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AUDIT MARKET AND AUDITOR CHOICE OF CHINESE LISTED FIRMS

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ABSTRACT

This chapter reviews the audit market and auditor choice of Chinese listed firms between 2007 and 2012. This chapter demonstrates that in China, the audit market share for Big 4 firms is still low, while that of Second-tier firms has been increasing during that period. Even though there is no sufficient evidence to support that the audit quality of Second-tier firms is not comparable to that of Big 4 firms, the firm and business sizes of Big 4 clients are substantially higher than those of Second-tier and Third-tier clients. The author suggests that in order to enhance the audit quality in Chinese accounting profession, the policy makers can encourage the foreign auditors (including Big 4 and Second-tier firms) to collaborate and merge with the domestic accounting firms and/or provide incentive to foreign auditors to set up branches in non-eastern coastal region.

Keywords: Audit market, auditor choice, corporate governance, Chinese listed firms

1. INTRODUCTION

Agency problems always exist between the principal (the owner) and the manager (the agent) in the contemporary corporation (Berle & Means, 1932). An independent or external audit (hereafter "audit") is one of the means to reduce such agency problems. An audit is defined as "a periodic examination of the financial statements of an entity by an independent auditor, to ensure

that those financial statements have been properly prepared, are accurate and in accordance with generally acceptable accounting principles and legal requirements and give a true and fair view of the financial state of the entity"[1].

An audit also plays an imporant role in the national stock market because audited financial statements are useful to investors, but their usefulness is contingent on their perceived creditability. In developed economies, real and/or perceived audit quality of Big 4 firms is greater than that of non-Big 4 firms as claimed by Cassell, Giroux, Myers and Omer (2013). Cassell et al. (2013) also point out that after the collapse of Anderson in 2000s, U.S. regulators encourage the use of Second-tier firms as an alternative to Big 4 firms and find that financial reporting creditability of Second-tier clients is indistinguishable from that of Big 4 clients. However, audit market in China is dominated by domestic firms which are neither Big 4 nor Second-tier firms, because of her own historical reasons and institutional frameworks.

1.2. Development of Accounting (Auditing) Profession in China

After the establishment of the People's Republic of China[2] in 1949, Chinese accounting (or auditing) profession became non-existent because all enterprises were owned by the state and managed by the civil servants. After the open door policy in 1980s, auditing services are required for verification of capital contributions and audits of financial statements of the Sino-foreign enterprises and the purpose of such audit was to protect Chinese Government, but not to solve the agency problems. However, the establishment of two Chinese stock exchanges in 1990s facilitated the development of corporate governance framework and accounting profession in China because financial statements of any Chinese listed firm have to be audited by independent certified public accountants (CPAs) with specific license[3], and therefore, the concept of agency theory in Chinese auditing profession has been developed since 1990s.

[1] This modified definition is extracted from Management Accounting Official Terminology, published by the Chartered Institute of Management Accountants (UK).

[2] In this chapter, the People's Republic of China or China excludes Hong Kong, Macau and Taiwan.

[3] This license is granted by the Ministry of Finance (MOF) and China Securities Regulatory Commission (CSRC) in accordance with "Supplementary Provisions to the Provisions on the Administration of the Permits for Certified Public Accountants to Undertake Business Relating to Securities and Futures."

Most Chinese accounting firms were initially established or sponsored by government agencies or social institutions (Lin & Liu, 2009) and initially all accounting firms were domestically owned and operated. As Chinese stock market was open to foreign investors and the rapid growth of foreign-invested enterprises in 1990s, the demand for high-quality audits has increased accordingly, and foreign accounting firms (epecially Big 4 and Second-tier firms) were allowed to establish joint ventures with domestic firms to perform statutory audits (Wang, O & Iqbal, 2009). Because most Chinese listed firms were state-owned or established by the state and then owned by their senior executives (i.e., management buyout), those listed firms would prefer domestic firms to Big 4 and Second-tier firms. For such guanxi between the owners/management and the domestic auditors, the independence and audit quality of domestic auditors are always challenged by various user groups, and more specially, some scholars evidence that domestic auditors rarely issued modified (qualified) audit opinion to the financial statements of the local state-owned enterprises (SOEs) (Wang, Wong & Xia, 2008) and those private firms with political connections and the domestic auditors rarely issue modified (qualified) audit opinion even though they have found some irregularities (Liu, Wang & Wu, 2011). Liu et al. (2011) further find that two types of guanxi, "firm-level connections derived from state ownership and personal connections developed through management with external auditors", have a close association with auditors' independence in China. Wang et al. (2009) summarize that the audit market in China is different from that of developed economies because first, competition among auditors is more pronounced due to active participation of small- and mid-sized CPA firms and low concentration of Big 4 firms and second, Chinese auditors usually operate only in the local market due to strong government and geographical influences in auditor choice.

