International Journal of Accounting xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

International Journal of Accounting

journal homepage: www.elsevier.com/locate/intacc

Does International Accounting Network Membership Affect Audit Fees and Audit Quality? Evidence From China

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ARTICLE INFO

Keywords:
International accounting networks
Small audit firms
Weak institutional environment
Audit fees
Audit quality

ABSTRACT

Regulators suggest that small audit firms join international accounting networks to reduce their resource constraints in serving large clients and providing high-quality service. Bills, Cunningham, and Myers (2016) investigate the issue in the United States and find that both audit fees and quality are higher for members of international accounting networks (i.e., member audit firms). We investigate the effects of network membership on audit fees and quality in China, a relatively weaker institutional environment than the United States. Using data of Chinese listed companies audited by *non-Big N* audit firms from 2001 to 2010, we find that member audit firms charge 3.9% higher fees than nonmember audit firms, much lower than the 30% fee premiums charged by U.S. member audit firms. We do not find consistent evidence that audit quality is higher for member audit firms. Overall, our results demonstrate that China's weak institutional environment may overwhelm the quality control brought by international accounting networks and that it may weaken or even offset the benefits of audit firms' participation in these networks, resulting in smaller or even no effects of membership on audit fees and quality.

1. Introduction

Non-Big N audit firms (i.e., other than Deloitte, EY, KPMG, PwC, or Arthur Andersen) are important players in the capital market, auditing about 45%[1] of all public companies in the United States and perhaps more in other countries. For example, they audit almost over 90% of Chinese public companies (e.g., Chen, Chen, Lobo, & Wang, 2011), 60% in Thailand, and 49% in Brazil (Francis, Michas, & Seavey, 2013). However, non-Big N audit firms are restricted in their ability to audit multinationals, leading to regulatory concerns about the sufficiency of domestic audit competition and their ability to serve clients expanding overseas (Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury (ACAP), 2008; The Ministry of Finance of China, 1996, 2009). ACAP recommends that regulators assist small audit firms in becoming viable suppliers of large public audits (Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury (ACAP), 2008). One of its proposals is to encourage small firms to join international accounting networks. Other countries, like China, also have issued similar guidance (e.g., The Ministry of Finance of China, 1996, 2009).

International accounting networks[2] are groups of affiliated accounting firms located in different countries. They share knowledge, resources, and at times staff but remain legally and financially independent. Member audit firms are subject to a pre-approval process

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[1] This is calculated based on audit opinions issued by U.S. audit firms for the fiscal year 2015 (Audit Analytics).
[2] For simplicity, we use networks to refer to these international accounting associations, networks, or alliances.

http://dx.doi.org/10.1016/j.intacc.2017.07.004
Received 28 May 2015
0020-7063/

(Bills, Cunningham, & Myers, 2016) and pay initial fees ranging from $0 to $10,000 and annual fees from $0 to a few thousand dollars. Members also enjoy the benefits of an international brand and marketing assistance as well as referrals from other member audit firms[3] (Miller, 2006). Members may also have risks, such as being liable for other members' misconduct. Lenz and James (2007) listed four risks associated with joining international accounting networks: (1) A network can be only partially controlled due to loose ties. (2) Members may lose their identities since they share a common name. (3) Networks are not stable, since members can easily leave. (4) Member audit firms may lose competence if there is a strong strategic leader in the network that determines the network's guidelines and audit tools.

Using U.S. data from 2010 to 2013, Bills et al. (2016) find that audit fees and quality are both higher for clients of member audit firms than for those of nonmember audit firms. Our paper complements their results by investigating whether their findings, which are based on firms in a developed country with a strong institutional environment, also apply to other countries with a weak institutional environment. We argue that the solution proposed by Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury (ACAP) (2008) and the findings of Bills et al. (2016) may not apply in China due to differing institutional environments.

We focus on China, the world's second-largest economy, which shares many similarities with other developing countries such as a lower opacity index[4] (Kurtzman & Yago, 2008). About half of Chinese audit firms became members of international accounting networks in recent years, which provides a good setting to investigate the effect of accounting networks.

