



# The joint effects of social identity and institutional pressures on audit quality: The case of the Chinese Audit Industry



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## ABSTRACT

This article examines how social identity links institutional pressures and audit quality. Combining institutional theory and social identity theory, we theoretically argue that the interaction between social and institutional forces shapes audit quality. Through an analysis of Chinese audit firms from 2000 to 2007, we show that isomorphic imitation has a more significant effect on firms belonging to the same-identity group than firms across cross-identity groups; foreign-affiliated audit firms are more willing to conform to normative pressure from professional networks than local firms; and foreign-affiliated firms are coerced to adapt to the local government's expectation, particularly when they have a geographically concentrated customer base. We further reveal that a larger customer base attenuates within-identity group imitation but strengthens cross-identity group imitation. The results shed light on the role of social identity in shaping conformity in the audit industry, thus contributing to international convergence-divergence literature and institutional theory.

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## 1. Introduction

International convergence of structures, processes, and practices has been suggested by a small but increasing stream of literature in the field of management, such as human resource management (HRM) (e.g., Rowley, Benson, & Warner, 2004; Zhu & Warner, 2000), business ethics and corporate governance (e.g., Brandau, Enderich, Trapp, & Hoffjan, 2013; Davis & Greve, 1997; Long & Driscoll, 2008), internationalization (e.g., Brown, 2011; Davis, Desai, & Francis, 2000), and marketing (e.g., Brouthers, O'Donnell, & Hadjimarcou, 2005; Deligonul, Elg, Cavusgil, & Ghauri, 2013; Hillebrand, Nijholt, & Nijssen, 2011). Mainly based on institutional theory, various studies have shown that coercive, normative, and mimetic pressures generally lead organizations to become convergent in their practices around the world (e.g., Ahlstrom & Bruton, 2001; Björkman, Smale, Sumelius, Suutari, & Lu, 2008; Brandau et al., 2013; Farndale & Paauwe, 2007; Huo, Han, Zhao, Zhuo, Wood, & Zhai, 2013), the process of which is defined as isomorphism (DiMaggio & Powell, 1983, 1991). Recent studies show that firms typically receive behavioral cues from and

experience multiple institutional prescriptions projected by different audiences (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Greenwood & Meyer, 2008), and thus their practices remain divergent under the influence of institutional pressures (Hannon, Huang, & Jaw, 1995; Kraatz & Zajac, 1996; Marquis & Lounsbury, 2007; Purdy & Gray, 2009). To explain the divergence of organizational practices among firms in a field, prior research has investigated how various firm- and macro-level economic features shape firms' responses to institutional pressures (Kraatz & Moore, 2002). For example, Marquis and Tilcsik (2013) show that firm size and macro-environmental uncertainty moderate firms' choice of philanthropic contributions when facing industry and community institutional pressures. Li and Parboteeah (2015) find that home country culture affects a firm's mimetic behavior as a response to institutional influences.

A shortcoming of these studies is that they primarily focus on firms' economic features while ignoring the social features. In particular, firms are embedded in social structures, as well as different social groups, and their social characteristics also significantly shape their strategic behavior (Rao, Davis, & Ward, 2000; Rao, Monin, & Durand, 2003). For example, firms may actively assess the consistency or conflicts between institutional pressures and their identity, so as to decide how much they conform to or resist institutional pressures. However, most previous studies either combine too many firms from different

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social groups, without distinguishing among them, or analyze a homogeneous sample (Davis, Diekmann, & Tinsley, 1994; DiMaggio & Powell, 1983; Henisz & Delios, 2001). Such neglect of possible heterogeneity of sub-groups may contribute to the mixed results of firms' convergent practices under institutional pressures.

Given the social identity differences, how do firms respond to institutional pressures? We explore this key question herein by combining social identity theory and institutional theory. We argue that every firm is attached to certain membership groups in which they must conform to the respective group codes to validate their identities and practices to internal and external stakeholders (Rao et al., 2003; Rao, Monin, & Durand, 2005). Such effort of validating identity will strengthen firms' conformity to institutional pressures when their identity code and the institutional pressures align; otherwise, firms' conformity to institutional pressures will be mitigated. Moreover, we argue that the social identity-based reaction to institutional pressure is refined when firms build up their customer base. As a firm increases its customer base, the urgency to validate social identity will diminish. The firm's ability to hold its social identity will strengthen when its customer base is geographically diverse. Accordingly, the firm will refine its social identity-based reaction to institutional pressure.