In developed economies, most scholars used Big 4 firms as proxy for high audit-quality because of their substantial market share and manpower in those countries (e.g., Francis, 2004; Lawrence, Minutti-Meza, & Zhang, 2011). Nonetheless, due to the historical, political, economic and guanxi factors, auditing services in China have been dominated by domestic accounting firms for Chinese listed firms, and those accounting firms with international alliance (e.g., Big 4 and international Second-tier firms) are still uncommon in Chinese stock market, especially in non-eastern coastal region where Big 4 and Second-tier firms usually do not have branches or affiliated firms.

In the literature of audit quality in China, some scholars (e.g., Chen, Shrome & Su, 2001; Simunic and Wu, 2009; Firth, Rui & Wu; 2012) still used

Big 4 firms as proxy for high audit-quality, while other scholars (e.g., Gul, Sun & Tsui, 2003; Lin & Liu, 2009; Lin, Liu & Wang, 2009) used Top 10 firms (being the largest 10 firms in terms of annual audit revenue) instead of Big 4 firms for the same purpose. Consistent with the U.S. practice for the encouragement of Second-tier firms as an alternative to Big 4 firms mentioned by Cassell et al. (2013), it is one of China Government policies to develop 10 big accounting firms that can provide multinational and comprehensive services and to further develop 200 firms for providing quality services to small and medium sized entities and listed firms[4]. It has been evidenced that in December 2010, the Ministry of Finance and the Chinese Securities Regulatory Commission (CSRC) approved a list of 12 mainland accounting firms[5] that are allowed to conduct statutory audits on mainland-incorporated entity listed in Hong Kong (H-share listed firms) (see Table 1). Other than five firms affiliated with PwC, Deloitte, Ernst & Young and KPMG, the remaining seven accounting firms are those affiliated with international firms, and therefore they are regarded as "Second-tier" firms in this chapter.

Table 1. Proxies for high audit-quality

Classification	Big 4 firms (in global name)	Top 10 firms in terms of revenue (from Lin & Liu, 2009)	12 recognized firms for H-share listed firms
Big 4 firms	PricewaterhouseCooper (PwC) Deloitte Ernst & Young (EY) KPMG	PwC Zhongtian (PwC) Deloitte Huayong (Deloitte) EY Huaming, EY Dahua (two E&Ys) KPMG Huazhen (KPMG)	PwC Deloitte EY Huaming EY Dahua KPMG
Second-tier/ non-Big 4 large firms		Lixin Changjiang Yuehua Xinyongzhonghe Beijing Jingdu Jiangsu Gongzheng	Lixin (BDO) Dahua[6] (BDO) Tianjian (Pan-China) ShineWing Crowe Horwath[7] Jingdu Tianhua[8] (Grant Thornton)

[4] Extracted from Annex of Guobanfa No. 56 (2009), "Notice of the Accelerated Development of Certified Public Accountants in China," issued by the Ministry of Finance in 2009.

[5] These 12 firms recognized for H-share listed firms are shown in the website of the Hong Kong Stock Exchange, "List of Approved Mainland Accounting Firms Eligible for Acting as Reporting Accountants and/or Auditors of Mainland Incorporated Companies Listed in Hong Kong" https://www.hkex.com.hk/eng/rulesreg/listrules/listsptop/afmlist.htm, accessed 28 September 2014.

[6] Name now changed to Dahua, a member of Moore Stephens since September 2013.

[7] Merged with Zhongrui Yuehua with effect from May 2013 and changed name to Ruihua, a member of both Crowe Horwath and RSM.

The summary of the categories of Big 4, Top 10 and 12 firms recognized by the Ministry of Finance for H-share listed firms are shown in Table 1.

Consistent with Cassell et al. (2013), this chapter uses a trichotomous auditor type classification (i.e., Big 4, Second-tier and Third-tier firms[9]) to examine the audit market and auditor choice of these three types.

