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# Journal of Contemporary Accounting and Economics

journal homepage: [www.elsevier.com/locate/jcae](http://www.elsevier.com/locate/jcae)

## Place attachment, audit pricing and audit quality

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### ARTICLE INFO

#### Article history:

Received 19 July 2022

Revised 29 March 2023

Accepted 23 April 2023

Available online 26 April 2023

#### JEL classifications:

M1

M4

#### Keywords:

Place attachment

Audit pricing

Audit quality

Familiarity bias

### ABSTRACT

Place attachment is an affective bond whereby people interact with and describe themselves as belonging to specific places. This study investigates the presence of place attachment in the auditing process. Using a large sample of listed clients in China, the findings reveal that auditors are likely to charge higher fees if their colleges are located in the same cities or provinces as their clients, supporting the familiarity bias hypothesis. This effect is more concentrated among smaller auditors, non-state-owned clients, and clients who switch auditors between years. In addition, a negative relationship is found between audit quality and geographical connections between auditors and clients. Overall, the results indicate the existence of place attachment in the auditing process.

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## 1. Introduction

Place attachment “is an affective bond that people establish with specific areas where they prefer to remain and where they feel comfortable and safe” (Hernández et al., 2007). People interact with and describe themselves as belonging to specific places. This study investigates the presence of place attachment in the auditing process, focusing on whether auditors’ idiosyncratic styles may impact on auditors’ or their clients’ behaviors. Specifically, we examine whether auditors change their pricing decisions and auditing service quality for clients located in their place of education.

In China, a society that stresses “relationships”, the symptoms of place attachment pervade business communities. Liu Qiangdong, founder of NASDAQ-listed company JD, has invested more than 20 billion RMB in his hometown in the last decade, covering e-commerce, smart city, logistics warehousing, smart industry and other businesses (Xinzhong Daily, 2022). The founder of Baidu, another company listed on NASDAQ, recently invested 1.4 billion RMB in building an intelligent cloud computing centre in his hometown (China Youth Net, 2019). In addition, business groups, such as merchants in Guangdong and Zhejiang, have been formed based on geographical connections throughout China. These groups avoid vicious internal competition and strengthen their external competitiveness, using their collective power to raise barriers for protection (Netease, 2023). In addition, China has a rich cultural heritage that may contribute to the development of place attachment among its citizens. In recent years, interest has been growing in protection and rational utilization of intangible cultural heritage (Zhou, 2023), which may further enhance the development of place attachment among business communities.

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Previous studies of place attachment mainly document the association between geographical location and managers' and investors' decision making (e.g., [Seasholes and Zhu, 2010](#); [Pool et al., 2012](#); [Yonker, 2017](#); [Chung et al., 2018](#)). Some studies find evidence of managers favouring hometown workers ([Yonker, 2017](#)), and CEOs being more likely to engage in mergers and acquisitions with companies near their hometowns ([Chung et al., 2018](#)). [Seasholes and Zhu \(2010\)](#) report that investors may tilt their portfolios toward local stocks. Other studies emphasize the potential behavioural bias of credit agencies (e.g., [Cornaggia et al., 2019](#)) and virtual marketplaces (e.g., [Lin and Viswanathan, 2015](#)). Studies of place attachment are attracting greater attention, but few have so far examined this topic in relation to auditing.

Two distinct explanations are given for the impact of place attachment. First, it may generate information benefits and reduce information asymmetries (e.g., [Seasholes and Zhu, 2010](#); [Chung et al., 2018](#)). For equity investors, CEOs' educational and professional network connections may be geographically clustered, giving them access to private information about companies in that region (e.g., [Seasholes and Zhu, 2010](#)). Moreover, cultural awareness of a geographical region may facilitate communication and negotiations between CEOs and investees, which may also encourage CEOs to favour local investments ([Chung et al., 2018](#)).

Second, place attachment may give rise to inefficient objectives and familiarity bias ([Yonker, 2017](#)). Cultural awareness of a geographical region may generate "homophily", as managers and investors may tend to associate and bond with similar others ([Lazarsfeld and Merton, 1954](#)). Moreover, favouring locals may create private benefits for managers and investors. For example, investing in local companies may raise managers' stature in that locality, or facilitate visits to friends, classmates and family ([Chung et al., 2018](#)). Accordingly, managers with familiarity bias may pursue local projects and investments unrelated to value optimization ([Chung et al., 2018](#)).

The impact of place attachment on audit fees is unclear. Audit fees may be affected by both demand- and supply-side factors (e.g., [DeFond and Zhang, 2014](#)). On the demand side, auditors can charge higher audit fees to compensate for either additional effort or increased risk only if there is increased client demand. On the supply side, audit fees reflect the cost of auditors' efforts and expected legal liabilities (e.g., [Simunic, 1980](#)). According to the information advantage hypothesis, place attachment may improve communication and negotiations between auditors and clients' managers, which may enhance mutual trust and audit efficiency. Furthermore, place-connected auditors may more easily use a wider range of communication methods to obtain key information about clients, which may reduce the risk of audit litigation ([Chung et al., 2018](#); [Seasholes and Zhu, 2010](#)). Therefore, improved auditing efficiency and reduced litigation risk may lead to lower audit fees for geographically-related clients.

However, the familiarity bias hypothesis suggests that place attachment may result in higher audit fees for geographically-related clients. On the demand side, it may enable clients to engage in financial misreporting. In return for tolerating such misreporting, clients may be willing to pay higher audit prices. On the supply side, under pressure to obtain and retain customers, auditors may allow clients with whom they are closely acquainted to adopt self-interested accounting treatments ([Chang et al., 2018](#)). This may amplify auditors' expected legal liabilities and increase audit fees. Overall, the impact of place attachment on audit fees is unclear.

Place attachment may also affect audit quality. It may facilitate auditors' collection of key information from related clients, thereby reducing the risk of auditor litigation ([Chung et al., 2018](#); [Seasholes and Zhu, 2010](#)). With improved audit efficiency and reduced litigation risk, auditors may be more confident in issuing unqualified audit opinions to related clients. Accordingly, the quality of auditing services may be improved. On the other hand, the familiarity bias hypothesis suggests that place attachment may enable clients to seek favourable audit opinions, even when engaging in financial misreporting. Geographical connection or homophily may weaken auditors' independence and professional scepticism. Auditors may accordingly favour related clients and issue unqualified audit opinions, even in the presence of apparent earnings management. Overall, place attachment may alter the quality of auditing services.

Based on signing auditors' college location and their clients' place of incorporation, we find that auditors are likely to charge higher audit fees if their college is located in the same city or province as their client. Specifically, we report a 3.9% audit fee premium when auditors' colleges are situated in the same city as their clients. Additionally, auditors may impose a 1.9% audit fee premium to a client if their college and the client are located in the same province. This supports the familiarity bias hypothesis, in that auditors are more likely to charge geographically-related clients higher audit fees in return for tolerating financial misreporting. This effect is more robust among smaller auditors, non-state-owned clients, and clients who switch auditors between years. We also show that auditors are more likely to issue favourable auditors' opinions to geographically connected clients, and that geographically related clients exhibit higher abnormal accruals than those with no geographical connection.