The audit industry in China offers a unique setting to examine the concurrent effects of social identity and institutional pressure. China has an institutional environment characterized by both unpredictable and inefficient bureaucracy (Ando & Ding, 2014; Bruton & Ahlstrom, 2003; Chan, Isobe, & Makino, 2008; Khanna & Palepu, 2000) and an open economy that welcomes foreign investment (Buckley & Ghauri, 2015). Such an institutional environment implies that the government dominates one set of institutional arrangements among local audit firms while foreign-affiliated audit firms link their Chinese activities to a set of more market-based institutions located offshore (Fuller, 2010). This situation creates divergence of audit practices among ownership identity groups but convergence within identity groups. Accordingly, we use a sample of audit firms in China from 2000 to 2007 and identify two social identity groups (i.e., foreign-affiliated audit firms and local audit firms) to examine how audit firms bearing different identities respond to mimetic, normative, and coercive pressures.

Our results firstly contribute to the literature on institutional theory and social identity theory. We identify social identity as the contingency to explain firms' divergent reactions to the same set of institutional pressures. We show that within the observed period, firms from different identity groups respond to institutional pressures differently, while those from the same identity group respond in a similar way. Such selective isomorphism is due to the alignment between institutional pressures and social identity. Moreover, we take a more dynamic view and show that as an audit firm grows its market, it refines its social identity-based reaction to institutional pressure. Second, our findings contribute to the ongoing international convergence–divergence research in management studies and international business studies. We reveal the limited convergence toward standardized audit service quality in China due to the audit firms' concerns with maintaining their social identities, which serve as an important marketing cue to cater to their target market segment. In this sense, the convergence–divergence decision is actually an adaptive strategy carrying significant marketing implication for both foreign and local players.

We begin the following sections with a review of a conceptual development, after which we present the empirical context in which we define the two identity groups in the Chinese audit industry. We then develop our hypotheses and discuss the methodology and results. We conclude by presenting the main

findings, identifying the contributions to multiple disciplines, and discussing limitations and future research avenues.

## 2. Literature review and conceptual development

### 2.1. Integrating institutional and social identity theories

Institutional theory is one of the most important theories to explicate the ongoing international convergence–divergence debate in management and international business literature (Beckert, 2010). Institutional theory contends that three types of institutional pressures in the environment shape firms' strategic behaviors: coercive, mimetic, and normative pressures (DiMaggio & Powell, 1983). One school of thought assumes that firms' practices will show similarity along the evolution (isomorphic process) when they face similar institutional pressures (Kostova, Roth, & Dacin, 2008). Thus, institutional pressures are equally effective among firms in enforcing conformity and finally lead to convergent practices in the field (Greenwood & Suddaby, 2006; Lounsbury, 2002; Purdy & Gray, 2009). Another school argues that divergent practices remain contested in the field under institutional pressures (Marquis & Lounsbury, 2007; Purdy & Gray, 2009), such that the three types of pressures convey different courses, respectively (Purdy & Gray, 2009). Such logic to explain the divergence of firms' practices rests on an important assumption—only one clear-cut course is prescribed by one type of institutional pressure, and therefore all firms follow that course. However, one type of institutional pressure may prescribe more than one course. Moreover, even if there is one clear-cut course, not all the firms take that course at the same rate or to the same extent, particularly before the isomorphism process has come to the stable phase. For example, upon KFC's initial introduction to the Asian market, opposite mimetic pressures simultaneously came from some consumers who always go to KFC and some who never go to KFC. In this situation, different sets of peers offer different behavioral cues for mimicry (Greenwood et al., 2011). Institutional theory has little power in further differentiating the conditions under which consumers will conform to or resist mimetic pressure.

Social identity theory may help address this gap. Social identity of an organization refers to the social group to which it is assigned. It entails codes of conduct, beliefs, and practical guidelines that specify the features an organization is expected to possess (Hsu & Hannan, 2005). It also influences an organization's features and actions through two channels: self-enforcement and consumer preference (Rao et al., 2000, 2003). On the one hand, internal audiences (e.g., shareholders, managers, employees) voluntarily adopt the social identity codes to self-justify and validate their existence and decisions and to minimize decision-making costs and uncertainty (Haveman, 1993). A positive “self-enforcement” effect on organizational practice is created (Weber, 1978). On the other hand, to cater to external audiences' expectations (“customer preference”) of its identity, an organization must adopt the identity codes, or else customers may devalue and be less attracted to the organization (Hsu, 2006).