1.3. Market Share of Auditing Profession in China

Due to the specific historical and institutional framework as mentioned above, the audit market share in China is dominated by domestic firms. Table 2 reports that the audit market share of Chinese listed firms with respect to the trichotomous auditor type classification from 2003 to 2012. As shown in Table 2, the market share (in terms of the number of audit clients and their percentages) of Big 4 firms was relatively smaller, and was about 7% and there was no significant change for that period; however, the market share for Second-tier firms increased from 26.3% in 2003 to 58.3% in 2012, while the market share for Third-tier firms has decreased from 65.0% in 2003 to 35.5% in 2012, partially because some domestic accounting firms merged with Second-tier firms during that period, leading to the client base switched from Third-tier firms to Second-tier firms for that period[10].

Table 2. The market share of auditing services in Chinese listed firms

	Years										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Number of Chinese listed firms engaging:											
Big 4 firms	113	100	101	101	116	111	114	131	150	155	1192
Second-tier firms	339	384	379	461	558	589	797	979	1160	1453	7099
Sub-total for 12 recognized firms	452	484	480	562	674	700	911	1110	1310	1608	8291

[8] Merged with Tianjian Zhengxin in January 2012 and changed name to Zhitong in June 2012.

[9] Third-tier firms, in this chapter, include those audit firms which are not the recognized 12 firms, but are allowed to conduct the annual audit of Chinese listed firms with the licence granted by MOF and CSRC (see Note 3).

[10] Wang et al. (2009) cite that Crowe Horwath and BDO have developed through mergers and partnerships with domestic firms.

Third-tier firms	838	895	894	895	897	925	863	1018	1053	884	9162
Total Chinese listed firms	1290	1379	1374	1457	1571	1625	1774	2128	2363	2492	17453
Percentage of Chinese listed firms engaging:											
Big 4 firms	8.8	7.3	7.4	6.9	7.4	6.8	6.4	6.2	6.3	6.2	6.8
Second-tier firms	26.3	27.8	27.6	31.6	35.5	36.2	44.9	46.0	49.1	58.3	40.7
Sub-total for 12 recognized firms	35.1	35.1	35.0	38.5	42.9	43.0	51.3	52.2	55.4	64.5	47.5
Third-tier firms	65.0	64.9	65.0	61.5	57.1	57.0	48.6	47.8	44.6	35.5	52.5
Total Chinese listed firms	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Source: All firm-year observations in CSMAR).

Previous literature adopted both Big 4 and Top 10 firms as the proxy for high audit-quality in China. The scope of "Big 4" firms is well defined in literature in developed economies; however, the market share of Big 4 firms in China is low and the audit market is dominated by non-Big 4 firms because of the specific historical and institutional framework. This raises the question of what shareholders and stakeholders perceive the audit quality and their auditor choice (Simunic & Wu, 2009). Even though some scholars use Top 10 firms as high audit quality, previous literature in China does provide little evidence on the development of Second-tier firms. Based on the trichotomous auditor type classification, the purpose of this chapter is to review the audit market and auditor choice of the Big 4, Second-tier and Third-tier firms in the contemporary Chinese stock market, and the firm characteristics of the respective audit clients with respect to the trichotomous auditor type classification.

2. LITERATURE REVIEW

The separation of ownership (the principal) and management (the agent) may result in opportunistic management behaviors and cause serious agency problems in contemporary enterprises (Fama & Jensen, 1983) and agency costs are likely to increase due to asymmetric information between managers and dispersed shareholders (Jensen & Meckling, 1976). However, ownership

of Chinese listed firms is concentrated in the hands of one or few large shareholders and even the controlling shareholders (who hold highest voting rights in the listed firms) can generally monitor management and they are unlikely to consider audit as a monitoring mechanism. For the protection of minority interest, there is a great demand for high-quality audits as one of effective monitoring (governance) mechanisms (Lin & Liu, 2009).

2.1. Corporate Governance Mechanisms and Auditor Choice

Previous literature well addresses the association between corporate governance mechanisms (CGMs) and the auditor choice. In general, CGMs can be classified as (1) ownership structure, (2) internal management structure and (3) external monitoring mechanisms.

There is a general perception that listed firms have to take a trade-off in their auditor choice decisions: (1) to hire "high-quality" auditors to signal effective audit monitoring and good corporate governance to lower their capital raising costs, and (2) to hire "low-quality auditors" with less effective audit monitoring in order to recap private benefits derived from weak corporate governance and less-transparent disclosure (the opaqueness gains) (Lin & Liu, 2009).

