

The curse of the birthplace: The effect of auditor's hometown on audit quality

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Abstract: This study examines the effects of auditor's hometown on audit quality. We speculate that auditors from big cities accumulate more human capital during their childhood, and are more capable of providing high-quality audits after they start their careers. Consistent with our hypothesis, the results of this study show that auditors from big cities perform higher-quality audits compared with auditors from small towns. The results are robust to different model specifications and alternative measures of auditor's hometown and audit quality. Additional tests suggest that the 'hometown effect' on audit quality is moderated when the auditors receive higher education or gain more auditing experience. We also find a fee premium for auditors from big cities. Overall, this paper provides evidence that the auditor's birthplace and related childhood experience has a far-reaching influence on audit quality.

Keywords: audit quality; auditor; experience; social environments

1. Introduction

Recent studies have demonstrated that auditors' personal experiences, such as international working experience, Big 4 working experience, and social connections from past experiences, are essential determinants of audit quality (Chen, Dai, Kong, & Tan, 2017; Chu, Florou, & Pope, 2016; Gul, Wu, & Yang, 2013; He, Kothari, Xiao, & Luo, 2018; Wang, Yu, & Zhao, 2014). However, these studies have mostly focused on auditors' adulthood experiences, giving limited attention to how auditors' childhood experiences might affect audit quality. On the other hand, research in social science has provided evidence that the social environment of an individual's hometown is a significant factor shaping people's early-stage socialization process, and has a far-reaching impact on people's behaviors in the long term.

This paper tries to fill the gap in the literature investigating the association between the auditor's hometown and audit quality. The biggest challenge to dig into this research question is how to identify the auditor's hometown accurately. We overcame this issue by acquiring a set of private data from the Chinese Institute of Certified Public Accountants (CICPA). This dataset contains the personal ID of all certified public auditors in mainland China. Using the first 6 digits of auditors' personal ID, we could accurately establish the auditors' hometowns, as specific as to the county level.

The speculation that there might be a hometown effect in audit quality is relatively straightforward. Auditors grow up in their hometowns, and these social environments significantly affect the accumulation of human capital and the

development of comprehensive abilities, thereby affecting auditors' capabilities of conducting high-quality audits. Many sociological studies suggest that people's main personality traits are formed during their early life (especially from a person's birth to his/her adolescence), and remain relatively stable afterward (Gould, Lavy, & Paserman, 2011; Oetting, Donnermeyer, Trimble, & Beauvais, 1998). According to the socialization theory, the social environments of people's hometowns shape their values, skills, and behavioral patterns to a large extent (Grusec & Hastings, 2015). A survey conducted by the Medical Research Council¹, which lasted for over seventy years, also reached a similar conclusion that people's early life experience has a crucial and long-lasting influence on their adulthood in many aspects, such as health conditions, cognitive functions, and socio-economic outcomes (Richards & Wadsworth, 2004; Wadsworth, Kuh, Richards, & Hardy, 2006).

Building on the socialization theory, we argue that being from a big city or a small town affects the auditor's audit quality, as the auditor accumulates different levels of human capital in these different social environments. For instance, people in big cities have better access to high-quality education facilities such as universities, libraries, and museums (Yang, Huang, & Liu, 2014). Auditors from big cities are more

¹ This survey starts with an initial maternity survey of 13,687 of all births recorded in England, Scotland and Wales during one week of March, 1946, and a socially stratified sample of 5,362 singleton babies born to married parents was selected for follow-up. The participants in this survey have been studied 24 times. During the participants' childhood, the main aim of the survey was to investigate how the environment at home and at school affected physical and mental development and educational attainment. During adulthood, the main aim was to investigate how childhood health and development and lifetime social circumstances affected their adult health and function and how these change with age.

likely to receive better preliminary education; therefore, they can master broader knowledge in a better way, which is beneficial to their performance in their future auditing career. In addition, auditors from big cities have better neighborhoods (Roca & Puga, 2017). Being around highly educated people helps auditors from big cities to become smarter and more creative, and accumulate more human capital (Lucas, 1988). Also, big cities are usually ‘melting pots,’ where people of different races and religious beliefs gather. Having more opportunities to meet different people at a young age, auditors from big cities tend to develop better social skills (Jovanovic & Rob, 1989) and are more likely to be able to cooperate with teammates and interact with clients successfully (Glaeser, 1999).

To empirically test the association between the auditor’s hometown and audit quality, we use a sample of Chinese listed firms from 2006 to 2015. We choose China as the study’s setting for three reasons. First, as a large emerging economy, China is still in the process of urbanization. According to statistics reported by the State Statistical Bureau, the urbanization rate in China was 59.58% at the end of 2018², indicating that nearly half of the population are still living in small towns. As there exist great disparities between big cities and small towns, the variation in social environments across different areas makes China a good context to examine our research question. The second advantage is the availability of data. Listed firms in China are required to publicly disclose the signing auditors’ names in the audit reports,

² http://www.gov.cn/shuju/2019-08/16/content_5421576.htm.

and privately report individual auditors' personal information (e.g., civil identification number, birthday, major, and so on) to the CICPA. Using these data, we are able to empirically test the relation between auditor hometown and audit quality. Finally, audit firms in China have been required to report the pre-audited earnings of their clients to the Ministry of Finance since 2006. We obtained this dataset from CICPA and use audit adjustment as a proxy for audit quality. As documented by Lennox, Wu, and Zhang (2016), audit adjustment is a more direct measure of audit outcomes since it is not contaminated with non-accounting factors, such as firms' fundamental performance and real earnings management. Using this proxy, we can better identify the association between the auditors' hometown and audit quality.

Specifically, we examine whether audit quality varies between auditors from big cities and auditors from small towns. We distinguish big cities from small towns based on the administrative level of the auditors' hometowns. Our findings reveal that audit quality is higher when audits are performed by auditors from big cities (cities of higher administrative levels). The results are robust to a variety of tests on alternative measures and model specifications. Additional analyses show that obtaining higher education or more auditing experience could weaken the association between the auditors' hometown and audit quality; we also find a fee premium for auditors from big cities, indicating that clients are willing to pay more for the higher-quality audits provided by auditors from big cities. Our study contributes to the extant literature in two ways. First, we provide novel insights into the relationship between auditors' characteristics and audit quality, examining whether and how auditors' childhood

experiences affect audit quality. Specifically, we study how audit quality varies for auditors from areas with different social environments. Prior studies have provided mounting evidence that auditor experience has a significant influence on audit quality (Gul et al., 2013; Chen et al., 2017; He et al., 2018). However, most of these studies focus on auditors' adulthood experience, and neglect the important influence of early-life experience on audit quality. This study bridges this gap in previous literature by showing that auditors' experience at their young age also affects audit quality. Second, our study contributes to understanding the determinants of auditors' competency. Auditors' competency has a crucial impact on audit quality. Prior research has mainly focused on how auditors' competence is influenced by career experiences, such as industry expertise, Big 4 experience, and co-operating working experience with teammates (Cahan & Sun, 2015; Ittonen, Johnstone, & Myllymäki, 2015; Su & Wu, 2016). Little is known about whether and how auditors accumulated human capital in their early life fosters their career performance in the long run. This study supplements this line of research by investigating the relation between auditor hometown and audit quality.

The remainder of this paper is organized as follows. In the next section, we review the relevant literature. Section 3 introduces the institutional background and develops the research hypothesis. Section 4 explains the research design. Section 5 reports the empirical results. Section 6 presents the results of the robustness tests and additional tests. Section 7 presents some conclusions.

2. Literature review

Recent auditing literature has provided evidence that individual auditors do not offer a consistent level of quality across the audit firm, and individual audit partners have different styles (Reynolds & Francis, 2000; DeFond & Francis, 2005; Francis, 2011; Defond and Zhang, 2014; Knechel, Vanstraelen, & Zerni, 2015). For example, Gul et al. (2013) found that partner fixed-effects are incrementally significant after the audit firm and audit office fixed-effects are controlled, thereby concluding that individual partners differ systematically in their levels of audit quality. Given that the individual auditors are important drivers of audit quality, much research has been conducted focusing on the level of individual auditors.

Previous studies explored how auditors' characteristics affect audit outcomes from the perspectives of age, gender, work expertise, workload, career experience, and personal relationships. For instance, Sundgren and Svanström (2014) and Goodwin and Wu (2016) find older audit partners provide lower-quality audits because they had fewer career concerns and were less willing to supply more effort. Hardies, Breesch, and Branson (2016) and Cameran, Campa, and Francis (2016) reported that female auditors provide higher audit quality. Chin and Chi (2009) find that when audit partners have more considerable industry expertise, accounting restatements are less likely to occur. Similarly, using accruals and audit opinions as audit quality proxies, Chi and Chin (2011) find partners' expertise is related to higher audit quality. He et al. (2018) argue that early career experience has a significant influence on a partner's mindset, and they find an audit partner's professional skepticism depends on the economic conditions when the partner first entered the auditing profession. Guan, Su, Wu, and

Yang (2016) discover auditors that attended the same university as their clients' executives are more likely to issue favorable audit opinions. Chen, Dai, Kong, and Tan (2017) document that auditors with international working experience produce audits of higher quality. In terms of partners' busyness, the findings are inconclusive. Lai, Sasmita, Gul, Foo, and Hutchinson (2016) and Gul, Ma, and Lai (2017) find auditors with multiple clients are associated with lower earnings quality, while Goodwin and Wu (2016) argue that busyness is optimally chosen by the partner, and in equilibrium there is no causal relationship between busyness and audit quality.

