**Brain Drain or Survival of the Fittest: Determinants and Consequences of Auditors’ Leaving Public Accounting**

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**Abstract**

This study investigates why auditors leave public accounting and the consequences of auditor departures. We find that both individual auditor demographics and audit competency are associated with a departure decision. Specifically, female, young, or non-Big 4 auditors, or those with better education backgrounds have a higher likelihood and hazard of departing public accounting. Audit partners or managers or those with higher audit competency have a lower likelihood and hazard of departure. In terms of consequences, we find that the audit firm is more likely to lose clients whose incumbent auditor departs and it tends to lower audit fees for clients that stay with the audit firm. However, the audit quality of such clients does not change after their auditor’s departure. Interestingly, audit quality decreases for clients whose departed auditors later become corporate executives. Our study provides insights that should be of interest to the audit profession, audit firms, and regulators.

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1. **Introduction**

This study examines why auditors leave the audit profession and the consequences of such exodus. The “brain drain” from public accounting has been a great concern for audit firms and their clients for many years. According to surveys conducted by the American Institution of Certificated Public Accountant (AICPA), accounting firms always rank staff recruitment and retention as their most pressing priority (Drew 2015). About half of all U.S. CPA firms, and virtually all large firms, will likely lose at least one partner or principal to retirement in the next five years, contributing to the already severe talent shortage faced by accounting firms (Knafo and Dennis 2014). Large numbers of auditor departures tend to increase labor costs and lower productivity. This cost has been increasing over the years. The AICPA estimates that “Even using conservative assumptions, a firm could easily spend $32,500 to replace a team member” (Brundage and Koziel 2010).[[1]](#footnote-1) Replacing an experienced senior auditor (e.g., managers and partners) could be much more costly.

In addition, auditor departures may lead to decreased audit quality.[[2]](#footnote-2) The Public Company Accounting Oversight Board (PCAOB) considers audit personnel turnover as one indicator of audit quality and argue that a comparatively high rate of turnover may adversely affect the quality of audits (PCAOB 2015). The Financial Reporting Council[[3]](#footnote-3) (FRC) (2006, pp. 26) also suggests that the failure to retain experienced and skilled staff could threaten the skill level of audit teams and impair audit quality.[[4]](#footnote-4) However, if auditors depart due to poor performance (i.e., auditors are forced out of the audit profession), then the profession as a whole is better off even though such departures still cause some disruptions. In particular, an auditor who provides poor audit quality could increase the audit firm’s business risk related to lawsuits, regulatory penalties, or loss of reputation. Examining how performance is related to auditor departures sheds light on whether audit firms are efficient in sorting employees, i.e., keeping the good performers and weeding out the bad performers. While there are studies on audit firm resignations from clients (Krishnan and Krishnan 1997; Bockus and Gigler 1998; Shu 2000; Huang and Scholz 2012; Ghosh and Tang 2015), to the best of our knowledge, this is the first archival study to systematically analyze why signing auditors leave the audit profession[[5]](#footnote-5) and the consequences of such departures.

This issue can be uniquely studied in China because the identity of the two signing auditors on each engagement and their personal profiles are publicly disclosed. This facilitates our investigation of potential individual-level determinants of the decision to leave public accounting. The two individuals signing the audit report in China are the “engagement auditor,” who leads the team through the audit process, and the “review auditor,” who reviews the audit work (Ministry of Finance of the People’s Republic of China 1995, 2001). The roles of these two auditors are similar to the lead and review partners in a U.S. engagement (Gul, Wu, and Yang 2013). The names of the signatory auditors are disclosed at the end of the audit report, and their personal profiles (including educational background, regulatory penalties, etc.) are publicly available on the website of the China Institute of Certified Public Accountants (CICPA). This information enables us to compile a dataset treating each signing auditor’s entire auditing career as one observation.

Our empirical analyses yield a number of interesting results. First, based on logit and hazard models, several auditor demographic characteristics are significantly associated with leaving the profession. Specifically, non-Big 4 auditors are more likely to leave the profession. Auditors who are female, less than 30 years old, or graduated from top universities with graduate degrees, are *more likely* to leave the audit profession. Auditors who are managers or partners, or are more than 50 years old, are *less likely* to leave the profession. Second, an auditor’s revenue generating ability, proxied by the average of yearly audited clients or the average of yearly audit fees collected by the auditor three years before his or her departure, is negatively associated with the likelihood of departure. Third, and potentially most important, audit quality, proxied by the average of yearly proportion of clients restating their financial reports or the average of yearly discretionary accruals of clients of an auditor three years before his or her departure, is negatively associated with individual departure. To the extent that audit revenue generation and audit quality reflect an auditor’s professional competency, these results suggest that “survival of the fittest” applies to the audit profession as lower competency auditors tend to drop out of auditing.

We also find that when an auditor leaves public accounting, there are significant consequences for the audit firm and the audited clients. In particular, the client whose signing auditor leaves public accounting is more likely to switch to a different audit firm after the departure. Clients that stay with the incumbent audit firm in spite of their signing auditor’s departure pay lower audit fees but audit quality is unaffected by the change in the signing auditor.

In additional analyses, we compare the departing auditors who become corporate executives after they leave public accounting—13.8% of all departures—with non-departing auditors, and find that auditors who are male and have better education backgrounds are more likely to depart and become corporate executives after their departures. We also find that after a signing auditor departs for the corporate world, clients are more likely to switch to different audit firms, pay lower audit fees and receive lower audit quality. In these cases, the signing auditor’s departure may be especially detrimental to an audit firm and their clients as the replacement signing auditor is less skilled than the departing signing auditor.[[6]](#footnote-6)

Our study contributes to both auditing theory and practice. To the best of our knowledge, this is the first large-sample archival study examining the determinants and consequences of auditor departure from the audit profession. Numerous researchers have called for the analysis of auditing research to be extended to the individual auditor level (e.g., DeFond and Zhang 2014). This study adds to the literature by enhancing our knowledge of individual auditors’ behavior and how such behavior affects the audit market and audit quality. It also complements behavioral studies which generally show high audit workload leads to job burnout, job dissatisfaction, and the *intention* to leave (Sweeney and Summers 2002; Chong and Monroe 2015). Our finding that auditors with high revenue generating ability (measured the same as audit workload in prior literature) are less likely to leave the audit profession, provides a different perspective on auditor workload. It tells us that relatively high audit workload may be endogenous to the management of an audit firm and is not always bad because it may reflect the ability of such auditors and increase their reputation, status, and compensation and thereby help keep these talented individuals in the profession. Our results also demonstrate that even if high audit workload may lead to auditor dissatisfaction, an auditor’s departure is only likely when an alternative career opportunity is available, meaning that expressed turnover intention may never materialize or may not occur until a future point in time (Kirschenbaum and Weisberg 1990).

Practically, the study should have implications for audit firms and regulators. High auditor job turnover seemingly has a more negative impact on audit firms than on clients because after the auditor leaves the audit profession, and in spite of switching costs, clients are more likely to switch to other audit firms and the clients who choose to stay with the incumbent audit firm pay lower audit fees, resulting in a detrimental effect on the audit firm’s revenues. Our study on the consequences of auditor departure highlights the importance of retaining highly talented personnel in audit firms. The investigation on what kinds of auditors are more likely to leave the audit profession may also provide some practical guidance for audit firms to retain their best auditors. In contrast, while auditor departure can be detrimental to audit firms, its impact on clients and the audit market is minimal because good performers are more likely to stay in the profession and audit quality does not deteriorate after a signing auditor leaves the audit profession. This suggests that the turnover of audit personnel may not as serious a problem as regulators have argued.

The remainder of the paper is organized as follows. Section 2 describes the institutional background and discusses our main predictions. Section 3 describes research design. Sections 4 present the empirical results on determinants of and the consequences of auditor departures from public accounting, respectively. Section 5 concludes.

1. **Institutional Background and Auditor Departure**

**2.1 Institutional Background**

The auditing profession in China started in the early 1980s shortly after the country started policies of economic reform. Auditing as a profession developed rapidly after the establishment of the Shanghai Stock Exchange and Shenzhen Stock Exchange in 1992 (Firth, Mo, and Wong 2012). In China, an audit report needs to bear the signatures of two auditors. An audit report issued by an audit firm organized as a partnership should bear the signatures of one partner and another qualified auditor. An audit report issued by an audit firm organized as a limited liability company should bear the signature of one chief or deputy chief auditor and another qualified auditor. Unless there is evidence to the contrary, the two signatory auditors share the same legal liability and are subject to the same rules on mandatory rotation.

To be a signing auditor, an auditor has to pass the Certified Public Accountant (CPA) Examinations and become a CPA.[[7]](#footnote-7) In China, the following requirements must be satisfied to become a CPA: (1) earn a college degree or higher, (2) pass all six parts of the CPA exams, (3) work in an audit firm for at least two years, and (4) register with the CICPA. When a CPA registers with the CICPA, he/she must upload his/her personal profile information on the CICPA website. The personal profile information includes his/her name, gender, birth date, education, position in the audit firm, CPA qualification year, Chinese Communist Party (CCP) membership, etc. CPAs must regularly update their personal profiles with the CICPA. If a CPA leaves the audit industry, his/her personal profile is deleted from the CICPA website. These unique characteristics make China an ideal setting to track the career path of individual auditors and to investigate why auditors leave the audit profession.

In this paper we examine the conditions that lead to auditor departure from the profession and the impact of such departures on observable audit-related outcomes. Figure 1 illustrates the conceptual links we will examine in our empirical analysis which are discussed in the remainder of this section. The direction of the expected association is indicated for each arrow in the diagram.

<<<<< Insert Figure 1 Here >>>>>

**2.2 Determinants of Auditor Departures**

The decision to leave the auditing profession can be quite complex and idiosyncratic to each individual. However, we argue that certain systematic characteristics related to auditor demographics and professional competency are likely to affect auditors’ decision to leave public accounting.[[8]](#footnote-8)

**2.2.1 Auditor Demographic Characteristics**

The intellectual root of most research on voluntary employee turnover can be traced to March and Simon (1958) who propose that turnover results from the employee’s perceptions about the ease and desirability of movement. Subsequently, a large literature in organization behavior, management, and psychology equate the “desirability of movement” to job satisfaction (e.g., Mobley 1977; Cotton and Tuttle 1986). Prior studies also examine other determinants of decisions to leave a position such as attraction/expected utility of current and alternative jobs (Mobley et al. 1979) and shocks such as mergers and acquisitions (Lee and Mitchell 1994). The economics literature typically relates turnover to macroeconomic conditions, level of pay, and the perception of better market opportunities (e.g., Servern 1968; Stoikov and Raimon 1968; Jovanovic 1984).

Another strand of literature uses individuals’ personal characteristics to predict their behavior. Notably, upper echelons theory (Hambrick and Mason 1984; Hambrick 2007) argues that the demographic characteristics of top executives are reasonable proxies for the underlying differences in their cognition, values, and perceptions, which in turn affect decisions they make, i.e., an individual’s skill as an auditor and status as a professional is likely to be associated with observable characteristics such as gender, age, and education background. We discuss a number of these characteristics in this section.

***Gender*:** The psychology, economics, and management literature shows that significant gender differences exist in cognitive style and behavior (Bernardi and Arnold 1997; Sunden and Surette 1998; Croson and Gneezy 2009). Scandura and Lankau (1997) provide evidence that the relation between flexible work hours and job satisfaction is stronger for women than for men. Auditing involves long working hours and extensive travel especially during the busy season (from fiscal year end to audit report issuance), which challenges the balance between work and family life. This is especially prominent for female auditors as society traditionally perceives women as the primary caregivers in the family. Therefore, compared with their male counterparts, female auditors are more likely to find that the work pressure makes it difficult to balance between auditing and their family roles (e.g., Trapp et al. 1989; Collins 1993; Pasewark and Viator 2006). A survey by the Pennsylvania Institute of Certified Public Accountants (2015) reveals that 94% of females find work-life balance extremely important and only 34% of them plan to stay with a firm long enough to reach retirement age, while 55% of males envision reaching retirement with their current employer. Based on these observations, we predict that female auditors are more likely to leave the audit profession and take up non-public accounting jobs.

***Age*:** Age is positively associated with an individual’s conservative behavior and risk-aversion (Herrmann and Datta 2006; ; Sundaram and Yermack 2007; Huang, Rose-Green, and Lee 2012). For example, Wiersema and Bantel (1992) find that older executives are more concerned about their financial and job security. An auditor’s age can be viewed both as a proxy for experience and as a measure of uncertainty avoidance. Older auditors are typically well established with years of audit experience and thus they are less willing to leave auditing and start a new career. Therefore, all else being equal, the older the auditor, the less likely he/she leaves auditing. In contrast, younger auditors tend to be less risk averse in terms of career changes as they have many more years ahead of them to start something new and tend to have more confidence that other career options can help them achieve their long term goals.

***Education background*:** The upper echelons literature suggests that education level reflects one’s knowledge, ability, and skills (Hambrick and Mason 1984; Chatterjee and Hambrick 2007; Nadkarni and Herrmann 2010). Gul et al. (2013) suggest that signing auditors with a better educational background can command more job opportunities. Therefore, if an auditor graduates from a top university or holds a graduate degree, then he/she is expected to have more outside job opportunities and be more optimistic and confident about his/her future career path.[[9]](#footnote-9) All else being equal, such an auditor is more likely to leave the audit profession.

***Auditor Rank***: An auditor with the rank of manager or partner has been rewarded by the audit firm with promotions. Such an auditor is less likely to leave the audit profession having achieved some of their more important personal goals, i.e., professional success. If auditor rank captures skills and competency which are rewarded in the audit profession, then managers and partners are less likely to leave public accounting. Moreover, these higher-ranked auditors are generally older, and as discussed earlier, they tend to be risk averse and less likely to seek a new career outside auditing.