This study makes several contributions. First, it contributes to the home bias literature (e.g., [Yonker, 2017](#); [Chung et al., 2018](#)) in the field of auditing by providing evidence of familiarity bias in the auditing process. Home bias and place attachment are related concepts that describe individuals' emotional connection to a particular place or location. Home bias in previous literature (e.g. [Pool et al., 2012](#)) refers to a tendency for individuals to prefer investments in their home or birthplace, and it typically applies to the context of financial decision-making. Place attachment, on the other hand, is a broader concept that describes individuals' emotional connection to a place or location, whether or not it involves financial decisions ([Hernández et al., 2007](#)). Given this research focuses on the relationship between the educational background of auditors and the geographic location of the audited firms, the term "place attachment" appears to be more appropriate in this context.

Extant home bias literature focuses mainly on investor behaviour (e.g., [Coval and Moskowitz, 2001](#); [Seasholes and Zhu, 2010](#)). These studies find that investors, such as fund managers, prefer to invest in local equities close to their homes or

places of birth (e.g., [Seasholes and Zhu, 2010](#)). In addition, a small body of literature has begun to examine the potential behavioural bias of CEOs (e.g., [Chung et al., 2018](#); [Yonker, 2017](#)), credit agencies (e.g., [Cornaggia et al., 2019](#)), and virtual marketplaces (e.g., [Lin and Viswanathan, 2015](#)). Hence, increasing attention is being paid to the impacts of home bias, although few studies have investigated this topic in the field of auditing. This study extends home bias literature and confirms the existence of a familiarity bias in the auditing process. The evidence for familiarity bias is consistent with [Cornaggia et al. \(2017\)](#), who find that credit analysts are more likely to give favourable ratings to rating issuers from their home state. The results also align with [Yonker's \(2017\)](#) findings that managers favour hometown workers over others, and CEOs are significantly less likely to lay off local employees than their non-local peers following industry distress. In general, the research finding of this study contributes to the home bias literature by providing additional evidence for the existence and impact of home bias on the decision-making processes and highlighting the need for further research and awareness of this phenomenon in different domains.

Second, this study contributes to literature on the association between audit fees, audit quality and social ties (e.g., [He et al., 2017](#); [Kwon and Yi, 2018](#); [Lennox and Park, 2007](#); [Guan et al., 2016](#); [Du, 2019a](#); [Chen et al., 2022](#); [Sharma et al., 2022](#)). Previous studies have examined the impact of social ties on audit quality and audit fees. Some find that social connections between clients and auditors may impair auditor independence ([He et al., 2017](#); [Lennox and Park, 2007](#); [Guan et al., 2016](#)), while others show that client–auditor social ties may be important for high-quality audits ([Kwon and Yi, 2018](#)). Our findings contribute to the debate by showing that the presence of place attachment in the auditing process may impair auditor independence.

Third, this study has implications for standard setters, regulators and investors. Extant auditing studies focus on auditors' characteristics, such as industry specialization and auditor size. This study reveals that another observable auditor characteristic – place attachment – also affects audit quality. The results provide empirical support for concerns about the unintended consequences of auditing regulation in China. They will therefore be particularly useful for standard setters and national audit firm regulators seeking to reveal and mitigate the unintended consequences of earnings manipulations resulting from current policy on auditor team composition. Collectively, our findings lend support to the narrative that the negative implications, namely the cost of social ties, may outweigh the benefits (i.e., higher audit fees and lower audit quality). Our findings will similarly be useful for investors who rely on high-quality financial statement information for decision making.

Currently, the construction of a legal framework in China is not well established, and legal consciousness is weak. Inadequate regulatory action is taken to safeguard against the adverse effects of geographical connections between market participants. In relation to auditing, the perception of auditors' independence is essential to maintain public trust in financial reporting. This study shows that auditors' awareness of the need for scepticism and independence is weakened in the presence of geographical relationships. Accordingly, audit regulators in China should pay close attention to geographical proximity between auditors and clients by strengthening disclosure of information, such as auditors' backgrounds and relationships with clients, enforcing periodic rotation of auditors, and requiring auditors to undergo training on maintaining independence and objectivity.

## 2. Auditing in China

China's audit market differs from those of other countries in having a large number of small and medium-sized audit companies, very low concentration and fierce market competition ([DeFond et al., 2000](#)). In response to recent calls by the Ministry of Finance, accounting firms have begun a wave of mergers. As a result, they have gained qualified staff and customers, and have become more competitive. Domestic firms' market share is increasing year by year, whereas the Big 4 accounting firms' share is lower than in developed countries ([Fang, 2019](#)).

The particularities of China's audit market and weak legal supervision lead to low-quality products. Under China's current legal framework, certified public accountant (CPA) appointments are decided by general meetings of shareholders. However, owing to strict internal controls in listed companies in China, decisions to appoint or remove accounting firms are actually made by companies' internal management. This corporate governance structure makes it impossible for accounting firms to issue audit opinions on behalf of all investors, and especially small and medium-sized investors ([Fang, 2019](#)). China's Ministry of Finance stipulates that audit reports issued by partnership accounting firms must be signed and sealed by two people – the partner ultimately responsible for the audit project, and the CPA in charge of the project.

## 3. Theory and related literature

### 3.1. Audit fees, audit quality and social ties

Previous studies have examined various aspects of the relationship between audit fees, audit quality and social ties ([He et al., 2017](#); [Kwon and Yi, 2018](#); [Lennox and Park, 2007](#); [Guan et al., 2016](#); [Du, 2019a](#); [Chen et al., 2022](#); [Sharma et al., 2022](#)). Scholars hold differing views on how social ties between clients and auditors impact on audit quality and audit fees, but the general consensus is that they may impair auditor independence.

He et al. (2017) use alma mater connections, professor–student bonding and employment affiliation as measures of social ties. They reveal that social ties between engagement auditors and audit committee members impair audit quality, and that audit fees are higher in the presence of such social ties. Similarly, Guan et al. (2016) document that auditors who attended the same university as clients' executives are more likely to issue favourable audit opinions for and tolerate earnings management by financially distressed clients. They also find that connected auditors earn higher audit fees, implying the presence of social reciprocity. In addition, firms with connected auditors exhibit lower earnings response coefficients (ERCs), and are more likely to have subsequent downward restatements than firms audited by non-connected auditors. Collectively, the findings suggest that educational connections facilitate collusion between auditors and managers, which ultimately impairs audit quality.

In addition to school connections, Du (2019a) shows that CEO–auditor dialect sharing is significantly positively related to discretionary accruals. Du (2019b) also focuses on the connection between auditor and CEO, revealing that auditor–CEO surname sharing (ACSS) is significantly positively related to financial misstatement for Chinese firms, and this positive relationship is more pronounced for rare than for common surnames. Rather than focusing solely on auditing services, Sharma et al. (2022) find that ties between auditor and audit committee are associated with the auditor providing significantly more non-audit services (NAS), which impairs audit quality. Beyond the connection between auditor and client, Chen et al. (2022) find that mutual fund managers who are socially connected with particular firms' auditors hold more shares in these firms and obtain superior portfolio returns. The authors also show that mutual funds and the firms in which they invest are more likely to appoint connected auditors and pay them higher fees.