Though there is fruitful evidence on individual auditors' characteristics and audit quality, a limitation of this body of literature is that most studies focused on auditors' adulthood experience, ignoring the effect of auditors' early life experience on audit quality. Our study fills this gap investigating the association between audit quality and auditors' early life experience from the perspective of auditor hometown's social environments.

3. Institutional background and research hypothesis

3.1 Institutional background

The economic conditions and social environments in China vary from place to place. Enormous social and economic disparities between urban and rural areas (or big cities and small towns) are significant features of the Chinese context and have profound institutional origins. In China, the government controls a large amount of resource, and plays a leading role in resource allocation, which is based on top-to-down plans.

In China, there are four administrative levels for cities; from the higher to the

lower level, they are directly-controlled municipalities, sub-provincial cities, prefecture-level cities, and county-level cities (or counties). In the process of resource allocation, the government considers the administrative level of a city as a significant factor. Usually, the government allocates more abundant resources to cities with higher administrative levels as they play a leading role in the central government's regional developmental strategy. Given the exceptional support from the government, cities with higher administrative levels enjoy many privileges in infrastructure constructions and economic development. In addition, cities of higher administrative ranks also have more business-promotion policies, such as preferential tax policies and comprehensive business-supporting services, which contribute to attracting more promising investment projects and outstanding talents.

Considering the importance of the administrative ranking on cities' access to capital, resources, and beneficial policies, we construct our key variable based on the administrative level of the auditors' hometowns. We assume that a higher administrative level represents better social environments compared to lower levels.

3.2 Research hypothesis

The audit industry is a labor-intensive service industry (Francis, 2011), and audit quality is ultimately determined by individual auditors' competence, or comprehensive abilities (Nelson, 2009; Nelson & Tan, 2005). The auditor's competence has long been seen as an essential determinant of audit quality, and professional organizations, such as the International Federation of Accountants (IFAC), have developed a competency framework for accounting technicians, stressing the importance of audit competencies,

such as professional knowledge, problem-solving, decision making, communication, and teamwork (IFAC, 2019). We speculate that auditors who grew up in big cities perform better in these competencies, thus conducting higher-quality audits.

According to the literature in sociology, people learn about social cultures, and develop values, behavioral patterns, and skills in the process of socialization (Grusec & Hastings, 2015). The primary period of socialization is from birth to adolescence. During this period, people develop their main personality traits, which remain relatively stable and have a long-lasting imprint. Given that the hometown is the place where people spend most of their time during the primary period of socialization, the social environments in people's hometown play a crucial role in the socialization process (Gould et al., 2011; Massey & Denton, 2013; Mayer & Jencks, 1989; Sampson, Morenoff, & Gannon-Rowley, 2002; Sharkey & Faber, 2014).

Research in sociology and economics has provided extensive evidence that the social environments in which people grow up are closely related with human socialization, and significantly affect people's future outcomes in both family and career (Sampson et al., 2002; Chetty & Hendren, 2016a, 2016b; Bacolod, Blum, & Strange, 2009; Chetty, Hendren, Kline, & Saez, 2014; Roca & Puga, 2017). For instance, Glaeser (1999), Glaeser and Mare (2001), and Baum-Snow & Pavan (2011) show that people who spend their childhood in big cities accumulate more human capital and master more skills than people who grow up in small towns. Zhao, Ye, Li, and Xue (2017) reveal that people from urban areas develop better cognitive skills than those from rural areas.

We assume that, compared to auditors from small towns, auditors from big cities may perform higher-quality audits, as the social environments in big cities are beneficial to the development of auditors' comprehensive abilities. One important reason is that big cities provide more and better educational opportunities. In China, there is a massive gap in education accessibility and quality across different areas (Hannum & Meiyan, 2006; Hannum, 1999; Qian & Smyth, 2008; Yang et al., 2014). Big cities enjoy more privileges in obtaining economic resources from the central government than small towns and have more money to fund education, including recruiting more capable teachers and providing more advanced teaching facilities. Also, having enough capital and resources, in big cities there are better infrastructures and cultural amenities, such as childcare centers, learning centers, libraries, museums, and so on. Thus, auditors who grow up in big cities can enjoy more educational opportunities and better education in the early years than those from small towns. As education at a young age plays a crucial role in the improvement of people's comprehensive skills (Lucas, 1988; Heckman, 2000; Cunha, Heckman, Lochner, & Masterov, 2006; Cunha & Heckman, 2007), auditors from big cities enjoy some benefits in human capital accumulation since their preliminary education is based on solid grounds, and they can master more skills during childhood in their hometown (Heckman, 2005).

In addition, auditors from big cities have more opportunities to interact with outstanding people, helping them to learn from others and enhance their personal competencies. In big cities, people are more likely to have high-quality neighborhoods

(Roca & Puga, 2017). As an old Chinese proverb goes ‘The person who lives with cripples will soon learn to limp,’ neighborhoods have a strong imprint on people. Previous literature in sociology and economics show that neighborhoods impact people’s visions, behaviors, and future achievements greatly (Gould et al., 2011; Massey & Denton, 2013; Sampson et al., 2002; Sharkey & Faber, 2014), as there is a human capital spillover effect among people who live close to each other (Lucas, 1988). Living in big cities provides people with more opportunities to learn from outstanding people, making them more open-minded and creative (Jencks and Mayer, 1990; Small & Newman, 2001).

Also, auditors from big cities have more opportunities to meet and interact with people from different backgrounds at a young age. Thus, they develop better social skills, such as communication and cooperation skills. Big cities are usually ‘melting pots’ in a country. People of different races and religious beliefs come from different states and countries and gather in big cities. With more opportunities to meet different people at young ages, auditors from big cities tend to develop better people skills (Jovanovic and Rob, 1989), and are likely to be better cooperate with teammates and interact with clients (Glaeser, 1999). Therefore, auditors from big cities can communicate with clients and co-operate with teammates more effectively, thereby improving audit quality.

In summary, we hypothesize that auditors from big cities are more likely to accumulate more human capital, thus showing higher audit competency in aspects related to professional knowledge, problem-solving, decision making, communication,

and teamwork, which further contribute to the improvement of audit quality. Based on this argument, we propose the following hypothesis:

H1: Auditors from big cities conduct higher-quality audits than auditors from small towns.

4. Sample and methodology

4.1 Sample selection

Our research sample included Chinese listed firms from 2006 to 2015. We choose this sample period because we use audit adjustment as our primary measure of audit quality, and the audit adjustment data are only available for this period. When screening the sample, we exclude: (1) observations in the financial industry, and (2) observations with missing values for key variables and control variables in the main results. In China, each audit report is signed by two auditors; thus, we conduct our main test using observations at the individual-client-year level. The final sample includes 30,288 observations. We winsorized all continuous variables in our study at the 1st and 99th percentiles.

Our data come from multiple sources. We obtained the data concerning individual auditors' personal ID, personal characteristics, audit adjustments, and audit office location from the CICPA, the financial restatement data from the Chinese Research Data Services Platform (CNRDS) database, GDP and population data from the CEInet Statistics database, and other financial and corporate governance data from the China Stock Market and Accounting Research (CSMAR) database.

4.2 Model specifications

To test our hypothesis that auditors from big cities conduct higher-quality audits than auditors from small towns, we run the following model (1):

$$Audit\ Quality = \beta_0 + \beta_1 Hometown + \sum Controls + OfficeAdd + Industry + Year + \varepsilon \quad (1)$$

In model (1), the dependent variable is audit quality. We construct two measures as proxies for audit quality using audit adjustments: (1) *Adjust_dum*, a dummy variable that equals 1 when the earnings are adjusted by auditors, and 0 otherwise; (2) $|Adjust_ratio|$, the absolute magnitude of the earnings adjustments scaled by the absolute value of pre-audit earnings. In particular, $|Adjust_ratio_{it}|$ equals $(|Earn_aud_{it} - Earn_pre_{it}|)/|Earn_pre_{it}|$ if the earnings are adjusted (i.e., when $Earn_aud_{it} \neq Earn_pre_{it}$), and equals 0 if the earnings are not adjusted. In the equation, $Earn_aud_{it}$ corresponds to audited earnings and $Earn_pre_{it}$ to pre-audit earnings. Compared to traditional audit quality measures, such as abnormal accruals, audit opinion, and earnings response coefficients (ERCs), audit adjustments can capture audit quality more directly as they can difference out the influence of non-accounting factors (Lennox, Wu, & Zhang, 2014; Lennox, Wang, & Wu, 2018). We estimated model (1) using the Tobit model when we use $|Adjust_ratio|$ as a proxy for audit quality because $|Adjust_ratio|$ is truncated at zero.

The independent variable in model (1) is *Hometown*. As there are four city administrative levels in China. From high to low, they are direct-controlled municipalities, sub-provincial cities, prefecture-level cities, county-level cities (or

counties). We construct the variable *Hometown* based on the administrative level: a higher value of *Hometown* indicates a larger city and better social environments. For instance, if an individual auditor was born in a directly controlled municipality, *Hometown* equals 4. Similarly, we assign values 3, 2, and 1 to sub-provincial cities, prefecture-level cities, and county-level cities (or counties), respectively. The administrative levels of some major cities in China are listed in Appendix A. According to hypothesis 1, we expect the coefficient on *Hometown* to be significantly positive.