**2.2.2 Auditor Professional Competency**

DeFond and Zhang (2014) suggest that auditor competency refers to the auditor’s abilities such as experience, training, skills and expertise to deliver high audit quality. While high audit competency helps to build an auditor’s reputation, such competency and reputation are not necessarily as valued outside the audit profession. Moreover, competent auditors are more likely to be rewarded by the audit firm with promotions and pay increases and, thus, will tend to stay in public accounting. Therefore, we expect that in general, auditors with higher professional competency are less likely to leave the audit industry because they have found a career path that suits their abilities. We use auditor’s (1) revenue generating ability and (2) audit quality as proxies for professional competency.

***(1) Revenue Generating Ability***: Auditors generate income for the audit firm by retaining old clients and attracting new clients. Knechel, Niemi, and Zerni (2013) find that Big 4 audit firms in Sweden reward partners who generate new business and retain old clients with higher compensation. The higher the reward received by the auditor, the higher his/her opportunity cost is for leaving the audit profession. Therefore, we expect that a signatory auditor is less likely to leave the audit profession when earning more audit fees and having a larger number of audit clients.

***(2) Audit Quality***: Gul et al. (2013) find that individual auditors in China have a direct effect on audit quality. More recently, Li et al. (2016) find a self-contagion effect of low audit quality at the individual auditor level. Knechel, Vanstraelen, and Zerni (2015) show that Type 2 and Type 1 audit reporting error rates persist over time in Sweden and extend to other clients of the same audit partner. A direct career-related effect of providing lower quality audit for auditors is to receive lower compensation from their employers (Knechel, Niemi, and Zerni 2013). In the long-run, an auditor who persistently provides low quality audits may also be forced out of the firm and, ultimately, may leave the profession.

**2.3 Consequences of Auditor Departures**

 An auditor leaving the profession can have significant ramifications for the individual’s co-workers, audit team members, clients and the audit firm. Primary concerns are the loss of a client, changes in audit fees, or a drop in audit quality surrounding an auditor’s departure.

**2.3.1 Auditor Departure and Audit Firm Switch**

Whether clients will switch audit firms once their signing auditors leave the audit profession is an empirical question. On the one hand, clients may choose to do so because the audit firm-client relationship often is built through the signing auditor. It is the signing auditor who creates and maintains the relationship, contracts with the client, manages the audit engagement at a high level, directs the audit effort, interprets the audit evidence, and finally issues the appropriate audit report (Ferguson et al. 2003). Relationships (known as Guanxi in Chinese) play a very important role in the business world of China (Liu, Wang, and Wu 2011; Guan et al. 2016). In a Guanxi-based culture, clients may switch to another audit firm once this Guanxi no longer exists. Based on explanations included in some annual reports, a company may change its audit firm when the individual signing auditor moves to a different firm. In such cases, the client is essentially following the auditor from firm to firm. Moreover, in cases when a signing auditor leaves the audit profession due to misconduct or incompetency, clients may question the qualifications of the audit firm itself and leave.

Alternatively, clients may not leave their audit firms because such a switch can be very costly. Prior studies have documented that auditor switches leads to negative market reactions (Fried and Schiff 1981), longer audit report lags (Schwartz and Soo 1996), and underpriced seasoned equity offers (Kim and Park 2006), not to mention the out-of-pocket costs that accompany the disruption of evaluating, hiring and installing a new audit firm on the engagement (Fiolleau et al. 2013). In some situations, there may be only one reputable audit firm locally, restricting clients’ flexibility in changing audit firms. Therefore, clients may stay with the incumbent audit firm after their signing auditors leave.

**2.3.2 Auditor Departure and Audit Fees and Audit Quality for Non-Switching Clients**

Per our discussion above, a client may switch or not switch auditors after the departure of their signing auditors. In this study we are interested in whether audit firms may treat non-switching clients differently after a signing auditor leaves the audit profession. Examination of this group should be of interest to audit firms and regulators. It is important to audit firms because client retention boosts their profitability and helps them maintain market share. In general, a 5% increase in client retention can increase a company's profitability by 75% and attracting new clients will cost firms five more times than keeping an existing client (Lawrence 2012).[[10]](#footnote-10) Therefore, audit firms have a strong motivation to keep an existing client, even if it might mean reducing audit fees in a highly competitive audit market. The PCAOB has expressed similar concerns, specifically, Chairman James Doty said in a speech at a conference that “the fight for market share becomes the fight for incumbency” because audit firms usually charge lower audit fees to attract new clients. Chinese regulators have also expressed concern that small auditors may have strong incentives to compete for clients by reducing audit fees, possibly resulting in lower audit quality (General Office of the State Council 2009).

Fee discounting for clients who switch auditors has been well documented in prior studies since new clients are usually found to be granted discounts during the initial audit engagement (Ettredge and Greenberg 1990). However, we do not know whether such a phenomenon also exists for clients who stay with the incumbent audit firm but whose signing auditor has left. To the best of our knowledge, the only study related to this is Huang et al. (2015). Using observations from China during the years 2002-2011, Huang et al. (2015) find that, relative to clients with the same audit firm and the same signing auditors (the baseline comparison group), clients pay lower fees when both audit firms and the two signing auditors are different from the prior year. However, the results in fee discounting are mixed when clients use the same audit firm but have two new signing auditors (variable *NEWPRTNR* in Huang et al., 2015). In such a situation, they find fee discounting relative to the baseline comparison group only in the cross sectional fee analyses but not in an analysis of fee changes. In contrast to Huang et al., (2015) who examine inter-group differences,[[11]](#footnote-11) we focus on a group of clients that keep the same audit firm after their signing auditor leaves the audit profession (i.e., clients that are loyal to an audit firm).

There are several reasons why we expect that an audit firm may grant a client a fee discount after their signing auditor departs. First, as we discussed earlier, attracting new clients is more costly than keeping existing clients and audit firms have a strong motivation to retain their clients. In the situation where signing auditors leave the audit profession, especially due to their incompetency or misconduct, clients may question the overall quality control of the firm and threaten to switch to another audit firm. Therefore, audit firms may reduce their audit fees to keep existing clients.

In terms of the audit quality of non-switching clients following their auditors’ departure, we have a non-directional expectation. On the one hand, newly engaged auditors may know little about the clients, resulting in lower audit quality. Additionally, audit quality may be lower due to the likely reduced audit input associated with lower audit fees charged to such clients. For example, audit firms may reduce audit hours, simplify or even skip certain audit procedures, or assign less experienced audit personnel to reduce their costs.[[12]](#footnote-12) Consistent with this, some studies find that audit quality is lower in the initial years of an audit engagement (e.g., Johnson, Khurana, and Reynolds 2002; Myers, Myers, and Omer 2003). Moreover, Bell, Causholli, and Knechel (2015) show that auditors actually do more work in the first year of an engagement in spite of the lower fee. They find that audit quality is still lower in year one than in later years in spite of the high level of audit effort, suggesting a steep learning curve on new engagements.

On the other hand, audit quality may not be lower following the signing auditors’ departure. First, audit firms typically have standardized audit procedures and strong internal quality controls constraining individual auditors in large audit firms from undermining audit quality. A recent study by Chen and Wang (2016) employing Taiwan data documents that unexpected auditor turnover does not trigger any significant changes in audit quality, especially for Big 4 firms, suggesting that individual auditors have limited influence over audit quality.[[13]](#footnote-13) Second, international studies examining audit firm/partner tenure and audit quality find no evidence that audit quality is lower when engaging new audit firms (e.g., Ruiz-Barbadillo, Gomez-Aguilar, and Carrera 2009) or new partners of the same firm (Huang et al. 2015). Finally, as we will show in our analyses in Tables 4 and 5, auditors providing lower-quality audits are more likely to depart the profession. Consequently, audit firms may be left with more qualified auditors who will be assigned to clients. Additionally, they may also assign more experienced auditors to help retain loyal clients, leading to higher audit quality (Gul et al, 2013).

1. **Research Design**

**3.1 Research Design for Determinants of Auditor Departure Decision**

We examine how auditors’ demographic characteristics and professional competency affect an auditor’s decision to leave public accounting with the following logit model:

*Prob* (*DEPARTURE=1*) *= f* (*auditor demographics, auditor competency, control variables, city effects*) (1)

where *DEPARTURE* equals 1 if an auditor leaves the audit industry, and 0 otherwise.

The first set of independent variables, *auditor demographics*, is discussed in section 2.2.1.For gender, *FEMALE* equals 1 if an auditor is a female and 0 otherwise. We use three variables—*MAJOR*, *SCHOOL*, and *DEGREE*—to measure an auditor’s educational background. *MAJOR* equals 1 if an auditor majored in accounting in college, and 0 otherwise. *SCHOOL* equals 1 if an auditor graduated from a top university in China (defined as one of the “Project 211” institutions in China[[14]](#footnote-14)), and 0 otherwise. *DEGREE* equals 1 if an auditor holds a graduate (i.e., master or higher) degree, and 0 otherwise. *RANK* equals 1 if an auditor is ranked as a manager or a partner in the audit firm, and 0 otherwise. *AGE30* equals 1 if an auditor is less than 30 years old, and 0 otherwise. *AGE50* equals 1 if an auditor is more than 50 years old, and 0 otherwise. Following Gul et al. (2013), we include the Chinese Communist Party membership as an individual characteristic even though we do not have a directional prediction of its effect, where *PARTY* equals 1 if an auditor is a member of the Chinese Communist Party, and 0 otherwise.

The second set of variables, *auditor competency*, measures the two aspects of an auditor’s professional competency as discussed in Section 2.2.2. We use two variables to measure an auditor’s revenue generating ability. *NUM\_CLIENTS* is the average of the yearly audited clients of an individual auditor for the three years before his/her departure and *TOTAL\_FEE* is the average of the yearly audit fees earned by an individual auditor for the three years before his/her departure. We use three variables to measure an individual auditor’s audit quality. First, *CLIENT\_REST* is the average of the yearly percentage of an auditor’s clients that restated their financial reports by decreasing income for the three years before his/her departure (Francis and Michas 2013; Francis, Michas, and Yu 2013).[[15]](#footnote-15) Second, *CLIENT\_DA* is the average of the yearly abnormal accruals of the clients audited by an engagement auditor for the three years before leaving public accounting. Third, *CLIENT\_MAO* is the average of the yearly percentage of the number of modified opinions issued by an auditor to the number of his/her clients for the three years before his/her departure.

We also include numerous control variables: *BIG4* equals 1 if the auditor is employed by a Big 4 audit firm. *CLIENT\_ZSCORE* is the mean of Altman Z-Scores for an auditor’s clients. *CLIENT\_VAR* is the standard deviation of the number of clients audited by the auditor for the three years before leaving public accounting. *FEE\_VAR* is the standard deviation of the total audit fees earned by the auditor for the three years before leaving public accounting. We include these two variables because they capture the workload of an auditor related to the heterogeneity of the auditor’s client portfolio (Knechel, Niemi, and Zerni 2013). *AF\_FEE* is the natural logarithm of the average of yearly total audit fees of an audit firm with which the auditor is affiliated for the three years before leaving public accounting. *AF\_CLIENT* is the natural logarithm of the average number of clients for the audit firm with which an auditor is affiliated for the three years before leaving public accounting. Both of these variables measure the size of the audit firm. *AF\_MERGE* equals 1 if the audit firm with which an auditor is affiliated merged with another audit firm within the three years before he/she leaves the profession and 0 otherwise. We include *AF\_MERGE* because structural “shocks” can affect the probability of an auditor departure. In particular, if an audit firm is merged with another audit firm, then individual auditors’ career decisions are expected to be affected by such shocks.[[16]](#footnote-16) Prior studies document that there are significant differences in partner compensation and the ability of generating fees across different office locations (Knechel et al. 2013; Choi et al. 2010; Francis, Reichelt, and Wang 2005) so we control for the differences in economic activities and job opportunities by including *city effect*s for the city where an auditor works before departure.

We can measure the number of years from when an auditor becomes a CPA (i.e., eligible to practice public accounting) to when the auditor leaves public accounting. This gives us the time at which the key event occurs, i.e., the auditor leaves profession. The logistic regression models described above only account for whether, but not when, an auditor leaves public accounting. In contrast, a hazard model can be used to estimate when an auditor is likely to depart. Therefore, we run the following proportional hazard model (i.e., Cox regression):

 *Hi*(*t*) = *λ0*(*t*)*exp*(***β’Xi***) (2)

*Hi*(*t*) is the hazard function for auditor *i*, *λ0*(*t*) is the baseline hazard function, and ***Xi*** is a vector that contains variables measuring auditor demographics, auditor professional competency, and control variables as in (1).

**3.2 Research Design for Consequences of Auditor Departures**

Figure 2 is provided to illustrate the research design for consequences of auditor departure, which we discuss below.

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**3.2.1 Audit Firm Switch Model**

To investigate a client’s switching decision after an auditor departs from public accounting, we use a matched sample to address the concern that clients whose auditors depart and those whose auditors stay may not be comparable.[[17]](#footnote-17) Specifically, each client whose auditor departs is matched with another client of the same audit firm whose auditors stay. They are also matched by industry affiliation, firm size, profitability (measured by return on assets), leverage, and ownership type (i.e., state-owned or non-state-owned). All matching criteria are based on the last year before the auditor departure (i.e., the last year that the departing auditor signs the audit report). We then run the following logistic regression.