China is characterized by a relatively weak institutional environment, where client misreporting and deficient audits are less likely to be detected and punished due to legal and regulatory constraints (e.g., Francis & Wang, 2008; Ke, Lennox, & Xin, 2014). Therefore, member audit firms in China may have low incentives to provide higher quality audit service. Secondly, government agencies also play a very active role in China's accounting industry (The Ministry of Finance of China, 1996, 2009). For example, survey data from audit firms show that government intervention is the most important factor in explaining publicized financial scandals, and the two most important concerns for auditors when issuing audit reports are to follow the instructions from local government and to maintain good relationships with clients (Gul, Qiu, & Kim, 2007). We argue that these peculiarities may overwhelm the quality control brought by international accounting networks and weaken or even offset the benefits of participation in these networks, resulting in smaller or even no added benefits of membership on audit fees and quality.

Using a sample of Chinese public companies audited by non-Big N audit firms from 2001 to 2010, we find that clients of member audit firms pay 3.9% higher audit fees but do not receive higher quality audits. Our conclusion is based on a battery of robustness checks. We address the endogeneity issues using both the Heckman two-stage method and propensity-score matching, and we reach similar conclusions.

We also find that the clients that are audited by member audit firms and located in regions with more developed credit markets and legal environments pay higher fee premiums and are less likely to misstate their financial reports. This finding suggests that a stronger institutional environment constrains earnings management and motivates member audit firms to provide higher quality audits.

Our paper makes several important contributions to the literature. First, our findings suggest that joining an international accounting network does not necessarily lead to higher audit quality *in a weak institutional environment*.[5] We complement Bills et al.'s (2016) study by providing evidence from a different—but a very important—setting. Our findings imply that within *non-Big N* networks (i.e., other than Deloitte, EY, KPMG, PwC, or Arthur Andersen), member audit firms around the world provide differentiated audits depending on the institutional environment where they are domiciled.

Second, we provide evidence that small audit firms in developing countries can charge higher audit fees by joining international accounting networks even though such an increase in audit prices is much lower than for member audit firms in developed countries.[6]

The remainder of the paper is organized as follows. Section 2 provides background on the Chinese audit environment. Section 3 develops our hypotheses. Section 4 describes research models and the sample selection process. Section 5 reports empirical results. Finally, Section 6 concludes.

2. Institutional setting: the Chinese audit market

Non-Big N firms audit over 90% of Chinese public companies (e.g., Chen et al., 2011). Starting in the 1990s, small Chinese audit firms became members of international accounting networks. The percentage of small audit firms joining such networks increased from about 20% in 2001 to almost 50% in 2010. Small member audit firms audit over 36% of public companies, and their clients account for about 43% of the total market capitalization over the years from 2001 to 2010.

Auditors in China work in a weak institutional environment, where client misreporting and deficient audits are less likely to be

[3] See the Accounting Associations and Networks Directory, http://www.aicpa.org/Research/ExternalLinks/Pages/AccountingAssociationsLinks.aspx.

[4] The opacity index was developed by the Milken Institute, a nonprofit, independent think tank. It is calculated based on corruption, legal system, enforcement policies, accounting/disclosure standards, and regulatory quality. A lower opacity index indicates less transparency.

[5] Our results may also suggest the symbolic value (or signaling effect) of joining international accounting networks. The signaling effect has been widely examined in marketing, management, and other disciplines (see Connelly, Certo, Ireland, & Reutzel, 2011, for a review). For example, research has documented the symbolic values of adopting new structures and policies in companies. Simply adopting these policies (such as long-term incentive plans and stock repurchase plans) is favorably received by investors even if these plans are not actually implemented—and thus do not have the claimed benefits (Westphal & Zajac, 1998; Zajac & Westphal, 2004).

[6] Recall that our paper finds that Chinese member audit firms charge only 3.9% higher audit fees than Chinese nonmember audit firms, but U.S. member audit firms charge 30% higher than their peers in the United States (Bills et al., 2016).