Following previous literature (Lennox et al., 2014; Lennox et al., 2018), we control for a vector of variables that may affect audit adjustments. The controls include client characteristics, auditor firm characteristics, and individual auditor characteristics. For client characteristics, we control for firm size (*Size*), measured as the natural logarithm term of total assets; leverage (*Lev*), measured as the total liabilities scaled by total assets; profitability (*ROA*), measured as net income divided by total assets; firm age (*Age*), calculated as the natural log of the client's age plus 1. We also include variables related to client's corporate governance: *BoardSize*, which equals the natural log of the number of board members plus 1; *BoardMeeting*, calculated as the natural log of the number of board meetings held during the year plus 1; *IndependDir*, measured as the ratio of independent directors in the board; and *AuditCom*, a dummy variable that equals 1 when the client sets up an audit committee, and 0 otherwise; *M&A*, which equals 1 when the client engages in material merger or acquisition during that fiscal year, and 0 otherwise; analyst following (*Analyst*), calculated as the natural log of the number of analysts following the client plus 1.

For audit firm characteristics, we control for *Big4*, which equals 1 when a firm is audited by Big 4 auditors, and 0 otherwise; Audit firm switches (*Switch*), which equals 1 if the audit firm is in the first year of tenure, and 0 otherwise; Audit firm tenure (*Tenure_firm*), which equals the natural log of the number of consecutive years the audit firm audited the client plus 1.

For individual auditor characteristics, we controlled for audit tenure (*Tenure_auditor*) and auditor gender (*Female*). In addition, we control for the fixed-effect of the administrative level of the city where the audit office is located (*OfficeAdd*), as it is possible that the location of the audit office is related to audit quality (i.e., offices in big cities may exhibit higher audit quality because of knowledge spillover effects), and auditors from big cities may be more likely to work in big cities. Year and industry fixed-effects are also included, and standard errors are clustered by client level. The detailed variable descriptions are provided in Appendix B.

5. Empirical results

5.1 Descriptive statistics

Table 1 presents the distribution of the administrative levels of auditors' hometowns. Panel A shows the distribution of the administrative levels, and Panel B presents the distribution of individual auditors' origins. As shown in Panel A of Table 1, the majority of audit engagements in our sample is conducted by auditors from prefecture-level cities (9,097 observations, 30.03% of the entire sample). In addition, 26.59% of auditors in our sample were born in county-level cities or counties (8,055 observations), 24.21% in sub-provincial cities (7,334 observations), 19.16% in directly-controlled

municipalities (5,802 observations). Panel B shows that there is a total of 3,630 individual auditors in our sample. Similar with the sample distribution shown in Panel A, most auditors are from county-level cities (1,218 auditors, 33.55% of the total number of auditors) or prefecture-level cities (1,099 auditors, 30.28% of the sample), followed by auditors from sub-provincial cities (723 auditors, 19.92% of the sample) and directly-controlled municipalities (590 auditors, 16.25% of the sample). The statistics indicate that the origin of the auditors in our sample is not concentrated on certain administrative levels; the number of auditors from cities of different administrative levels does not vary much and is relatively comparable.

Insert Table 1

Table 2 presents the summary statistics of the main variables in our sample. The mean value of *Adjust_dum* is 0.605, indicating that audit adjustments occur on 60.05% of audit engagements, which is similar to the percentage of 67.09 in Lennox et al. (2014). The mean value of $|Adjust_ratio|$ is 0.096, showing that the average ratio of audit adjustments made by auditors to pre-audit earnings is 9.6% in our sample. The standard deviation of $|Adjust_ratio|$ is 0.303, indicating that there are significant variances in the magnitude of audit adjustments to pre-audit earnings across different clients. The mean (median) value of *Hometown* is 2,359 (2,000). All firms in our sample have an average (median) size of 21,735 (21,611) in the logarithm form of total assets (*Size*). The average (median) size of the board (*BoardSize*) is 8.70 (9.00). The ratio of independent

directors on the board (*IndependDir*) ranges from 5.2% to 57.1%. A percentage of 5.6% of companies in the sample are involved in a material merger or acquisition transaction (*M&A*). The mean value of *Big4* shows that 3.8% of all companies in our sample are audited by Big 4 audit firms, and this ratio is in line with prior literature. On average, 13.1% of companies switch their audit firm (*Switch*). The mean value of audit tenure at the audit firm level (*Tenure_firm*) and the individual auditor level (*Tenure_auditor*) is 1,795 and 1,225, respectively. On average, 29.6% of all signing auditors are female. Other financial variables of our sample are also in consistent with the latest studies.

Insert Table 2

5.2 Regression results

Table 3 reports the regression results of model (1). Column (1) shows the results using *Adjust_dum* as the dependent variable, and Column (2) shows the results with *|Adjust_ratio|* as the dependent variable. As shown in Table 3, the coefficients on *Hometown* are significantly positive for both *Adjust_dum* (0.082, z-stat.=4.34) and *|Adjust_ratio|* (0.012, z-stat.=3.47). The results suggest that audit adjustments are significantly more frequent, and the magnitude of audit adjustments is significantly larger for auditors from big cities. The results support our hypothesis that the auditors born in big cities are more capable of providing high-quality audits compared to auditors from small towns. Our results are also economically significant. For instance,

a one-standard-deviation increase in *Hometown* implies a 3.75%³ increase in the likelihood of audit adjustments. In summary, these findings suggest that individual auditors born in big cities deliver higher audit quality than auditors born in small towns.

The results for the control variables are in line with previous studies. For instance, in the *Adjust_dum* model, board meetings (*BoardMeeting*), analyst following (*Analyst*), audit firm switches (*Switch*), and audit tenure at the audit firm level (*Tenure_firm*) and individual auditor level (*Tenure_auditor*) are all positively related to the probability of audit adjustments. On the other hand, company size (*Size*), financial leverage (*Lev*), company age (*Age*), and Big 4 audit firms (*Big4*) are negatively connected with the likelihood of audit adjustments. In the *Adjust_ratio* model, financial leverage (*Lev*), board meetings (*BoardMeeting*), the ratio of independent directors (*IndependDir*), audit firm switches (*Switch*), and audit tenure at audit firm level (*Tenure_firm*) and individual auditor level (*Tenure_auditor*) are all significantly positive, suggesting the positive effects of these factors on the magnitude of audit adjustments. On the contrary, a company with a larger size (*Size*), higher profitability (*ROA*), and Big 4 audit firms (*Big4*) will receive fewer audit adjustments, suggesting a negative impact of these indicators on audit adjustments.

Insert Table 3

³ The coefficient value (0.082) is multiplied by the standard deviation of *Adjust_dum* (0.489) and divided by the standard deviation of *Hometown* (1.070).

6. Robustness tests

6.1 Sub-sample of auditors working in big cities

There is a possibility that auditors born in big cities tend to work in big cities as well. Therefore, our results may be capturing a working-city effect, rather than the hometown effect. To alleviate this concern, we run a robustness test to re-examine the relation between auditor's hometown and audit adjustments using a sub-sample that only include auditors working in big cities. This could help us to rule out the potential working-city effect, because all the auditors in this sub-sample work in big cities, while may be born either in big cities or small towns.

Specifically, we maintain an observation in our sub-sample if an auditor works in directly controlled municipalities (the administrative level 4), and exclude observations if the auditors work in cities with lower administrative levels (i.e., 3 or lower). This results in a sub-sample of 11,296 observations (1,602 individual auditors). In this sub-sample, 43.81% of auditors (4,949 observations, 518 individual auditors) were born in directly controlled municipalities (*Hometown=4*), 11.47% (1,296 observations, 188 individual auditors) in sub-provincial cities (*Hometown=3*), 24.05% (2,717 observations, 453 individual auditors) in prefecture-level cities (*Hometown=2*), and 20.66% (2,334 observations, 443 individual auditors) in county-level cities or counties (*Hometown =1*). The statistics indicates that the origin of the auditors in this sub-sample also varies in terms of administrative levels, and the number of auditors from cities of different administrative levels is relatively comparable.

Table 4 displays the regression results using the sub-sample of auditors working

in big cities. As shown in Table 4, the coefficient on *Hometown* remains significantly positive with a value of 0.176 in Column (1) (z-stat=6.46), and a value of 0.032 in Column (2) (z-stat=5.33). The above results show that the hometown effect on audit quality still holds in the sub-sample of auditors working in big cities, and suggest that our previous findings were not driven by the effect of working in big cities for auditors who were born there.

Insert Table 4

6.2 Alternative measures of audit quality

To confirm the credibility of our results, we use two alternative measures of audit quality. The first measure is $|Adjust_ratio|$, the absolute magnitude of earnings adjustments scaled by the lagged total assets. Specifically, it equals $100 * (|Earn_aud_{it} - Earn_pre_{it}|) / Asset_{it-1}$.⁴ The second measure is *Restate*, a dummy variable that equals 1 if the financial statement is restated, and 0 otherwise. When using *Restate* as a proxy for audit quality, we run the following model (2):

$$Restate = \beta_0 + \beta_1 Hometown + \sum Controls + OfficeAdd + Industry + Year + \varepsilon \quad (2)$$

In model (2), the dependent variable is *Restate*; it equals 1 if a company's financial

⁴ *Earn_aud_{it}* corresponds to the audited earnings, and *Earn_pre_{it}* to the pre-audit earnings. Multiplying the value by 100 does not change the structure of the initial data.

report is restated, and 0 otherwise. We also control for variables such as client characteristics, auditor firm characteristics, and individual auditor characteristics.

For client characteristics, we control for firm size (*Size*), measured as the natural logarithm term of the total assets; leverage (*Lev*), measured as the total liabilities scaled by total assets; profitability (*ROA*), measured as the net income divided by total assets; cash flow (*CashFlow*), calculated as net operating cash flow scaled by total assets; inventory (*Inventory*), calculated as net inventory scaled by total assets; growth opportunities (*Growth*), measured as Tobin's Q; and audit opinion (*Opinion*), which equals 1 when a company received a modified opinion in the previous year and 0 otherwise. For audit firm characteristics and individual auditor characteristics, we control for the same variables as in model (1). Other variables in model (2) are the same as defined in model (1).