*Prob* (*SWITCH=1*) *= f* (*DEPARTURE, control variables, city effects, industry effects, year effects*) (3)

The dependent variable is *SWITCH*, coded as 1 if the client hires a different audit firm in the post-departure year (i.e., the year right after the auditor departs), and 0 otherwise. *DEPARTURE*equals 1 if the client’s auditor leaves public accounting after signing the audit report in the pre-departure year (i.e., the year right before the auditor departs), and 0 otherwise. Prior literature documents that audit opinions, audit quality, and characteristics of the clients and audit firms are important determinants of clients’ auditor switch decisions (Chow and Rice 1982; Roberts, Glezen, and Jones 1990). Therefore, *control variables*include the following: *MAO*, which equals 1 if the client receives something other than a clean audit opinion, and 0 otherwise; *FIN\_REST*, which equals 1 if the client restates its financial report, and 0 otherwise; *AUDIT\_FEE*, which equals the natural logarithm of audit fees the client pays; *AF\_SIZE*, which equals the natural logarithm of the total audit fees received by the audit firm from all clients; *IND\_SPE*, which equals 1 if the audit firm’s total audit fees earned from one industry is ranked in the top two deciles, and 0 otherwise; *BIG4*, which equals 1 if the audit firm is a Big 4 audit firm, and 0 otherwise; *M&A*, which equals 1 if the audit firm engages in a merger or acquisition, and 0 otherwise; *EQUIY\_FIN*, which equals 1 if the client firm has equity financing, and 0 otherwise; *LNTA*, which equals the natural logarithm of total assets of the client firm; *LOSS*, which equals 1 if the client firm reports negative net income, and 0 otherwise; *LEV*, which equals total liabilities divided by total assets of the client firm; and *SOE*, which equals 1 if the client is a state-owned enterprise in, and 0 otherwise. All control variables are measured in the pre-departure year, i.e., the last year a departing auditor signs an audit report.

**3.2.2 Audit Fee and Audit Quality Models**

To investigate the effect of auditor departures on audit fees and audit quality, we use a matched sample and a difference-in-difference research design using two years of data. For each observation in our sample with an auditor departure (i.e., our treatment firm), we identify a control firm audited by the same audit firm but whose signing auditors stay in the profession. The match is done such that in the year prior to the treatment firm’s auditor departure (i.e., the last year that the departing auditor signs the audit report), the treatment firm and the control firm are in the same industry and close in firm size and profitability (measured by return on assets), leverage, and ownership type (i.e., state-owned or non-state-owned). See Figure 2 for a graphical representation of our research design for the audit fee and quality analyses.

 We estimate the following fee model based on Hay et al. (2006):

*AUDIT\_FEE* *= f* (*DEPARTURE, POST, DEPARTURE\*POST, control variables, city effects, industry effects, year effects*) (4)

where *AUDIT\_FEE* is the natural logarithm of audit fees that a client pays in a year. *DEPARTURE* equals 1 for a client whose auditor leaves public accounting and 0 otherwise. *POST*equals 1 if the year refers to the post-departure year (i.e., the year right after a signing auditor departs) and 0 if the year is the pre-departure year (i.e., the last year that the departing auditor signs an audit report). *DEPARTURE\*POST* is the interaction between *DEPARTURE* and *POST* and is the main variable of interest. Following prior studies, we control for audit firm and client characteristics that affect audit fees. Specifically, we include *MAO*, *AF\_SIZE*, *IND\_SPE*, *BIG4*, *LNTA*, *LOSS*, *ROA*, *LEV*, and *SOE*, as defined earlier. We also include *INVREC\_TA* which equals total inventory and receivable divided by total assets of the client, *CURRENT\_RATIO* which equals current assets divided by current liabilities of the client, and *FIRM\_AGE* which equals the natural logarithm of the number of years that the client firm has been publicly listed.

We run the following regression to examine how audit quality is affected when signing auditors leave the profession but the client stays with the audit firm using a research design similar to the audit fee analysis.

*AUDIT\_QUALITY= f* (*DEPARTURE, POST, DEPARTURE\*POST, control variables, city effects, industry effects, year effects*) (5)

*AUDIT\_QUALITY* is measured by the absolute value of performance-adjusted discretionary accruals (*ABS\_DA*) (Kothari, Leone, and Wasley 2005)[[18]](#footnote-18) and the probability of an income-decreasing restatement (*FIN\_REST*).[[19]](#footnote-19)Again, *DEPARTURE\*POST* is the variable of interest. *Control variables* include *AF\_SIZE*, *IND\_SPE*, *BIG4*, *LNTA*, *LOSS, ROA, LEV*, and *SOE* as defined before. We also include *GROWTH* (the sales growth rate for the client firm in a year), *BM* (the book to market value of the client), and *ZSCORE* which is the Altman Z-Score of the client.

Since the effect of individual auditor on audit firm switch, audit fees, and audit quality can differ between Big 4 and non-Big 4 audit firms, we also run regressions (3) to (5) separately for Big 4 and non-Big 4 auditor departures. We expect that Big 4 audit firms have higher capabilities to cope with auditor departures than non-Big 4 audit firms, as the former have more audit resources and standardized procedures.

1. **Sample and Results**

**4.1 Sample**

The identities of signatory auditors are obtained from the China Securities Market and Accounting Research (CSMAR) database which includes the signing auditors’ names on audit reports of all publicly-traded firms. We then manually collect personal profile information of all the signing auditors from the website of the CICPA. As we did not have access to the internal records of audit firms, we identify whether a signatory auditor leaves the audit industry using two criteria: (1) the auditor’s personal profile information has been deleted from the website of the CICPA;[[20]](#footnote-20) and (2) the auditor has not signed audit reports for the three years after he/she last appears on the CICPA website. The data for calculating variables used in the empirical analysis is obtained from CSMAR. Our sample covers the period 1992-2011. We start the sample period in 1992 because it is the first year when audit data are available in CSMAR. We end the sample period in 2011 because we need to make sure that an auditor has not signed any audit report for at least three years (i.e., criterion (2) above) to determine whether he/she has left the audit profession. Table 1 reports the distribution of the number of auditors who have signed their names on the audit reports of publicly-traded firms and the number of auditors who leave public accounting from 1992 to 2011. The profession grew rapidly in that period as the number of signatory auditors rose from 39 in 1992 to 2,362 in 2011. During this period, the number of auditors leaving the profession increases substantially. In total 38.5% of auditors leave public accounting in our sample. The percentage of auditors leaving public accounting is higher in the 1990s than in recent years with a 38.5% departure rate in 1992, dropping to 11.7% in 2011.

<<<<< Insert Table 1 Here >>>>>

Panel A of Table 2 reports the sample selection process. From 1992 to 2011, 6,866 auditors signed their names on audit reports for publicly-traded clients. Among them, 4,221 are still working in the audit profession and 2,645 have left. We delete 1,178 auditors because we do not have sufficient information to calculate the variables used in the empirical analysis. As a result, the final sample used for analyzing the determinants of auditor departure includes 5,688 auditors, 3,719 of whom are still working in the audit profession while 1,969 have left. As mentioned before, to analyze the consequences of auditor departure, we use matched-sample research designs. The final matched samples used in the auditor switch analyses consist of 3,596 firm-years, and 6,200 firm-years for both the audit fee and audit quality analyses.

<<<<< Insert Table 2 Here >>>>>

**4.2 Empirical Results of Determinants of Auditor Exodus**

**4.2.1 Descriptive Statistics**

Panel A of Table 3 provides the summary statistics related to individual auditors, their clients, and audit firms. Females comprise 39.6% of signing auditors in the full sample (46.3% for Big 4 auditors and 38.7 for non-Big 4 auditors). Almost half of the auditors (46.5%) majored in accounting or auditing. Overall, 24.9% of auditors in the full sample graduated from the top universities in China (62.4% for Big 4 auditors and 20.1% for non-Big 4 auditors). Only 6.1% of the auditors in the full sample have graduate degrees (18.1% for Big 4 auditors and 4.6% for non-Big 4 auditors). Managers and partners comprise 64.6% of the signing auditors.[[21]](#footnote-21) A large proportion of signing auditors in China are middle-aged, with 11.6% of them less than 30 years old and 8.5% more than 50 years old. Additionally, 22.6% are Chinese Communist Party members.

The univariate tests in Panel B of Table 3 indicate that auditors who leave the profession and those who stay are different in several aspects. For example, the percentage of females leaving the profession is higher than those staying in the profession (46.8% vs. 35.8%). Departing auditors also appear to have a better education background than non-departing auditors as indicated by statistics of *MAJOR*, *SCHOOL*, and *DEGREE*. However, auditors with a higher rank or party membership seem less likely to leave public accounting. Compared with the departing auditors, auditors who stay in the audit profession serve more clients (*NUM\_CLIENTS*), collect more fees (*TOTAL\_FEE*), and provide higher quality audits as evidenced by the proportion of restating clients and the average abnormal accruals of their clients (*CLIENT\_REST* and *CLIENT\_DA*). Interestingly, we also observe that auditors leaving the audit profession are more likely to issue modified audit opinions (MAOs) before their departure compared with non-departing auditors (0.103 vs. 0.036). This result is driven by non-Big 4 auditors, as will be discussed later.

<<<<< Insert Table 3 Here >>>>>

**4.2.2 Main Results**

Table 4 presents the logistic regression results based on model (1). The coefficient for *FEMALE* is positive and significant (p = 0.084), consistent with the prediction that female auditors are more likely to leave the profession. The coefficient for *MAJOR* is positive but not significant, indicating that majoring in accounting does not significantly influence the likelihood that an auditor will leave. The coefficients on *SCHOOL* and *DEGREE* are both positive and significant at the 1% level, suggesting that auditors with a better educational background are more likely to leave the profession. This evidence is consistent with the trend that more and more accounting students in top universities do not consider Big 4 as their preferred job destinations.[[22]](#footnote-22) The coefficient on *RANK* is negative and significant, indicating that auditors who are audit managers or partners are less likely to leave the profession. The coefficient on *AGE30* is positive and significant whereas the coefficient on *AGE50* is negative and significant, indicating that younger auditors are more likely to depart and the older auditors are less likely to do so compared to the “middle-aged” auditors. This is consistent with general human resource literature which finds that younger employees are more likely to change jobs than their older counterparts (Lopina, Rogelberg, and Howell 2012).

We also find that professional competency affects the decision to leave the audit profession. The coefficient on *NUM\_CLIENTS* is negative and significant, indicating auditors with a large client portfolio are less likely to leave public accounting. The coefficient on *TOTAL\_FEE* is negative and significant, suggesting that auditors who bring in larger amounts of audit fees to the audit firms are less likely to leave the profession.[[23]](#footnote-23) The coefficients on *CLIENT\_REST* and *CLIENT\_DA* are positive and significant, indicating that auditors are more likely to depart if their audit quality is low (i.e., more of their clients tend to restate earnings and have higher abnormal accruals). The coefficient on *CLIENT\_MAO* is positive and significant, suggesting that auditors are more likely to depart if they issue more non-standard audit opinions to their clients. This might be due to the fact that the audit market in China is generally a buyers’ market (Chen et al. 2010),[[24]](#footnote-24) so auditors are more likely to lose their clients (and thus revenues) if they are too conservative. Overall, the findings indicate that auditors with higher professional competency are less likely to leave public accounting. This is consistent with “survival of the fittest” in the sense that auditors with higher professional competency—as reflected in audit fee generation, client portfolio size, and audit quality—tend to stay in the profession.

In terms of control variables, our result indicates that auditors working for a Big 4 audit firm are less likely to leave public accounting. The negative and significant coefficients on *AF\_FEE* and *AF\_CLIENT* indicate that auditors in large audit firms are also less likely to depart. Finally, the coefficient on *AF\_MERGE* is positive and significant, suggesting that auditors are more likely to leave the profession if their firm merges with another.

The loss of professional talent is an important issue for both Big 4 and non-Big 4 firms. Our results indicate that Big 4 auditors and auditors working in larger non-Big 4 firms are less likely to leave public accounting. Big 4 firms are often considered a good training platform and a springboard for career advancements outside auditing and they have a job turnover rate of 15-20%.[[25]](#footnote-25) Examining this issue is also important to non-Big 4 firms since small-to-medium audit firms have trouble finding qualified applicants and thus face more talent shortages than the Big 4.[[26]](#footnote-26) Consequently, we report separate logistic regression results for Big 4 auditors and non-Big 4 auditors in Table 4.

Examining the Big 4 sub-sample, we find that the coefficients on the demographic variables are all insignificant except for *RANK*. The coefficients on proxies of revenue generating ability, *NUM\_CLIENTS* and *TOTAL\_FEE*, suggest that Big 4 auditors that generate more revenues are less likely to leave. Furthermore, audit quality (*CLIENT\_REST*, *CLIENT\_DA,* and *CLIENT\_MAO* ) does not appear to explain why Big 4 auditors leave public accounting, consistent with the fact that Big 4 auditors typically are viewed as delivering higher quality audits. In contrast, the non-Big 4 results largely resemble the full sample. The significant impact of *CLIENT\_MAO* for non-Big 4 auditors suggests that, compared with Big 4 auditors, they are more likely to lose clients (and revenues) after issuing a modified audit opinion (MAO) and such losses are more likely to prompt departure from the audit profession, consistent with non-Big 4 audit firms facing more competition and being less able to stand up to their clients.

<<<<< Insert Table 4 Here >>>>>

Table 5 presents the hazard model results. The results are generally consistent with those in Table 4. We present hazard ratios in addition to coefficient estimates for ease of economic interpretations. For example, based on the full model, graduating from a top university increases the hazard of leaving public accounting by 5.3%, being a manager or partner decreases the hazard by 39.4%, and having one additional client decreases the hazard by 43.7%. The impact of age appears to be very large: being under 30 increases the hazard by 232.9%, while being over 50 decreases the hazard by 43.6%, relative to auditors between 30 and 50.

In sum, the following overall patterns emerge from our logit and hazard models. First, female auditors, younger auditors, and auditors who have a better educational background are more likely to leave public accounting, which is generally consistent with the literature on employee turnover. Second, auditors with higher professional competence are less likely to do so. Finally, Big 4 auditor and non-Big 4 auditor departures have different underlying determinants.

