(0.04)	(0.04)	0.06	0.17	1.00											
11 YREND	0.04	(0.02)	(0.00)	(0.01)	0.08	0.08	0.08	0.01	0.04	(0.02)	1.00										
12 SPECIAL	(0.09)	0.02	0.10	0.06	(0.16)	0.03	(0.08)	0.34	0.01	(0.01)	(0.03)	1.00									
13 FORG	(0.06)	0.02	(0.05)	0.06	0.00	(0.14)	(0.04)	0.32	0.13	0.05	(0.12)	0.08	1.00								
14 INCONS	0.10	(0.01)	0.04	0.06	(0.01)	0.03	(0.02)	0.05	0.10	0.54	0.02	0.03	0.05	1.00							
15 DFILE	(0.02)	0.01	(0.05)	(0.11)	(0.12)	(0.08)	(0.03)	0.30	0.01	(0.14)	(0.02)	0.20	0.17	(0.09)	1.00						
16 B4B4	(0.06)	0.04	0.10	0.13	(0.14)	(0.02)	(0.11)	0.50	0.05	0.03	0.01	0.47	0.23	0.10	0.26	1.00					
17 B4NB4	0.12	(0.03)	(0.13)	(0.07)	0.13	(0.12)	0.00	(0.04)	0.06	0.08	(0.06)	(0.29)	0.07	(0.02)	0.03	(0.40)	1.00				
18 NB4NB4	(0.02)	(0.01)	(0.03)	(0.06)	0.08	0.13	0.08	(0.49)	(0.10)	(0.07)	0.04	(0.30)	(0.28)	(0.07)	(0.32)	(0.42)	(0.49)	1.00			
19 NB4B4	(0.07)	(0.00)	0.11	0.01	(0.14)	0.00	0.04	0.10	0.01	(0.05)	0.02	0.25	(0.01)	(0.00)	0.08	(0.18)	(0.21)	(0.22)	1.00		
20 TECH	0.07	0.00	(0.07)	0.04	0.07	0.04	0.21	(0.21)	(0.06)	0.01	(0.01)	(0.04)	0.05	0.01	(0.01)	(0.04)	0.07	(0.01)	(0.04)	1.00	
21 QUALGC	(0.01)	0.02	(0.06)	(0.04)	0.04	0.31	0.20	(0.33)	0.05	0.02	0.05	(0.10)	(0.11)	0.01	(0.19)	(0.14)	(0.04)	0.20	(0.04)	0.10	1.00

Bolded correlation coefficients are significant at $p < .05$ or better. Variables are as follows: (ASP) Number of calendar days between the engagement date of the successor auditor and the resignation date of the predecessor auditor. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise. (PYRESTATED) 1 if the client's financial statements were restated in the year prior to the audit change, 0 otherwise. (RESIGNED) 1 if the predecessor auditor resigned, 0 if the predecessor auditor was dismissed. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (YREND) 1 if a firm did not have a June 30 or December 31 year end, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (FORG) 1 if a firm reported foreign income, 0 otherwise. (INCONS) 1 if the exhibit letter filed by the incumbent auditor following auditor resignation disagrees with the Form 8-K filed by the firm, 0 otherwise. (DFILE) Fiscal year end plus 60 days minus the auditor resignation date for accelerated filers, or the fiscal year end plus 90 days for non-accelerated filers. (B4B4) 1 if a firm switched from a Big 4 to a Big 4 auditor, 0 otherwise. (B4NB4) 1 if a firm switched from a Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4NB4) 1 if a firm switched from a non-Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4B4) 1 if a firm switched from a non-Big 4 to a Big 4 auditor, 0 otherwise. (TECH) Firms with the following SIC codes: 2833–2836, 3570–3577, 3600–3674, 7371–7379, and 8731–8734. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise.

Auditor Search Period Model Results

Model 1

Table 4 reports the univariate analysis of differences for the search period model (Model 1). Successor auditors who subsequently restate the prior year's financial statements (WILLRESTATE) spend an additional three days engaged in the search process compared to those who will not restate. Auditors who engage clients that have already restated in the prior year take an additional five days to accept versus those auditors whose clients have not restated (PYRESTATED). Auditors take 23 more days in the search process when the change is driven by the predecessor resigning (RESIGNED) versus the client dismissing the auditor (33 days vs. 10 days). Auditors' search processes are 25 days longer when questions surround management integrity (INTEG), and 21 days longer when the predecessor auditor disagrees with the client's disclosure of the audit change (INCONS). Results also show industry specialists (SPECIAL) spend on average 36% less time (20 days versus 13 days) in the search process than those who are not specialists. This is consistent with industry experts demonstrating efficiency in the process where they have requisite resources in place for such an engagement (Khalil et al. 2011; Johnstone 2001). Lastly, auditors spend an additional three days in due diligence when the engagement is for a client in the technology industry (TECH). There is no univariate difference in the search period when the client incurs a loss (LOSS), suffers from internal control issues (INTCTR), has a busy season year-end (YREND), has foreign operations (FORG), or when the predecessor auditor has modified their opinion (QUALGC).

TABLE 4

Model 1 (ASP) Univariate Analysis of Differences

Variable	No	Yes	Diff.	t-stat.
WILLRESTATE	17.55	20.67	3.13	1.88 **
PYRESTATED	17.86	23.00	5.14	2.37 ***
RESIGNED	9.70	32.76	23.06	14.73 ***
LOSS	18.65	18.74	0.09	0.06
INTCTR	18.05	20.07	2.02	1.17
INTEG	17.94	42.64	24.69	5.36 ***
YREND	17.00	19.20	2.20	1.16
SPECIAL	19.80	12.68	-7.12	-3.89 ***
FORG	19.53	17.46	-2.07	-1.27
INCONS	18.34	39.17	20.82	3.32 ***
B4B4	19.85	15.32	-4.53	-2.72 ***
B4NB4	16.48	23.34	6.86	3.76 ***
NB4NB4	19.05	17.98	-1.07	-0.63
NB4B4	19.12	14.17	-4.95	-1.75 *
TECH	17.38	20.88	3.49	2.05 **
QUALGC	18.84	17.83	-1.01	-0.45

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). Variables are as follows: (ASP) Number of calendar days between the engagement date of the successor auditor and the resignation date of the predecessor auditor. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise. (PYRESTATED) 1 if the client's financial statements were restated in the year prior to the audit change, 0 otherwise. (RESIGNED) 1 if the predecessor auditor resigned, 0 if the predecessor auditor was dismissed. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (YREND) 1 if a firm did not have a June 30 or December 31 year end, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (FORG) 1 if a firm reported foreign income, 0 otherwise. (INCONS) 1 if the exhibit letter filed by the incumbent auditor following auditor resignation disagrees with the Form 8-K filed by the firm, 0 otherwise. (DFILE) Fiscal year end plus 60 days minus the auditor resignation date for accelerated filers, or the fiscal year end plus 90 days for non-accelerated filers. (B4B4) 1 if a firm switched from a Big 4 to a Big 4 auditor, 0 otherwise. (B4NB4) 1 if a firm switched from a Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4NB4) 1 if a firm switched from a non-Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4B4) 1 if a firm switched from a non-Big 4 to a Big 4 auditor, 0 otherwise. (TECH) Firms with the following SIC codes: 2833–2836, 3570–3577, 3600–3674, 7371–7379, and 8731–8734. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise.