As a result, social identity serves as a mechanism of legitimation because organizations tend to behave in ways that fit their assigned social category (Hsu & Hannan, 2005). Thus, a firm's social identity will dictate whether it will conform to the course prescribed by one type of institutional pressure. The effect of institutional forces is reinforced when these forces prescribe the same behavior as a firm's social identity but is weakened when the behavior dictated by institutional forces contradicts a firm's social identity. Continuing with the previous example, upon KFC's entry into Asian countries, consumers who assign themselves with international identity will favor the Western culture and follow the mimic pressure to go to KFC, while consumers who assign

**Table 1**  
Ranking of leading accounting networks/associations.<sup>a</sup>

Accounting network/association	2008 <sup>b</sup>		2010 <sup>c</sup>	
	Rank	Annual income <sup>d</sup> (\$m)	Rank	Annual income <sup>d</sup> (\$m)
<b>Accounting networks</b>				
PwC	1	28,185	2	26,569
Deloitte	2	27,400	1	26,578
Ernst & Young	3	24,523	3	21,550
KPMG	4	19,810	4	20,630
BDO	5	4704	5	5284
RSM international	6	3620	6	3879
Crowe Horwath International	10	2527	9	2729
Baker Tilly International	11	2500	8	3066
Nexia International	12	2300	12	2101
HLB international	16	1729	13	1692
Kreston International	17	1700	14	1673
<b>Accounting association</b>				
AGN International	20	1317	4	1462
Morison International	24	685	11	496

<sup>a</sup> We only included the leading international accounting networks or associations with which our sample audit firms are associated.

<sup>b</sup> Ranking in 2008 was issued by Accountancy Age (2008 survey of international accountancy groups. <http://www.accountancyage.com>). The accounting networks and associations were put together for ranking in 2008.

<sup>c</sup> Ranking in 2010 was from International Accounting Bulletin World Survey (<http://www.integra-international.net/files/files/World-Survey-2010-Tables.pdf>). The accounting networks and associations were ranked in separate groups in 2010.

<sup>d</sup> Annual income refers to the combined annual income, including income from audit and accounting, tax services, management consultant, corporate finance, corporate recovery/insolvency, litigation support, and others.

themselves with patriot identity will favor the traditional custom and never go to KFC. Social identity thus provides more segmented fields in which we can identify the variation of influence of one institutional pressure.

## 2.2. Identify groups among Chinese Audit Firms

Social identity theory posits that organizations fall into various social categories depending on internal and external audiences' perceptions of their features and actions (Ashforth & Mael, 1989; Hsu & Hannan, 2005). For example, Rao et al. (2005) classify French restaurants into two groups (i.e., classical and nouvelle cuisines) based on cooking styles perceived by internal and external stakeholders.

A large body of literature has found that both consumers and internal audiences use country of origin (COO) as an extrinsic cue to evaluate a firm (e.g., Ferner, Quintanilla, & Varul, 2001; Nes & Ghauri, 1998; Sweeney, Arnold, & Pierce, 2010). On the one hand, marketing research suggests that consumers perceive COO and make purchase decisions based on it (e.g., Baker & Ballington, 2002; Mohd Yasin & Mohamad, 2007; Piron, 2000). For example, consumers in China may prefer to buy products from American, European, and Japanese companies because they identify these firms as foreign and thus perceive the quality of their products as more reliable (Khanna, Palepu, & Sinha, 2005). On the other hand, the management and international business literature indicates that the COO of audit firms affects their internal audience's perception (e.g., Ferner et al., 2001; Pudelko & Harzing, 2010). For example, Sweeney et al. (2010) find that country has a significant impact on manager-level auditors' perceived unethical pressure. Therefore, COO affects the perception of both internal and external audience. Accordingly, a brand's COO serves as an important categorization schema to classify firms into different identity groups. In line with this schema, the audit industry in China is characterized by two types of audit firms depending on whether they are linked with any foreign identity: local audit firms, which do not join the international audit firms' network, and foreign-affiliated audit firms, which join the international audit firms' alliances.