<<<<< Insert Table 5 Here >>>>>

A potential competing explanation for our results is that they may reflect the natural process of career progression followed by retirement. To evaluate this possibility, we rerun our analysis excluding auditors who are more than 60 years old when they depart.[[27]](#footnote-27) Untabulated results indicate that our conclusions based on Tables 4 and 5 do not change. Another concern is that many instances of auditors’ leaving the profession occur around audit firm mergers. While we control for this in the primary analysis, we delete auditors who exit the profession within three years of audit firm mergers. Our results (untabulated) do not change. There are about 105 auditors sanctioned by CSRC due to fraudulent behavior during an audit engagement, with 55 of them departing the public accounting shortly thereafter, suggesting that auditors sanctioned by CSRC are more likely to quit. We re-run our regressions after deleting auditors sanctioned by CSRC to assess whether sanctioned auditors drives our results. Our results hold when the analysis is applied only to non-sanctioned auditors.

**4.3 Economic Consequences of Auditor Departure**

The departure of a signing auditor could have various implications for the ongoing relationship between a client and the audit firm they have been dealing with. We explore three possible ramifications of an auditor departure: (1) client switches to different audit firms, (2) changes in audit fees, and (3) changes in audit quality.

Table 6 presents the logistic regression for auditor switches. The coefficient on *DEPARTURE* is positive and significant, suggesting that clients whose incumbent signing auditor leaves public accounting are more likely to switch to a different audit firm in the following year. Specifically, the odds of changing audit firms for clients whose auditors leave the audit profession are 10% higher than for clients whose auditors stay. The coefficient on *DEPARTURE* is only marginally significant in the Big 4 sub-sample, but positive and significant in the non-Big 4 sub-sample. In other words, when a non-Big 4 signing auditor leaves public accounting, the client tends to switch to a different audit firm. However, if the departing auditor is from a Big 4 audit firm, clients are less likely to do so. This is consistent with Big 4 audit firms having the capability to keep their clients satisfied after auditor departures, while non-Big 4 firms tend to lose clients after such departures.

<<<<< Insert Table 6 Here >>>>>

Table 7 reports our audit fee analysis. The coefficient on *DEPARTURE* is only marginally significant, suggesting that our treatment group have slightly lower audit fees than our control group in the pre-departure year. The coefficient on *POST* is not significant, suggesting that firms in the control group do not significantly increase audit fees. The coefficient on *DEPARTURE\*POST* is negative and significant, suggesting that audit firms grant clients a fee discount if the client’s signing auditor leaves.

Examining Big 4 and non-Big 4 sub-samples, we observe that the coefficient on *DEPARTURE\*POST* is only marginally significant for the Big 4 sub-sample, but is much larger in magnitude and statistically significant for the non-Big 4 sub-sample. The coefficient estimates are significantly different across the two sub-samples. This suggests that audit fees barely change for clients of Big 4 audit firms after a signing auditor departs, whereas clients of non-Big 4 audit firms receive significant fee discounts from their incumbent audit firms after a signing auditor leaves the profession.

<<<<< Insert Table 7 Here >>>>>

Table 8 provides results for the analysis of audit quality. For the full sample and the Big 4 sub-sample, the coefficients on *DEPARTURE\*POST* are not statistically significant in either the abnormal accruals regression or the restatement models. For the non-Big 4 sub-sample the coefficients on *DEPARTURE\*POST* are positive but only marginally significant. These results suggest that the audit quality of clients does not significantly change if they stay with the audit firm after its signing auditor leaves, though there is some weak evidence that audit quality declines for non-Big 4 clients whose signing auditors leave the profession.[[28]](#footnote-28)

<<<<< Insert Table 8 Here >>>>>

In sum, when an auditor leaves the audit profession, his or her clients are more likely to switch away from the audit firm where the auditor was employed. Moreover, the audit firm has an incentive to reduce audit fees to keep clients whose engagement auditor has departed. However, the quality of the audits for clients retained by the firm after the signing auditor leaves does not change significantly. Taken together, these results suggest that while the impact of auditor departure is minimal for Big 4 firms and their clients, the departure of a signing auditor can have a dynamic impact on the ongoing client-audit firm relationship for non-Big 4 audit firms, with clients apparently using the departure as an opportunity to reassess their audit needs and either hire a new audit firm or negotiate a discount with the incumbent firm.

**4.4 Additional Analysis**

Finally, we investigate whether the factors affecting an auditor’s decision to leave public accounting depends on where the auditor goes after his or her departure. There are all kinds of job possibilities outside auditing and there is no data for us to track each auditor’s post-audit career path so we focus on one particular career path which is known to be common among ex-auditors: executive positions (such as CFO) in a publicly-traded company. Menon and Williams (2004), Lennox (2005), and Lennox and Park (2007) show that a large number of audit firms’ former employees become senior officers in the corporate world and these alumni can provide economic benefits to their former employers (i.e., audit firms). Not all auditors can become top executives of listed firms but, for those who do become corporate executives, we surmise that they did not depart because their audit quality or revenue generating ability was low.

To obtain the data for this analysis, we track whether a former auditor joins a publicly-traded firm as a top executive or independent director as follows: First, we downloaded all the top executives’ and directors’ personal profile information from the CSMAR database,[[29]](#footnote-29) which includes each individual’s name, gender, birth year, educational background, and work experience. Second, we merged ex-auditor profile information with the profiles of top executives and directors based on name, birth year, and gender. Third, we verified that the auditor-executive matches were actually the same person by manually checking their work experience. If the matched senior corporate officer once worked in the same audit firm with the departed auditor, then we concluded that they were the same person. This process resulted in 271 ex-auditors who we identified as holding executive or director positions after leaving their firm. This is 13.8% of all auditors leaving the profession during our sample period. Based on the sample of these 271 ex-auditors and 3,719 auditors who remained in public accounting, we now define *DEPARTURE* equals 1 if an auditor leaves public accounting *and* becomes an executive of a publicly listed firm, and 0 if the auditor stays in the audit profession. We then re-run the logistic regression model (1) using this “auditor-executive” sub-sample.

As reported in Panel A of Table 9, we find that neither audit revenue generating ability nor audit quality is a determinant of leaving public accounting. Furthermore, neither the rank of the auditor within the audit firm nor the age of the auditor affects departure. This is in stark contrast with the analysis in Tables 4 and 5. We find that auditors graduating from top schools or with graduate degrees are more likely to leave public accounting and become corporate executives. The coefficients for *FEMALE*, *AF\_FEE*, and *AF\_CLIENT* are negative and significant, indicating that females or those work at large audit firms are less likely to leave auditing to become corporate executives.

In terms of consequences of departures, we find that, after the signing auditor departs to become a corporate executive, his or her clients are more likely to switch to different audit firms as reported in Panel B, and receive lower audit fees if they stay with the incumbent audit firm as reported in Panel C. These are consistent with results based on the full departure sample reported in Tables 6 and 7. However, audit quality is now observed to *decrease* after the auditor departs, as indicated by the positive significant coefficients on *DEPARTURE\*POST* in the abnormal accruals regression and restatement regression in Panel D. This suggests that the newly hired auditors may not match the audit quality of the predecessors who departed to become corporate executives.

<<<<< Insert Table 9 Here >>>>>

1. **Conclusions**

In this study, we examine the determinants and consequences of auditors’ departure from the audit profession. First, we find that the auditors’ demographic characteristics are significantly associated with departures. Specifically, if the auditor is female, graduates from a top university, holds a graduate degree, or is less than 30 years old, then the auditor is more likely to leave the audit profession, whereas an auditor at the rank of manager or partner, or more than 50 years old, is less likely to depart. Second, we find an auditor with higher professional competency, as measured by revenue generating ability and audit quality, is less likely to leave public accounting. In addition, we find that auditors working for large audit firms are less likely to leave public accounting, and audit firm mergers are positively associated with auditor departure from the profession. Our findings are mainly driven by auditors in non-Big 4 audit firms, and some of the determinants have differing impact on decisions to leave between Big 4 auditors and non-Big 4 auditors.

We also find significant consequences of auditor departures. Clients tend to switch to a different audit firm after their auditors leave public accounting. For those clients who stay with the incumbent audit firms, they are charged lower audit fees but their audit quality remains about the same. In additional analysis, we tracked the departing auditors and find that 13.8% of them become top executives or independent directors of publicly-traded firms. For these former auditors, the departure seems to be driven solely by their connections with the corporate world because they tend to graduate from top universities or have graduate degrees (and, thus, are likely to have school ties with executives). After their departure, their former clients tend to switch to different audit firms, receive lower audit fees if the clients stay with the incumbent audit firms, and have lower audit quality.

To the best of our knowledge, this is the first archival research investigating the departure of auditors from the audit profession and the consequences of such behavior. Our results have implications for audit firms with regard to adjusting their recruitment policies, training policies, work time arrangements, etc. Identifying the causes and consequences of leaving public accounting can help the industry to improve practice so that it can retain talented personnel and weed out less skilled auditors, while keeping disruption to the audit firms and their clients to a minimum. The results also suggest that turnover in audit firm personnel is not as a severe a problem as some regulators perceive. This may be due to the procedures that audit firms have to cope with work force turnover to maintain the quality of their audit work.

This study also has several caveats. First, we do not observe the actual reasons of why auditors leave public accounting. Even though we have revenue generating ability, audit quality, performance, and age as determinants of auditor departure and in sensitivity analyses we remove auditor departures due to sanctions from the Chinese regulators, we caution that we cannot clearly distinguish voluntary departures and departures that are initiated by the audit firm. Second, there may be other determinants of auditor departures that we cannot observe related to audit office culture or partner leadership style, to name a couple. Third, even though signing auditors are the most important gate keepers to ensure high quality audits, lower-level audit staff in an engagement team perform many audit procedures. However, we could not examine the departures of those lower-level auditors due to data constraints. Finally, our analyses only use data from one country, which may affect the generalization of the results. Nonetheless, auditors from different countries should have much in common when considering personal career prospects and work-life balance when deciding whether to leave public accounting. In spite of these potential limitations, we feel that the results provide unique and valuable insights into the dynamics of personnel management of audit firms and we hope that future research will examine some of the other potential forces driving professional turnover and its impact on audit quality.

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**Figure 1 Conceptual Model**



**Figure 2: Research Design for Analyzing the Consequences of Auditor Departures**



Note:

*Pre-Departure Year* is the last year that the auditor who leaves public accounting signs the audit report. *Post-Departure Year* is the first year after the auditor leaves public accounting.

*Audit Firm Switch Analyses*: using data of treatment and control groups in the pre-departure year to predict whether clients whose auditors leave public accounting (DEPARTURE=1) are more likely to switch to a different audit firm in the post-departure year, compared to clients whose auditor stay in the profession (DEPARTURE=0).

*Audit Fees and Quality Analyses*: using data of both treatment and control groups in the pre-departure and post-departure years to examine whether non-switching clients have lower audit fees and audit quality following their auditors’ departures.

Table 1 The Distribution of Number of Signatory Auditors in China by Year

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Number of Auditors | Number of Departures | Departure Percent  | Big 4 | Big 4 Departures | Departure Percent | Non-Big 4 | Non-Big 4 Departures | Departure Percent |
| 1992 | 39 | 15 | 38.5% | 0 | 0 |   | 39 | 15 | 38.5% |
| 1993 | 157 | 59 | 37.6% | 18 | 2 | 11.1% | 139 | 57 | 41.0% |
| 1994 | 264 | 73 | 27.7% | 26 | 4 | 15.4% | 238 | 69 | 29.0% |
| 1995 | 290 | 82 | 28.3% | 30 | 4 | 13.3% | 260 | 78 | 30.0% |
| 1996 | 443 | 94 | 21.2% | 31 | 7 | 22.5% | 412 | 87 | 21.1% |
| 1997 | 526 | 99 | 18.8% | 41 | 9 | 21.9% | 485 | 90 | 18.6% |
| 1998 | 567 | 96 | 16.9% | 40 | 6 | 15.0% | 527 | 90 | 17.1% |
| 1999 | 668 | 102 | 15.3% | 39 | 8 | 20.5% | 629 | 94 | 14.9% |
| 2000 | 753 | 108 | 14.3% | 41 | 2 | 4.9% | 712 | 106 | 14.9% |
| 2001 | 865 | 131 | 15.1% | 50 | 5 | 10.0% | 815 | 126 | 15.5% |
| 2002 | 950 | 143 | 15.0% | 70 | 7 | 10.0% | 880 | 136 | 15.5% |
| 2003 | 1,041 | 151 | 14.5% | 73 | 13 | 17.8% | 968 | 138 | 14.2% |
| 2004 | 1,231 | 147 | 11.9% | 106 | 15 | 14.1% | 1,125 | 132 | 11.7% |
| 2005 | 1,319 | 160 | 12.1% | 115 | 25 | 21.7% | 1,204 | 135 | 11.2% |
| 2006 | 1,458 | 164 | 11.2% | 120 | 21 | 17.5% | 1,338 | 143 | 10.7% |
| 2007 | 1,578 | 177 | 11.2% | 141 | 28 | 19.8% | 1,437 | 149 | 10.4% |
| 2008 | 1,711 | 166 | 9.7% | 153 | 20 | 13.1% | 1,558 | 146 | 9.4% |
| 2009 | 1,796 | 186 | 10.3% | 156 | 25 | 16.0% | 1,640 | 161 | 10.0% |
| 2010 | 2,166 | 216 | 10.0% | 196 | 36 | 18.3% | 1,970 | 180 | 9.1% |
| 2011 | 2,362 | 276 | 11.7% | 221 | 41 | 18.5% | 2,141 | 235 | 11.0% |
| *Total Distinct Auditors* | 6,866 | 2,645 | 38.5% | 718 | 276 | 38.4% | 6148 | 2,369 | 38.5% |

Note:

*Number of Auditors* is the number of signing auditors in a specific year, and some auditors appear in several years. A signing auditor is defined as leaving the audit profession if he/she has not signed audit reports for at least three years and his/her personal profile information has been deleted from CICPA website. *Number of Departures* is the number of signing auditors who leave public accounting in the next year. Correspondingly, *Departure Percent* is the proportion of signing auditors that leaves public accounting in the next year, i.e., the year-to-year departure rate. For example, 108 (14.3%) of the 753 signing auditors in 2000 leave public accounting in 2001. *Total Distinct Auditors* is the number of unique individual auditors over the period of 1992-2011.