Table 5, column 1, models the search period using ordinary least-squares regression.⁴⁰ When a prior year restatement will occur (WILLRESTATE), auditors extend their acceptance process by two days. On average, auditors increase their due diligence by five days when the client has already issued a restatement (PYRESTATED) and 21 days when resignation is the cause of the predecessor auditor's relationship terminating (RESIGNED).⁴¹ These results are consistent with auditors extending their search period when facing increased risks (Khalil et al. 2011). Similarly, auditors extend their due diligence by two days when the client has a net loss (LOSS), 12 days when management integrity issues are present (INTEG) and 15 days when the predecessor auditor disagrees (INCONS) with the client's disclosure of the auditor change. Time constraints also affect due diligence as auditors let the filing deadline (DFILE) affect their time in the search process. Auditors reduce (extend) the length of their search period when faced with a quicker (longer) filing deadline (Dezoort and Lord 1997). Counter to expectations, auditors spend less time in the search process when internal control issues exist (INTCTR) and the client has foreign operations (FORG). One explanation for the finding on INTCTR may be that while internal control issues increase audit risk, they may also simplify audit strategy by compelling auditors to plan for high substantive audits, thus reducing time otherwise spent on controls reliance. As it relates to the result on FORG, I expected foreign operations to introduce audit complexities forcing auditors to respond with increased due diligence; however, my results suggest otherwise.

As a test of robustness, I model the search period using two more specifications. Table 5, column 2 follows prior literature (Khalil et al. 2011; Pacheco-Parades et al. 2017) estimating the search period using the square-root of the search period as the dependent variable and Table 5,

⁴⁰ As my sample contains firms that appear more than once, I use robust standard errors clustered by firm.

⁴¹ Auditors must adjust to these increased risks as restatements are an overt sign of financial reporting failure (Kinney et al. 2004; Stanley and Dezoort 2007), while resignations are associated with a number of adverse outcome (Catanach et al. 2011; Shu 2000).

column 3 estimates the model using quantile regression. When my dependent variable is the square-root of the search period (column 2), all significant findings from Table 5, column 1 remain unchanged, except for LOSS which no longer remains significant.

When I estimate my model using quantile regression (Table 5, column 3), the findings for variables PYRESTATED, LOSS, DFILE, and RESIGNED remain consistent with those from the OLS regression (column 1). However, WILLRESTATE, INTEG and INCONS are no longer significant, suggesting a change in these variables does not significantly affect the median search period timeline. Furthermore, while the unexpected finding on INTCTR fails to persist, the unexpected effect of FORG does persist.

TABLE 5

Model 1 (ASP) Regression

Variable	Prediction	(1) OLS ASP	(2) OLS SQRT	(3) Q ASP
INTERCEPT		-0.94 (-0.18)	1.15 * (1.86)	2.23 (0.81)
WILLRESTATE	+	2.02 * (1.35)	0.25 * (1.32)	-0.77 (-0.96)
PYRESTATED	+	4.52 ** (2.11)	0.54 ** (2.12)	1.64 * (1.30)
FINDIST	+	3.42 (1.16)	0.38 (1.07)	2.02 (1.16)
LOSS	+	2.29 * (1.52)	0.20 (1.12)	1.50 ** (1.68)
AT	+	0.00 (0.73)	0.00 (0.56)	0.00 (0.38)
INTCTR	+	-3.09 ** (-1.87)	-0.27 * (-1.32)	-0.60 (-0.63)
INTEG	+	12.23 ** (1.84)	2.44 *** (2.54)	4.93 (0.36)
YREND	+	0.60 (0.40)	0.09 (0.49)	-0.71 (-0.81)
SPECIAL	-	-2.05 (-1.02)	-0.24 (-0.93)	-0.74 (-0.68)
FORG	+	-2.47 ** (-1.70)	-0.32 ** (-1.81)	-1.35 ** (-1.69)
INCONS	+	15.44 ** (1.86)	2.34 ** (1.77)	13.47 (0.70)
DFILE	+	0.02 *** (3.08)	0.00 *** (2.97)	0.01 * (1.39)
B4NB4	+	1.97 (1.03)	0.12 (0.52)	-0.04 (-0.04)
NB4NB4		1.49 (0.67)	0.17 (0.60)	-0.40 (-0.33)
NB4B4		3.33 (1.45)	0.32 (1.15)	0.80 (0.75)
TECH		0.31 (0.20)	0.04 (0.19)	0.90 (0.99)
QUALGC	+	-0.40 (-0.19)	-0.05 (-0.19)	-0.45 (-0.34)
AUDITOR_RESIGNI	+	21.27 *** (13.66)	2.55 *** (14.00)	22.13 *** (14.63)
Year		Yes	Yes	Yes
Industry		Yes	Yes	Yes
n		731	731	731
F		10.32	11.34	
R ²		0.37	0.38	

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). OLS regression is estimated using robust standard errors clustered by firm. Column 1 is modeled using OLS. The dependent variable is the untransformed auditor search period. Column 2 is modeled using OLS. The dependent variable is the square-root of the auditor search period. Column 3 is modeled using quantile regression. The dependent variable is the untransformed auditor search period. Variables are as follows: (ASP) Number of calendar days between the engagement date of the successor auditor and the resignation date of the predecessor auditor. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise. (PYRESTATED) 1 if the client's financial statements were restated in the year prior to the audit change, 0 otherwise. (RESIGNED) 1 if the predecessor auditor resigned, 0 if the predecessor auditor was dismissed. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (YREND) 1 if a firm did not have a June 30 or December 31 year end, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (FORG) 1 if a firm reported foreign income, 0 otherwise. (INCONS) 1 if the exhibit letter filed by the incumbent auditor following auditor resignation disagrees with the Form 8-K filed by the firm, 0 otherwise. (DFILE) Fiscal year end plus 60 days minus the auditor resignation date for accelerated filers, or the fiscal year end plus 90 days for non-accelerated filers. (B4B4) 1 if a firm switched from a Big 4 to a Big 4 auditor, 0 otherwise. (B4NB4) 1 if a firm switched from a Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4NB4) 1 if a firm switched from a non-Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4B4) 1 if a firm switched from a non-Big 4 to a Big 4 auditor, 0 otherwise. (TECH) Firms with the following SIC codes: 2833–2836, 3570–3577, 3600–3674, 7371–7379, and 8731–8734. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise.

Restatement Model Results

Model 2

Recall that H1 states increased client acceptance effort is negatively associated with future restatements. Using the residuals from the search period model (Model 1), I test my first hypothesis.⁴² I present the univariate results of my findings in Table 6. I find auditors who are involved in audit failures and restate spend two (1.95) fewer days than expected in due diligence (ABNASP) than those auditors who avoid a restatement. This difference, however, is not significant at the univariate level. I find that restating firms are larger (AT) than non-restating firms. This is likely due to the challenge of overcoming more complex learning curves associated

⁴² My restatement sample consists of 714 observations that receive an audit opinion from their successor auditor. Seventeen of the 731 initial observations turn over before the successor auditor issues their first opinion. Since no opinion is issued, I remove these 17 as they neither represent a restatement nor a non-restatement observation.

with auditing large first year clients (Cassell et al. 2020; Pacheco-Parades et al. 2017). My results show that restating firms engage in higher financing (FINANCE). Additionally, I find that of restating firms, 40% have material weaknesses (MATWEAK), while only 15% of non-restating firms have material weaknesses. This finding is intuitive as functioning internal controls prevent and detect misstatements; thus, any breakdown would naturally increase the likelihood of a misstatement occurring (Blankley et al. 2012). Lastly, I find that restating firms terminate their prior relationship 31 days closer to the filing date (DFILE) than those firms that do not restate. This is consistent with time constraints having a negative effect on audit quality (Cassell et al. 2020; Dezoort and Lord 1997; Low and Tan 2011). There is no difference between restating and non-restating firms in their degree of debt (DT), market-to-book value (MTB), earnings-to-price (EPR), financing raised (FINANCE), free cash flow (FREE), and successor auditor specialization (SPECIAL).