A few studies establish that social ties between client and auditor do not impair audit quality. In South Korea, Kwon and Yi (2018) find that, rather than impairing audit quality, CEO–auditor school ties are associated with high-quality audits and audit fee premiums. They interpret these findings to mean that CEO–auditor social ties may be important for high-quality audits in settings with low investor protection. Overall, previous studies produce differing results on whether social ties between clients and auditors harm audit quality.

### 3.2. Place attachment

In the emerging literature on place attachment (e.g., Fee et al., 2013; Pool et al., 2012; Yonker, 2017; Chung et al., 2018), the general findings are that place attachment impacts on people's decision making, and people's idiosyncratic styles may impact on their behaviour. Yonker (2017) focuses on managers' childhood origins, claiming that managers are more likely to favour workers from their hometown communities. Seasholes and Zhu (2010) find that less experienced investors have a greater propensity to invest locally. Other studies suggest that place attachment may also affect the decision making of mutual fund managers, who may overweight stocks from their home states (Pool et al., 2012).

However, it is important to understand the mechanism underlying the effect of place attachment. Previous studies provide various explanations, based mainly on either informational advantages or the familiarity bias hypothesis (Ivkovic and Weisbenner, 2005; Lin and Viswanathan, 2015; Yonker, 2017). According to the former, place attachment may reduce information asymmetries and improve decision making (e.g., Coval and Moskowitz, 2001). For equity investors, managers' educational or professional networks may be geographically clustered, giving them access to private information about companies in that region (e.g., Seasholes and Zhu, 2010). Ability to exploit non-public information may explain why investors tilt toward local stocks in their portfolios (Seasholes and Zhu, 2010).

Familiarity is recognized as a key cognitive element of place attachment (Scannell and Gifford, 2010), as decision makers may be affected by inefficient objectives and susceptibility to familiarity bias (e.g., Yonker, 2017). Cultural awareness of a geographical region may generate "homophily", whereby managers or investors tend to associate and bond with similar others (Lazarsfeld and Merton, 1954). Moreover, favouring locals may generate private benefits for managers and investors. For example, investing in local companies may raise managers' stature in the locality, or facilitate visits to friends, classmates and family (Chung et al., 2018).

### 3.3. Impact of place attachment on auditing fees

Audit fees are associated with quality in the audit process (e.g., Simunic, 1980; Johnstone and Bedard, 2004; Lyon and Maher, 2005; DeFond and Zhang, 2014). Previous literature reveals that audit fees are determined by both demand- and supply-side factors (Hilary and Lennox, 2005; DeFond and Zhang, 2014; Florou and Yuan, 2022). On the demand side, auditors can charge higher audit fees only if there is increased client demand. On the supply side, audit fees relate to the costs of auditors' efforts and expected legal liabilities (e.g., Simunic, 1980; Lyon and Maher, 2005; Choi et al., 2008; Ji et al., 2018; Kim, 2021; Yuan, 2021). Previous studies provide evidence that auditors are likely to charge a risk premium in the form of higher audit fees when faced with higher litigation risk and reputational damage owing to an increased risk of failing to discover financial misreporting (e.g., Hilary and Lennox, 2005; Weber et al., 2008; Kim et al., 2012).

Based on the informational advantage hypothesis, cultural awareness of a geographical region may facilitate communication and negotiations between the auditor and the client's management. Improved communication channels may enhance mutual trust and increase audit efficiency, and auditors may use more convenient communication methods to obtain key information on an enterprise and reduce the risk of audit litigation (Chung et al., 2018; Seasholes and Zhu, 2010). Moreover, auditors' educational networks may grant them access to private information about companies in that region, which may

further reduce information asymmetries and expected legal liabilities (Pool et al., 2012). In turn, improved auditing efficiency and reduced litigation risk may lead to lower audit fees for geographically-related clients.

However, according to the familiarity bias hypothesis, auditors may charge higher audit fees to geographically-related clients. On the demand side, a place relationship may enable clients to engage in financial misreporting, and clients may actively invite higher audit prices from their auditors in return for tolerating such misreporting. On the supply side, China's audit market is characterized by relatively low concentration and fierce competition (DeFond et al., 2000). Auditors face pressure to obtain and retain customers. This may encourage those with place connections to allow clients with whom they are acquainted to adopt accounting treatments in their own self-interests, thereby increasing the likelihood of auditing failures and potential legal liabilities. This mutually beneficial relationship between signing auditors and clients leads to the following hypothesis:

**HYPOTHESIS 1.** *Auditors are more likely to charge higher audit fees to geographically-related clients.*

#### 4. Research design and data

Regression analysis was employed to measure the impact of place attachment on audit fees. Based on previous literature (e.g., Simunic, 1980; Choi et al., 2008), the audit fee model is as follows:

$$AUDFEE_{it} = \beta_0 + \beta_1 SAME_{it} + \sum \delta_j Controls_{jit} + \sum \beta_k FixedEffects + \varepsilon_{it} \quad (1)$$

$AUDFEE$  is measured as the logarithm of audit fees in Chinese Yuan. Two proxies –  $SAME\_CITY$  and  $SAME\_PROVINCE$  – are used to represent the variable of interest,  $SAME$ . These are indicator variables equaling one if both signing auditors attended college(s) in the city or province where the client was incorporated, and zero otherwise.  $\beta_1$  is the coefficient of the test variable and measures the impact of  $SAME$  on audit fees.

The model controls for multiple client-level variables, including size, leverage, ratio of receivables and inventories to total assets, book-to-market ratio, ROA, CFO, liquidity, Big 4, auditor switching, and the nature of the controlling interest. To control for unobservable heterogeneity, we also include client, year and auditor fixed effects in the model where appropriate. We report  $t$ -statistics based on client clusters and heteroskedasticity-corrected standard errors. All continuous variables are winsorized at the 1% and 99% levels. As a robustness test, we used a two-stage model to control for unobserved omitted factors that might bias the results. In addition, we selected instruments as proxies for  $SAME$  to control for potential self-selection bias by the auditors in our study.

##### 4.1. Data

We collected data on Chinese companies listed on the Shanghai and Shenzhen Stock Exchanges from the China Stock Market & Accounting Research (CSMAR) database. The sample period was 2007–2019. To obtain data for the audit fee analysis, we deleted observations for financial-sector client firms, clients without data on auditors' college location, and firm-year observations with no data for client-level control variables. This resulted in a final sample of 10,647 observations. Table 1 reports the sample composition for the audit fee analysis. Table 2 reports the geographical distribution of signing auditors' colleges being located in the same city or province as the corresponding client. Shanghai (city) accounts for the largest proportion of cases where an auditor's college and a client's city coincided, and Jiangsu is the province with the most overlap between auditor's college and client's location.