The empirical results are reported in Table 5. In Column (1) of Table 5, the coefficient on *Hometown* remains significantly positive with a value of 0.066 (z-stat=3.68). In Column (2), we continue to find a significant coefficient on *Hometown*, with a value of -0.160 (z-stat=-4.12). The results indicate that the probability of financial restatement is lower for audits conducted by auditors from bigger cities. In summary, the above results suggest that our results still hold when using alternative measures of audit quality.

Insert Table 5

6.3 Alternative measures of auditors' hometowns

To confirm the robustness and credibility of our results, we utilize alternative measures of the auditor's hometown and rerun the regressions. Specifically, we use the following measures: (1) Big city indicator (*BigCity*). *BigCity* equals 1 when *Hometown* equals 4, and 0 otherwise; this measure captures whether or not an auditor comes from a big city; (2) Economic development (*GDP*), calculated as the natural log of GDP of the auditor's hometown: a higher *GDP* indicates better social environment of a city; (3) Population (*Population*), calculated as the natural log of the population of the auditor's hometown. Higher values of *GDP* and *Population* indicate bigger cities and better social environments. According to our hypothesis, we predict the estimated coefficients on these variables to be significantly positive.

Table 6 presents the robustness test results using the alternative measures of the auditor's hometown. As shown in Table 6, the coefficients on *BigCity*, *GDP*, and *Population* are all significantly positive. These findings also confirm that individual auditors born in big cities can provide higher-quality audits.

Insert Table 6

6.4 Replacing the sample with firm-year observations

In our main analysis, we use observations at the individual-client-year level as each audit report is signed by two auditors in China. In this additional analysis, we replace our sample by using firm-year observations. Our new sample consists of 16,845 firm-

year observations. In this robustness test, we replace the independent variable, namely the administrative level of each individual auditor's hometown (*Hometown*), with the average administrative level of the two signing auditors' hometowns (*Hometown_avg*). Other control variables at the individual auditor level are also replaced with the mean values of the two signing auditors. The empirical results are reported in Table 7. The coefficients on *Hometown_avg* both remain significantly positive (0.131, z-stat.=4.40 in Column (1); 0.020, z-stat.=3.53 in Column (2)), which is in line with the results reported in Table 3. Moreover, we also divide the whole sample into two sub-samples: the engagement partners and the review partners. Our results still hold for both sub-samples.

Insert Table 7

6.5 Controlling for audit firm fixed effect

To better identify the effects of the auditor's hometown on audit quality, we need to rule out the effects of audit firms, as each firm might have specific preferences for auditors from certain areas. Thus, we further control for the fixed-effects of audit firm to address the potential problem of time-invariant omitted variables at the audit firm level.

The empirical results are reported in Table 8. As shown in Table 8, the coefficients on *Hometown* are both positive and significant (0.056, z-stat.=2.89 in Column (1); 0.008, z-stat.=2.40 in Column (2)). These results confirm that the auditor's

hometown still has a significant impact on audit quality after controlling for the audit firm fixed-effect.

Insert Table 8

6.6 Placebo test

Another concern about the reliability of our results is that there may be some omitted variables coinciding with the auditor's hometown, which drive our results. We address this possibility by conducting a placebo test. Specifically, we disrupt the proper assignment of hometowns to auditors and randomly match hometown cities with auditors. The distribution of the auditors' hometowns remains the same as the one in our baseline regressions. If an unobservable factor drives our results, we would still find significant results after the randomization. However, if no such unobservable factor exists, our incorrect assignments of hometowns to auditors should weaken the results.

The independent variable used for this analysis was *Hometown_random*. We rerun model (1) after replacing *Hometown* with *Hometown_random*. After 100 times of random assignments, we draw the distribution diagram of the t-values of the estimated coefficients on independent variable *Hometown_random*. The results are shown in Figure 1, which shows that most t-values of the coefficients on *Hometown_random* are around 0, and are not statistically significant. The results indicate that our findings are not over-identified.

Insert Figure 1

7. Additional tests

7.1 *The moderating effects of education*

According to our hypothesis, the social environments of an individual auditor's hometown is a significant factor influencing the auditor's early-stage socialization process and has a far-reaching impact on audit quality in the long term. However, socialization is a process that lasts throughout one's life. Even though people accomplish primary socialization during childhood, they continuously gain knowledge and learn concepts and norms after they enter adulthood (Cunha & Heckman, 2007). Such 'continuous socialization' or 'second socialization' indicates that even though an auditor comes from a small town, and did not enjoy any advantages in developing skills during childhood, he/she can still make up for it when he/she enters adulthood.

Previous literature notes that getting advanced education is an effective way to alleviate the disadvantages related to hometown origins (Hout, 1984, 1988; Mare, 1980, 1981). For instance, Xu (2017) proves that the effects of a disadvantaged background were weakened for people who received a college education, because university provides fair and open learning environments for people from various social backgrounds, and improves people's non-cognitive skills for future careers. Sharkey and Torrats-Espinosa (2017) and Xu (2017) also find college education could narrow the ability gap between individuals from different social backgrounds. Therefore, we test whether receiving higher education could alleviate the influence of the auditor's

hometown on audit quality, running model (3):

$$\begin{aligned} \text{Audit Quality} = & \beta_0 + \beta_1 \text{Hometown} + \beta_2 \text{Hometown} * \text{Education} + \beta_3 \text{Education} + \sum \text{Controls} \\ & + \text{OfficeAdd} + \text{Industry} + \text{Year} + \varepsilon \end{aligned} \quad (3)$$

where *Education* equals 1 if an individual auditor obtained a Bachelor's degree or above, and 0 otherwise. *Hometown*Education* is the interaction term of *Hometown* and *Education*. Other variables in model (3) are the same as defined in model (1). According to our assumption, the coefficient on *Hometown*Education* is expected to be negative and statistically significant.

Table 9 presents the results for model (3). We find significantly negative coefficients on *Hometown*Education* in both Column (1) (coefficient=-0.142, z-stat.=-3.86) and Column (2) (coefficient=-0.027, z-stat.=-3.66). The estimated coefficients on the interaction term *Hometown*Education* and *Hometown* are in opposite directions, indicating a negative moderating effect of *Education*. This suggests that obtaining a Bachelor's degree or above mitigates the difference in audit quality between individual auditors from different hometowns. In addition, the results for the control variables in Table 9 are in accordance with those in Table 3, which are in line with the findings of previous studies. The findings above imply that even though auditors from big cities exhibit higher audit quality because of the advantaged social environments in their hometowns, college education in adulthood can still contribute to making up for the disadvantages of auditors from small towns in accumulating human capital.

Insert Table 9

7.2 *The moderating effects of auditor experience*

Another critical factor that plays a crucial role in an individual's 'continuous socialization' or 'second socialization' is the working experience, through which people develop personal skills. The extant literature has reached a consensus that audit experience helps individual auditors make more accurate audit judgments, thanks to the more adequate and comprehensive information acquired in previous engagements, resulting in higher audit quality (Cahan & Sun, 2015). After engaging in vast audits, auditors can acquire adequate information and develop a meaningful and comprehensive memory structure. Therefore, we test whether sufficient audit experience could make up for the disadvantages related to being born and raised in small towns, and help to reduce the gap in audit quality between auditors from small towns and big cities.

To test whether gaining more auditing experience could weaken the influence of auditor hometown on audit quality, we add the interaction terms between the auditor's hometown and individual auditors' experience to model (1), and run model (4) as follows:

$$\begin{aligned} \text{Audit Quality} = & \beta_0 + \beta_1 \text{Hometown} + \beta_2 \text{Hometown} * \text{Experience} + \beta_3 \text{Experience} + \\ & \sum \text{Controls} + \text{OfficeAdd} + \text{Industry} + \text{Year} + \varepsilon \end{aligned} \quad (4)$$

In model (4), *Experience* is an indicator of more experienced auditors. We define *Experience* based on the number of years an individual auditor had been working as an auditor. *Experience* equals 1 when the auditing experience exceeds the mean value of the sample, and 0 otherwise. *Hometown*Experience* is the interaction term of *Hometown* and *Experience*. Other variables in model (4) are the same as defined in model (1). According to our conjecture, the coefficient on *Hometown*Experience* is expected to be negative and statistically significant.

Table 10 presents the empirical results for model (4). The estimated coefficients on *Hometown*Experience* are both significantly negative (-0.092, z-stat.=-2.94 in Column (1); -0.017, z-stat.=-2.66 in Column (2)). The results indicate a negative moderating effect of *Experience* on the relation between the auditor's hometown and audit quality, suggesting that an experienced auditor could weaken the impact of his/her hometown on audit quality. Furthermore, the results for the control variables in Table 10 are in accordance with those in Table 3, which are in line with the findings of previous research. The findings above indicate that even though auditors from big cities exhibit higher audit quality because of the advantaged social environments in their early life, adequate experience in audit engagements can help mitigate the effects of the disadvantages in accumulating human capital for auditors from small towns.