### 2.2.1. Local Audit Firms

Before 1998, owing to the lack of capital, most domestic auditing firms in China were established and sponsored by local government agencies. The assessments of domestic auditors and the type of audit report issued were often affected by the local government agencies sponsoring them (Tang, 1999; Zhong, 1998). In 1997, the Ministry of Finance issued regulations to disaffiliate auditing firms from their sponsoring government agencies (Zhou, 2012). Since the implementation of the reform in 1998, despite domestic auditing firms severing their official ties with their government sponsors in the areas of finance and organizational linkage, their personnel (who are former government-affiliated auditors) have maintained close relationships with local governments for client attraction and retention, as well as for administrative advantages (Chan, Lin, & Mo, 2006). One of these local audit firms was Beijing Tianhua Zhongxing<sup>1</sup> (before 2003), which did not join any international audit alliances.

### 2.2.2. Foreign-affiliated Audit Firms

Since the mid-1980s, foreign auditing firms were allowed to enter the Chinese market by setting up joint ventures with local auditing firms. By the end of the 1990s, all the Big 5 international auditing firms (now Big 4) had established member firms in China. In recent years, they have been more aggressive to increase their audit market by establishing more member firms through partnerships (Chen, Su, & Wang, 2005). To compete with foreign rivals, some domestic audit firms joined the international audit association (listed in Table 1). For example, in December 2003, Beijing Tianhua Zhongxing joined Baker Tilly International and became one of the top 100 foreign-affiliated audit firms.

Yet not all domestic audit firms join the international audit network. Many other domestic audit firms remain disconnected with the international audit association till now. Thus, two groups of audit firms can be identified in China: foreign-affiliated audit firms and local audit firms. These two types of firms vary

<sup>1</sup> Before 2006, Beijing Tianhua Zhongxing was called Beijing Tianhua. In 2006, Beijing Tianhua and Zhongxing New Century merged to form Beijing Tianhua Zhongxing. In 2008, Beijing Tianhua Zhongxing joined Beijing Lixin.

**Table 2**  
Top foreign-affiliated and local audit firms' listed customers in China in 2008.

Panel A: Customer base of foreign-affiliated auditing firms						
	Number of customers	Average audit fees/customers (¥Million)	Highest fees charged (¥Million)	Total audit Fees (¥Million)	% of total audit Fees in Chinese market	
PWC	39	13.94	221	543.50	24.23%	
E&Y	31	14.05	181	435.46	19.41%	
KPMG	15	23.42	175	351.23	15.66%	
Deloitte	18	6.49	70	116.74	5.20%	
Total	103			1446.93	64.51%	

  

Panel B: Customer base of top six domestic auditing firms						
	Number of customers	Average audit fees/customers (¥Million)	Highest fees charged (¥Million)	Total audit Fees (¥Million)	% of total audit Fees in Chinese market	
Li Xin	116	0.80	4.8	92.69	4.13%	
Zhong Rui Yue Hua	62	1.46	4.797	90.55	4.04%	
Zhe Jiang Tian Jian	74	0.66	2.8	48.87	2.18%	
Beijing Jingdu	47	0.90	5.4	42.08	1.88%	
Xin Yong Zhong He	47	0.82	6.96	38.73	1.73%	
Tianjian Guanghua	53	0.70	3.0	37.21	1.66%	
Total	399			350.13	15.61%	

Note: Total audit fees for listed firms: 2243 ¥Million. Source: Wang & Xu (2010).

substantially in terms of internal and external audiences' perception in China. By being members of the leading international accounting networks or associations with high rankings and annual incomes (as Table 1 shows), foreign-affiliated audit firms are disciplined to adopt and follow the international standard in providing auditing services. Accordingly, customers around the world perceive them as providing world-standard audit quality and possessing a prestigious reputation. In contrast, born in the under-developed corporate governance system and institutions, the local audit firms in China have formed such a code that reporting in harmony with their customers' desires is the best way to attract and retain them (Chan et al., 2006). Prior accounting studies have confirmed their difference. For example, Shafer (2008) shows that individual auditors employed by local Chinese firms judge questionable actions as more ethical than auditors employed by foreign-affiliated Chinese firms. At the same time, the customers usually perceive these firms as providing low-standard audit quality and lack of reputation. Chen et al. (2010) show that Chinese customers switch from audit firms that merged with the Big 4 to local firms mainly to gain greater discretion over financial reporting.