TABLE 6

Model 2 (Restatement) Univariate Analysis of Differences

Variable	Restate = 0	Restate = 1	Diff.	t-stat.
ABNASP	0.28	-1.67	1.95	1.02
AT	339.43	448.18	-108.76	-1.60 *
DT	123.37	166.62	-43.24	-0.75
MTB	2.83	2.98	-0.15	-0.43
FINANCE	49.54	68.95	-19.41	-1.38 *
EPR	-0.10	-0.10	-0.01	-0.19
FREE	5.26	10.10	-4.84	-1.22
MATWEAK	0.15	0.40	-0.25	-4.67 ***
DAYS	154.96	123.13	31.83	2.68 ***
SPECIAL	0.16	0.15	0.01	0.17
n	622	92		

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). Variables are as follows: (ABNASP) The residual from the auditor search period model. (AT) Sum of total assets in the year of the change. (DT) Sum of total debt in the year of the change. (MTB) Firm market value divided by book value. (FINANCE) Sum of additional cash raised from issuance of long-term debt, common stock, and preferred stock. (EPR) Income from continuing operations divided by market value. (FREE) Sum of cash from operations less average capital expenditures. (MATWEAK) Indicator variable set to 1 if a firm received a material weakness opinion in the current or following year, 0 otherwise. (DAYS) The number of days from the successor auditor’s engagement date to fiscal year-end. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021.

Table 7, column 1, presents the logistic regression results of my restatement model (Model 2) using the error term (ABNASP) obtained from Table 5, column 1. The effects of material weaknesses (MATWEAK) and days to year-end (DAYS) remain consistent with my univariate findings, while firm size (AT) and financing raised (FINANCE) no longer remain significant. The presence of material weaknesses increases the odds of a restatement by 2.9 times. Every day the search period begins closer to the fiscal year-end increases the likelihood of a restatement by 0.3%. As for my variable of interest (ABNASP), there is a significant and negative relationship between abnormal search period effort (ABNASP) and the likelihood of a future restatement. I find that

each additional day that auditors spend beyond expectation in the search reduces the likelihood of a future restatement by 1%. Thus, I find H1 is supported.

Table 7, column 2, presents the logistic regression results of my restatement model (Model 2) when ABNASP is coded as the residual from Model 1 using OLS and the square-root ASP. Under this specification, my variable of interest (ABNASP) no longer remains significant. Table 7, column 3, presents the logistic regression results of my restatement model (Model 2) when ABNASP is coded as the residual from Model 1 using quantile regression. Under this specification, my variable of interest (ABNASP) no longer remains significant. While the relationship between additional search period effort and future restatements remains negative, it is not significant for the median search period.

TABLE 7

Model 2 (Restatement) Logistic Regression

Variable	Prediction	(1) OLS ASP	(2) OLS SQRT	(3) Q ASP
INTERCEPT		-2.22 *** (49.94)	-2.22 *** (49.99)	-2.20 *** (48.98)
ABNASP	-	-0.01 * (2.14)	-0.07 (1.64)	-0.01 (1.47)
AT	-	0.00 (0.42)	0.00 (0.43)	0.00 (0.48)
DT	+	0.00 (0.01)	0.00 (0.01)	0.00 (0.02)
MTB	+	0.04 (1.01)	0.04 (1.05)	0.04 (1.02)
FINANCE	+	0.00 (0.56)	0.00 (0.54)	0.00 (0.55)
EPR	-	-0.45 (0.76)	-0.45 (0.76)	-0.46 (0.79)
FREE	-	0.00 (1.31)	0.00 (1.24)	0.00 (1.21)
MATWEAK	+	1.36 *** (26.01)	1.36 *** (26.02)	1.37 *** (26.16)
DAYS	-	-0.00 *** (6.41)	-0.00 *** (6.34)	-0.00 *** (6.16)
SPECIAL	-	-0.13 (0.12)	-0.12 (0.11)	-0.14 (0.15)
Year		Yes	Yes	Yes
Industry		Yes	Yes	Yes
n		714	714	714
Pseudo R2		0.12	0.12	0.12

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). Column 1's ABNASP is obtained from Table 4, column 1 (OLS regression; DV coded as ASP). Column 2's ABNASP is obtained from Table 4, column 2 (OLS regression; DV coded as square-root ASP). Column 3's ABNASP is obtained from Table 4, column 3 (Quantile regression; DV coded as ASP). Variables are as follows: (ABNASP) The residual from the auditor search period model. (AT) Sum of total assets in the year of the change. (DT) Sum of total debt in the year of the change. (MTB) Firm market value divided by book value. (FINANCE) Sum of additional cash raised from issuance of long-term debt, common stock, and preferred stock. (EPR) Income from continuing operations divided by market value. (FREE) Sum of cash from operations less average capital expenditures. (MATWEAK) Indicator variable set to 1 if a firm received a material weakness opinion in the current or following year, 0 otherwise. (DAYS) The number of days from the successor auditor's engagement date to fiscal year-end. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021.

Termination Model Results

Model 3

Recall that H2 states increased client acceptance effort is negatively associated with future auditor-client terminations.⁴³ I present the univariate results of these findings in Table 8 and the full model's results in Table 9. In Table 8, in contrast to my hypothesis, I find that turnover auditors devote additional time to the acceptance process (ABNASP) versus those auditors who don't turnover. I also find persistent relationships are associated with larger firms (AT). Relationships with larger firms provide auditors with higher audit fees and thus may incentivize auditors to continue the relationship (Hay et al. 2006). Larger clients are also incentivized against turnover as they have more to lose from negative market reactions (DeFond et al. 1997; Shu 2000). Surprisingly, I find that relationships with higher initial internal control issues (INTCTR) are more likely to persist. Recall, I code INTCTR as 1 when internal control issues exist and are known before the successor auditor begins the engagement. This finding could be the result of auditors withdrawing less from engagements when they are aware of potential risks upfront rather than being surprised by them on the back end. I find no univariate differences between bankruptcy probability (FINDIST), management integrity (INTEG), auditor specialization (SPECIAL), prior opinion type (QUALGC), new executives (NEWEXEC), or restatement occurrences (WILLRESTATE and SELFRESTATE).

⁴³ My termination sample consists of 535 auditor changes that have an auditor of record (received an audit opinion) for four years after the change. Observations that no longer file audit opinions may have gone private or bankrupt. Either way, there is no data to determine whether these relationships terminated within the four year window, therefore, these I remove these observations. However, if an observation does not have four years of opinions, but a turnover occurs before audit opinions cease, I include this observation as I can discern its termination.

TABLE 8**Model 3 (Termination) Univariate Analysis of Differences**

Variable	Term = 0	Term = 1	Diff.	t-stat.
ABNASP	-1.15	4.17	-5.32	-2.45 ***
FINDIST	0.11	0.12	-0.01	-0.50
AT	387.45	208.77	178.68	3.87 ***
INTEG	0.03	0.06	-0.04	-1.45
INTCTR	0.32	0.21	0.11	2.26 **
SPECIAL	0.16	0.12	0.04	0.99
QUALGC	0.13	0.14	-0.01	-0.30
NEWEXEC	0.63	0.70	-0.07	-1.28
WILLRESTATE	0.41	0.34	0.07	1.32
SELFRESTATE	0.27	0.20	0.06	1.36
n	426	109		

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). Variables are as follows: (ABNASP) The residual from the auditor search period model. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise. (NEWEXEC) 1 if a firm hired a new CEO, CFO, or audit committee member within the first four years of successor auditor tenure, 0 otherwise. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise. (SELFRESTATE) 1 if a restatement occurs involving the work of the successor auditor within the first four years of the tenure, 0 otherwise.

Table 9, column 1, presents the logistic regression results of my termination model (Model 3) using the error term (ABNASP) obtained from Table 5, column 1.⁴⁴ Consistent with my univariate findings, I find that for each additional day auditors spend in the search process their likelihood of turnover increases by 2%. Also consistent with my univariate findings, larger firms

⁴⁴ Table 5, column 1, calculates the error term (abnormal search period) using OLS regression with the dependent variable coded as the untransformed auditor search period.