Insert Table 10

7.3 *The auditor's hometown and audit fees*

In this section, we extend our study by testing the effect of the auditor's hometown on audit fees. Previous literature concludes that auditors charge higher fees for higher-quality audits (Francis, 1984; Palmrose, 1986). As auditors from big cities provide higher-quality audits than those from small towns, they are likely to charge higher audit fees. Therefore, we test the influence of the auditor's hometown on audit fees by running the following OLS regression of model (5).

$$AuditFee = \beta_0 + \beta_1 Hometown + \sum Controls + OfficeAdd + Industry + Year + \varepsilon \quad (5)$$

In model (5), the dependent variable is *AuditFee*, and other variables are the same as defined in model (2). Table 11 presents the results. In accordance with our prediction, the estimated coefficient on *Hometown* is positive and statistically significant (coefficient=0.0067, t-stat=2.63), suggesting that auditors from big cities charge higher audit fees. The coefficients on the control variables in Table 10 are also in line with prior literature. These findings provide further evidence of the effect of the auditor's hometown on audit fees.

Insert Table 11

7. Conclusions

In this study, we examine how the auditors' hometown affects audit quality. We

hypothesize that auditors from big cities perform higher-quality audits than auditors from small towns. This speculation was based on the assumption that auditors from big cities could enjoy more privileges in accumulating human capital and enhance comprehensive abilities, thus being more capable of conducting high-quality audits. Using a set of unique data in China from 2006 to 2015, the results of the analysis provide support for our hypothesis. The results hold consistently after using alternative measures of audit quality and auditor hometown and are robust to alternative model specifications.

Further analyses suggest that the relation between the auditor's hometown and audit quality is mitigated when the auditors obtain higher education or more auditing experience. In addition, we also find that there is a fee premium for auditors from big cities, suggesting that the clients pay more for the high-quality audits provided by auditors from big cities. Overall, our findings suggest that the social environment during auditors' childhood has a far-reaching effect on an auditor's audit quality.

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Table 1. Distribution of the auditors' hometowns.

Panel A. Sample distribution by the administrative level of the auditors' hometowns		
	# of Observations	% of Sample
Directly controlled municipalities (<i>Hometown</i> =4)	5,802	19.16%
Sub-provincial cities (<i>Hometown</i> =3)	7,334	24.21%
Prefecture-level cities (<i>Hometown</i> =2)	9,097	30.03%
County-level cities or counties (<i>Hometown</i> =1)	8,055	26.59%
Total	30,288	100.00%
Panel B. Distribution of individual auditors' origins		
	# of Auditors	% of Auditors
Directly controlled municipalities (<i>Hometown</i> =4)	590	16.25%
Sub-provincial cities (<i>Hometown</i> =3)	723	19.92%
Prefecture-level cities (<i>Hometown</i> =2)	1,099	30.28%
County-level cities or counties (<i>Hometown</i> =1)	1,218	33.55%
Total	3,630	100%

Notes: This table presents the distribution of our sample, partitioned by *Hometown*. *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments.

Table 2. Descriptive statistics.

Variables	N	Mean	Median	Std. Dev.	Min.	Max.
<i>Adjust_dum</i>	30,288	0.605	1.000	0.489	0.000	1.000
<i> Adjust_ratio </i>	30,288	0.096	0.006	0.303	0.000	2.349
<i>Hometown</i>	30,288	2.359	2.000	1.070	1.000	4.000
<i>BigCity</i>	30,288	0.192	0.000	0.394	0.000	1.000
<i>GDP</i>	30,258	16.428	16.734	1.775	12.733	18.860
<i>Population</i>	30,263	14.689	14.666	1.166	12.250	16.569
<i>Size</i>	30,288	21.735	21.611	1.255	18.839	25.522
<i>Lev</i>	30,288	0.461	0.453	0.238	0.046	1.359
<i>ROA</i>	30,288	0.038	0.036	0.063	-0.249	0.225
<i>Age</i>	30,288	2.649	2.708	0.399	1.386	3.332
<i>BoardSize</i>	30,288	2.163	2.197	0.200	1.609	2.708
<i>BoardMeeting</i>	30,288	2.275	2.303	0.326	1.609	3.136
<i>IndependDir</i>	30,288	0.369	0.333	0.052	0.286	0.571
<i>AuditCom</i>	30,288	0.860	1.000	0.347	0.000	1.000
<i>M&A</i>	30,288	0.056	0.000	0.229	0.000	1.000
<i>Analyst</i>	30,288	1.436	1.386	1.148	0.000	3.664
<i>Big4</i>	30,288	0.038	0.000	0.191	0.000	1.000
<i>Switch</i>	30,288	0.131	0.000	0.337	0.000	1.000
<i>Tenure_firm</i>	30,288	1.795	1.792	0.681	0.693	3.045
<i>OfficeAdd</i>	30,288	3.185	3.000	0.726	2.000	4.000
<i>Tenure_auditor</i>	30,288	1.225	1.099	0.484	0.693	2.833
<i>Female</i>	30,288	0.296	0.000	0.456	0.000	1.000

Notes: This table presents the summary statistics of the main variables in our sample. *Adjust_dum* is a dummy variable, which equals 1 when there is an audit adjustment to a company, and 0 otherwise; *|Adjust_ratio|* is the absolute magnitude of earnings adjustments scaled by the absolute value of pre-audit earnings, which equals $(|Earn_{aud_{it}} - Earn_{pre_{it}}|)/|Earn_{pre_{it}}|$, where *Earn_{aud_{it}}* is audited earnings and *Earn_{pre_{it}}* is pre-audit earnings. *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments. Refer to Appendix B for further definitions.

Table 3. The auditors' hometowns and audit quality.

<u>Variables</u>	<u>Adjust dum</u>	<u> Adjust ratio </u>
<i>Hometown</i>	0.082*** (4.34)	0.012*** (3.47)
<i>Size</i>	-0.145*** (-4.98)	-0.039*** (-6.59)
<i>Lev</i>	-0.230* (-1.78)	0.058** (2.14)
<i>ROA</i>	0.577 (1.55)	-0.752*** (-7.77)
<i>Age</i>	-0.200** (-2.48)	-0.020 (-1.64)
<i>BoardSize</i>	-0.112 (-0.71)	-0.011 (-0.44)
<i>BoardMeeting</i>	0.142* (1.96)	0.026** (2.05)
<i>IndependDir</i>	0.289 (0.53)	0.175* (1.81)
<i>AuditCom</i>	-0.087 (-1.27)	-0.002 (-0.17)
<i>M&A</i>	-0.027 (-0.35)	-0.005 (-0.30)
<i>Analyst</i>	0.070*** (2.70)	-0.006 (-1.39)
<i>Big4</i>	-1.627*** (-9.02)	-0.284*** (-8.49)
<i>Switch</i>	0.205*** (2.95)	0.049*** (3.45)
<i>Tenure_firm</i>	0.431*** (7.95)	0.066*** (6.86)
<i>Tenure_auditor</i>	0.106*** (2.85)	0.017** (2.39)
<i>Female</i>	0.012 (0.30)	0.000 (0.04)
Constant	3.044*** (4.14)	0.734*** (5.38)
<i>OfficeAdd</i> dummies	Yes	Yes
Industry dummies	Yes	Yes
Year dummies	Yes	Yes
Observations	30,284	30,288
Pseudo-R ²	0.07	0.08

Notes: This table presents how the auditor's hometown affects audit quality. The dependent variables are *Adjust_dum* in Column (1) and *|Adjust_ratio|* in Column (2). *Adjust_dum* is a dummy variable, which equals 1 when there is an audit adjustment to the auditee, and 0 otherwise; *|Adjust_ratio|* is the absolute magnitude of earnings adjustments scaled by the absolute value of pre-audit earnings, which equals $(|Earn_{aud_{it}} - Earn_{pre_{it}}|) / |Earn_{pre_{it}}|$, where $Earn_{aud_{it}}$ is audited earnings and $Earn_{pre_{it}}$ is pre-audit earnings. *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments. Refer to Appendix B for further definitions. The standard errors are clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 4. Robustness checks: Sub-sample of auditors working in big cities.

Variables	<i>Adjust_dum</i>	<i> Adjust_ratio </i>
<i>Hometown</i>	0.176*** (6.46)	0.032*** (5.33)
<i>Size</i>	-0.246*** (-5.75)	-0.060*** (-5.69)
<i>Lev</i>	-0.183 (-0.89)	0.069 (1.35)
<i>ROA</i>	0.742 (1.21)	-0.861*** (-4.51)
<i>Age</i>	0.037 (0.28)	0.014 (0.56)
<i>BoardSize</i>	-0.114 (-0.48)	-0.052 (-1.16)
<i>BoardMeeting</i>	0.070 (0.61)	0.018 (0.80)
<i>IndependDir</i>	1.485* (1.85)	0.423** (2.51)
<i>AuditCom</i>	-0.059 (-0.55)	-0.025 (-1.16)
<i>M&A</i>	0.150 (1.28)	0.026 (0.84)
<i>Analyst</i>	0.079** (1.96)	-0.003 (-0.34)
<i>Big4</i>	-1.392*** (-6.52)	-0.277*** (-6.06)
<i>Switch</i>	0.321*** (3.00)	0.085*** (3.27)
<i>Tenure_firm</i>	0.600*** (7.24)	0.110*** (6.41)
<i>Tenure_auditor</i>	0.120* (1.91)	0.014 (1.10)
<i>Female</i>	0.137** (2.21)	0.020 (1.58)
Constant	3.776*** (3.51)	0.944*** (3.98)
Industry dummies	Yes	Yes
Year dummies	Yes	Yes
Observations	11,292	11,296
Pseudo-R ²	0.11	0.10

Notes: This table presents the results obtained when using an alternative sample that contains only auditors working in big cities. The dependent variables are *Adjust_dum* in Column (1) and *|Adjust_ratio|* in Column (2). *Adjust_dum* is a dummy variable, which equals 1 when there is an audit adjustment to the auditee, and 0 otherwise; *|Adjust_ratio|* is the absolute magnitude of earnings adjustments scaled by the absolute value of pre-audit earnings, which equals $(|Earn_{audit} - Earn_{preit}|) / |Earn_{preit}|$, where *Earn_{audit}* is audited earnings and *Earn_{preit}* is pre-audit earnings. *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments. Refer to Appendix B for definitions of other control variables. The results are based on robust standard errors clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 5. Robustness checks: Alternative measures of audit quality.