2.1.1. Ownership Structure

There are two controversial issues on the concentrated ownership of the listed firms on the auditor choice. On one hand, some scholars argue that with high ownership concentration, the financial information of listed firms is likely to be opaque due to the incentives for rent-seeking and expropriation by their controlling shareholders (Copley & Douthett, 2002), and because those controlling shareholders would try to maximize their private benefits through tunneling or expropriation of other shareholders (La Porta, Lopez-De-Silanes, Shleifer & Vishny, 2002; Anderson, Kadous & Koonce, 2004) and therefore, those Chinese listed firms would hire low-quality auditors. Lin and Liu (2009) evidence that Chinese listed firms with controlling shareholders are less likely to hire high-quality auditors from 2001 to 2004. On the other hand, some controlling shareholders may also introduce effective CGMs that restrict his/her abilities to expropriate Chinese listed firms and therefore mitigate the agency conflict (Ang, Cole & Lin, 2000) and firm with such agency problems are more likely to hire the Big 4 firms (previously Big 5 firms which included Anderson) (Fan & Wong, 2005). Further, after the share reform, most

controlling shareholders of Chinese listed firms have converted their ownership from non-tradable shares to tradable ones, and therefore they can realize their shares of Chinese listed firms for cash. Accordingly, some controlling shareholders may have an incentive to hire high-quality auditors for the protection of their own interests. Other large shareholders may prefer high-quality auditors. Leung and Cheng (2013) find that the higher the degree of ownership concentration among other large shareholders, the higher the firm value because the alignment of those large shareholders can challenge the acts of the largest (controlling) shareholders. Therefore, other largest shareholders are assumed to prefer high-quality auditors for the protection of their interests.

2.1.2. Internal Management Structure

Agency theory assumes that the internal management structure (including directors and senior executives), as agents, do not prefer an effective CGM to them and an opaque financial reporting system. Xie, Davidson III and DaDalt (2003) suggest that board size and percentage of independent directors in the board can be used as proxies of strength of governance and board monitoring mechanism. As evidenced by Lin and Liu (2009), firms with smaller size of supervisory board and dual capacity of CEO and the board chairperson are less likely to hire high-quality auditors. External (or independent) directors are responsible for monitoring the operations of listed firms, and therefore, firms with higher portion of external directors are likely to hire high-quality auditors (Cheng & Leung, 2012). Nevertheless, the contemporary Company Law (2005) and Securities Law (2005) explicitly provide legal responsibilities for Chinese listed firms together with their directors and senior executives which and who provide fraudulent financial information to their shareholders. Therefore, in the contemporary Chinese institutional framework, internal management structure is more likely to prefer high-quality auditors to reduce their risk exposure.

2.1.3. External Governance Mechanisms - Institutional Framework and Marketization

In addition to ownership structure and internal management structure, external governance mechanisms may also have influence on the auditor choice. First, Wang and Xin (2011) find that Big 4 firms play an important role in improving earnings quality in firms dual-listed in Hong Kong and China (i.e., A/H shares) from 1998 to 2008 because the institutional framework in Hong Kong has been well established for investor protection.

Second, Wang, Wong and Xia (2008) find that central SOEs in regions, where institutions are less developed, and local SOEs are more likely to hire small local auditors from 1993 to 2003, maybe because the auditor choice decisions are derived by collusion incentives or local auditors' superior knowledge. Third, Leung and Cheng (2013) suggest that the firm value of Chinese listed firms registered in eastern coastal (well developed) region is higher than that of firms registered elsewhere because the enterprises in the developed regions have better CGMs and are more likely to engage high-quality auditors. Therefore, external governance factors may have a significant influence on the auditor choice.

2.2. What Is A High-Quality Auditor?

Audit quality means "technical aspect - the ability to detect misstatements" and "independent aspect - willing to report the misstatements uncovered in the audit work" (Lee, Stokes, Taylor & Walter, 2003). Boone, Khurana and Raman (2010) claim that two primary drivers of audit quality are litigation cost and reputation cost and the large auditors have an incentive to lower litigation risk and protect their reputation by providing more creditable audit opinion.