(AT) are less likely to turnover. A one billion dollar increase in assets reduces the likelihood of future termination by one percent. Firms with initial internal control issues (INTCTR) are 48 percent less likely to turnover. I also find engagements with management integrity (INTEG) issues are 5 times more likely to turnover and engagements with new executives (NEWEXEC) are 48% more likely to turnover.⁴⁵

Table 9, column 2, presents the logistic regression results of my termination model (Model 3) when ABNASP is coded as the residual from Model 1 using OLS and the square-root ASP. The results from my termination model remain unchanged under this specification. Table 9, column 3, presents the logistic regression results of my termination model (Model 3) when ABNASP is coded as the residual from Model 1 using quantile regression. The results from my termination model remain unchanged under this specification as well.

Given my variable of interest (ABNASP) is in the opposite direction of my hypothesis, I investigate this further by performing a supplemental analysis examining which party initiates these terminations. The implications are notably different for a relationship that is terminated by dismissal (client driven) versus terminated by resignation (auditor driven). See the supplemental analysis section for these results.

⁴⁵ Pacheco-Parades et al. (2017) find new executives have a significant effect on the timing of auditor changes, thus it follows that new executives have a significant effect on the changing decision itself.

TABLE 9

Model 3 (Termination) Logistic Regression

Variable	Prediction	(1) OLS ASP	(2) OLS SQRT	(3) Q ASP
INTERCEPT		-1.48 *** (21.33)	-1.49 *** (21.50)	-1.50 *** (21.96)
ABNASP	-	0.02 *** (6.23)	0.12 ** (5.04)	0.01 ** (3.81)
FINDIST		0.02 (0.00)	0.02 (0.00)	0.00 (0.00)
AT		-0.00 *** (9.95)	-0.00 *** (9.87)	-0.00 *** (10.10)
INTEG		1.80 *** (8.42)	1.79 *** (8.31)	1.68 *** (7.30)
INTCTR		-0.66 ** (4.44)	-0.66 ** (4.42)	-0.64 ** (4.21)
SPECIAL		0.24 (0.37)	0.24 (0.37)	0.27 (0.47)
QUALGC		-0.11 (0.08)	-0.12 (0.09)	-0.12 (0.09)
NEWEXEC	+	0.39 * (2.42)	0.40 * (2.49)	0.40 * (2.46)
WILLRESTATE		0.17 (0.23)	0.19 (0.28)	0.15 (0.17)
SELFRESTATE		-0.38 (0.84)	-0.40 (0.89)	-0.39 (0.87)
Year		Yes	Yes	Yes
Industry		Yes	Yes	Yes
n		535	535	535
Pseudo R ²		0.14	0.14	0.13

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). Column 1's ABNASP is obtained from Table 4, column 1 (OLS regression; DV coded as ASP). Column 2's ABNASP is obtained from Table 4, column 2 (OLS regression; DV coded as square-root ASP). Column 3's ABNASP is obtained from Table 4, column 3 (Quantile regression; DV coded as ASP). Variables are as follows: (ABNASP) The residual from the auditor search period model. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise. (NEWEXEC) 1 if a firm hired a new CEO, CFO, or audit committee member within the first four years of successor auditor tenure, 0 otherwise. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financials once engaged, 0 otherwise. (SELFRESTATE) 1 if a restatement occurs involving the work of the successor auditor within the first four years of the tenure, 0 otherwise.

SUPPLEMENTAL ANALYSES

H2 Subsequent Analysis: Resignation vs. Dismissal

Recall my results in H2 were in the opposite direction of what I predicted. I predicted a negative relationship between the abnormal search period and subsequent termination; however, Table 9 shows a positive relationship between the abnormal search period and the auditor's likelihood of turnover. This finding argues that not only are auditors who invest upfront due diligence unable to prevent their relationship from terminating, but auditors who invest in due diligence actually increase their likelihood of having their relationship terminate. Recall that I code my dependent variable in Model 3 as 1 if the relationship terminates within four years, and 0 otherwise. This coding treats every termination, whether driven by the client (dismissal) or the auditor (resignation), as the same. However, the implications are unique if the abnormal search period is associated with one type of termination over the other. Therefore, I run Model 3 (untabulated) using two additional iterations by coding my dependent variable TERM by the type of termination. In my first iteration, I run the model coding TERM as 1 if the relationship ends via the client (dismissal), 0 otherwise. In my second iteration, I run the model coding TERM as 1 if the relationship ends via the auditor (resignation), 0 otherwise.

When TERM is coded as 1 for dismissals, I find a significant and positive relationship between the abnormal search period and subsequent dismissals. This result suggests that when auditors increase their due diligence, their clients are more likely to dismiss them. This could be due to a mismatch of client expectations and auditor performance. It is possible in the normal

course of business that clients do not see the value of higher quality auditors, therefore any increase in quality may be cumbersome and unappreciated by the client. After all, higher quality audits necessitate additional workloads on the clients themselves.⁴⁶ In my second iteration, when TERM is coded as 1 for resignations, I find no relationship between the abnormal search period and subsequent resignations.

I further examine my findings from H2 using a subset of auditor changes that is conditional on subsequent termination. Increasing due diligence should prepare auditors to find and address all relevant and potential risks. Auditors who both discover and address these risks before the audit should have less reason to resign during the engagement. On the other hand, auditors who exhibit less due diligence increase their likelihood of being unprepared, thus providing them more reasons for which to resign. I expect prepared (unprepared) auditors to be less (more) likely to resign. To test the impact of the abnormal audit search period on termination type, I use the following logistic model:

$$\begin{aligned}
 TERMTYPE = & \beta_0 + \beta_1 ABNASP_{it} + \beta_2 NEWEXEC_{it} + \beta_3 SPECIAL_{it} + \beta_4 INTEGRITY_{it} \\
 & + \beta_5 WILLRESTATE_{it} + \beta_6 SUBRESTATE_{it} + \beta_7 CHFINDIST_{it} + \varepsilon_{it} \quad (4)
 \end{aligned}$$

I extend my sample window through 2021 to capture as many subsequent auditor changes as possible. My sample consists of 121 observations: 32 resignations and 89 dismissals. I code my dependent variable TERMTYPE as 1 if the relationship terminates via the auditor (resignation) and 0 if via the client (dismissal). My variable of interest remains the additional effort auditors

⁴⁶ An alternative explanation for this finding could be that the abnormal search period manifests due to auditor inefficiency and thus the client responds to poor auditor quality by dismissing the auditor. However, there is no such evidence for this as prior literature (Khalil et al. 2011; Pacheco-Parades et al. 2017; Mande et al. 2017), my findings in H1, and conversations with audit partners all support the notion that increased search periods are an auditor's qualitative response to increased risks. My findings in H1 indicate that the additional time auditors engage in the search period is associated with audit quality.

employ during the search period (ABNASP). Keeping my expectations consistent with H2, I expect auditors who increase search effort to discover and mitigate more risks before the engagement. Therefore, I predict a negative relationship between the amount of due diligence auditors employ and subsequent resignation.

Table 10 presents the results of my supplemental analysis. As predicted, I find a negative relationship between due diligence (ABNASP) and resignation. When auditors increase search period effort, they decrease the likelihood that auditor resignation is the cause of a relationship's turnover. In my analysis, I control for new executives hired during the tenure (NEWEXEC), auditor specialization (SPECIAL), the presence of integrity issues during the tenure (INTEGRITY), whether the successor auditor restates work by the predecessor (WILLRESTATE), whether a restatement is issued involving the work of the successor (SELFRESTATE), and the change in the client's financial distress (CHFINDIST). NEWEXEC is my only control variable that significantly predicts termination type. I find a significant and negative effect on NEWEXEC, suggesting that a change in client management is associated with the client dismissing the audit firm.