Table 3 reports the distributional properties of all variables in the audit fee analysis. The mean value of  $AUDFEE$  is ¥1,312,783, and in more than 10% of engagements, the signing auditor's college was located in the same city as that of

**Table 1**  
Sample composition by year.

Year	N	%
2007	334	3.14
2008	426	4.00
2009	476	4.47
2010	647	6.08
2011	775	7.28
2012	942	8.85
2013	978	9.19
2014	1,034	9.71
2015	1,186	11.14
2016	1,276	11.98
2017	1,110	10.43
2018	1,111	10.43
2019	352	3.31
<b>Total</b>	<b>10,647</b>	<b>100</b>

**Table 2**  
Geographical distribution of same place.

City	N	%	Province	N	%
Shanghai	295	26.29	Shanghai	295	12.04
Urumqi	5	0.45	Yunnan	14	0.57
Lanzhou	30	2.67	Peking	152	6.20
Peking	152	13.55	Jilin	75	3.06
Nanking	40	3.57	Sichuan	111	4.53
Nanchang	45	4.01	Tianjing	45	1.84
Xiamen	37	3.30	Ningxia	1	0.04
Hefei	5	0.45	Anhui	159	6.49
Harbin	6	0.53	Shandong	167	6.81
Dalian	42	3.74	Shanxi	10	0.41
Tianjin	45	4.01	Guangdong	139	5.67
Taiyuan	3	0.27	Xinjiang	19	0.78
Guangzhou	61	5.44	Jiangsu	319	13.02
Chengdu	57	5.08	Jiangxi	81	3.30
Kunming	10	0.89	Hebei	25	1.02
Hangzhou	58	5.17	Henan	27	1.10
Wuhan	56	4.99	Zhejiang	178	7.26
Shenyang	13	1.16	Hainan	5	0.20
Jinan	8	0.71	Hubei	122	4.98
Haikou	5	0.45	Hunan	74	3.02
Shenzhen	2	0.18	Gansu	44	1.80
Yantai	5	0.18	Fujian	175	7.14
Shijiazhuang	13	1.16	Liaoning	131	5.34
Fuzhou	8	0.71	Chongqing	21	0.86
Suzhou	1	0.09	Shanxi	51	2.08
Xian	33	2.94	Heilongjiang	11	0.45
Zhengzhou	8	0.71	<b>Total</b>	<b>2,451</b>	<b>100</b>
Chongqing	21	1.87			
Changchun	27	2.41			
Changsha	33	2.94			
Qingdao	1	0.09			
<b>Total</b>	<b>1,122</b>	<b>100</b>			

**Table 3**  
Descriptive statistics (N = 10,647).

Variable	Mean	Median	Std. Dev
AUDFEE	1,322,783	800,000	3,709,447
SAME_CITY	0.105	0.000	0.307
SAME_PROVINCE	0.230	0.000	0.421
SIZE	22.092	21.924	1.286
LEVERAGE	0.436	0.426	0.214
RECINVENT	0.265	0.243	0.169
ROA	0.034	0.036	0.058
LOSS	0.095	0.000	0.293
OPINION	0.036	0.000	0.186
BM	0.432	0.355	0.312
CFO	0.041	0.042	0.074
LIQUIDITY	2.269	1.521	2.471
BIG4	0.050	0.000	0.219
STATE	0.426	0.000	0.494
SWITCH	0.335	0.000	0.472

Notes: See Appendix for definitions of all variables.

the client. For *SAME\_PROVINCE*, the signing auditor's college and the client were in the same province in 23% of the sample. Untabulated results revealed no multicollinearity issues.

## 5. Results and discussion

### 5.1. Baseline results on place identity and audit fees

Table 4 reports the results of the audit fee analysis. In model (1), the coefficient of *SAME\_CITY* is positive and significant at the 5% level ( $\beta_1 = 0.038$ ,  $t = 2.16$ ). This suggests that when signing auditors' colleges are located in the same city as their clients, they may be more likely to charge higher audit fees. Specifically, place attachment may result in a 3.9% audit fee pre-

**Table 4**  
Auditor–client familiarity and audit fees.

Dependent variable	AUDFEE			
	1	2	1	2
<i>SAME_CITY</i>	0.038** (2.16)	0.038** (3.83)	– –	– –
<i>SAME_PROVINCE</i>	– –	– –	0.019* (1.69)	0.019** (3.45)
<i>SIZE</i>	0.350*** (23.59)	0.350*** (33.97)	0.350*** (23.58)	0.350*** (34.83)
<i>RECINVENT</i>	0.040 (0.74)	0.040** (3.07)	0.041 (0.77)	0.041** (3.07)
<i>LEVERAGE</i>	–0.147** (–2.17)	–0.147** (–2.21)	–0.144** (–2.12)	–0.144* (–2.20)
<i>ROA</i>	–0.094 (–0.97)	–0.094 (–1.02)	–0.094 (–0.97)	–0.094 (–1.02)
<i>LOSS</i>	0.014 (1.12)	0.014** (2.84)	0.014 (1.11)	0.014* (2.71)
<i>OPINION</i>	0.108*** (4.24)	0.108*** (7.61)	0.108*** (4.22)	0.108*** (7.49)
<i>BM</i>	–0.098*** (–3.85)	–0.098** (–3.50)	–0.000*** (–3.86)	–0.000** (–3.44)
<i>CFO</i>	–0.011 (–0.25)	–0.011 (–0.37)	–0.011 (–0.23)	–0.011 (–0.35)
<i>CURRENT</i>	0.002 (0.60)	0.002 (0.75)	0.002 (0.88)	0.002 (0.76)
<i>BIG4</i>	0.143 (1.55)	0.143*** (4.87)	0.142 (1.54)	0.142** (4.37)
<i>STATE</i>	–0.068** (–1.97)	–0.068 (–1.72)	–0.067* (–1.93)	–0.067 (–1.71)
<i>SWITCH</i>	0.004 (0.65)	0.004 (0.76)	0.004 (0.63)	0.004 (0.72)
<i>CONSTANT</i>	6.149*** (18.04)	5.626*** (19.39)	6.147*** (18.07)	5.634*** (20.31)
<i>N</i>	10,647	10,647	10,647	10,647
<i>Year FE</i>	YES	YES	YES	YES
<i>Client FE</i>	YES	YES	YES	YES
<i>Audit Firm FE</i>	YES	YES	YES	YES
<i>Adjusted R<sup>2</sup></i>	0.672	0.672	0.672	0.672

Notes: See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. In models (1) and (2), *t*-statistics are based on client- (industry)-corrected standard errors. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

mium. The signs of the control variables are generally consistent with the previous literature. The coefficient of *SAME\_PROVINCE* in model (1) is significant and positive at the 10% level ( $\beta_1 = 0.019$ ,  $t = 1.69$ ), indicating that auditors may charge higher audit fees to a client if their college and the client are in the same province. This also shows that the role of same city attachment is stronger than that of same province. Model (2) repeats model (1) with the adoption of industry-clustered standard errors. The results are in line with those of model (1).