Variables	<i> Adjust_ratioI </i>	<i>Restate</i>
<i>Hometown</i>	0.066*** (3.68)	-0.160*** (-4.12)
<i>Size</i>	-0.346*** (-9.56)	0.011 (0.19)
<i>Lev</i>	0.843*** (4.41)	0.290 (1.04)
<i>ROA</i>	-1.483** (-2.15)	-3.698*** (-4.96)
<i>Age</i>	-0.078 (-1.13)	0.075 (0.43)
<i>BoardSize</i>	-0.086 (-0.60)	
<i>BoardMeeting</i>	0.084 (1.24)	
<i>IndependDir</i>	1.116** (2.20)	
<i>AuditCom</i>	-0.125* (-1.66)	
<i>M&A</i>	0.026 (0.31)	
<i>Analyst</i>	0.131*** (5.01)	
<i>Big4</i>	-1.428*** (-7.28)	-0.921*** (-2.84)
<i>Switch</i>	0.504*** (4.52)	0.224 (1.36)
<i>Tenure_firm</i>	0.336*** (6.65)	-0.018 (-0.18)
<i>Tenure_auditor</i>	0.036 (0.99)	0.005 (0.06)
<i>Female</i>	-0.006 (-0.17)	-0.001 (-0.01)
<i>CashFlow</i>		-2.169*** (-3.64)
<i>Inventory</i>		-0.653 (-1.56)
<i>Growth</i>		0.026 (1.11)
<i>Opinion</i>		0.037 (0.19)
Constant	6.054*** (8.00)	-1.491 (-1.18)
<i>OfficeAdd</i> dummies	Yes	Yes
Industry dummies	Yes	Yes
Year dummies	Yes	Yes
Observations	28,276	27,638
Pseudo-R ²	0.03	0.09

Notes: This table presents the robustness test results of alternative measures of audit quality. The dependent variables are *|Adjust_ratioI|* in Column (1) and *Restate* in Column (2). *|Adjust_ratioI|* is the absolute magnitude of earnings adjustments scaled by the lagged total asset, and then multiplied for 100, which equals $100 * (|Earn_{audit} - Earn_{pre_{it}}|) / Asset_{t-1}$, where *Earn_{audit}* is audited earnings and *Earn_{pre_{it}}* is pre-audit earnings. *Restate* is a dummy variable, which equals 1 if a client's financial report is restated in later years and 0 otherwise; *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments. Refer to Appendix B for the definitions of other control variables. The results are based on robust standard errors clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 6. Robustness checks: Alternative measures of the auditor's hometown.

Variables	<i>Adjust_dum</i>	<i> Adjust_ratio </i>	<i>Adjust_dum</i>	<i> Adjust_ratio </i>	<i>Adjust_dum</i>	<i> Adjust_ratio </i>
<i>BigCity</i>	0.558*** (9.10)	0.089*** (7.65)				
<i>GDP</i>			0.069*** (6.06)	0.010*** (4.81)		
<i>Population</i>					0.106*** (6.07)	0.016*** (4.96)
<i>Size</i>	-0.145*** (-5.03)	-0.039*** (-6.68)	-0.144*** (-4.98)	-0.039*** (-6.61)	-0.144*** (-4.95)	-0.039*** (-6.59)
<i>Lev</i>	-0.202 (-1.58)	0.062** (2.33)	-0.223* (-1.73)	0.059** (2.18)	-0.229* (-1.78)	0.058** (2.16)
<i>ROA</i>	0.577 (1.55)	-0.751*** (-7.78)	0.564 (1.52)	-0.755*** (-7.81)	0.570 (1.53)	-0.754*** (-7.80)
<i>Age</i>	-0.202** (-2.51)	-0.020* (-1.66)	-0.202** (-2.50)	-0.021* (-1.66)	-0.205** (-2.53)	-0.021* (-1.70)
<i>BoardSize</i>	-0.116 (-0.74)	-0.012 (-0.48)	-0.116 (-0.73)	-0.012 (-0.45)	-0.123 (-0.77)	-0.013 (-0.49)
<i>BoardMeeting</i>	0.144** (1.99)	0.026** (2.05)	0.142* (1.95)	0.025** (2.01)	0.140* (1.92)	0.025** (1.98)
<i>IndependDir</i>	0.285 (0.52)	0.175* (1.82)	0.287 (0.52)	0.174* (1.80)	0.274 (0.50)	0.172* (1.77)
<i>AuditCom</i>	-0.086 (-1.26)	-0.002 (-0.14)	-0.085 (-1.25)	-0.002 (-0.16)	-0.085 (-1.24)	-0.002 (-0.16)
<i>M&A</i>	-0.028 (-0.37)	-0.005 (-0.32)	-0.026 (-0.34)	-0.005 (-0.28)	-0.028 (-0.36)	-0.005 (-0.29)
<i>Analyst</i>	0.071*** (2.75)	-0.006 (-1.37)	0.070*** (2.71)	-0.006 (-1.37)	0.070*** (2.71)	-0.006 (-1.37)
<i>Big4</i>	-1.763*** (-9.66)	-0.303*** (-9.02)	-1.647*** (-9.13)	-0.286*** (-8.57)	-1.645*** (-9.11)	-0.286*** (-8.56)
<i>Switch</i>	0.190*** (2.73)	0.047*** (3.28)	0.200*** (2.88)	0.049*** (3.41)	0.199*** (2.86)	0.048*** (3.39)
<i>Tenure_firm</i>	0.418*** (7.72)	0.063*** (6.67)	0.435*** (8.04)	0.066*** (6.92)	0.433*** (8.00)	0.066*** (6.89)
<i>Tenure_auditor</i>	0.095** (2.57)	0.015** (2.13)	0.092** (2.48)	0.015** (2.12)	0.094** (2.55)	0.015** (2.15)
<i>Female</i>	0.016 (0.40)	0.001 (0.10)	0.003 (0.08)	-0.001 (-0.17)	0.007 (0.19)	-0.001 (-0.10)
Constant	3.236*** (4.44)	0.762*** (5.62)	2.138*** (2.84)	0.600*** (4.34)	1.728** (2.23)	0.534*** (3.78)
<i>OfficeAdd</i> dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	30,284	30,288	30,254	30,258	30,259	30,263
Pseudo-R ²	0.08	0.08	0.07	0.08	0.07	0.08

Notes: This table presents the robustness test results of alternative measures of the independent variable. The dependent variables are *Adjust_dum* in Column (1), Column (3), Column (5) and $|Adjust_ratio|$ in Column (2), Column (4), Column (6). *Adjust_dum* is a dummy variable, which equals 1 when there is an audit adjustment to the auditee, and 0 otherwise; $|Adjust_ratio|$ is the absolute magnitude of earnings adjustments scaled by the absolute value of the pre-audit earnings, which equals $(|Earn_aud_{it} - Earn_pre_{it}|)/|Earn_pre_{it}|$, where *Earn_aud_{it}* is audited earnings and *Earn_pre_{it}* is pre-audit earnings. *BigCity* is a dummy variable, which equals 1 when *Hometown* equals 4, indicating bigger cities, and 0 otherwise; *GDP* is the natural log of GDP of auditor hometown; *Population* is the natural log of the population in the auditor's hometown. Refer to Appendix B for the definitions of other control variables. The results are based on robust standard errors clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 7. Robustness checks: Sample including firm-year observations.

Variables	<i>Adjust_dum</i>	<i> Adjust_ratio </i>
<i>Hometown_avg</i>	0.131*** (4.40)	0.020*** (3.53)
<i>Size</i>	-0.148*** (-5.25)	-0.039*** (-6.70)
<i>Lev</i>	-0.251** (-2.01)	0.053** (1.99)
<i>ROA</i>	0.576 (1.58)	-0.738*** (-7.91)
<i>Age</i>	-0.219*** (-2.78)	-0.022* (-1.74)
<i>BoardSize</i>	-0.136 (-0.88)	-0.018 (-0.70)
<i>BoardMeeting</i>	0.154** (2.17)	0.030** (2.39)
<i>IndependDir</i>	0.411 (0.76)	0.186* (1.93)
<i>AuditCom</i>	-0.071 (-1.07)	-0.003 (-0.26)
<i>M&A</i>	-0.045 (-0.60)	-0.010 (-0.63)
<i>Analyst</i>	0.076*** (3.00)	-0.007 (-1.46)
<i>Big4</i>	-1.606*** (-9.14)	-0.278*** (-8.22)
<i>Switch</i>	0.231*** (3.38)	0.050*** (3.45)
<i>Tenure_firm</i>	0.401*** (7.26)	0.059*** (5.82)
<i>Tenure_auditor_avg</i>	0.200*** (3.15)	0.033*** (2.65)
<i>Female_avg</i>	0.010 (0.15)	-0.001 (-0.06)
Constant	3.011*** (4.25)	0.722*** (5.42)
<i>OfficeAdd</i> dummies	Yes	Yes
Industry dummies	Yes	Yes
Year dummies	Yes	Yes
Observations	16,843	16,845
Pseudo-R ²	0.07	0.08

Notes: This table presents the robustness test results based on firm-year observations. The dependent variables are *Adjust_dum* in Column (1) and *|Adjust_ratio|* in Column (2). *Adjust_dum* is a dummy variable, which equals 1 when there is an audit adjustment to the auditee, and 0 otherwise; *|Adjust_ratio|* is the absolute magnitude of earnings adjustments scaled by the absolute value of pre-audit earnings, which equals $(|Earn_{aud_{it}} - Earn_{pre_{it}}|)/|Earn_{pre_{it}}|$, where *Earn_{aud_{it}}* is audited earnings and *Earn_{pre_{it}}* is pre-audit earnings. *Hometown_avg* is the average value of *Hometown* of the signing auditors of the same client, ranging from 1 to 4; a higher value of *Hometown_avg* represents better social environments; *Tenure_auditor_avg* is the average value of audit tenure at the individual auditor level, the average value of *Tenure_auditor* for the signing auditors for the same client; *Female_avg* is the average value of *Female* for the signing auditors for the same client. Refer to Appendix B for the definitions of other control variables. The results are based on robust standard errors clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 8. Robustness checks: Controlling for audit firm fixed-effects.