TABLE 10

Model 4 (Termination) Logistic Regression

Variable	Coefficient	t-stat.
INTERCEPT	0.34	0.38
ABNASP	-0.02	2.28 *
NEWEXEC	-1.15	5.49 ***
SPECIAL	-0.26	0.10
INTEGRITY	0.67	0.76
WILLRESTATE	-0.38	0.28
SELFRESTATE	0.22	0.06
CHFINDIST	-0.23	0.10
Year	No	
Industry	Yes	
n	121	
Pseudo R ²	0.14	

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). ABNASP is obtained from Model 1 (Table 4, column 1; OLS regression; DV coded as ASP). Variables are as follows: (ABNASP) The residual from the auditor search period model. (NEWEXEC) 1 if a firm hired a new CEO, CFO, or audit committee member during the successor auditor tenure, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (INTEGRITY) 1 if the predecessor or successor auditor reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor’s financials once engaged, 0 otherwise. (SELFRESTATE) 1 if a restatement occurs involving the work of the successor auditor, 0 otherwise. (CHFINDIST) Change in the client’s probability of bankruptcy using Zmijewski’s (1984) financial condition index.

Resignation vs. Dismissal Subsamples

Recall that in my main analyses (H1 and H2) my results are modeled using a pooled sample of auditor changes with both resignations and dismissals. As a follow-up analysis, I assess H1 and H2 with respect to both dismissal and resignation changes, separately. I disaggregate my pooled sample into two subsamples: one of auditor changes due to resignations and one of auditor changes due to dismissals. Next, I estimate my search period models (Table 11), restatement models (Table 12), and termination models (Table 13) for each of these two subsamples. All models are run using

the same methodology as my main analyses. I am, however, not able to include year and industry fixed effects in some models due to quasi-complete separation of data points.⁴⁷

⁴⁷ Quasi-complete separation of data points occurs in logistic regression when an independent variable perfectly predicts the outcome of the dependent variable (there is a lack of variance). For example, there are no restatements for fiscal year 2009 in my resignation subsample, therefore, I cannot control for year-fixed effects without misspecifying my model.

TABLE 11

Model 1 (ASP) Regression

Variable	OLS ASP		OLS SQRT		Q ASP	
	(1) Resigned	(2) Dismissed	(3) Resigned	(4) Dismissed	(5) Resigned	(6) Dismissed
INTERCEPT	14.90 (1.09)	2.92 (0.89)	3.34 ** (2.27)	1.52 *** (2.63)	-11.36 (-0.65)	2.34 (1.15)
WILLRESTATE	1.64 (0.48)	2.47 ** (2.09)	0.11 (0.32)	0.37 ** (1.84)	3.87 (1.14)	0.17 (0.28)
PYRESTATED	2.04 (0.49)	1.95 (1.20)	0.40 (0.91)	0.47 * (1.56)	4.36 (0.90)	1.28 * (1.35)
FINDIST	2.76 (0.43)	2.53 (1.13)	0.20 (0.29)	0.37 (1.05)	-0.21 (-0.02)	2.13 * (1.60)
LOSS	0.59 (0.16)	2.04 ** (1.81)	-0.17 (-0.46)	0.34 ** (1.82)	-2.31 (-0.56)	1.14 ** (1.92)
AT	-0.01 * (-1.36)	0.00 (0.84)	0.00 * (-1.29)	0.00 (0.98)	0.00 (0.12)	0.00 (0.72)
INTCTR	0.24 (0.06)	-2.91 *** (-2.48)	0.21 (0.49)	-0.52 *** (-2.61)	-1.39 (-0.28)	-0.63 (-1.02)
INTEG	15.60 * (1.58)	18.77 *** (2.74)	2.09 ** (1.88)	4.37 *** (2.71)	8.72 (0.47)	24.96 ** (1.74)
YREND	3.67 (0.92)	-0.31 (-0.26)	0.36 (0.93)	-0.03 (-0.13)	8.42 ** (1.77)	-0.10 (-0.13)
SPECIAL	-9.44 * (-1.57)	-0.63 (-0.44)	-1.04 * (-1.54)	0.00 (0.01)	-10.96 (-1.18)	0.28 (0.39)
FORG	-0.35 (-0.10)	-0.98 (-0.88)	-0.16 (-0.46)	-0.22 (-1.12)	7.39 ** (1.95)	-0.60 (-1.05)
INCONS	15.08 (0.72)	5.54 (0.74)	2.75 (1.03)	1.12 (0.90)	130.68 * (1.54)	-2.06 (-0.15)
DFILE	0.04 *** (2.46)	0.01 * (1.46)	0.00 *** (2.42)	0.00 ** (1.74)	0.03 ** (1.81)	0.00 (0.04)
B4NB4	3.40 (0.68)	-1.26 (-0.86)	0.07 (0.13)	-0.13 (-0.54)	5.25 (0.77)	-0.41 (-0.54)
NB4NB4	3.63 (0.60)	1.63 (0.97)	0.16 (0.25)	0.26 (0.94)	7.23 (0.96)	0.85 (0.86)
NB4B4	20.56 ** (2.39)	-0.26 (-0.16)	2.10 ** (2.47)	-0.07 (-0.24)	17.22 (1.08)	-0.17 (-0.21)
TECH	-1.86 (-0.52)	-0.20 (-0.16)	-0.21 (-0.57)	0.05 (0.25)	-3.85 (-0.87)	-0.20 (-0.32)
QUALGC	-2.48 (-0.53)	0.75 (0.45)	-0.21 (-0.40)	0.00 (0.01)	0.84 (0.15)	-0.50 (-0.61)
Year	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
n	285	446	285	446	285	446
F	38.31	3.49	16.88	1.89		
R ²	0.25	0.17	0.27	0.20		

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). OLS regression is estimated using robust standard errors clustered by firm. Column 1 and 2 are modeled using OLS. The dependent variable is the untransformed auditor search period. Column 3 and 4 are modeled using OLS. The dependent variable is the square-root of the auditor search period. Column 5 and 6 are modeled using quantile regression. The dependent variable is the untransformed auditor search period. Variables are as follows: (ASP) Number of calendar days between the engagement date of the successor auditor and the resignation date of the predecessor auditor. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise. (PYRESTATED) 1 if the client's financial statements were restated in the year prior to the audit change, 0 otherwise. (RESIGNED) 1 if the predecessor auditor resigned, 0 if the predecessor auditor was dismissed. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (YREND) 1 if a firm did not have a June 30 or December 31 year end, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (FORG) 1 if a firm reported foreign income, 0 otherwise. (INCONS) 1 if the exhibit letter filed by the incumbent auditor following auditor resignation disagrees with the Form 8-K filed by the firm, 0 otherwise. (DFILE) Fiscal year end plus 60 days minus the auditor resignation date for accelerated filers, or the fiscal year end plus 90 days for non-accelerated filers. (B4B4) 1 if a firm switched from a Big 4 to a Big 4 auditor, 0 otherwise. (B4NB4) 1 if a firm switched from a Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4NB4) 1 if a firm switched from a non-Big 4 to a non-Big 4 auditor, 0 otherwise. (NB4B4) 1 if a firm switched from a non-Big 4 to a Big 4 auditor, 0 otherwise. (TECH) Firms with the following SIC codes: 2833–2836, 3570–3577, 3600–3674, 7371–7379, and 8731–8734. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise.

Consistent with my main findings and in support of H1, abnormal search effort (ABNASP) is significantly and negatively associated with future restatements in my dismissals subsample. For every additional day spent in the search process, auditors reduce their likelihood of a future restatement by four percent (Table 12, column 2). Significance is retained under both robustness specifications. As it relates to my resignations subsample, abnormal search period effort (ABNASP) is not associated with future restatements.