Consistent with the baseline results, clients with aggressive earnings adjustments actively strive for higher audit prices in return for tolerating earnings adjustments. The baseline results suggest that place attachment is more pronounced among high-accrual clients. Client groups with higher accruals may also be associated with greater information asymmetry. Auditors who experience familiarity bias may prefer these clients, and therefore charge higher audit fees. Panel A of Table 5 shows the results of repeating the baseline model (1) with the sample split into high- and low-accrual clients. Accruals are classified as high if clients' total accruals are above the mean of all firm years, and low otherwise. Consistent with expectations, the results shown in Table 5 reveal that the baseline effects are significant only for clients reporting high accruals.

To further validate the hypothesis, we test the relationship between place attachment and alternative audit quality proxies, as shown in Panel B of Table 5. We expect a negative relationship between audit quality proxies and geographical connectivity. Our three proxies for audit quality are the likelihood of issuing a qualified auditor opinion (*OPINION*), abnormal accruals based on the modified Jones (1991) model (*AQ1*), and abnormal accruals based on Dechow and Dichev's (2002) model (*AQ2*). Consistent with our expectations, we find a negative relationship between audit quality and geographical connectivity for all three measures. Auditors are more likely to issue a favourable auditors' opinion to geographically connected clients, and geographically related clients exhibit lower audit quality than those without such connections.

**Table 5a**  
Panel A: High- and low-accrual clients.

Dependent variable	AUDFEE			
	HIGH		LOW	
SAME_CITY	0.058* (1.93)	-	0.024 (0.83)	-
SAME_PROVINCE	-	0.046** (2.51)	-	0.001 (0.08)
SIZE	0.347*** (17.83)	0.348*** (17.79)	0.351*** (12.24)	0.350*** (12.24)
RECINVENT	0.111 (1.35)	0.114 (1.39)	0.127 (1.17)	0.127 (1.17)
LEVERAGE	-0.044 (-0.33)	-0.039 (-0.29)	-0.179* (-1.68)	-0.173 (-1.63)
ROA	0.376* (1.68)	0.391* (1.75)	-0.116 (-0.81)	-0.119 (-0.83)
LOSS	-0.002 (-0.06)	-0.000 (-0.01)	0.027 (1.52)	0.027 (1.49)
OPINION	0.124*** (2.60)	0.124*** (2.61)	0.077** (1.98)	0.077** (1.98)
BM	-0.000 (-0.22)	-0.000 (-0.21)	-0.000*** (-3.02)	-0.000*** (-3.01)
CFO	0.098 (0.87)	0.102 (0.91)	-0.047 (-0.42)	-0.051 (-0.45)
CURRENT	-0.000 (-0.10)	-0.000 (-0.08)	0.000 (0.10)	0.000 (0.09)
BIG4	0.191 (0.90)	0.192 (0.91)	0.218 (1.45)	0.217 (1.45)
STATE	-0.054 (-0.88)	-0.050 (-0.81)	0.005 (0.08)	0.007 (0.13)
SWITCH	-0.005 (-0.42)	-0.005 (-0.38)	-0.002 (-0.18)	-0.003 (-0.21)
CONSTANT	6.085*** (13.07)	6.066*** (13.03)	6.171*** (9.36)	6.185*** (9.42)
N	3,997	3,997	4,079	4,079
Year FE	YES	YES	YES	YES
Client FE	YES	YES	YES	YES
Audit Firm FE	YES	YES	YES	YES
Adjusted R <sup>2</sup>	0.713	0.714	0.653	0.653

Notes: See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

**Table 5b**  
Panel B: Place attachment and audit quality.

Dependent variables	OPINION		AQ1		AQ2	
	1		2		3	
	(1)	(2)	(1)	(2)	(1)	(2)
SAMECITY	-1.086***		0.007*		0.008*	
SAMEPROVINCE		-0.387**		0.006**		0.008***
Control variables	YES	YES	YES	YES	YES	YES
N	10,916	10,916	8,050	8,050	6,602	6,602
Adjusted/Pseudo R <sup>2</sup>	0.323	0.320	0.618	0.618	0.420	0.421

Notes: This table reports coefficient estimates using alternative audit quality measures. OPINION is a dummy variable that equals 1 if the client received a qualified audit opinion, and 0 otherwise. AQ1 is discretionary accruals estimated as the residual of the modified Jones (1991) model. AQ2 is discretionary accruals estimated as the residual of Dechow and Dichev (2002) model. See Appendix 1 for definitions of all variables.

## 5.2. Diagnostic and robustness tests

The robustness of the main findings reported in Table 4 was assessed through a series of additional tests using baseline model (1). First, clients may intentionally select auditors who are geographically related, and pay them higher fees for tolerating earnings management. To alleviate this concern, the Heckman two-stage model was used to examine potential selection bias amongst auditors in our study (Srinidhi et al., 2011). In the first stage we ran a probit regression, using SAME as the dependent variable, and variables affecting this selection decision as independent variables (SIZE, LEVERAGE, ROA, RECINVENT, LOSS, BM, CFO, CURRENT, BIG 4, STATE, SWITCH). We then computed the inverse Mills ratio (IMR) and input this into



the baseline models to control for potential endogeneity. In general, the results shown in column (1) of Table 6 are in line with the baseline results.

We also used a two-stage model to control for the impact of unobserved factors that might bias the estimation of coefficients. In the first stage, we ran a probit regression with *SAME* as the dependent variable, and the independent variables included in model (1). The residual from stage 1 was then included in the baseline model. The results shown in column (2) of Table 6 are in line with the baseline results.

Third, a potential concern was that the baseline effects might be attributable mainly to place ties between the two signing auditors themselves, rather than their association with the client. Place connections between the two signing auditors might make them more likely to collude to achieve higher prices. To alleviate this concern, an alternative definition of *SAME* was adopted, using *SAME\_CITY* and *SAME\_PROVINCE* as indicator variables equal to one if the two signing auditors attended colleges in the same city/province but in a different location from that of the client. As shown in column (3) of Table 6, the coefficients of *SAME\_CITY* and *SAME\_PROVINCE* are insignificant in both cases, indicating that the baseline effects are attributable mainly to place ties between signing auditors and clients.

Fourth, we excluded firm-years in 2007 to alleviate the effect of the 2008 global financial crisis. As shown in column (4) of Table 6, the coefficients of *SAME* are still positively significant. Next, as ST shares were subject to special treatment and potential delisting from the stock exchange, column (5) shows the results of repeating the baseline model with the inclusion of *ST*, a variable indicating whether the client is an ST or \*ST company. The coefficient of *SAME\_CITY* remains positive and highly significant at the 1% level, while that of *SAME\_PROVINCE* is insignificant.