Variables	<i>Adjust_dum</i>	<i> Adjust_ratio </i>
<i>Hometown</i>	0.056*** (2.89)	0.008** (2.40)
<i>Size</i>	-0.143*** (-4.72)	-0.036*** (-6.67)
<i>Lev</i>	-0.061 (-0.45)	0.082*** (3.14)
<i>ROA</i>	0.155 (0.38)	-0.838*** (-8.66)
<i>Age</i>	-0.168** (-2.04)	-0.012 (-1.00)
<i>BoardSize</i>	-0.041 (-0.26)	-0.004 (-0.17)
<i>BoardMeeting</i>	0.183** (2.50)	0.025** (1.99)
<i>IndependDir</i>	0.502 (0.95)	0.180** (1.97)
<i>AuditCom</i>	-0.007 (-0.10)	0.011 (0.92)
<i>M&A</i>	-0.044 (-0.53)	-0.005 (-0.32)
<i>Analyst</i>	0.074*** (2.81)	-0.008* (-1.80)
<i>Big4</i>	-2.254*** (-4.64)	-0.413*** (-4.18)
<i>Switch</i>	0.120 (1.55)	0.037*** (2.61)
<i>Tenure_firm</i>	0.362*** (6.22)	0.049*** (5.33)
<i>Tenure_auditor</i>	0.061 (1.55)	0.011 (1.59)
<i>Female</i>	0.034 (0.87)	0.003 (0.44)
Constant	3.258*** (3.76)	0.789*** (4.96)
Audit firm dummies	Yes	Yes
<i>OfficeAdd</i> dummies	Yes	Yes
Industry dummies	Yes	Yes
Year dummies	Yes	Yes
Observations	29,802	30,288
Pseudo-R ²	0.19	0.15

Notes: These presents the robustness test results of controlling for audit firm fixed-effect. The dependent variables are *Adjust_dum* in Column (1) and *|Adjust_ratio|* in Column (2). *Adjust_dum* is a dummy variable, which equals 1 when there is an audit adjustment to the auditee, and 0 otherwise; *|Adjust_ratio|* is the absolute magnitude of the earnings adjustments scaled by the absolute value of pre-audit earnings, which equals $(|Earn_{aud_{it}} - Earn_{pre_{it}}|) / |Earn_{pre_{it}}|$, where *Earn_{aud_{it}}* is audited earnings and *Earn_{pre_{it}}* is pre-audit earnings. *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments. Refer to Appendix B for the definitions of other control variables. The results are based on robust standard errors clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 9. Education, auditor's hometown, and audit quality.

Variables	<i>Adjust dum</i>	<i> Adjust_ratio </i>
<i>Hometown</i>	0.185*** (5.45)	0.033*** (4.57)
<i>Hometown*Education</i>	-0.142*** (-3.86)	-0.027*** (-3.66)
<i>Education</i>	0.391*** (4.27)	0.066*** (3.71)
<i>Size</i>	-0.146*** (-5.02)	-0.039*** (-6.61)
<i>Lev</i>	-0.227* (-1.76)	0.058** (2.16)
<i>ROA</i>	0.555 (1.49)	-0.756*** (-7.82)
<i>Age</i>	-0.197** (-2.45)	-0.020 (-1.60)
<i>BoardSize</i>	-0.110 (-0.69)	-0.011 (-0.43)
<i>BoardMeeting</i>	0.143** (1.97)	0.026** (2.05)
<i>IndependDir</i>	0.297 (0.54)	0.177* (1.83)
<i>AuditCom</i>	-0.081 (-1.19)	-0.001 (-0.09)
<i>M&A</i>	-0.028 (-0.37)	-0.006 (-0.33)
<i>Analyst</i>	0.070*** (2.73)	-0.006 (-1.37)
<i>Big4</i>	-1.615*** (-8.94)	-0.279*** (-8.35)
<i>Switch</i>	0.202*** (2.91)	0.049*** (3.42)
<i>Tenure_firm</i>	0.428*** (7.90)	0.065*** (6.79)
<i>Tenure_auditor</i>	0.103*** (2.77)	0.016** (2.35)
<i>Female</i>	0.012 (0.30)	0.000 (0.02)
Constant	2.790*** (3.78)	0.687*** (5.01)
<i>OfficeAdd</i> dummies	Yes	Yes
Industry dummies	Yes	Yes
Year dummies	Yes	Yes
Observations	30,284	30,288
Pseudo-R ²	0.08	0.08

Notes: This table presents the moderating effect of the auditor's education on the influence between the auditor's hometown and audit quality. The dependent variables are *Adjust dum* in Column (1) and *|Adjust_ratio|* in Column (2). *Adjust dum* is a dummy variable, which equals 1 when there is an audit adjustment to the auditee, and 0 otherwise; *|Adjust_ratio|* is the absolute magnitude of the earnings adjustments scaled by the absolute value of pre-audit earnings, which equals $(|Earn_{aud_{it}} - Earn_{pre_{it}}|)/|Earn_{pre_{it}}|$, where *Earn_{aud_{it}}* is audited earnings and *Earn_{pre_{it}}* is pre-audit earnings. *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments; *Education* is an indicator of higher education, which equals 1 when an individual auditor obtains a Bachelor's degree or above, and 0 otherwise. Refer to Appendix B for further definitions. The standard errors are clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 10. Experience, auditor's hometown, and audit quality.

Variables	<i>Adjust dum</i>	<i> Adjust ratio </i>
<i>Hometown</i>	0.114*** (4.33)	0.021*** (3.77)
<i>Hometown*Experience</i>	-0.092*** (-2.94)	-0.017*** (-2.66)
<i>Experience</i>	0.300*** (3.79)	0.041*** (2.65)
<i>Size</i>	-0.145*** (-4.91)	-0.039*** (-6.63)
<i>Lev</i>	-0.210 (-1.60)	0.064** (2.37)
<i>ROA</i>	0.593 (1.57)	-0.759*** (-7.89)
<i>Age</i>	-0.171** (-2.09)	-0.018 (-1.46)
<i>BoardSize</i>	-0.041 (-0.26)	-0.005 (-0.19)
<i>BoardMeeting</i>	0.144* (1.95)	0.029** (2.26)
<i>IndependDir</i>	0.329 (0.60)	0.169* (1.78)
<i>AuditCom</i>	-0.102 (-1.47)	-0.006 (-0.48)
<i>M&A</i>	-0.052 (-0.67)	-0.007 (-0.41)
<i>Analvst</i>	0.071*** (2.71)	-0.006 (-1.37)
<i>Big4</i>	-1.648*** (-9.15)	-0.284*** (-8.45)
<i>Switch</i>	0.164** (2.29)	0.043*** (2.92)
<i>Tenure firm</i>	0.434*** (7.83)	0.065*** (6.69)
<i>Tenure auditor</i>	0.054 (1.35)	0.011 (1.59)
<i>Female</i>	0.025 (0.61)	0.003 (0.38)
Constant	2.732*** (3.68)	0.692*** (5.15)
<i>OfficeAdd</i> dummies	Yes	Yes
<i>Industr</i> dummies	Yes	Yes
<i>Year</i> dummies	Yes	Yes
Observations	28,026	28,030
Pseudo-R ²	0.08	0.08

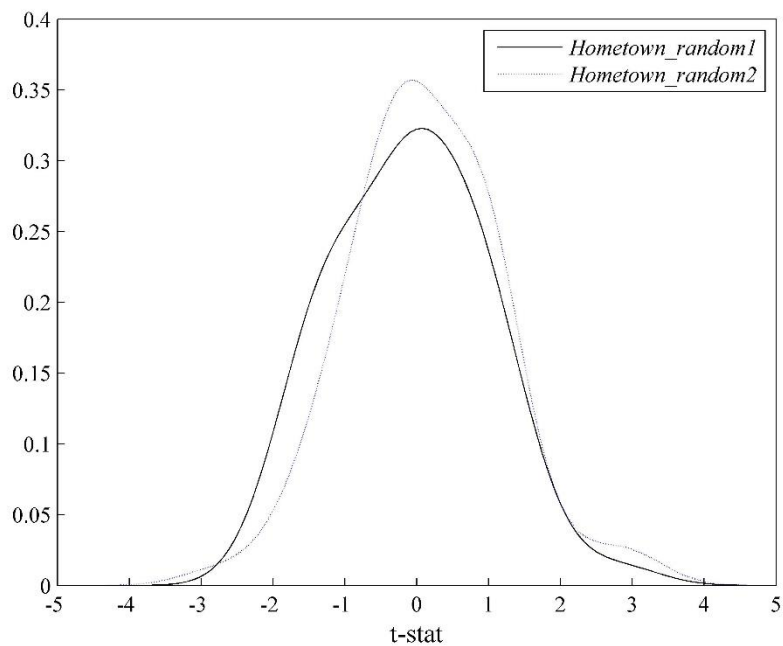
Notes: This table presents the moderating effect of the auditor's experience on the influence between the auditor's hometown and audit quality. The dependent variables are *Adjust dum* in Column (1) and *|Adjust ratio|* in Column (2). *Adjust dum* is a dummy variable, which equals 1 when there is an audit adjustment to the auditee, and 0 otherwise; *|Adjust ratio|* is the absolute magnitude of earnings adjustments scaled by the absolute value of pre-audit earnings, which equals $(|Earn_{audit} - Earn_{preit}|)/|Earn_{preit}|$, where *Earn_{audit}* is audited earnings and *Earn_{preit}* is pre-audit earnings. *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments; *Experience* is an indicator of experienced auditors, which equals 1 when the number of years that an individual has been engaged in audit work is higher than the mean value of the sample, and 0 otherwise. Refer to Appendix B for further definitions. The standard errors are clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 11. The auditor's hometown and audit fees.