Most foreign scholars adopt Big 4 firms as the proxy for high audit-quality. DeFond, Wong and Li (2000) find that big audit firms are more likely to issue the qualified audit opinion in China. Francis (2004) also claims that audits of Big 4 firms are of higher audit-quality than non-Big 4 firms (including Second-tier firms) because Big 4 firms can charge higher audit fee for higher audit quality through more audit effort and greater expertise of the auditor. However, Cassell et al. (2013) find that after the collapse of Anderson, financial reporting creditability of the Second-tier clients is indistinguishable from that of Big 4 clients, while Boone et al. (2010) find little difference in actual audit quality in terms of the going concern audit opinion and accruals-based earnings management, but a more pronounced difference in perceived audit quality between Big 4 and Second-tier firms from 2003 to 2006 in U.S. and therefore, they suggest that the choice between Big 4 and Second-tier firms is not mainly a quality-based choice, but is mainly driven by cost savings in the form of lower ex-ante equity risk premiums due to hiring a Big 4 firm. Accordingly, there is no evidence to support that the audit quality of Second-tier firms is inferior to that of Big 4 firms in an international context.

However, Chinese auditing market presents an interesting issue for the study of auditor choice because Chinese accounting profession is not only regulated, but also administrated, by government agencies (e.g., the Ministry of Finance, CSRC, etc.) (Lin & Liu, 2009). Since the market share of the Big 4 firms is low, this raises the questions of what factors determines the differences in audit quality among the large set of audits performed by non-Big 4 firms in China (Simunic & Wu, 2009).

First, several scholars still adopted Big 4 and non-Big 4 (including Second-tier) firms as proxy for high-quality and low-quality auditors, respectively, mainly because the Big 4 firms should possess a higher degree of industrial expertise and are less politically influenced by local governments in China (e.g., Chen et al., 2001; Simunic & Wu, 2009; Chen, Su & Wu, 2009; Guedhami et al., 2009; Wang & Xin, 2011). Furthermore, Wang et al. (2009) state that the Big 4 firms claim their business focus on industry expertise as shown on their websites, and find that the Big 4 firms with industry expertise can earn additional fee premium from higher service quality as compared to the Big 4 firms equipped only with general brand reputation. Boone et al. (2010) suggest that investors perceive the Big 4 firms to Second-tier firms, likely because the Big 4 firms have "deeper pockets" (greater funds) and ability to share the shareholders' loss and litigation costs in case of audit failure.

Second, some Chinese scholars adopt "Top 10" firms (including Big 4 firms) in terms of their revenue as high-quality auditors in China (e.g., Lin & Liu, 2009; Li & Luo, 2011). In December 2010, the Ministry of Finance approved 12 mainland audit firms which are eligible to conduct the statutory audit of H-share listed firms. Therefore, the audit quality of those twelve firms (including Big 4 and international second-tier firms) is likely comparable to international auditing standards. This chapter divides those 12 firms as Big 4 and Second-tier firms, and other licensed firms as Third-tier firms for analysis.

3. DESCRIPTIVE STATISTICS OF AUDITOR CHOICE IN CHINESE LISTED FIRMS

3.1. Data Source and Descriptions of Firm Characteristics of Chinese Listed Firms

This study covers six years, from 2007 to 2012, and the data was obtained from the China Stock Market and Accounting Research Database (CSMAR)

that are commonly used by scholars in the research of financial accounting and corporate governance in China. There are 11955 Chinese main-board A-share firm-year observations for these six years available from the CSMAR. There are 11955 firm-year observations for these six years, of which 210 observations from the financial sector, 758 observations with missing variables and 1059 observations being listed less than one year, are removed. The final sample contains 9928 firm-year observations.

Table 3. Definition of descriptive statistics of firm characteristics of Chinese listed firms

TOP1	Percentage of shares held by the largest shareholder
TOP2_5	Aggregate percentage of shares held by the second to fifth large shareholders
BOS	The number of supervisors in the supervisory committee
BOD	The number of directors in the board of directors
DUAL_CAP	Dummy variable; 1 if the chairperson of the board and CEO are the same person, 0 otherwise
EXT_DIR	Proportion of independent directors to the total directors on board
UNPAID_DIR	Proportion of unpaid directors in the board of directors
TOPEXE_SHARE	Aggregate percentage of shares held by the top executives (including directors)
DUAL_LIST	Dummy variable; 1 if the listed firm is also listed as B-shares or H-shares, 0 otherwise
MI	Dummy variable; 1 if the listed firm is registered in the eastern coastal area[11], 0 otherwise
LEV	Total long-term liabilities to the total assets at year end
GROW_TA	$\frac{TA_t - TA_{t-1}}{TA_{t-1}}$, where TA is the total assets of listed firms at year end
GROW_SALES	$\frac{SALES_t - SALES_{t-1}}{SALES_{t-1}}$, where SALES is the total sales for the year.
TAC	$\frac{NP - OCF}{TA}$, where NP and OCF are the profit (loss) and operating cash flows for the year respectively whereas TA is the total assets at year end (representing "accounting accruals")
TQ	Tobin-Q value as a ratio of the market value of equity of a firm to the book value of its assts
C_SCLF	Ultimate shareholders of Chinese listed firms are central government
L_SCLF	Ultimate shareholders are local governments
N_SCLF	Neither C_SCLF nor L_SCLF