Fifth, as a client's place of incorporation may be different from its headquarters, we replace the former with the latter. As reported in column (6) of Table 6, the coefficient of *SAME\_CITY* is significant at the 1% level ( $\beta_2 = 0.043$ ;  $t = 2.83$ ), but that of *SAME\_PROVINCE* is insignificant ( $\beta_2 = 0.017$ ;  $t = 1.48$ ), suggesting that auditors may charge higher audit fees to clients headquartered in the same city as their college.

Finally, we attempted to measure the impact of auditor–client familiarity on auditors' report lag, measured as the natural logarithm of the time lag between the fiscal year end and the date of signing the corresponding audit report. Previous studies suggest that auditors' report lag can be used as a proxy for audit effort (e.g., Knechel et al., 2009; Tanyi et al., 2010; Mitra et al., 2015). Specifically, if an increase in audit fees is a reward for tolerating earnings adjustments rather than increased auditor effort for place-connected clients, we would not expect to observe a significant impact of place attachment on auditors' report lag. As shown in Table 7, the coefficients of both *SAME\_CITY* and *SAME\_PROVINCE* are insignificant, indicating that enhanced audit fees are unlikely to be attributable to increased auditor effort.

In summary, signing auditors are more likely to charge higher audit fees to clients with whom they have place connections, and this finding is robust to a series of research design choices.

**Table 6**  
Robustness tests.

Dependent variable	AUDFEE											
	Selection Bias		Omitted factors		Alternative explanation		Exclusion of year 2007		Exclusion of ST and ST*		Place of headquarter	
	1	(2)	2	(2)	3	(2)	4	(2)	5	(2)	6	(2)
<i>SAMECITY</i>	0.038**		0.012**		0.015		0.043**		0.068***		0.043***	0.017
	(2.16)		(2.22)		(1.39)		(2.42)		(2.80)		(2.83)	(1.48)
<i>SAMEPROVINCE</i>		0.019*		0.008*			0.015			0.021*		0.009
	(1.66)		(1.70)				(1.06)			(1.85)		(0.58)
<i>Control variables</i>	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
<i>N</i>	10,647	10,647	10,647	10,647	10,647	10,647	10,647	10,647	10,313	10,313	10,647	10,647
<i>Adjusted R<sup>2</sup></i>	0.672	0.672	0.672	0.672	0.672	0.672	0.672	0.672	0.660	0.660	0.678	0.677
	0.672											

Notes: Table 6 reports sensitivity tests based on model (1) of Table 4. Column (1) tests whether self-selection bias affects the impact of *SAMECITY* (*SAMEPROVINCE*) on audit fees. Column (2) tests whether omitted variables affect the impact of *SAMECITY* (*SAMEPROVINCE*) on audit fees. Column 3 adopts alternative definitions of *SAMECITY* and *SAMEPROVINCE*, being equal to one if both signing auditors attended colleges in the same city/province but different from the client's location, and zero otherwise. Column 4 excludes firm-year observations in 2007. Column 5 repeats the baseline model but includes a variable, *ST*, that indicates whether the client is an ST or \*ST company. Column 6 replaces clients' place of incorporation with their place of headquarters. See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

**Table 7**  
Auditor–client familiarity and auditors' report lag.

Dependent variable	ARL			
	1	2	1	2
<i>SAME_CITY</i>	0.019 (0.90)	0.019 (0.60)	– –	– –
<i>SAME_PROVINCE</i>	– –	– –	0.008 (0.60)	0.008 (0.53)
<i>SIZE</i>	0.077*** (5.85)	0.077*** (6.89)	0.077*** (5.84)	0.077*** (7.05)
<i>LAGARL</i>	–0.055*** (–2.62)	–0.055 (–1.93)	–0.055*** (–2.63)	–0.055 (–1.93)
<i>LAGACCRUAL</i>	0.016 (0.32)	0.016 (0.96)	0.016 (0.32)	0.016 (0.97)
<i>LEVERAGE</i>	0.134** (1.98)	0.134 (1.35)	0.136** (2.01)	0.136 (1.41)
<i>ROA</i>	–0.334*** (–3.00)	–0.334* (–2.21)	–0.334*** (–3.01)	–0.335* (–2.23)
<i>LOSS</i>	0.043*** (2.66)	0.043** (2.93)	0.043*** (2.66)	0.043** (2.95)
<i>OPINION</i>	0.079*** (2.76)	0.079*** (9.44)	0.079*** (2.75)	0.079*** (9.24)
<i>BM</i>	0.000*** (3.14)	0.000*** (5.53)	0.000*** (3.13)	0.000*** (5.45)
<i>CFO</i>	–0.056 (–0.83)	–0.056 (–1.07)	–0.055 (–0.81)	–0.055 (–1.02)
<i>CURRENT</i>	0.002 (0.39)	0.002 (1.04)	0.002 (0.40)	0.002 (1.04)
<i>BIG4</i>	–0.032 (–0.45)	–0.032 (–1.83)	–0.033 (–0.46)	–0.033 (–2.09)
<i>SWITCH</i>	0.024** (2.43)	0.024** (3.44)	0.023** (2.41)	0.023*** (3.34)
<i>STATE</i>	0.007 (0.16)	0.007 (0.27)	0.008 (0.18)	0.008 (0.30)
<i>CONSTANT</i>	2.966*** (8.53)	3.318*** (11.75)	2.965*** (8.51)	3.327*** (12.03)
<i>N</i>	6,012	6,012	6,012	6,012
<i>Year FE</i>	YES	YES	YES	YES
<i>Client FE</i>	YES	YES	YES	YES
<i>Audit Firm FE</i>	YES	YES	YES	YES
<i>Adjusted R<sup>2</sup></i>	0.104	0.104	0.104	0.104

Notes: This table reports the coefficient estimates from regression analyses, showing the average effect of place attachment on auditors' report lag. ARL is the report lag measured as the natural log of the time lag between the date of signing the audit report and the corresponding fiscal year end. See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

### 5.3. Heterogeneity tests

#### 5.3.1. Auditor size

In order to gain further insights into the mechanism underlying the impact of auditor–client familiarity on audit fees, we examined whether the baseline effects might alter with different characteristics of auditors, clients and cities. First, tests were conducted to establish any variation in audit fee premiums between larger and smaller audit firms, and in levels of rivalry and competition between different segments of the audit market (Ghosh and Lustgarten, 2006). Large auditors may be less likely to tolerate earnings management than small auditors owing to concerns about reputation and litigation (DeFond and Zhang, 2014). Large auditors have “deep pockets” that may be targeted by shareholders in litigation claims (Choi et al., 2008). Accordingly, they may be less conducive to familiarity bias, so the baseline effects may be more pronounced among small auditors.

Table 8 shows the results of repeating the previous analysis with the sample split into large and small auditors in China. Large auditors are the Big 6 identified in CICPA's (2016) evaluation of top accounting firms. The coefficient of *SAME\_CITY* is positive and significant ( $\beta_2 = 0.045$ ;  $t = 2.11$ ) only for small auditors, whereas the coefficient of *SAME\_PROVINCE* is insignificant for both groups. This is consistent with Hypothesis 1, that place attachment may lead small auditors to increase their audit fees, possibly because they are less concerned about reputational damage and litigation and are thus more likely to tolerate earnings management.