TABLE 12

Model 2 (Restatement) Logistic Regression

Variable	OLS ASP		OLS SQRT		Q ASP	
	(1) Resigned	(2) Dismissed	(3) Resigned	(4) Dismissed	(5) Resigned	(6) Dismissed
INTERCEPT	-1.67 *** (14.57)	-2.22 *** (32.78)	-1.67 *** (14.59)	-2.20 *** (32.55)	-1.66 *** (14.34)	-2.08 *** (28.66)
ABNASP	0.00 (0.00)	-0.04 ** (4.44)	0.00 (0.00)	-0.17 * (2.68)	0.00 (0.04)	-0.03 ** (3.17)
AT	0.00 (0.33)	0.00 (0.26)	0.00 (0.33)	0.00 (0.36)	0.00 (0.34)	0.00 (0.33)
DT	0.00 (0.23)	0.00 (0.00)	0.00 (0.23)	0.00 (0.01)	0.00 (0.23)	0.00 (0.01)
MTB	0.09 ** (2.89)	-0.04 (0.43)	0.09 ** (2.89)	-0.04 (0.49)	0.09 ** (2.91)	-0.04 (0.49)
FINANCE	0.00 (0.85)	0.00 (1.12)	0.00 (0.86)	0.00 (1.06)	0.00 (0.85)	0.00 (1.19)
EPR	-0.01 (0.00)	-0.55 (0.49)	-0.01 (0.00)	-0.56 (0.49)	-0.02 (0.00)	-0.59 (0.55)
FREE	0.01 ** (3.88)	0.00 (0.13)	0.01 ** (3.86)	0.00 (0.09)	0.01 ** (3.91)	0.00 (0.12)
MATWEAK	1.06 *** (8.36)	1.56 *** (16.99)	1.06 *** (8.37)	1.53 *** (16.5)	1.06 *** (8.35)	1.57 *** (17.32)
DAYS	0.00 * (2.46)	0.00 ** (4.21)	0.00 * (2.39)	0.00 ** (3.96)	0.00 * (2.58)	0.00 ** (4.03)
SPECIAL	-0.38 (0.35)	0.06 (0.02)	-0.39 (0.36)	0.05 (0.01)	-0.38 (0.35)	0.03 (0.00)
Year	No	No	No	No	No	No
Industry	Yes	No	Yes	No	Yes	No
n	275	439	275	439	275	439
Pseudo R2	0.10	0.10	0.10	0.10	0.10	0.10

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). Column 1 and 2's ABNASP are obtained from their respective ASP models (OLS regression; DV coded as ASP). Column 3 and 4's ABNASP are obtained from their respective ASP models (OLS regression; DV coded as square-root ASP). Column 5 and 6's ABNASP are obtained from their respective ASP models (Quantile regression; DV coded as ASP). Variables are as follows: (ABNASP) The residual from the auditor search period model. (AT) Sum of total assets in the year of the change. (DT) Sum of total debt in the year of the change. (MTB) Firm market value divided by book value. (FINANCE) Sum of additional cash raised from issuance of long-term debt, common stock, and preferred stock. (EPR) Income from continuing operations divided by market value. (FREE) Sum of cash from operations less average capital expenditures. (MATWEAK) Indicator variable set to 1 if a firm received a material weakness opinion in the current or following year, 0 otherwise. (DAYS) The number of days from the successor auditor's engagement date to fiscal year-end. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021.

As for the supplemental tests of my second hypothesis (H2), consistent with my main findings and in contrast to my original expectations (H2), abnormal search period effort (ABNASP) is significantly and positively associated with future terminations in my dismissals subsample under all three specifications (Table 13). As it relates to my resignations subsample, abnormal search period effort (ABNASP) is not associated with future termination under any specification.

TABLE 13

Model 3 (Termination) Logistic Regression

Variable	OLS ASP		OLS SQRT		Q ASP	
	(1) Resigned	(2) Dismissed	(3) Resigned	(4) Dismissed	(5) Resigned	(6) Dismissed
INTERCEPT	-1.02 ** (4.56)	-1.22 *** (16.66)	-1.02 ** (4.56)	-1.22 *** (16.44)	-1.05 ** (4.68)	-1.34 *** (19.20)
ABNASP	0.01 (0.75)	0.03 *** (6.41)	0.06 (0.63)	0.26 *** (10.30)	0.01 (0.84)	0.03 *** (7.66)
FINDIST	0.26 (0.15)	-0.30 (0.23)	0.27 (0.15)	-0.27 (0.18)	0.25 (0.14)	-0.35 (0.30)
AT	0.00 * (3.16)	0.00 ** (5.33)	0.00 * (3.15)	0.00 ** (5.65)	0.00 * (2.92)	0.00 ** (5.53)
INTEG	2.15 *** (8.40)	0.43 (0.12)	2.13 *** (8.27)	-0.13 (0.01)	2.11 *** (8.09)	-0.11 (0.01)
INTCTR	-0.69 (2.37)	-0.88 ** (4.77)	-0.69 (2.36)	-0.86 ** (4.58)	-0.67 (2.24)	-0.80 ** (3.90)
SPECIAL	-1.44 (1.61)	0.29 (0.52)	-1.43 (1.59)	0.27 (0.44)	-1.42 (1.57)	0.33 (0.65)
QUALGC	0.51 (0.82)	-0.65 (1.59)	0.51 (0.82)	-0.69 (1.74)	0.52 (0.86)	-0.71 (1.82)
NEWEXEC	0.24 (0.37)	0.58 ** (3.38)	0.24 (0.37)	0.59 ** (3.43)	0.24 (0.36)	0.60 ** (3.54)
WILLRESTATE	0.24 (0.17)	-0.18 (0.18)	0.26 (0.20)	-0.18 (0.18)	0.21 (0.13)	-0.28 (0.42)
SELFRESTATE	-0.29 (0.21)	-0.17 (0.11)	-0.31 (0.24)	-0.19 (0.13)	-0.28 (0.20)	-0.15 (0.09)
Year	No	No	No	No	No	No
Industry	Yes	No	Yes	No	Yes	No
n	205	330	205	330	205	330
Pseudo R2	0.10	0.08	0.10	0.09	0.10	0.08

*, **, *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively (one-tailed if predicted, and two-tailed otherwise). Column 1 and 2's ABNASP are obtained from their respective ASP models (OLS regression; DV coded as ASP). Column 3 and 4's ABNASP are obtained from their respective ASP models (OLS regression; DV coded as square-root ASP). Column 5 and 6's ABNASP are obtained from their respective ASP models (Quantile regression; DV coded as ASP). Variables are as follows: (ABNASP) The residual from the auditor search period model. (FINDIST) Client's probability of bankruptcy using Zmijewski's (1984) financial condition index. (LOSS) 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise. (AT) Sum of total assets in the year of the change. (INTCTR) 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise. (INTEG) 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise. (SPECIAL) A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021. (QUALGC) 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise. (NEWEXEC) 1 if a firm hired a new CEO, CFO, or audit committee member within the first four years of successor auditor tenure, 0 otherwise. (WILLRESTATE) 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise. (SELFRESTATE) 1 if a restatement occurs involving the work of the successor auditor within the first four years of the tenure, 0 otherwise.

CONCLUSION

In my study, I examine the effects of auditor due diligence during the client acceptance process. Specifically, I measure whether the additional time that auditors take during the acceptance process mitigates future adverse outcomes. I proxy adverse outcomes using restatements in the subsequent period and auditor-client terminations. Both restatements and relationship turnover can negatively affect both parties in the form of reputational damage and financial losses.

My first hypothesis predicts that due diligence during client acceptance is negatively associated with future restatements. Auditors evaluate a significant number of risk factors during the acceptance process, therefore increasing the effort expended during this assessment should have a downstream effect of improving subsequent audit quality (e.g., reducing future misstatements). In support of my hypothesis, I find that every additional day of effort that auditors spend in the search process reduces their likelihood of a future restatement by one percent.

My second hypothesis predicts that due diligence during client acceptance is negatively associated with relationship termination. My results, however, find evidence for the opposite. I find that for every day that auditors exert additional effort, their likelihood of future turnover increases by two percent. I investigate this result further and find that the client primarily drives this turnover, i.e., the client dismisses the auditor rather than the auditor resigning from the engagement. I believe this could be due to a mismatch of auditor effort and client expectations. When auditors exert high effort, this puts additional workloads on clients which they may not

anticipate. If clients do not see the value in higher audit quality, this additional workload may cause them to enter the market once again for an auditor that is more acceptable to their standards.