Table 2 Sample Selection

|  |  |
| --- | --- |
| **RQ1: Determinants of Auditor Departure** | **Number of Auditors** |
| Signing Auditors over the Period of 1992-2011 | 6,866 |
| Auditors who stay in the audit profession | 4,221 |
| Auditors who have left the audit profession | 2,645 |
| *Less:* | (1,178) |
| Auditors without enough information to calculate analysis variables |
| ***Final Sample*** | **5,688** |
| Auditors who stay in the audit profession | 3,719 |
| Auditors who have left the audit profession | 1,969 |
|  |  |
| **RQ2: Consequences of Auditor Departure** | **Number of Firm-Years** |
| **Audit Firm Switch Analyses** |  |
| Total client-years whose auditor departs | 2,495 |
| *Less:* client-years unable to find a matched client-year | (697) |
| Client-years able to find a match firm-year | **1,798** |
| ***Final Sample***  | **1,798\*2=3,596a** |
| **Audit Fee and Quality Analyses for Non-Switching Clients** |  |
| Total client-years whose auditor departs | 2,495 |
| *Less:* client-years switching auditors | (900) |
| *Less:* client-years unable to find a matched client-year | (45) |
| Client-years able to find a match firm-year | **1,550** |
| ***Final Sample*** | **1,550\*4=6,200b** |

Note:

For audit switch analyses, we use a matched sample to predict whether a client will switch its auditor in the subsequent year so the final sample including both treatment and control firms, 1,798\*2=3,596 firm-years.

For audit fee and audit quality analyses, we use a difference in difference research design so we use treatment and control firms for both the pre and post-departure years. Therefore, the final sample is 1,550\*4=6,200 firm years.

Table 3 Descriptive Statistics

Panel A: Summary Statistics

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Full Sample |  | Big 4 |  | Non-Big 4 |
|  |  | Obs |  | Mean |  | Median |  | Std.dev |  | Mean |  | Median |  | Std.dev |  | Mean |  | Median |  | Std.dev |
| *FEMALE* |  | 5,688 |  | 0.396 |  | 0.000 |  | 0.479 |  | 0.463 |  | 0.000 |  | 0.499 |  | 0.387 |  | 0.000 |  | 0.475 |
| *MAJOR* |  | 5,688 |  | 0.465 |  | 0.000 |  | 0.500 |  | 0.411 |  | 0.000 |  | 0.492 |  | 0.472 |  | 1.000 |  | 0.500 |
| *SCHOOL* |  | 5,688 |  | 0.249 |  | 0.000 |  | 0.472 |  | 0.624 |  | 1.000 |  | 0.484 |  | 0.201 |  | 0.000 |  | 0.458 |
| *DEGREE* |  | 5,688 |  | 0.061 |  | 0.000 |  | 0.330 |  | 0.181 |  | 0.000 |  | 0.385 |  | 0.046 |  | 0.000 |  | 0.322 |
| *RANK* |  | 5,688 |  | 0.646 |  | 1.000 |  | 0.499 |  | 0.631 |  | 1.000 |  | 0.499 |  | 0.648 |  | 0.000 |  | 0.493 |
| *AGE30* |  | 5,688 |  | 0.116 |  | 0.000 |  | 0.292 |  | 0.113 |  | 0.000 |  | 0.317 |  | 0.116 |  | 0.000 |  | 0.289 |
| *AGE50* |  | 5,688 |  | 0.085 |  | 0.000 |  | 0.274 |  | 0.034 |  | 0.000 |  | 0.181 |  | 0.091 |  | 0.000 |  | 0.283 |
| *PARTY* |  | 5,688 |  | 0.226 |  | 0.000 |  | 0.390 |  | 0.145 |  | 0.000 |  | 0.353 |  | 0.236 |  | 0.000 |  | 0.394 |
| *NUM\_CLIENTS* |  | 5,688 |  | 1.645 |  | 1.000 |  | 1.285 |  | 1.531 |  | 1.000 |  | 1.162 |  | 1.659 |  | 1.000 |  | 1.297 |
| *TOTAL\_FEE* |  | 5,688 |  | 13.559 |  | 13.385 |  | 0.888 |  | 15.081 |  | 14.963 |  | 1.278 |  | 13.366 |  | 13.305 |  | 0.602 |
| *CLIENT\_REST* |  | 5,688 |  | 0.053 |  | 0.000 |  | 0.212 |  | 0.018 |  | 0.000 |  | 0.121 |  | 0.057 |  | 0.000 |  | 0.219 |
| *CLIENT\_DA* |  | 5,688 |  | 0.060 |  | 0.046 |  | 0.053 |  | 0.053 |  | 0.042 |  | 0.044 |  | 0.061 |  | 0.046 |  | 0.054 |
| *CLIENT\_MAO* |  | 5,688 |  | 0.059 |  | 0.000 |  | 0.215 |  | 0.022 |  | 0.000 |  | 0.129 |  | 0.064 |  | 0.000 |  | 0.229 |
| *BIG4* |  | 5,688 |  | 0.108 |  | 0.000 |  | 0.311 |  |  |  |  |  |  |  |  |  |  |  |  |
| *CLIENT\_ZSCORE* |  | 5,688 |  | 3.122 |  | 2.048 |  | 3.665 |  | 3.545 |  | 2.034 |  | 2.739 |  | 3.068 |  | 2.189 |  | 3.741 |
| *CLIENT\_VAR* |  | 5,688 |  | 0.417 |  | 0.372 |  | 0.690 |  | 0.413 |  | 0.389 |  | 0.662 |  | 0.418 |  | 0.369 |  | 0.698 |
| *FEE\_VAR* |  | 5,688 |  | 0.331 |  | 0.203 |  | 0.391 |  | 0.318 |  | 0.209 |  | 0.387 |  | 0.333 |  | 0.211 |  | 0.392 |
| *AF\_FEE* |  | 5,688 |  | 18.546 |  | 18.657 |  | 1.545 |  | 20.150 |  | 20.416 |  | 1.013 |  | 18.343 |  | 18.369 |  | 1.484 |
| *AF\_CLIENT* |  | 5,688 |  | 3.689 |  | 3.625 |  | 1.177 |  | 3.688 |  | 3.638 |  | 0.673 |  | 3.689 |  | 3.713 |  | 1.212 |
| *AF\_MERGE* |  | 5,688 |  | 0.268 |  | 0.000 |  | 0.451 |  | 0.093 |  | 0.000 |  | 0.398 |  | 0.290 |  | 0.000 |  | 0.755 |

Panel B: Univariate Tests of Departing and Non-Departing Auditors

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Auditors Staying in Public Accounting |  |  Auditors Leaving Public Accounting |  | Group Difference |
|  |  | Obs |  | Mean |  | Median |  | Obs |  | Mean |  | Median |  | Mean-Difference |  | Median-Difference |
| *FEMALE* |  | 3,719 |  | 0.358 |  | 0.000 |  | 1,969 |  | 0.468 |  | 0.000 |  | -0.110\*\*\* |  | 0.000 |
| *MAJOR* |  | 3,719 |  | 0.438 |  | 0.000 |  | 1,969 |  | 0.516 |  | 0.000 |  | -0.078\*\*\* |  | 0.000 |
| *SCHOOL* |  | 3,719 |  | 0.202 |  | 0.000 |  | 1,969 |  | 0.337 |  | 0.000 |  | -0.135\*\*\* |  | 0.000 |
| *DEGREE* |  | 3,719 |  | 0.027 |  | 0.000 |  | 1,969 |  | 0.125 |  | 0.000 |  | -0.098\*\*\* |  | 0.000 |
| *RANK* |  | 3,719 |  | 0.694 |  | 1.000 |  | 1,969 |  | 0.556 |  | 1.000 |  | 0.138\*\*\* |  | 0.000 |
| *AGE30* |  | 3,719 |  | 0.105 |  | 0.000 |  | 1,969 |  | 0.136 |  | 0.000 |  | -0.031\*\* |  | 0.000 |
| *AGE50* |  | 3,719 |  | 0.083 |  | 0.000 |  | 1,969 |  | 0.088 |  | 0.000 |  | -0.005 |  | 0.000 |
| *PARTY* |  | 3,719 |  | 0.255 |  | 0.000 |  | 1,969 |  | 0.171 |  | 0.000 |  | 0.084\*\*\* |  | 0.000 |
| *NUM\_CLIENTS* |  | 3,719 |  | 1.903 |  | 1.000 |  | 1,969 |  | 1.158 |  | 1.000 |  | 0.745\*\*\* |  | 0.000 |
| *TOTAL\_FEE* |  | 3,719 |  | 13.728 |  | 13.480 |  | 1,969 |  | 13.238 |  | 13.039 |  | 0.490\* |  | 0.242 |
| *CLIENT\_REST* |  | 3,719 |  | 0.008 |  | 0.000 |  | 1,969 |  | 0.138 |  | 0.000 |  | -0.130\*\*\* |  | 0.000 |
| *CLIENT\_DA* |  | 3,719 |  | 0.057 |  | 0.045 |  | 1,969 |  | 0.065 |  | 0.000 |  | -0.008\* |  | -0.020\*\* |
| *CLIENT\_MAO* |  | 3,719 |  | 0.036 |  | 0.000 |  | 1,969 |  | 0.103 |  | 0.000 |  | -0.067\*\*\* |  | 0.000 |
| *BIG4* |  | 3,719 |  | 0.112 |  | 0.000 |  | 1,969 |  | 0.102 |  | 0.000 |  | 0.010 |  | 0.000 |
| *CLIENT\_ZSCORE* |  | 3,719 |  | 3.313 |  | 2.199 |  | 1,969 |  | 2.761 |  | 1.674 |  | 0.552\*\*\* |  | 0.525\*\*\* |
| *CLIENT\_VAR* |  | 3,719 |  | 0.292 |  | 0.335 |  | 1,969 |  | 0.404 |  | 0.362 |  | -0.112\*\* |  | -0.007 |
| *FEE\_VAR* |  | 3,719 |  | 0.336 |  | 0.214 |  | 1,969 |  | 0.321 |  | 0.201 |  | 0.015 |  | 0.013 |
| *AF\_FEE* |  | 3,719 |  | 19.176 |  | 19.355 |  | 1,969 |  | 17.356 |  | 17.147 |  | 1.820\*\*\* |  | 2.208\*\*\* |
| *AF\_CLIENT* |  | 3,719 |  | 3.807 |  | 3.794 |  | 1,969 |  | 3.420 |  | 3.412 |  | 0.387\*\*\* |  | 0.382\*\*\* |
| *AF\_MERGE* |  | 3,719 |  | 0.238 |  | 0.000 |  | 1,969 |  | 0.325 |  | 0.000 |  | -0.087\*\* |  | 0.000 |

Notes:

*FEMALE* is 1 if an auditor is a female, and 0 otherwise. *MAJOR* is 1 if an auditor majored in accounting in college, and 0 otherwise. *SCHOOL* is 1 if an auditor graduated from a top university in China, and 0 otherwise. *DEGREE* is 1 if an auditor holds a graduate (i.e., master or higher) degree, and 0 otherwise. *RANK* is 1 if an auditor is ranked as a manager or a partner in the audit firm, and 0 otherwise. *AGE30* is 1 if an auditor is less than 30 years old, and 0 otherwise. *AGE50* is 1 if an auditor is more than 50 years old, and 0 otherwise. *PARTY* is 1 if an auditor is a member of the Chinese Communist Party, and 0 otherwise. *BIG4* is 1 if the auditor is affiliated to one of the Big 4 audit firms when he/she leaves public accounting, and 0 otherwise. All the following variables are measured as the average for last the three years before the auditor leaves public accounting if the auditor leaves or for the most recent three years if the auditor stays. *NUM\_CLIENTS* is the average of yearly number of clients audited by an individual auditor. *TOTAL\_FEE* is the average of yearly total audit fees earned by an auditor. *CLIENT\_REST* is the average of yearly percentage of an auditor’s clients that downward restated their reported earnings. *CLIENT\_DA* is the average of absolute abnormal discretionary accruals of the clients audited by an auditor. *CLIENT\_MAO* is the average of yearly proportion of the number of modified opinions issued by an auditor. *CLIENT\_ZSCORE* is the average of an auditor’s clients’ Altman Z-Scores. *CLIENT\_VAR* is the standard deviation of the number of clients audited by an auditor. *FEE\_VAR* is the standard deviation of the total audit fees earned by an auditor. *AF\_FEE* is the natural logarithm of the total audit fees of the audit firm that an auditor affiliated. *AF\_CLIENT* is the natural logarithm of the average number of clients for the audit firm that an audit partner affiliated. *AF\_MERGE* is 1 if the audit firm that an auditor affiliated merged with another audit firm during three years before leaving public accounting, and 0 otherwise.