The prestigious group identity of foreign-affiliated audit firms is also reflected in the much higher premiums they charge than their local counterparts. Table 2 shows that the average audit fees per customer that foreign-affiliated audit firms charge are more than 10 times those of the top six local audit firms as of 2008. Foreign-affiliated audit firms also have more market control than local audit firms. Although the top six local audit firms service three times the listed customers than the foreign-affiliated audit firms, the total audit fees earned by the former are only one-quarter that earned by the latter. Thus, compared with foreign-affiliated audit firms, the identity of local audit firms is less favorable among customers in China. This lends support to the validity of using a firm's COO as the categorization schema.

### 2.3. Hypotheses

Audit quality is an important auditor practice of applying accounting standards and faithfully reflecting customers' economic activities (DeFond & Zhang, 2014; Francis, 2004; Malone & Roberts, 1996). An audit firm's own competitive advantage and

preference of customers influence the strategic choice of its audit quality. For example, Malone and Roberts (1996) find that auditors with stronger quality control systems were less likely to participate in questionable audit quality behaviors. DeAngelo (1981) claims that audit firms have the incentive to reduce audit quality to retain customers. Other accounting research reveals that institutional pressures affect audit quality as an important auditor behavior. For example, Francis and Wang (2008) investigate how a country's legal system affects auditor behavior in terms of their audit quality. Jeong and Rho (2004) show that if the institutional setting does not encourage high-quality audits, auditors may not constrain the earnings management practices of customers but behave opportunistically. Thus, we extend institutional pressures beyond the country's legal system and investigate how multiple institutional pressures shape audit firms' audit quality in China.

#### 2.3.1. Mimetic pressure: peers' audit quality as a reference benchmark

Institutionalists argue that to cope with uncertainty, organizations imitate the practices of other organizations, particularly those with similar characteristics to themselves (Haunschild & Miner, 1997; Haveman, 1993). Social identity theory posits that organizations strive to fit their practices with their social category (Hsu & Hannan, 2005). Combining these two theories, we argue that an audit firm will imitate peers in the same identity group more than peers in different identity groups when determining its audit quality.

First, a focal audit firm will imitate within-group peers' audit quality because of the need for self-enforcement (Weber, 1978). Owing to incomplete information, an audit firm faces various market uncertainty, such as potential low market response from customers due to unfavorable product features, price, and so on. This market uncertainty will create ambiguity in making wise decisions. Audit firms in the same identity group share similar features to the focal audit firm, such as company goals, target market segments, and resource endowments. Their actions will serve as a proper reference group for the focal audit firm to tap into for collective wisdom and to validate its decision (Brouthers et al., 2005; Haveman, 1993). Such voluntary self-enforcement thus alleviates operational uncertainty. In comparison, peers in another social identity group will have different resources and market

positions from the focal audit firm, and thus their actions will likely not be of great value for reference.

Second, a focal audit firm imitates within-group peers' audit quality to cater to "customer preference" (Wang, Chen, & Xie, 2010), so as to reduce customers' perceived uncertainty and increase market acceptance. Customers perceive uncertainty when making a purchase because only the seller has access to the full information on the quality and other specific attributes of the goods and services exchanged (Yeung, 2002). This is particularly the case for professional service, for which the quality cannot be observed or evaluated before the real usage (Bloom, 1984). In this uncertain environment, customers may use information cues to hasten their decision-making process (Grewal & Monroe, 1995). Social identity is one such information cue that a firm can establish and convey to its target market segment to ease perceived uncertainty. To validate its social identity, a firm must take on the identity group norms, which are formed and shared by a group's members (Campbell, 2003; Hsu & Hannan, 2005). From customers' perspectives, they will only appreciate a firm's identity if the firm complies with and presents such norms, while negatively evaluating a firm and reject its identity if they perceive it as violating those norms (Negro, Hannan, & Rao, 2010; Rao et al., 2005). Therefore, the focal firm is forced to benchmark and imitate the audit practices of its peers in the same identity group but stay away from another identity groups' audit practices.

We also argue that such mimetic pressures are more salient among geographically proximate audit firm peers for two reasons: (1) they are more accessible to a focal audit firm (Rao et al., 2005) and, (2) because of the need for intimacy between the supplier and the buyer in the service industry, an audit firm's strategy is likely to be restricted by the geographic market segment (Carman & Langeard, 1980). Therefore, we propose the following hypotheses.