**Table 8**  
Large and small audit firms.

Dependent variable	AUDFEE			
	LARGE		SMALL	
SAME_CITY	0.009 (0.23)	- -	0.045** (2.11)	- -
SAME_PROVINCE	- -	0.025 (1.00)	- -	0.021 (1.57)
SIZE	0.362*** (9.78)	0.362*** (9.78)	0.353*** (23.87)	0.344*** (23.06)
RECINVENT	0.039 (0.36)	0.040 (0.37)	0.079 (1.36)	0.076 (1.43)
LEVERAGE	-0.112 (-0.72)	-0.112 (-0.72)	-0.174** (-2.28)	-0.141** (-2.10)
ROA	-0.146 (-0.67)	-0.144 (-0.66)	-0.002 (-0.01)	-0.063 (-0.66)
LOSS	0.025 (1.11)	0.027 (1.15)	0.020 (1.38)	0.013 (1.02)
OPINION	0.084 (1.46)	0.084 (1.46)	0.130*** (4.51)	0.110*** (4.35)
BM	-0.004 (-0.08)	-0.004 (-0.08)	-0.000*** (-3.30)	-0.000*** (-3.47)
CFO	0.084 (0.74)	0.086 (0.76)	-0.003 (-0.05)	0.005 (0.11)
CURRENT	-0.004 (-0.76)	-0.004 (-0.73)	0.006* (1.73)	0.003 (1.28)
STATE	-0.034 (-0.65)	-0.034 (-0.64)	-0.080* (-1.95)	-0.063* (-1.80)
SWITCH	-0.006 (-0.44)	-0.006 (-0.43)	0.002 (0.33)	0.003 (0.42)
CONSTANT	6.092*** (7.32)	6.073*** (7.28)	6.053*** (17.22)	6.226*** (18.17)
N	2,859	2,859	7,788	7,788
Year FE	YES	YES	YES	YES
Client FE	YES	YES	YES	YES
Audit Firm FE	YES	YES	YES	YES
Adjusted R <sup>2</sup>	0.619	0.619	0.679	0.683

Notes: See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

### 5.3.2. State ownership

Previous Chinese studies find that non-state-owned companies may be subject to greater uncertainty in the audit environment owing to lack of government support. Such companies are generally smaller, and thus more dependent on their auditors (Chang et al., 2018). In contrast, with governmental support and help, state-owned enterprises (SOEs) are normally larger, with stronger state intervention and lower dependence on auditors (Chang et al., 2018). Accordingly, non-SOEs may have more incentives than SOEs to reward auditors for tolerating earnings management.

To examine whether the effect of client–auditor familiarity on audit fees varied between companies with different ownership properties, we split the sample into state-owned and non-state-owned companies. As shown in Table 9, the coefficient of SAME\_CITY is more significant for non-state-owned companies ( $\beta_2 = 0.061$ ;  $t = 2.38$ ), and the coefficient of SAME\_PROVINCE is positively significant for non-state-owned companies ( $\beta_2 = 0.034$ ;  $t = 2.11$ ) but insignificant for state-owned companies ( $\beta_2 = 0.018$ ;  $t = 1.21$ ). These results indicate that the effect of place attachment is more pronounced among non-state-owned companies, which lack close relationships with government, are relatively weak and find it more difficult to obtain governmental support.

### 5.3.3. Switching auditors

Next, we examined whether auditor switching might impact on the baseline effect of auditor–client familiarity. Previous studies have produced conflicting results on the association between auditor switching and audit quality. Some find that clients may switch auditors to avoid receiving unfavourable audit opinions (e.g., Carcello and Neal, 2003; Lennox, 2000), while others claim that former and subsequent auditors treat their clients no differently (Krishnan et al., 1996).

Table 10 compares clients that switched auditors between years with those that did not. The coefficients of SAME\_CITY ( $\beta_2 = 0.081$ ;  $t = 2.56$ ) and SAME\_PROVINCE ( $\beta_2 = 0.042$ ;  $t = 2.02$ ) are more significant for clients that switched auditors, supporting the notion that the place attachment effect is more concentrated among clients that switch auditors, potentially to avoid unfavourable audit opinions. As a reward for tolerating financial misreporting, clients may pay higher audit fees to their subsequent auditors.

**Table 9**  
State ownership.

Dependent variable	AUDFEE			
	SOE		Non-SOE	
SAME_CITY	0.039* (1.76)	- -	0.061** (2.38)	- -
SAME_PROVINCE	- -	0.018 (1.21)	- -	0.034** (2.11)
SIZE	0.315*** (11.21)	0.315*** (11.19)	0.341*** (19.15)	0.341*** (19.17)
RECINVENT	0.102 (1.10)	0.103 (1.11)	0.071 (1.10)	0.073 (1.13)
LEVERAGE	-0.252*** (-2.64)	-0.244** (-2.56)	-0.063 (-0.67)	-0.062 (-0.67)
ROA	-0.123 (-0.73)	-0.121 (-0.72)	-0.072 (-0.62)	-0.073 (-0.64)
LOSS	-0.016 (-0.90)	-0.015 (-0.89)	0.027 (1.55)	0.027 (1.52)
OPINION	0.042 (0.96)	0.041 (0.93)	0.132*** (4.33)	0.131*** (4.33)
BM	-0.000** (-2.22)	-0.000** (-2.23)	-0.000 (-1.15)	-0.000 (-1.17)
CFO	-0.062 (-0.95)	-0.062 (-0.95)	0.061 (1.00)	0.062 (1.02)
CURRENT	0.010 (1.25)	0.010 (1.22)	0.002 (0.82)	0.002 (0.84)
BIG4	0.391*** (3.18)	0.387*** (3.16)	-0.138 (-1.04)	-0.131 (-1.00)
SWITCH	-0.015 (-1.58)	-0.015 (-1.59)	0.020** (2.28)	0.020** (2.25)
CONSTANT	7.000*** (10.87)	6.996*** (10.85)	6.351*** (15.62)	6.358*** (15.74)
N	4,534	4,534	6,113	6,113
Year FE	YES	YES	YES	YES
Client FE	YES	YES	YES	YES
Audit Firm FE	YES	YES	YES	YES
Adjusted R <sup>2</sup>	0.650	0.650	0.692	0.692

Notes: See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

### 5.3.4. State effects

Other confounding factors, such as the cost of living or state effects, may potentially cause the main effect. In particular, financially motivated auditors are more likely to engage in audits for which they can charge higher fees. As reported in Table 2, around 25% of companies in the sample were from Jiangsu and Shanghai, where the cost of living is much higher than the national average. In order to alleviate concern that some “big states” may have driven the main results, we repeated the main tests of Table 4 after removing clients incorporated in Jiangsu and Shanghai from the sample. As shown in Panel A of Table 11, the coefficient of SAME\_CITY is significant at the 10% level, while the coefficient of SAME\_PROVINCE is insignificant.