Table 4 The Determinants of Signing Auditor Leaving Public Accounting

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Full Sample |  | Big 4 |  | Non-Big 4 |
|  |  | Coeff. | p-value |  | Coeff. | p-value |  | Coeff. | p-value |
| Intercept |  | 10.722 | 0.000 |  | 13.875 | 0.000 |  | 25.826 | 0.000 |
| *FEMALE* |  | 0.099 | 0.084 |  | -0.116 | 0.654 |  | 0.087 | 0.091 |
| *MAJOR* |  | 0.068 | 0.404 |  | 0.364 | 0.173 |  | 0.035 | 0.719 |
| *SCHOOL* |  | 0.162 | 0.047 |  | -0.298 | 0.259 |  | 0.256 | 0.018 |
| *DEGREE* |  | 0.298 | 0.019 |  | -0.058 | 0.869 |  | 0.388 | 0.011 |
| *RANK* |  | -0.379 | 0.000 |  | -0.675 | 0.038 |  | -0.351 | 0.001 |
| *AGE30* |  | 0.621 | 0.000 |  | 0.295 | 0.503 |  | 0.542 | 0.001 |
| *AGE50* |  | -0.124 | 0.015 |  | 0.871 | 0.312 |  | -0.149 | 0.003 |
| *PARTY* |  | -0.145 | 0.189 |  | -0.481 | 0.223 |  | -0.067 | 0.603 |
| *NUM\_CLIENTS* |  | -0.841 | 0.000 |  | -1.106 | 0.000 |  | -1.052 | 0.000 |
| *TOTAL\_FEE* |  | -0.728 | 0.000 |  | -0.266 | 0.028 |  | -0.443 | 0.000 |
| *CLIENT\_REST* |  | 1.684 | 0.000 |  | -0.251 | 0.790 |  | 1.249 | 0.000 |
| *CLIENT\_DA* |  | 0.947 | 0.000 |  | 1.100 | 0.685 |  | 0.531 | 0.045 |
| *CLIENT\_MAO* |  | 0.719 | 0.001 |  | -0.574 | 0.518 |  | 0.543 | 0.007 |
| *BIG4* |  | -0.527 | 0.002 |  |  |  |  |  |  |
| *CLIENT\_ZSCORE* |  | -0.016 | 0.159 |  | -0.115 | 0.009 |  | -0.013 | 0.322 |
| *CLIENT\_VAR* |  | -0.063 | 0.397 |  | 0.586 | 0.151 |  | -0.137 | 0.365 |
| *FEE\_VAR* |  | -0.008 | 0.951 |  | -0.714 | 0.010 |  | 0.019 | 0.824 |
| *AF\_FEE* |  | -0.662 | 0.000 |  | -0.127 | 0.048 |  | -0.596 | 0.000 |
| *AF\_CLIENT* |  | -0.507 | 0.000 |  | -2.084 | 0.000 |  | -2.798 | 0.000 |
| *AF\_MERGE* |  | 0.309 | 0.009 |  | 1.069 | 0.058 |  | 0.235 | 0.040 |
| *City fixed effects* |  | Yes |  | Yes |  | Yes |
| *Pseudo R2* |  | 26.93% |  | 30.53% |  | 42.34% |
| *Observation* |  | 5,688 |  | 639 |  | 5,049 |

Notes:

This table presents logistics regression results of determinants of auditor departure. *FEMALE* is 1 if an auditor is a female, and 0 otherwise. *MAJOR* is 1 if an auditor majored in accounting in college, and 0 otherwise. *SCHOOL* is 1 if an auditor graduated from a top university in China, and 0 otherwise. *DEGREE* is 1 if an auditor holds a graduate (i.e., master or higher) degree, and 0 otherwise. *RANK* is 1 if an auditor is ranked as a manager or a partner in the audit firm, and 0 otherwise. *AGE30* is 1 if an auditor is less than 30 years old, and 0 otherwise. *AGE50* is 1 if an auditor is more than 50 years old, and 0 otherwise. *PARTY* is 1 if an auditor is a member of the Chinese Communist Party, and 0 otherwise. *BIG4* is 1 if the auditor is affiliated to one of the Big 4 audit firms when he/she leaves public accounting, and 0 otherwise. All the following variables are measured as the average for the last three years before the auditor leaves public accounting if the auditor leaves or for the most recent three years if the auditor stays. *NUM\_CLIENTS* is the average of yearly number of clients audited by an individual auditor. *TOTAL\_FEE* is the average of yearly total audit fees earned by an auditor. *CLIENT\_REST* is the average of yearly percentage of an auditor’s clients that downward restated their reported earnings. *CLIENT\_DA* is the average of absolute abnormal discretionary accruals of the clients audited by an auditor. *CLIENT\_MAO* is the average of yearly proportion of the number of modified opinions issued by an auditor. *CLIENT\_ZSCORE* is the average of an auditor’s clients’ Altman Z-Scores. *CLIENT\_VAR* is the standard deviation of the number of clients audited by an auditor. *FEE\_VAR* is the standard deviation of the total audit fees earned by an auditor. *AF\_FEE* is the natural logarithm of the total audit fees of the audit firm that an auditor affiliated. *AF\_CLIENT* is the natural logarithm of the average number of clients for the audit firm that an audit partner affiliated. *AF\_MERGE* is 1 if the audit firm that an auditor affiliated merged with another audit firm during three years before leaving public accounting, and 0 otherwise.

Table 5 Survival Analysis of Auditor Departure Using Cox Proportional Hazard Model

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Full Sample |  | Big 4 |  | Non-Big 4 |
|  |  | Coeff. |  | Haz. Ratio |  | p-value |  | Coeff. |  | Haz. Ratio |  | p-value |  | Coeff. |  | Haz. Ratio |  | p-value |
| *FEMALE* |  | 0.091 |  | 1.075 |  | 0.068 |  | -0.742 |  | 0.504 |  | 0.001 |  | 0.099 |  | 1.104 |  | 0.056 |
| *MAJOR* |  | -0.081 |  | 0.929 |  | 0.181 |  | -0.205 |  | 0.871 |  | 0.012 |  | -0.057 |  | 0.944 |  | 0.368 |
| *SCHOOL* |  | 0.143 |  | 1.053 |  | 0.020 |  | 0.356 |  | 1.501 |  | 0.525 |  | 0.093 |  | 1.098 |  | 0.041 |
| *DEGREE* |  | 0.212 |  | 1.237 |  | 0.022 |  | 1.777 |  | 0.104 |  | 0.385 |  | 0.221 |  | 1.248 |  | 0.029 |
| *RANK* |  | -0.438 |  | 0.606 |  | 0.000 |  | -0.800 |  | 0.460 |  | 0.173 |  | -0.392 |  | 0.675 |  | 0.000 |
| *AGE30* |  | 1.318 |  | 3.968 |  | 0.000 |  | -0.063 |  | 0.914 |  | 0.744 |  | 1.268 |  | 3.556 |  | 0.000 |
| *AGE50* |  | -0.652 |  | 0.564 |  | 0.000 |  | 0.029 |  | 1.007 |  | 0.890 |  | -0.722 |  | 0.486 |  | 0.000 |
| *PARTY* |  | -0.269 |  | 0.780 |  | 0.001 |  | -0.366 |  | 0.706 |  | 0.057 |  | -0.264 |  | 0.767 |  | 0.002 |
| *NUM\_CLIENTS* |  | -0.630 |  | 0.563 |  | 0.000 |  | -0.260 |  | 0.765 |  | 0.326 |  | -0.618 |  | 0.539 |  | 0.035 |
| *TOTAL\_FEE* |  | -0.287 |  | 0.629 |  | 0.000 |  | -0.745 |  | 0.463 |  | 0.000 |  | -0.444 |  | 0.641 |  | 0.000 |
| *CLIENT\_REST* |  | 0.514 |  | 1.821 |  | 0.000 |  | 0.848 |  | 6.746 |  | 0.216 |  | 0.467 |  | 1.595 |  | 0.000 |
| *CLIENT\_DA* |  | 0.624 |  | 1.816 |  | 0.011 |  | -0.969 |  | 0.362 |  | 0.095 |  | 0.565 |  | 1.759 |  | 0.000 |
| *CLIENT\_MAO* |  | 0.079 |  | 1.095 |  | 0.453 |  | -0.333 |  | 0.718 |  | 0.304 |  | 0.175 |  | 1.191 |  | 0.034 |
| *BIG4* |  | -1.202 |  | 3.329 |  | 0.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| *CLIENT\_ZSCORE* |  | -0.008 |  | 0.991 |  | 0.330 |  | 0.041 |  | 1.037 |  | 0.155 |  | -0.010 |  | 0.989 |  | 0.264 |
| *CLIENT\_VAR* |  | -0.022 |  | 0.978 |  | 0.687 |  | 0.031 |  | 0.689 |  | 0.673 |  | 0.064 |  | 1.065 |  | 0.268 |
| *FEE\_VAR* |  | -0.116 |  | 0.859 |  | 0.145 |  | -0.151 |  | 0.871 |  | 0.593 |  | -0.227 |  | 0.796 |  | 0.132 |
| *AF\_FEE* |  | -0.333 |  | 0.717 |  | 0.000 |  | -0.397 |  | 0.771 |  | 0.001 |  | -0.793 |  | 0.212 |  | 0.000 |
| *AF\_CLIENT* |  | -0.235 |  | 0.991 |  | 0.002 |  | -1.120 |  | 0.258 |  | 0.000 |  | -0.426 |  | 3.243 |  | 0.000 |
| *AF\_MERGE* |  | 0.275 |  | 1.317 |  | 0.000 |  | 0.818 |  | 2.359 |  | 0.000 |  | 0.164 |  | 1.178 |  | 0.001 |
| *City fixed effects* |  |  |  | Yes |  |  |  |  |  | Yes |  |  |  |  |  | Yes |  |  |
| Observations |  | 5,688 |  | 639 |  | 5,049 |
| Prob>chi2 |  | 0.000 |  | 0.000 |  | 0.000 |
| LR chi2 |  | 1959.33 |  | 218.81 |  | 1902.11 |

Note:

This table presents the proportional hazard regression results of auditor departures. *FEMALE* is 1 if an auditor is a female, and 0 otherwise. *MAJOR* is 1 if an auditor majored in accounting in college, and 0 otherwise. *SCHOOL* is 1 if an auditor graduated from a top university in China, and 0 otherwise. *DEGREE* is 1 if an auditor holds a graduate (i.e., master or higher) degree, and 0 otherwise. *RANK* is 1 if an auditor is ranked as a manager or a partner in the audit firm, and 0 otherwise. *AGE30* is 1 if an auditor is less than 30 years old, and 0 otherwise. *AGE50* is 1 if an auditor is more than 50 years old, and 0 otherwise. *PARTY* is 1 if an auditor is a member of the Chinese Communist Party, and 0 otherwise. *BIG4* is 1 if the auditor is affiliated to one of the Big 4 audit firms when he/she leaves public accounting, and 0 otherwise. All the following variables are measured as the average for the last three years before the auditor leaves public accounting if the auditor leaves or for the most recent three years if the auditor stays. *NUM\_CLIENTS* is the average of yearly number of clients audited by an individual auditor. *TOTAL\_FEE* is the average of yearly total audit fees earned by an auditor. *CLIENT\_REST* is the average of yearly percentage of an auditor’s clients that downward restated their reported earnings. *CLIENT\_DA* is the average of absolute abnormal discretionary accruals of the clients audited by an auditor. *CLIENT\_MAO* is the average of yearly proportion of the number of modified opinions issued by an auditor. *CLIENT\_ZSCORE* is the average of an auditor’s clients’ Altman Z-Scores. *CLIENT\_VAR* is the standard deviation of the number of clients audited by an auditor. *FEE\_VAR* is the standard deviation of the total audit fees earned by an auditor. *AF\_FEE* is the natural logarithm of the total audit fees of the audit firm that an auditor affiliated. *AF\_CLIENT* is the natural logarithm of the average number of clients for the audit firm that an audit partner affiliated. *AF\_MERGE* is 1 if the audit firm that an auditor affiliated merged with another audit firm during three years before leaving public accounting, and 0 otherwise.

Table 6 The Effect of Auditor Departure on Audit Firm Switch

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Full Sample |  | Big 4 Sample |  | Non-Big 4 Sample |  | Coefficients Differences |
|  |  | Coefficient |  | p-value |  | Coefficient |  | p-value |  | Coefficient |  | p-value |  | Big 4 vs. Non-Big 4 |  | p-value |
| Intercept |  | 1.092 |  | 0.000 |  | 0.842 |  | 0.000 |  | 1.117 |  | 0.000 |  |  |  |  |
| *DEPARTURE* |  | 0.096 |  | 0.000 |  | 0.057 |  | 0.062 |  | 0.105 |  | 0.000 |  | -0.048 |  | 0.037 |
| *MAO* |  | 0.133 |  | 0.000 |  | 0.099 |  | 0.000 |  | 0.137 |  | 0.000 |  | -0.038 |  | 0.069 |
| *FIN\_REST* |  | 0.034 |  | 0.049 |  | 0.031 |  | 0.048 |  | 0.041 |  | 0.039 |  | -0.010 |  | 0.382 |
| *AUDIT\_FEE* |  | 0.008 |  | 0.217 |  | 0.006 |  | 0.325 |  | 0.010 |  | 0.184 |  | -0.004 |  | 0.895 |
| *AF\_SIZE* |  | -0.027 |  | 0.092 |  | -0.024 |  | 0.155 |  | -0.029 |  | 0.060 |  | 0.005 |  | 0.886 |
| *IND\_SPE* |  | -0.044 |  | 0.029 |  | -0.058 |  | 0.012 |  | -0.034 |  | 0.028 |  | -0.024 |  | 0.073 |
| *BIG4* |  | -0.065 |  | 0.017 |  |  |  |  |  |  |  |  |  |  |  |  |
| *M&A* |  | -0.213 |  | 0.430 |  | -0.236 |  | 0.361 |  | -0.182 |  | 0.569 |  | -0.054 |  | 0.019 |
| *EQUIT\_FIN* |  | 0.165 |  | 0.572 |  | 0.174 |  | 0.482 |  | 0.149 |  | 0.601 |  | 0.025 |  | 0.107 |
| *LNTA* |  | -0.002 |  | 0.754 |  | -0.005 |  | 0.784 |  | -0.002 |  | 0.750 |  | -0.003 |  | 0.922 |
| *LOSS* |  | 0.007 |  | 0.338 |  | 0.016 |  | 0.179 |  | 0.005 |  | 0.301 |  | 0.011 |  | 0.369 |
| *LEV* |  | 0.016 |  | 0.245 |  | 0.020 |  | 0.191 |  | 0.014 |  | 0.249 |  | 0.006 |  | 0.794 |
| *SOE* |  | 0.001 |  | 0.886 |  | 0.001 |  | 0.899 |  | 0.001 |  | 0.881 |  | 0.000 |  | 0.952 |
| *City Fixed Effects* |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Industry Fixed Effects* |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Year Fixed Effects* |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Pseudo R2* |  | 0.174 |  | 0.130 |  | 0.189 |  |  |  |  |
| *Observation* |  | 3,596 |  | 618 |  | 2,978 |  |  |  |  |