[11] Gao and Kling (2008) consider Beijing, Tianjin, Shanghai, Jiangsu, Zhejiang, Fujian and Guangdong as the developed eastern coastal region, which might exhibit better governance structures.

3.2. Firm Characteristics of the Big 4, Second-Tier and Third-Tier Clients

Table 4 reports the descriptive statistics of firm characteristics of the sample. The significant deviations of the means of firm characteristics of respective Big 4, Second-tier and Third-tier clients are discussed. In general, the mean of TOP1 of Big 4 clients (45%) is comparatively higher than sample average (36%) and those of audit clients of Second-tier firms (37%) and Third-tier firms (35%), implying that the higher ownership of the largest shareholders, the greater demand for higher audit quality, consistent with Ang et al. (2000) because after share reform, the controlling shareholders have a strong incentive to hire high quality auditors for the protection of their interests. Similarly, the mean of TOP2_5 of Big 4 clients (20%) is also comparatively higher than sample average (16%) and those of Second-tier clients (16%) and Third-tier clients (15%), implying that higher ownership of other large shareholders would demand for higher audit quality. The mean of TOPEXE_SHARE of Big 4 clients is the lowest (1%) and that of Second-tier clients is the highest (9%), implying that firms with highest agency problem (i.e., the deviation of the ownership of top executives) prefer Big 4 firms and those with lowest agency problem prefer Second-tier firms.

Table 4. Firm characteristics of Big 4, Second-tier and Third-tier clients

	BIG4	Second-tier	Third-tier	All
	Mean			
TOP1	0.447	0.370	0.346	0.363
TOP2_5	0.196	0.157	0.149	0.156
TOPEXE_SHARE	0.014	0.086	0.054	0.066
BOS	4.175	3.658	3.661	3.691
BOD	9.895	8.935	8.785	8.917
UNPAID_DIR	0.285	0.240	0.240	0.243
EXT_DIR	0.375	0.364	0.366	0.366
DUAL_CAP	0.100	0.210	0.190	0.190
DUAL_LIST	0.530	0.050	0.040	0.080
MI	0.780	0.630	0.480	0.570
LEV	0.128	0.075	0.070	0.076
TQ	1.395	1.970	2.010	1.954
TAC	-0.019	0.002	-0.005	-0.003
GROW_TA	0.195	0.587	2.767	1.599
GROW_REV	-0.192	0.168	1.756	0.901
C_SCLF	0.390	0.210	0.120	0.180
L_SCLF	0.420	0.320	0.410	0.370
N_SCLF	0.190	0.470	0.470	0.450
Number of observations	607	4601	4720	9928

(Source: CSMAR).

Over half of Big 4 clients are dual-listed (53%) whereas few Second-tier and Third-tier clients are dual-listed (5% and 4%), implying that Chinese firms with dual-list status prefer Big 4 firms, maybe because they are of high-reputation in the international financial markets and technical competence in the international corporate governance practice. About 78%, 63% and 48% of Big 4, Second-tier and Third-tier clients are registered in the eastern coastal region, maybe because most Big 4 and Second-tier firms do not have regional offices and affiliated firms in the non-eastern coastal region. However, the growth rates of total assets and revenue of Third-tier clients (277% and 176%) are much higher than those of Big 4 clients (20% and -19%) and Second-tier clients (59 and 17%), implying that Chinese listed firms with the higher growth rates would prefer the Third-tier firms whereas the quite stable firms would prefer Big 4 firms. Central SCLFs prefer Big 4 firms (39%) whereas non-SCLFs prefer Third-tier firms (47%), maybe because central government is likely to engage the high-quality auditors, and domestic shareholders prefer Second-tier and Third-tier firms because of the existence of guanxi in firm-level and personal connections.