Variables	<i>AuditFee</i>
<i>Hometown</i>	0.010** (2.13)
<i>Size</i>	0.333*** (35.92)
<i>Lev</i>	0.068* (1.93)
<i>ROA</i>	-0.230** (-2.48)
<i>Age</i>	-0.000 (-0.02)
<i>Big4</i>	0.617*** (14.43)
<i>Switch</i>	-0.047*** (-2.92)
<i>Tenure_firm</i>	0.014 (1.05)
<i>Tenure_auditor</i>	0.018** (2.31)
<i>Female</i>	0.016* (1.82)
<i>CashFlow</i>	0.053 (0.83)
<i>Inventory</i>	-0.092* (-1.75)
<i>Growth</i>	0.029*** (8.41)
<i>Opinion</i>	0.104*** (4.04)
Constant	5.767 (29.04)***
<i>OfficeAdd</i> dummies	Yes
Industry dummies	Yes
Year dummies	Yes
Observations	25,713
Adj-R ²	0.59

Notes: This table presents the additional test results of the influence of the auditor's hometown on audit fee. The dependent variable is *AuditFee*, which equals the natural log of audit fee; *Hometown* is an indicator representing the social environment of the auditor's hometown, ranging from 1 to 4; a higher value of *Hometown* represents better social environments. Refer to Appendix B for the definitions of other control variables. The results are based on robust standard errors clustered at the client level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Figure 1. Robust checks: distribution diagram of the t-values of the coefficients on an independent variable in a placebo test.



Notes: We run a placebo test to disrupt the proper assignment of hometowns to auditors by randomly assigning an auditor to a hometown (after being randomly disorganized, the independent variable is defined as *Hometown_random*), and then repeat the regression in model (1). After 100 times of random disorganizing, we draw the distribution diagram of the t-values of the estimated coefficients on the independent variable. *Hometown_random1* represents the distribution diagram of t statistics when the dependent variable is *Adjust_dum*; *Hometown_random2* represents the distribution diagram of t statistics when the dependent variable is $|Adjust_ratio|$.

Appendix A. The administrative ranks of the major cities.

Administrative level	Major Cities	Hometown Value
Directly controlled municipality	Beijing, Shanghai, Tianjin, and Chongqing.	4
Sub-provincial city	Changchun, Chengdu, Dalian, Guangzhou, Hangzhou, Harbin, Jinan, Nanjing, Ningbo, Qingdao, Shenyang, Shenzhen, Wuhan, Xi'an, and Xiamen.	3
Prefecture-level city	Ankang, Baicheng, Baoding, Chenzhou, Dongguan, Foshan, Huangshan, Jingmen, Lijiang, Nanyang, Shantou, Tangshan, Weihai, Xianyang, Yancheng, Zhuhai and so on (269 prefecture-level cities in total).	2
County-level city or county	Guangtong, Huaiyang, Ningyang, Pingyang, Yanchang, Zhongjiang, Ninghai, Fenghua, Yuyao, Tonglu, Yinzhou, Xiangshan, Pingyang, and so on (2,071 county-level cities or counties in total).	1

Appendix B: Variables, definitions, and data sources.

Variable	Definition	Source
Dependent variables:		
<i>Adjust_dum</i>	A dummy variable, which equals 1 when earnings are adjusted by auditors, and 0 otherwise.	CICPA & calculated
$ Adjust_ratio $	The absolute magnitude of earnings adjustments scaled by the absolute value of pre-audit earnings: $ Adjust_ratio_{it} = (Earn_aud_{it} - Earn_pre_{it}) / Earn_pre_{it} $, where <i>Earn_aud_{it}</i> is audited earnings and <i>Earn_pre_{it}</i> is pre-audit earnings.	CICPA & calculated
$ Adjust_ratioI $	The absolute magnitude of earnings adjustments scaled by the lagged total assets, and then multiple 100: $ Adjust_ratioI_{it} = 100 * (Earn_aud_{it} - Earn_pre_{it}) / Asset_{it-1}$, where <i>Earn_aud_{it}</i> is audited earnings and <i>Earn_pre_{it}</i> is pre-audit earnings.	CICPA & calculated
<i>Restate</i>	A dummy variable, which equals 1 if a company's financial report is restated, and 0 otherwise.	CNRDS
<i>AuditFee</i>	The natural log of audit fee.	CSMAR
Independent variables:		
<i>Hometown</i>	An indicator representing the social environment of the auditor's hometown, which is measured on the basis of the administrative level of the auditor's hometown. If an individual auditor is born in a municipality, <i>Hometown</i> equals 4; if an individual auditor is born in a sub-provincial city, <i>Hometown</i> equals 3; if an individual auditor is born in other prefecture-level cities, then <i>Hometown</i> equals 2; if an individual auditor is born in a county-level city or a county, <i>Hometown</i> equals 1. A larger value of <i>Hometown</i> represents a better social environment.	CICPA & hand-calculated
<i>BigCity</i>	A dummy variable, which equals 1 when <i>Hometown</i> equals 3 or 4, indicating bigger places and 0 otherwise.	CICPA
<i>GDP</i>	The natural log of the average GDP of the auditor's hometown in ten thousand of CNY in the period from 2003 to 2015.	CEInet
<i>Population</i>	The natural log of the average population of the auditor's hometown in the period from 2003 to 2015.	CEInet
Control variables at the client level:		
<i>Size</i>	Firm size, measured as the natural log of total assets.	CSMAR

<i>Lev</i>	Leverage, measured as total liabilities scaled by total assets.	CSMAR
<i>ROA</i>	Profitability, measured as net income divided by total assets.	CSMAR
<i>Age</i>	The natural log of the client's age plus 1.	CSMAR
<i>BoardSize</i>	The natural log of the number of board members plus 1.	CSMAR
<i>BoardMeeting</i>	The natural log of the number of board meetings held during the year plus 1.	CSMAR
<i>IndependDir</i>	The ratio of independent directors in the board.	CSMAR
<i>AuditCom</i>	A dummy variable, which equals 1 when the client sets up an audit committee, and 0 otherwise.	CSMAR
<i>M&A</i>	A dummy variable, which equals 1 when the client engages in material merger or acquisition during that fiscal year, and 0 otherwise.	CSMAR
<i>Analyst</i>	The natural log of the number of analysts following the client plus 1.	CSMAR
<i>CashFlow</i>	Net operating cash flow scaled by total assets.	CSMAR
<i>Inventory</i>	Net inventory scaled by total assets.	CSMAR
<i>Growth</i>	Tobin's Q, calculated as the market equity plus total liabilities and then divided by total assets.	CSMAR
<i>Opinion</i>	A dummy variable, which equals 1 when a company received a modified opinion in the previous year, and 0 otherwise	CSMAR

Control variables at the audit firm level:

<i>Big4</i>	A dummy variable, which equals 1 when a client company is audited by one of the Big 4 audit firms and 0 otherwise.	CSMAR
<i>Switch</i>	A dummy variable which equals 1 the audit firm is in the first year of tenure, and 0 otherwise.	website of CICPA
<i>Tenure_firm</i>	Audit tenure at audit firm level, measured as the natural log of the number of consecutive years the audit firm audited the client plus 1.	CSMAR & calculated
<i>OfficeAdd</i>	The administrative level of the city where the audit office is located. If an audit firm office is located in a municipality, <i>OfficeAdd</i> equals 4; if an audit firm office is located in a sub-provincial city, <i>OfficeAdd</i> equals 3; if an audit firm office is located in another prefecture-level city, <i>OfficeAdd</i> equals 2.	CICPA & calculated

Control variables at the individual auditor level:

<i>Tenure_auditor</i>	Audit tenure at the individual auditor level, measured as the natural log of the number of total years the individual auditor audited the client plus 1.	CSMAR & calculated
<i>Female</i>	A dummy variable, which equals 1 when an individual auditor is female and 0 otherwise.	CICPA

Moderating variables:

<i>Education</i>	A dummy variable, which equals 1 when an individual auditor has obtained a Bachelor's degree or above and 0 otherwise.	CICPA
<i>Experience</i>	An indicator of auditing experience, which equals 1 when the number of years that an individual has been engaged in audit work is higher than the mean value of the sample, and 0 otherwise.	CICPA