Note:

This table presents the logistic regression results using a matched sample in which each client whose auditor departs is matched with another client of the same audit firm whose auditors stay. The dependent variable *SWITCH* is coded 1 if the client hires a different audit firm in the post-departure year (i.e., the first year right after the auditor departs), and 0 otherwise. *DEPARTURE*equals 1 if the client’s auditor leaves public accounting and 0 otherwise. All the following control variables are measured in the pre-departure year (i.e., the last year that the departing auditor signs an audit report). *MAO* is 1 if the client receives a non-clean audit opinion and 0 otherwise. *FIN\_REST* is 1 if the client has an income-decreasing restatement and 0 otherwise. *AUDIT\_FEE* is the natural logarithm of audit fees the client pays. *AF\_SIZE* is the natural logarithm of the total audit fees received by the audit firm. *IND\_SPE* is 1 if the audit firm’s total audit fees earned from an industry is ranked in the top two deciles and 0 otherwise. *BIG4* is 1 if the audit firm is one of the Big 4 and 0 otherwise. *M&A* is 1 if the audit firm engages in a merger or acquisition, and 0 otherwise. *EQUITY\_FIN*is 1 if the client has equity financing and 0 otherwise. *LNTA* is the natural logarithm of total assets of the client. *LOSS* is 1 if the client reports negative net income and 0 otherwise. *LEV* is total liabilities divided by total assets of the client. *SOE* is 1 if the client is state-owned and 0 otherwise.

We use the Wald statistics to test differences between coefficients reported in each row across the Big4 and Non-Big4 audit sub-samples. In calculating the Wald-test, we estimate an extended model pooling all observations and allowing the intercept and all of the slopes for explanatory variables to vary between Big4 and Non-Big4 sub-samples. We report the p-values of the Wald-tests.

Table 7 The Effect of Auditor Departure on Audit Fees

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | *Full Sample* |  | *Big4 Sample* |  | *Non-Big4 Sample* |  | *Coefficient Difference* |
|  |  | Coefficient |  | p-value |  | Coefficient |  | p-value |  | Coefficient |  | p-value |  | Big4 vs. Non-Big4 |  | p-value |
| Intercept |  | 4.620 |  | 0.000 |  | 3.849 |  | 0.000 |  | 5.232 |  | 0.000 |  |  |  |  |
| *DEPARTURE* |  | -0.077 |  | 0.084 |  | -0.028 |  | 0.134 |  | -0.091 |  | 0.065 |  | 0.063 |  | 0.028 |
| *POST* |  | 0.027 |  | 0.251 |  | 0.033 |  | 0.198 |  | 0.015 |  | 0.324 |  | 0.018 |  | 0.257 |
| *DEPARTURE\*POST* |  | -0.159 |  | 0.000 |  | -0.072 |  | 0.059 |  | -0.184 |  | 0.000 |  | 0.112 |  | 0.000 |
| *MAO* |  | -0.062 |  | 0.016 |  | -0.056 |  | 0.043 |  | -0.065 |  | 0.008 |  | 0.009 |  | 0.492 |
| *AF\_SIZE* |  | 0.025 |  | 0.000 |  | 0.027 |  | 0.000 |  | 0.020 |  | 0.000 |  | 0.007 |  | 0.621 |
| *IND\_SPE* |  | 0.127 |  | 0.032 |  | 0.089 |  | 0.052 |  | 0.131 |  | 0.024 |  | -0.042 |  | 0.056 |
| *BIG4* |  | 0.093 |  | 0.000 |  |  |  |  |  |  |  |  |  |  |  |  |
| *LNTA* |  | 0.182 |  | 0.019 |  | 0.163 |  | 0.031 |  | 0.187 |  | 0.006 |  | -0.024 |  | 0.181 |
| *LOSS* |  | 0.044 |  | 0.020 |  | 0.036 |  | 0.048 |  | 0.049 |  | 0.024 |  | -0.013 |  | 0.389 |
| *ROA* |  | 0.012 |  | 0.087 |  | 0.009 |  | 0.152 |  | 0.014 |  | 0.080 |  | -0.005 |  | 0.728 |
| *LEV* |  | 0.023 |  | 0.000 |  | 0.018 |  | 0.000 |  | 0.027 |  | 0.000 |  | -0.009 |  | 0.523 |
| *SOE* |  | 0.124 |  | 0.000 |  | 0.129 |  | 0.000 |  | 0.094 |  | 0.000 |  | 0.035 |  | 0.062 |
| *INVREC\_TA* |  | 0.094 |  | 0.000 |  | 0.085 |  | 0.000 |  | 0.098 |  | 0.000 |  | -0.013 |  | 0.472 |
| *CURRENT\_RATIO* |  | 0.007 |  | 0.000 |  | 0.005 |  | 0.009 |  | 0.008 |  | 0.000 |  | -0.003 |  | 0.896 |
| *FIRM\_AGE* |  | 0.011 |  | 0.000 |  | 0.015 |  | 0.000 |  | 0.009 |  | 0.492 |  | 0.006 |  | 0.712 |
| *City Fixed Effects* |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Industry Fixed Effects* |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Year Fixed Effects* |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Adjusted R2* |  | 0.575 |  | 0.486 |  | 0.562 |  |  |  |  |
| *Observation* |  | 6,200 |  | 1,196 |  | 5,004 |  |  |  |  |

Note:

This table presents the logistic regression results using a matched sample in which each client whose auditor departs is matched with another client of the same audit firm whose auditors stay. A difference-in-difference research design is used to test whether clients have lower audit fees after their auditors’ departures. *AUDIT\_FEE* is the natural logarithm of audit fees that a client pays in a year. *DEPARTURE* equals 1 for a client whose auditor leaves public accounting and 0 otherwise. *POST*equals 1 if the year refers to the post-departure year (i.e., the first year after a signing auditor departs) and 0 if the year is the pre-departure year (i.e., the last year that the departing auditor signs an audit report). *MAO* is 1 if the client receives a non-clean audit opinion and 0 otherwise. *AF\_SIZE* is the natural logarithm of total audit fees earned by the audit firm in a year. *IND\_SPE* is 1 if the audit firm’s total audit fees earned from an industry is ranked in the top two deciles and 0 otherwise. *BIG4* is 1 if the audit firm is one of the Big 4 and 0 otherwise. *LNTA* is the natural logarithm of total assets of the client. *LOSS* is 1 if the client reports negative net income and 0 otherwise. *ROA* is the ratio of return to total assets of the client. *LEV* is total liabilities divided by total assets of the client. *SOE* is 1 if the client is state-owned and 0 otherwise. *INVREC\_TA* is total inventory and receivable divided by total assets of the client. *CURRENT\_RATIO* is current assets divided by current liabilities of the client. *FRIM\_AGE* is the natural logarithm of the number of years that the client has been publicly listed

We use the Wald statistics to test differences between coefficients reported in each row across the Big4 and Non-Big4 audit sub-samples. In calculating the Wald-test, we estimate an extended model pooling all observations and allowing the intercept and all of the slopes for explanatory variables to vary between Big4 and Non-Big4 sub-samples. We report the p-values of the Wald-tests.

Table 8 The Effect of Auditor Departure on Audit Quality

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | *Full Sample* |  | *Big 4 Sample* |  | *Non-Big 4 Sample* |  | *Coefficient Difference* *between Big 4 and Non-Big 4* |
|  |  | *ABS\_DA* |  | *FIN\_REST* |  | *ABS\_DA* |  | *FIN\_REST* |  | *ABS\_DA* |  | *FIN\_REST* |  | *ABS\_DA* |  | *FIN\_REST* |
| Intercept |  | 0.029(0.753) |  | 1.472(0.046) |  | 0.020(0.824) |  | 1.135(0.059) |  | 0.035(0.638) |  | 1.629(0.035) |  |  |  |  |
| *DEPARTURE* |  | 0.016(0.415) |  | 0.049(0.491) |  | 0.010(0.596) |  | 0.028(0.532) |  | 0.017(0.369) |  | 0.054(0.330) |  | -0.007(0.870) |  | -0.026(0.094) |
| *POST* |  | 0.011(0.735) |  | 0.033(0.640) |  | 0.008(0.784) |  | 0.026(0.620) |  | 0.012(0.705) |  | 0.039(0.510) |  | -0.004(0.890) |  | -0.013(0.315) |
| *DEPARTURE\*POST* |  | 0.037(0.242) |  | 0.086(0.191) |  | 0.021(0.475) |  | 0.073(0.301) |  | 0.057(0.090) |  | 0.103(0.064) |  | -0.036(0.037) |  | -0.040(0.035) |
| *AF\_SIZE* |  | -0.052(0.059) |  | -0.235(0.000) |  | -0.032(0.081) |  | -0.205(0.000) |  | -0.055(0.057) |  | -0.242(0.000) |  | 0.023(0.148) |  | 0.037(0.034) |
| *IND\_SPE* |  | -0.075(0.022) |  | -0.171(0.054) |  | -0.054(0.043) |  | -0.172(0.050) |  | -0.080(0.020) |  | -0.170(0.073) |  | 0.036(0.047) |  | -0.002(0.844) |
| *BIG4* |  | -0.082(0.015) |  | -0.152(0.077) |  |  |  |  |  |  |  |  |  |  |  |  |
| *LNTA* |  | -0.001(0.938) |  | 0.059(0.217) |  | -0.002(0.920) |  | 0.071(0.146) |  | -0.001(0.910) |  | 0.060(0.215) |  | -0.001(0.932) |  | 0.011(0.351) |
| *LOSS* |  | 0.004(0.758) |  | 0.305(0.000) |  | 0.006(0.703) |  | 0.341(0.000) |  | 0.003(0.712) |  | 0.296(0.000) |  | 0.003(0.905) |  | 0.055(0.014) |
| *ROA* |  | -0.035(0.220) |  | 0.216(0.301) |  | -0.037(0.206) |  | 0.240(0.299) |  | -0.030(0.302) |  | 0.212(0.368) |  | -0.007(0.692) |  | 0.028(0.090) |
| *LEV* |  | -0.013(0.736) |  | 0.285(0.016) |  | -0.007(0.875) |  | 0.296(0.029) |  | -0.014(0.702) |  | 0.275(0.02.) |  | 0.007(0.709) |  | 0.021(0.75) |
| *SOE* |  | -0.032(0.037) |  | -0.101(0.205) |  | -0.040(0.028) |  | -0.083(0.295) |  | -0.027(0.035) |  | -0.104(0.189) |  | -0.013(0.420) |  | 0.021(0.134) |
| *GROWTH* |  | 0.009(0.023) |  | 0.057(0.396) |  | 0.014(0.009) |  | 0.072(0.368) |  | 0.007(0.032) |  | 0.051(0.484) |  | 0.007(0.590) |  | 0.021(0.189) |
| *BM* |  | 0.008(0.499) |  | 0.091(0.066) |  | 0.015(0.367) |  | 0.076(0.079) |  | 0.006(0.489) |  | 0.096(0.060) |  | 0.009(0.278) |  | -0.020(0.215) |
| *ZSCORE* |  | -0.012(0.149) |  | -0.083(0.048) |  | -0.015(0.110) |  | -0.072(0.068) |  | -0.009(0.217) |  | -0.087(0.045) |  | -0.006(0.849) |  | 0.015(0.271) |
| *City Fixed Effects* |  | Yes |  | Yes |  | Yes |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Industry Fixed Effects* |  | Yes |  | Yes |  | Yes |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Year Fixed Effects* |  | Yes |  | Yes |  | Yes |  | Yes |  | Yes |  | Yes |  |  |  |  |
| *Adjusted or Pseudo R2* |  | 0.110 |  | 0.093 |  | 0.096 |  | 0.082 |  | 0.113 |  | 0.101 |  |  |  |  |
| *Observation* |  | 6,200 |  | 6,200 |  | 1,196 |  | 1,196 |  | 5,004 |  | 5,004 |  |  |  |  |

Note:

This table presents the OLS and logistic regression results using a matched sample in which each client whose auditor departs is matched with another client of the same audit firm whose auditors stay. A difference-in-difference research design is used to test whether audit quality is affected by auditor departure. The first dependent variable is *ABS\_DA*, measured as the absolute value of performance adjusted discretionary accruals developed by Kothari, Leone, and Wasley (2005). The second dependent variable is *FIN\_REST*, coded as 1 if the client has an income-decreasing restatement and 0 otherwise. *DEPARTURE* equals 1 for a client whose auditor leaves public accounting and 0 otherwise. *POST*equals 1 if the year refers to the post-departure year (i.e., the first year after a signing auditor departs) and 0 if the year is the pre-departure year (i.e., the last year the departing auditor signs an audit report). *AF\_SIZE* is the natural logarithm of total audit fees earned by the audit firm in a year. *IND\_SPE* is 1 if the audit firm’s total audit fees earned from an industry is ranked in the top two deciles and 0 otherwise. *BIG4* is 1 if the audit firm is one of the Big 4 and 0 otherwise. *LNTA* is the natural logarithm of total assets of the client. *LOSS* is 1 if the client reports negative net income and 0 otherwise. *ROA* is the ratio of return to total assets of the client. *LEV* is total liabilities divided by total assets of the client. *SOE* is 1 if the client is state-owned and 0 otherwise. *GROWTH* is the sales growth rate for the client. *BM* is the book to market value of the client. *ZSCORE* is the Altman Z-Score of the client.