Panel B of Table 11 shows the results of repeating the main tests of Table 4 with the inclusion of a cost of living index (i.e. COST\_LIVE). COST\_LIVE is the natural log of the average per capita annual consumption expenditure of urban households in each province. The coefficient of SAME\_CITY is significant at the 5% level, while the coefficient of SAME\_PROVINCE is marginally significant at the 10% level. Taken together, these results are generally in line with those shown in Table 4 after taking cost of living and state effects into consideration.

## 6. Conclusion

This study investigates the impact of place attachment on audit fees for listed companies in China. Based on signing auditors' place of college graduation and clients' place of incorporation, we find that geographically-related clients are likely to pay higher audit fees to their auditors. This impact is more concentrated among smaller auditors, non-state-owned clients, clients that switch auditors between years and clients located in large cities. We also find that geographically related clients are more likely to receive standard, unqualified audit opinions from their auditors than those with no geographical connection. Moreover, place-related clients exhibit higher abnormal accruals.

This study has some limitations. First, place of education is just one aspect of place attachment, and other factors, such as place of birth or workplace, may also play a role. Furthermore, this study focuses solely on the Chinese market, and whether

**Table 10**  
Switching auditors.

Dependent variable	AUDFEE		NON-SWITCH	
	SWITCH			
SAME_CITY	0.081** (2.56)	-	0.041* (1.81)	-
SAME_PROVINCE	-	0.042** (2.02)	-	0.017 (1.23)
SIZE	0.306*** (8.16)	0.309*** (8.17)	0.370*** (22.63)	0.369*** (22.62)
RECINVENT	0.074 (0.54)	0.079 (0.58)	0.061 (0.98)	0.062 (1.00)
LEVERAGE	-0.132 (-0.94)	-0.133 (-0.94)	-0.102 (-1.26)	-0.097 (-1.19)
ROA	-0.069 (-0.31)	-0.074 (-0.33)	-0.131 (-1.18)	-0.128 (-1.15)
LOSS	-0.001 (-0.02)	-0.000 (-0.01)	0.009 (0.64)	0.009 (0.65)
OPINION	0.098* (1.75)	0.100* (1.78)	0.100*** (3.56)	0.099*** (3.53)
BM	-0.000*** (-3.05)	-0.000*** (-3.12)	-0.000*** (-2.87)	-0.000 (-2.88)
CFO	-0.041 (-0.35)	-0.040 (-0.34)	0.040 (0.68)	0.042 (0.71)
CURRENT	0.004 (0.81)	0.005 (0.86)	-0.001 (-0.21)	-0.001 (-0.21)
BIG4	0.208** (2.31)	0.205** (2.28)	0.202 (0.63)	0.195 (0.61)
STATE	-0.062 (-0.94)	-0.056 (-0.85)	-0.075 (-1.60)	-0.074 (-1.57)
CONSTANT	7.262*** (8.87)	7.196*** (8.74)	5.457*** (13.30)	5.491*** (13.57)
N	3,570	3,570	7,077	7,077
Year FE	YES	YES	YES	YES
Client FE	YES	YES	YES	YES
Audit Firm FE	YES	YES	YES	YES
Adjusted R <sup>2</sup>	0.654	0.653	0.695	0.695

Notes: See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

place attachment exists in other institutional settings is as yet unknown. Overall, this study has implications for standard setters and regulators, and provides a useful starting point for further research.

### Data availability

The authors do not have permission to share data.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**Table 11**  
State effects.

Panel A: Dropping Jiangsu and Shanghai		
Dependent variable	AUDFEE	
	1	2
<i>SAME_CITY</i>	0.036*	
	(1.83)	
<i>SAME_PROVINCE</i>		0.020
		(1.56)
Control variables	YES	YES
N	8,803	8,803
Adjusted R <sup>2</sup>	0.673	0.673
Panel B: Inclusion of cost of living index		
Dependent variable	AUDFEE	
	1	2
<i>SAME_CITY</i>	0.038**	
	(2.14)	
<i>SAME_PROVINCE</i>		0.019*
		(1.67)
<i>COST_LIVE</i>	-0.081	-0.084
	(-0.90)	(-0.93)
Control variables	YES	YES
N	10,647	10,647
Adjusted R <sup>2</sup>	0.672	0.672

Notes: This table reports the impact of state effects on the relationship between geographical connection and audit fees. Panel A drops clients incorporated in Jiangsu and Shanghai, and Panel B includes the cost of living index. *COST\_LIVE* is the natural log of the average annual consumption expenditure per capita of urban households in each province. See Appendix for definitions of all variables. All continuous variables are winsorized at the 1st and 99th percentiles. \*\*\*, \*\* and \* denote significance at the 1%, 5% and 10% levels, respectively (two-tailed test).

## Appendix . Definitions of variables

Dependent variables	
<i>AUDFEE</i>	The natural logarithm of audit fees in Chinese Yuan
<i>AQ1</i>	Discretionary accruals estimated as the residual of the modified Jones (1991) model
<i>AQ2</i>	Discretionary accruals estimated as the residual of the Dechow and Dichev (2002) model
<i>ARL</i>	The report lag measured as the natural log of the time lag between the date of signing the audit report and the corresponding fiscal year end
Variables of interest	
<i>SAME_CITY</i>	An indicator variable equal to one if both signing auditors attended colleges in the same city as the client's location, and zero otherwise.
<i>SAME_PROVINCE</i>	An indicator variable equal to one if both signing auditors attended colleges in the same province as the client's location, and zero otherwise
Firm-specific controls	
<i>SIZE</i>	Natural logarithm of total assets
<i>RECINVENT</i>	Ratio of the sum of inventories and receivables to total assets
<i>LOSS</i>	Dummy variable that equals one if the client reports a net loss in the current year, and zero otherwise
<i>LEVERAGE</i>	Ratio of long-term debt to total assets
<i>OPINION</i>	Dummy variable that equals one if the client receives a non-standard unqualified audit opinion, and zero otherwise
<i>BIG4</i>	Dummy variable that equals one if the client uses one of the Big 4 audit firms, and zero otherwise

## . Definitions of variables (continued)

Dependent variables	
AUDFEE	The natural logarithm of audit fees in Chinese Yuan
ROA	Ratio of net income to total assets
CFOSCALED	Cash flow from operations scaled by total assets
BM	Book value of equity scaled by the market value of equity in thousands of Chinese Yuan
LAGACCRUAL	One-year lagged value of total accruals, calculated as the difference between net income before extraordinary items and cash flow from operations scaled by lagged total assets
LIQUIDITY	Ratio of current assets to current liabilities
STATE	Equal to one if a client is a state-owned enterprise, and zero otherwise
SWITCH	Equal to one if a client changed auditor between the previous ( $t-1$ ) and current ( $t$ ) years, and zero otherwise
LAGARL	The one-year lagged value of total accruals, measured as the difference between net income before extraordinary items and cash flow from operations
COST_LIVE	The natural log of the average per capita annual consumption expenditure of urban households in each province

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