My findings shed light on the relationship between two previously incongruent propositions. Prior archival studies find that shorter search periods are associated with reduced client acceptance risks (Kahlil et al. 2011; Mande et al. 2017). The implication here is that one should have less concern about the relationship when the relationship starts after a short search period. However, theoretical implications suggest that longer search periods should be associated with a reduction in relationship risks. For instance, during the acceptance process auditors are at an information disadvantage (Blankley et al. 2021). Therefore, providing auditors with additional time to perform due diligence should help them to identify and mitigate any such risks. My findings provide evidence that, given a client with a set risk profile, auditors who spend more time in the search period subsequently perform higher quality audits once engaged. My findings, however, also provide evidence that clients may not appreciate this effort as they are more likely to dismiss their auditor when more effort is exerted. Subsequent analyses suggest that auditor changes due to client dismissals primarily drive these results.

My paper contributes to client acceptance research, specifically to the auditor search period literature. Current search period literature examines the antecedents of the auditor search period (Khalil et al. 2011; Pacheco-Parades et al. 2017), as well as auditor acceptance rates and investor responses (Mande et al. 2017). Pacheco-Paredes et al. (2017) investigate audit quality in relation to the search period but find no results. My paper is unique as I am the first to investigate and find how extending (limiting) search period effort impacts future audit quality and auditor-client tenure.

My findings are relevant to auditors, clients, and regulators. My discussions with auditors already inform me of their concern that a rushed search period is more likely to result in negative

downstream effects. My findings provide archival support for these concerns. For similar reasons, clients should be wary of imposing expedited timelines for engaging auditors. A mismanaged acceptance process can be costly for both parties. Furthermore, there is currently no regulation regarding the client acceptance process. Regulators may consider a minimum search period requirement with the purpose of protecting auditors and clients from hastily engaging in a new relationship. Current research looks at the acceptance process exclusively from the auditor's perspective. Future research would do well to investigate the other half of the relationship, i.e., the client's perspective.

My study faces limitations. First, like Kahlil et al. (2011), my model only accounts for auditor considerations during the acceptance process. In practice, the search period is a function between multiple parties. As such, clients have a considerable impact on the timeline as well. Furthermore, there is likely a level of measurement error with the search timeline as detailed by Form 8-K filings. Even when audit firms are not actively engaged with a client, good audit firms tend to keep those lines of communication open, maintaining a level of readiness when opportunities for client acquisition arise. Second, I do not directly observe the driver of the unexpected search period. For instance, an extended search period could be the result of client scheduling conflicts or caused by strategic auditor pushback. However, interpretation of my results remains unchanged. Regardless of which causes drive the unexpected period, the auditor enjoys a longer period to perform due diligence. I also note that I cannot explicitly measure the actual level/degree of due diligence that audit firms employ during the search period. However, the successor's new engagement date does provide a limit beyond which auditors cannot perform due diligence.

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LIST OF APPENDICES

Appendix A: Examples of 8-K Auditor Change Reports

Panel A: Example of Company Initiated Auditor Dismissal

This auditor change has an ASP of 0 days.

Item 4.01. Change in Registrant's Certifying Accountant

On June 12, 2015, the Audit Committee (the “Audit Committee”) of the Board of Directors of FalconStor Software, Inc., a Delaware corporation (the “Company”), approved the engagement of BDO USA, LLP (“BDO”) as the Company’s independent registered public accounting firm for the Company’s fiscal year ended December 31, 2015, effective immediately, and dismissed KPMG LLP (“KPMG”) as the Company's independent registered public accounting firm.

KPMG’s audit reports on the Company’s consolidated financial statements as of and for the fiscal years ended December 31, 2014 and 2013 did not contain an adverse opinion or a disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles.

During the fiscal years ended December 31, 2014, and 2013, and the subsequent interim periods through June 12, 2015, there were (i) no disagreements (as described in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) between the Company and KPMG on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which, if not resolved to KPMG’s satisfaction, would have caused KPMG to make reference thereto in their reports on the financial statements for such years, and (ii) no “reportable events” within the meaning of Item 304(a)(1)(v) of Regulation SK except that KPMG LLP advised the Company of the existence of a material weakness as of September 30, 2014 relating to the precision of the Company’s contract review control over revenue which was remediated by the Company as of December 31, 2014. Accordingly, KPMG’s report on the effectiveness of the Company’s internal control over financial reporting as of December 31, 2014, which was included in the Company’s Form 10-K for the fiscal year ended December 31, 2014, did not contain an adverse opinion thereon.

The Company provided KPMG with a copy of the disclosures it is making in this Current Report on Form 8-K and requested that KPMG furnish a letter addressed to the Securities and Exchange Commission stating whether or not it agrees with the statements made herein. A copy of KPMG’s letter dated June 16, 2015, is filed as Exhibit 16.1 hereto.

During the fiscal years ended December 31, 2014, and 2013, and the subsequent interim periods through June 12, 2015, neither the Company nor anyone acting on its behalf has consulted with BDO regarding (i) the application of accounting principles to a specific transaction, either

completed or proposed, or the type of audit opinion that might be rendered on the Company's financial statements or the effectiveness of internal control over financial reporting, and neither a written report or oral advice was provided to the Company that BDO concluded was an important factor considered by the Company in reaching a decision as to any accounting, auditing, or financial reporting issue, (ii) any matter that was the subject of a disagreement within the meaning of Item 304(a)(1)(iv) of Regulation S-K, or (iii) any reportable event within the meaning of Item 304(a)(1)(v) of Regulation S-K.

Appendix A (Continued): Examples of 8-K Auditor Change Reports

Panel B: Example of Auditor Initiated Auditor Resignation

This auditor change has an ASP of 171 days.

Item 4.01. Change in Registrant's Certifying Accountant

On December 4, 2018, Ernst & Young LLP (“EY”) informed the Audit Committee of the Board of Directors of MiMedx Group, Inc. (the “Company”) that EY was resigning from the engagement to audit the Company’s consolidated financial statements for the years ended December 31, 2017 and 2018, effective immediately. The Audit Committee accepted EY’s resignation.

EY was engaged on August 4, 2017 to audit the Company’s consolidated financial statements as of and for the year ended December 31, 2017. The 2017 audit was still in process at the time of EY’s resignation, and EY did not issue any audit reports on the Company’s consolidated financial statements for this or any other period. During the engagement period, EY had one “disagreement,” as that term is defined in Item 304(a)(1)(iv) of Regulation S-K, with certain members of the Company’s prior senior management who were subsequently separated from the Company, which separations were later determined to be “for cause” as disclosed in a Form 8-K filed by the Company on September 20, 2018 (collectively, the “Separated Officers”), regarding revenue recognition under certain distributor contracts. However, this disagreement was not the cause of EY’s resignation and was in any event resolved in June 2018, when the Audit Committee, after discussing the disagreement with EY and based on interim findings of its independent investigation, concluded that the Company’s previously issued consolidated financial statements could no longer be relied upon, as disclosed in a Form 8-K filed by the Company on June 7, 2018. This disagreement was only between EY and the Separated Officers.

The Audit Committee has authorized EY to respond fully to the inquiries of the Company’s successor independent registered public accounting firm concerning financial reporting matters, including revenue recognition and the reportable events described below.

Except as noted above, during the period from August 4, 2017 through December 4, 2018, there were no disagreements with EY on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedures which, if not resolved to the satisfaction of EY, would have caused EY to make reference to the subject matter of the disagreements in connection with its audit report.