We use the Wald statistics to test differences between coefficients reported in each row across the Big4 and Non-Big4 audit sub-samples. In calculating the Wald-test, we estimate an extended model pooling all observations and allowing the intercept and all of the slopes for explanatory variables to vary between Big4 and Non-Big4 sub-samples. We report the p-values of the Wald-tests.

Table 9 Additional Tests

Panel A: The Determinants of Auditor Departure Based on Auditor-Executive Sub-Sample

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Coefficient |  | p-value |
| Intercept |  | 12.584 |  | 0.000 |
| *FEMALE* |  | -0.594 |  | 0.005 |
| *MAJOR* |  | -0.041 |  | 0.794 |
| *SCHOOL* |  | 0.316 |  | 0.057 |
| *DEGREE* |  | 0.744 |  | 0.003 |
| *RANK* |  | 0.158 |  | 0.490 |
| *AGE30* |  | -0.523 |  | 0.169 |
| *AGE50* |  | -0.062 |  | 0.825 |
| *PARTY* |  | 0.053 |  | 0.743 |
| *NUM\_CLIENTS* |  | -0.196 |  | 0.205 |
| *TOTAL\_FEE* |  | -0.213 |  | 0.189 |
| *CLIENT\_REST* |  | 0.977 |  | 0.110 |
| *CLIENT\_DA* |  | 1.425 |  | 0.361 |
| *CLIENT\_MAO* |  | 0.338 |  | 0.402 |
| *BIG4* |  | 0.084 |  | 0.513 |
| *CLIENT\_ZSCORE* |  | -0.045 |  | 0.141 |
| *CLIENT\_VAR* |  | 0.157 |  | 0.572 |
| *FEE\_VAR* |  | -0.113 |  | 0.495 |
| *AF\_FEE* |  | -0.584 |  | 0.000 |
| *AF\_CLIENT* |  | -0.633 |  | 0.000 |
| *AF\_MERGE* |  | 0.055 |  | 0.726 |
| *City fixed effects* |  | Yes |
| *Pseudo R2* |  | 25.35% |
| *Observation* |  | 3,990 |

Panel B: The Effect of Auditor Departure on Audit Firm Switching based on Auditor-Executive Sub-Sample

|  |  |  |
| --- | --- | --- |
|  |  | *SWITCH* |
|  |  | Coefficient |  | p-value |
| Intercept |  | 0.747 |  | 0.000 |
| *DEPARTURE* |  | 0.149 |  | 0.000 |
| *Controls* |  | Included |
| *Pseudo R2* |  | 0.097 |
| *Observation* |  | 838 |

Panel C: The Effect of Auditor Departure on Audit Fees based on Auditor-Executive Sub-Sample

|  |  |  |
| --- | --- | --- |
|  |  | *AUDIT\_FEE* |
|  |  | Coefficient |  | p-value |
| Intercept |  | 1.852 |  | 0.036 |
| *DEPARTURE* |  | -0.059 |  | 0.109 |
| *POST* |  | 0.032 |  | 0.377 |
| *DEPARTURE\*POST* |  | -0.113 |  | 0.000 |
| *Controls* |  | Included |
| *Adjusted R2* |  | 0.427 |
| *Observation* |  | 1,220 |

Panel D: The Effect of Auditor Departure on Audit Quality based on Auditor-Executive Sub-Sample

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | *ABS\_DA* |  | *FIN\_REST* |
|  |  | Coefficient |  | p-value |  | Coefficient |  | p-value |
| Intercept |  | 0.019 |  | 0.784 |  | 0.503 |  | 0.152 |
| *DEPARTURE* |  | 0.053 |  | 0.069 |  | 0.122 |  | 0.052 |
| *POST* |  | 0.021 |  | 0.157 |  | 0.039 |  | 0.093 |
| *DEPARTURE\*POST* |  | 0.082 |  | 0.059 |  | 0.115 |  | 0.047 |
| *Controls* |  | Included |  | Included |
| *Adjusted or Pseudo R2* |  | 0.137 |  | 0.109 |
| *Observation* |  | 1,220 |  | 1,220 |

Note:

This table presents analysis results using the auditor-executive sub-sample, i.e., a sub-sample consisting of auditors who leave public accounting to become executives in publicly traded companies. The definitions of variables in the table are the same as those in Tables 4, 6, 7, and 8.

In Panel A, 271 auditors in our sample leave public accounting and later become corporate executives and 3,719 stay in the profession.

In Panel B, there are 439 clients audited by these 271 individual auditors in the departure year. We construct a matched sample such that each client whose auditor departs is matched with another client of the same audit firm whose signing auditors stay. The treatment firm and control firm are matched by firm size, profitability, leverage, and ownership status right before auditor departure. We successfully construct a sample of 419 firm-year observations with auditor departures and 419 firm-year observations without auditor departures.

In Panel C and Panel D, there are 318 clients choose to stay with their current audit firms after auditor departures. We construct a matched sample in which each client whose auditor departs is matched with another client of the same audit firm whose signing auditors stay. The treatment firm and control firm are matched by firm size, profitability, leverage, and ownership status right before auditor departure. We successfully construct a sample of 305 firm-year observations with auditor departures and 305 firm-year observations without auditor departures. Since we need two years of data to do the difference-in-difference analysis, we have 1,220 (610\*2) firm-year observations.

1. This $32,500 cost includes new employee lost productivity (ramp-up time times salary, $9000), new employee training (orientation hours × trainer rate, $3,750), recruiting cost ($10,000), candidate selection and interview cost ($3,750), and substitute employee cost ($6,000). [↑](#footnote-ref-1)
2. Turnover has a negative impact on organization performance such as operating costs (Alexander, Bloom, & Nuchols, 1994) and firm profitability and market value (e.g., Batt, 2012; Huselid, 1995). The relation is even more pronounced if the departed employees possess extensive social capital (Shaw et al., 1998 and Shaw et al., 2005). [↑](#footnote-ref-2)
3. The Financial Reporting Council is the UK’s independent regulator responsible for promoting high quality corporate governance and reporting to foster investment. https://www.frc.org.uk/ [↑](#footnote-ref-3)
4. Experienced auditors have an abundance of knowledge of audit programs, auditing and accounting standards, audit work review, and quality control procedures, as well as client-specific knowledge of internal control systems, business models, and client-specific accounting issues. See Nelson and Tan (2005) and Nelson (2009). [↑](#footnote-ref-4)
5. A few behavioral studies in earlier years use survey data to examine certified public accountants (CPAs)/auditors’ job turnover *intention* (e.g., Bullen and Flamholtz 1985;Parker, and Kohlmeyer 2005). Our paper differs from these prior behavioral studies since we examine the *actual* departure of signing auditors from the audit profession. Our paper also differs from Chi et al. (2013) since it only examines the determinants of *audit staff turnover* using data from one audit firm in Taiwan but we focus on *signing auditors* and examine both determinants and consequences of auditor departures. [↑](#footnote-ref-5)
6. Assuming that highly skilled auditors have more career options upon voluntary departure, *ceteris paribus*, such departures reduce the average talent pool of the audit firm absent direct hires of equally skilled personnel. Developing equally skilled personnel internally takes time and likely results in lower audit quality, at least temporarily. While it is unlikely that regulators can influence the departure of auditors from the profession, rules on revolving door policies may slow the loss of talent from the profession. However, as discussed below, if auditors depart because they are poor performers, departures may raise the average level competence of audit personnel. [↑](#footnote-ref-6)
7. The China Institute of Certified Public Accountants (CICPA), established in 1988, oversees the accounting/audit profession by developing Uniform CPA Examination, annually inspecting audit firms, penalizing the CPAs for their misconduct etc. similar to the roles played by the American Institute of Certified Public Accountants (AICPA) and PCAOB. http://www.cicpa.org.cn. [↑](#footnote-ref-7)
8. Before we started this project, we interviewed 60 auditors (including 20 partners, 20 managers, and 20 “rank and file” auditors) and asked them about their career consideration and why they wanted to leave the audit profession. About 80% of the auditors stated that the tremendous audit work pressure, especially during the peak season (between fiscal year end and audit report issuance date), is an important factor. More than 60% said that they spent six months a year traveling and could not spend enough time with their family. About 50% stated that auditing is complex but compensation levels do not match their effort. [↑](#footnote-ref-8)
9. Gul et al. (2013) find that more educated auditors tend to provide more aggressive audits. Therefore, such auditors do not necessarily provide higher quality audits. [↑](#footnote-ref-9)
10. These results are not specific to audit firms but provide some general insight into the effect of losing a client. [↑](#footnote-ref-10)
11. Huang et al. (2015) compare several groups with the baseline group (clients using the same audit firm and signing auditors). The comparison groups are clients using new audit firms and new signing auditors (*NEWBOTH* in their paper), clients using a different audit firm but the same signing auditors (*NEWFIRM* in their paper), and clients using the same audit firm but new signing auditors (*NEWPRTNR* in their paper). [↑](#footnote-ref-11)
12. Audit firms in the U.S. and Australia faced the fee pressure from clients and choose to outsource/offshore audit work overseas to reduce costs, raising the concerns about audit quality http://www.reuters.com/article/us-usa-audit-india-idUSBRE89F1GC20121016

http://www.accountantsdaily.com.au/latest-news/17-news/8377-pricing-pressure-hitting-accounting-firms-says-cba [↑](#footnote-ref-12)
13. Our study differs from Chen and Wang (2016) in several aspects: (1) while the focus of Chen and Wang (2016) is the reassessment of whether there is an individual auditor effect on audit quality, the scope of our paper is much broader. We examine both the determinants and consequences of auditor departure from audit profession. Understanding why auditors leave the profession helps to inform discussions on the loss of attractiveness of auditing as a career choice. (2) We investigate audit firm switch and audit fee changes, in addition to audit quality changes, after the auditor leaves public accounting. (3) While our analysis of audit quality following auditor departure complements Chen and Wang (2016) using a different setting and sample , our paper also shows that audit quality suffers if the departed auditor later becomes a corporate executive. [↑](#footnote-ref-13)
14. Project 211 institutions account for (top) 6% of all universities in China. It was initiated by the Chinese Ministry of Education in 1995. For more information and a complete list, please see https://en.wikipedia.org/wiki/Project\_211. [↑](#footnote-ref-14)
15. Results do not change if we use all restatements. [↑](#footnote-ref-15)
16. In order to enhance domestic audit firms’ ability to compete with their international counterparts, the government has promulgated several policies since 2000 to encourage domestic audit firms to merge with each other. The Ministry of Finance (MOF) issued *The guidance regarding how to promote audit firms to become bigger and stronger* on May 26th, 2007 and *Guidance on how to accelerate the development of China’s audit industry* on October 3rd, 2009, aiming at establishing about ten big audit firms which have the core competitiveness and can provide comprehensive services at multinational locations. These policies led to merger waves in China’s audit industry. Largely due to mergers, the number of audit firms decreases from 72 in early 2000s to 44 now. [↑](#footnote-ref-16)
17. We also use the full sample and reach similar conclusions. [↑](#footnote-ref-17)
18. We also use modified audit opinion as the proxy for audit quality, and find similar results. [↑](#footnote-ref-18)
19. Our results do not change if use all restatements. [↑](#footnote-ref-19)
20. The CICPA maintains the historical personal profile for each CPA. We get the departed auditors’ personal profiles from the CICPA directly, which have been deleted from the website of the CICPA once they are no longer registered with the CICPA. [↑](#footnote-ref-20)
21. In China, signing auditors are CPAs with several years of auditing public clients and thus not necessarily partners. [↑](#footnote-ref-21)
22. Ten years ago, Big 4 audit firms were very popular for undergraduate students in China. The competition for a job offer from Big 4 was very fierce. Now more and more students consider banks, securities companies, and state-owned companies as their favorite job destinations. [↑](#footnote-ref-22)
23. We also use the average audit fees (*TOTAL\_FEE/NUM\_CLIENTS*) to replace *TOTAL\_FEE* and *NUM\_CLIENTS*, and find that auditors earning higher audit fees per client are less likely to depart. [↑](#footnote-ref-23)
24. There are about 44 audit firms in China, and no one has overwhelming market dominance. So the competition in Chinese audit market is very fierce. [↑](#footnote-ref-24)
25. http://www.economist.com/node/9507322 [↑](#footnote-ref-25)
26. 3 Reasons Why Small to Mid-sized CPA Firms Can’t Seem to Find Talent-and How to Address It https://tax.thomsonreuters.com/blog/organizations/accounting-firms/3-reasons-why-small-to-mid-sized-cpa-firms-cant-seem-find-talent-and-how-to-address-it/, accessed on 8/22/2016 [↑](#footnote-ref-26)
27. In China, the general retirement age is about 60 for state-owned sectors, while retirement age for non-state-owned sectors (including auditing) is more flexible. Our conversation with audit partners indicates that the retirement age for auditors is generally 60. [↑](#footnote-ref-27)
28. While in our main analyses we focus on non-switching clients, in sensitivity analyses we also use the full sample and reach similar conclusions that clients have lower audit fees but their audit quality does not change following their auditors’ departure. We also examine switching clients alone and find that their audit fees decrease significantly after the switch and audit quality drops marginally. [↑](#footnote-ref-28)
29. CSMAR includes all the top executives’ and directors’ personal profile information of publicly-traded firms since 1992. CSMAR collects the information from “Profile of Directors and Senior Managers” section of the firm’s financial report. [↑](#footnote-ref-29)