Overall, those Chinese listed firms with effective firm-level corporate governance mechanisms would prefer Big 4 firms, and then Second-tier firms, and finally Third-tier firms.

4. AUDIT MARKET IN CHINA

The author further reviews the market portfolio of Big 4, Second-tier and Third-tier firms. From the CSMAR database mentioned in Section 3, the averages of audit fee, total assets and sales of these three types of auditors from 2007 to 2012 are presented in Table 5. In terms of audit fee level, there is no significant change for those years, but that of Big 4 firms (over RMB10 million) is substantially higher than that of Second-tier and Third-tier firms, but there is no substantial difference among Second-tier and Third Tier firms (below RMB1 million). In terms of total assets and sales (i.e., firm and business sizes), there are approximately an increase by 50% from 2007 to 2012 for the audit clients of these three types of audit firms, but similar to the audit fee level, firm and business sizes of Big 4 clients (firm size from RMB348 billion to RMB534 billion and business size from RMB52 billion to RMB76 billion, respectively) are much higher than those of Second-tier and Third-tier firms (below RMB10 billion). Therefore, we can interpret that even though the audit market by Big 4 firms are weak in China, the fee level of Big

4 firms is higher than that of other firms and their audit clients are much bigger than the clients of other firms. Indeed, big 4 banks and many big state-owned enterprises in China engage Big 4 firms as external auditors. For example, big 4 banks in China are Bank of China, China Construction Bank, Industrial and Commercial Bank of China, Agricultural Bank of China, but the change of their auditors is within Big 4 firms, and China Construction Bank appointed PwC as auditor for replacing KPMG in 2011 and Agricultural Bank of China appointed PwC as auditor to replace Deloitte in 2013. Chinese regulators have instituted auditor rotation for her SOEs, normally for five-year term. Such auditor choice decisions are likely because Big 4 firms with industry expertise can earn additional fee premium from higher service quality as claimed by Wang et al. (2009).

Table 5. Market portfolio of Big 4, Second-tier and Third-tier firms from 2007 to 2012

	Years						
	2007	2008	2009	2010	2011	2012	Total
	Audit fee (RMB million)						
Clients of:							
Big 4 firms	15.1	14.6	11.8	14.0	11.6	11.9	13.0
Second-tier firms	0.6	0.8	0.8	0.8	0.8	0.9	0.8
Third-tier firms	0.5	0.5	0.6	0.6	0.7	0.8	0.6
	Total assets (RMB billion)						
Clients of:							
Big 4 firms	348.4	390.9	482.2	593.0	611.4	667.1	534.0
Second-tier firms	5.9	7.1	7.2	7.7	8.5	8.0	7.7
Third-tier firms	4.2	4.4	5.9	6.9	5.1	5.1	5.3
	Sales (RMB billion)						
Clients of:							
Big 4 firms	52.2	62.5	64.4	80.0	89.2	95.3	76.5
Second-tier firms	3.3	4.3	3.7	4.4	4.8	4.4	4.3
Third-tier firms	2.3	2.3	2.5	3.1	3.6	3.5	2.9

(Source: CSMAR).

CONCLUSION

Previous literature supports that the quality of audit services provided by Big 4 firms was better than that of non-Big 4 firms (where Second-tier firms were grouped within non-Big 4 firms). Recently, China regulators (such as the

Ministry of Finance and China Securities Regulatory Committee) encourage the use of Second-tier firms as an alternative of Big 4 firms and improve the market's perception of the Second-tier firms. For example, in 2010, the Ministry of Finance issued a list of 12 mainland auditors (including both Big 4 and Second-tier firms) recognized to conduct statutory audits on the mainland-incorporated entities listed in Hong Kong. Even though the market share of Second-tier firms has been increased while that of Big 4 firms is still low, the firm and business sizes of Big 4 clients are substanrtially higher than those of Second-tier and Third-tier clients, and therefore, Big 4 firms act an important role in Chinese stock market.

Besides, Wang et al. (2008) find that Chinese listed firms have a preference to hire auditors within the same regions. Therefore, in order to enhance the audit quality in Chinese accounting profession, the policy makers can encourage the foreign auditors (including Big 4 and Second-tier firms) to collaborate and merge with the domestic accounting firms and/or provide incentive to foreign auditors to set up branches in non-eastern coastal region.

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