During this same period, there were the following “reportable events,” as that term is defined in 304(a)(1)(v) of Regulation S-K:

- EY advised the Company that the internal controls necessary for the Company to develop reliable financial statements do not exist;
- Although EY could accept representations from the current Interim CEO and Interim CFO based on their knowledge, EY advised the Company that EY is unable to rely on

representations from them because, as of the date of the resignation, the current Interim CEO and Interim CFO, in turn, would have needed to rely on representations from certain legacy management personnel still in positions that could affect what is reflected in the Company's books and records. At the time of EY's resignation, the Audit Committee's independent investigation was still ongoing;

- EY advised the Company of the need to significantly expand the scope of its audit, due to material allegations of inappropriate financial reporting, material allegations of noncompliance with laws and regulations, the findings to date from the independent investigation conducted by the Audit Committee into these allegations, and the lack of internal controls necessary for the Company to develop reliable financial statements. EY had not completed the necessary work in connection with this expanded audit scope at the time of its resignation; and
- EY advised the Company that information has come to EY's attention that EY has concluded materially impacts the reliability of previously issued financial statements, and the issues raised by this information have not been resolved to EY's satisfaction prior to its resignation.

The Company has provided EY with a copy of the foregoing disclosures and requested that EY furnish the Company with a letter addressed to the Securities and Exchange Commission stating whether EY agrees with the above statements. A copy of EY's letter dated December 7, 2018 is filed as Exhibit 16.1 to this Form 8-K.

Appendix A (Continued): Examples of 8-K Auditor Change Reports

Panel C: Example of Auditor Engagement following a Prior Auditor Resignation

This auditor change has an ASP of 171 days.

Item 4.01. Change in Registrant's Certifying Accountant

(b) On May 24, 2019, the audit committee of the board of directors of MiMedx Group, Inc. (the “Company”) approved the engagement of and executed an agreement with BDO USA, LLP (“BDO”) as the Company’s new independent registered public accounting firm.

During the years ended December 31, 2018 and 2017, and the subsequent interim period prior to May 24, 2019, neither the Company nor anyone on its behalf consulted with BDO, regarding (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company’s financial statements, and neither a written report nor oral advice was provided to the Company that BDO concluded was an important factor considered by the Company in reaching a decision as to any accounting, auditing or financial reporting issue or (ii) any matter that was either the subject of a disagreement (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) or a reportable event (as described in Item 304(a)(1)(v) of Regulation S-K).

Appendix B: Variable Definitions

Variable	Definition
ASP	Number of calendar days between the engagement date of the successor auditor and the resignation date of the predecessor auditor.
WILLRESTATE	Indicator variable set to 1 if the successor auditor restates the predecessor auditor's financial once engaged, 0 otherwise.
PYRESTATED	Indicator variable set to 1 if the client's financial statements were restated in the year prior to the audit change, 0 otherwise.
RESIGNED	Indicator variable set to 1 if the predecessor auditor resigned, 0 if the predecessor auditor was dismissed.
FINDIST	Client's probability of bankruptcy using Zmijewski's (1984) financial condition index.
LOSS	Indicator variable set to 1 if a firm reported a loss in the year preceding the year of auditor change, 0 otherwise.
AT	Sum of total assets in the year of the change.
INTCTR	Indicator variable set to 1 if the predecessor auditor or the firm reported the presence of internal control weaknesses, 0 otherwise.
INTEG	Indicator variable set to 1 if the predecessor auditor or the firm reported issues related to management representation and/or the presence of illegal acts by top management, 0 otherwise.
YREND	Indicator variable that is equal to 1 if a firm did not have a June 30 or December 31 year end, 0 otherwise.
SPECIAL	A Big 4 (non-Big 4) audit firm is coded as a specialist in case it consistently audited 25 percent or more of the clients audited by Big 4 (non-Big 4) audit firms in the industry over the period 2003–2021.
FORG	Indicator variable set to 1 if a firm reported foreign income, 0 otherwise.
INCONS	Indicator variable set to 1 if the exhibit letter filed by the incumbent auditor following auditor resignation disagrees with the Form 8-K filed by the firm, 0 otherwise.

Variable	Definition
DFILE	The fiscal year end plus 60 days minus the auditor resignation date for accelerated filers, or the fiscal year end plus 90 days for non-accelerated filers.
B4B4	Indicator variable set to 1 if a firm switched from a Big 4 to a Big 4 auditor, 0 otherwise.
B4NB4	Indicator variable set to 1 if a firm switched from a Big 4 to a non-Big 4 auditor, 0 otherwise.
NB4NB4	Indicator variable set to 1 if a firm switched from a non-Big 4 to a non-Big 4 auditor, 0 otherwise.
NB4B4	Indicator variable set to 1 if a firm switched from a non-Big 4 to a Big 4 auditor, 0 otherwise.
TECH	Firms with the following SIC codes: 2833–2836, 3570–3577, 3600–3674, 7371–7379, and 8731–8734.
QUALGC	Indicator variable set to 1 if the audit firm qualified its opinion for scope limitation or going concern reasons in the year preceding the auditor change, 0 otherwise.
TERM	Indicator variable set to 1 if the new relationship ends before a four-year period, 0 otherwise.
ABNASP	The unscaled residual from the auditor search period model.
RESTATE	Indicator variable set to 1 if the first-year’s financial statements are restated under the successor auditor, 0 otherwise.
DT	Sum of total debt in the year of the change.
MTB	Firm market value divided by book value.
FINANCE	Sum of additional cash raised from issuance of long-term debt, common stock, and preferred stock.
EPR	Income from continuing operations divided by market value.
FREE	Sum of cash from operations less average capital expenditures.
MATWEAK	Indicator variable set to 1 if a firm received a material weakness opinion in the current or following year, 0 otherwise.
DAYS	The number of days from the successor auditor’s engagement date to fiscal year-end.

Variable	Definition
SELFRESTATE	Indicator variable set to 1 if a restatement occurs involving the work of the successor auditor within the first four years of the tenure, 0 otherwise.
NEWEXEC	Indicator variable set to 1 if a firm hired a new CEO, CFO, or audit committee member within the first four years of successor auditor tenure, 0 otherwise.

VITA

Garrison LaDuca, CPA

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EDUCATION

Masters of Accountancy May 2015
Samford University Birmingham, AL

B.S.B.A, Accounting May 2014
Samford University Birmingham, AL

PROFESSIONAL EXPERIENCE AND CERTIFICATIONS

PricewaterhouseCoopers 2015-2018
Assurance Experienced Associate Birmingham, AL

Certified Public Accountant 2016-present
Alabama Inactive

TEACHING EXPERIENCE

Introduction to Accounting Principles I, University of Mississippi Spring 2021
Summer 2020
Fall 2020
Spring 2020
Fall 2019
Fall 2018

Introduction to Accounting Principles II, University of Mississippi Spring 2023
Spring 2022
Spring 2019

Cost Control, University of Mississippi Fall 2022
Summer 2022
Fall 2021

Intermediate Accounting II (Teaching Assistant), University of Mississippi Summer 2021

RESEARCH

Dissertation

“Accepting New Clients and the Downstream Effects of Auditor Due Diligence” (Committee: Jeremy Griffin (Chair), Morris Stocks, Rachna Prakash, and John Bentley)

Working Papers

“Do Auditors Recognize the Strategic Risks of Their Clients? The Impact of Life Cycle on Audit Fees” (with Candice Boucree, Vicki Dickinson, and Pradeep Sapkota)

“Audit Reports in the Pre-SEC Era” (with Kendall Bowlin, Jeremy Griffin, and Rachna Prakash)

“PCAOB Constituent Impact on Emerging Growth Companies and Broker Dealers” (with Mark Wilder and Tyler Williams)

CONFERENCE ACTIVITIES

AAA Annual Meeting

2022 – San Diego, CA

AAA Auditing Section Midyear

2022 – Las Vegas, NV

AAA/Deloitte Foundation/J. Michael Cook Doctoral Consortium

2021 – Virtual

AAA FARS Section Midyear

2021 – Virtual (Doctoral Consortium)

PROFESSIONAL AFFILIATIONS

American Accounting Association	2020-present
American Institute of Certified Public Accountants	2015-2018
Alabama Society of Certified Public Accountants	2015-2018

LEADERSHIP AND HONORS

Doctoral Teaching Award	2020-2021
University of Mississippi	Oxford, MS

Diversity Council Member	2016-2018
PricewaterhouseCoopers	Birmingham, AL