**Hypothesis 1a.** *The audit quality of foreign peers in the same region has a stronger positive effect on a foreign-affiliated than a local audit firm's audit quality in the Chinese market.*

**Hypothesis 1b.** *The audit quality of local peers in the same region has a stronger positive effect on a local than a foreign-affiliated audit firm's audit quality in the Chinese market.*

### 2.3.2. Normative pressure from professionalism

DiMaggio and Powell (1983) consider normative isomorphism a result of professionalization; that is, organizations may voluntarily adopt some practices because the professionals therein claim them to be superior. Isomorphism resulting from normative pressure involves two processes. First, members of the same profession receive similar training (e.g., physicians, attorneys, university professors), which socializes them to have similar worldviews. Second, members interact through professional networks, which promote normative standards (Steen, 2006). Thus, professional networks allow new practices to be diffused rapidly throughout organizations (DiMaggio and Powell, 1983). For example, professional associations for accountants determine the criteria for accounting practices (Greenwood, Suddaby, & Hinings, 2002). Thus, audit firms that have strong ties with professional associations are influenced by the institutional pressure of these associations.

However, we argue that the extent to which organizations conform to the normative pressure depends on their social identities. Organizations will voluntarily adapt their practices to the superior standards of the professional network only if such standards are consistent with their perceived identity and related group code, so as to reinforce the self-enforcement and customer preference effects. High standard practices promoted by the professional network are consistent with foreign-affiliated audit

firms' identity code. Adopting the professional network's standard thus reinforces their authenticity. In contrast, in China, customers perceive local audit firms' identity as associated with a low-quality and low-price audit. Professionalization violates local audit firms' perceived identity, which will reduce their attraction to customers. As a result, normative pressure could be less successful in establishing high-quality audit practices in this identity group, leading to the following hypothesis.

**Hypothesis 2.** *The normative pressure from professionalism has a stronger positive effect on the audit quality of foreign-affiliated than local audit firms in the Chinese market.*

### 2.3.3. Coercive pressure from local government

Pressures from external coercive authority may compel organizations to change their existing organizational practice (Oliver, 1992). Extant research posits that the degree of adaptability to coercive isomorphism depends on the level of consistency between what is required of firms and their internal strategies, structures, and processes (Oliver, 1991). The greater the consistency between the required practices and firms' internal logics, the more likely firms will comply with the coercive pressures and vice versa (Oliver, 1991).

In China, both the central government and the local governments exert influences on firms' audit quality as a result of successive decentralization (Chien, 2010; Pepinsky & Wihardja, 2011). At the central level, China Securities Regulatory Commission (CSRC)<sup>2</sup> regulates the stock market with approval and delisting systems. With an approval system, all companies must obtain approval from CSRC to be listed on the exchange. With a delisting system, firms with losses in three consecutive years are delisted. Facing this delisting pressure, listed companies have the incentive to manage their earnings to avoid reporting losses.

At the local level, successive decentralization has granted the local government economic and political powers and motives to create local institutional arrangements (Dong, 2007), and thus it has become an important coercive authority. With a decentralized fiscal system, a tripartite tax system effect from 1994 allows local governments to claim a local portion of taxes and extra-budgetary revenue<sup>3</sup> (Bahl, 1999; Jin, Qian, & Weingast, 2005). However, as the local government cannot set the tax rate, adjust the tax collection base, or introduce new taxes, the only way to satisfy the requirements of the local projects is to build a more solid tax base among enterprises within the region. Associated with the decentralized fiscal system, the career advancement of local government officials is tightly linked to local economic growth (Maskin & Xu, 2001). In a nutshell, both social aims and personal goals of the local government are engineered by regional economic development.

At the same time, the local-listed companies are often the pillars of the local economy as they pay more taxes, provide more employment, and create more investment opportunities through their link with many other unlisted firms along the value chain. Many of these are also among the first batch of firms to have adopted the modern enterprise system pushed by the Chinese central government and thus are regarded as political achievements of local government officials (Mookerjee & Yu, 1999). As a result, the local government has a strong incentive to push audit

<sup>2</sup> CSRC is the centralized supervisory body for the Chinese stock market.

<sup>3</sup> In the tripartite tax system, which took effect in China in 1994, taxes are classified into three categories: central, local, and shared. Under this system, local revenue includes budgetary revenue from local taxes and the local portion of shared taxes, as well as extra-budgetary revenue consisting of tax surcharges and user fees levied by central and local government agencies and some source of earnings.

firms to help local companies' earning manipulation to gain listing status and to avoid being delisted.

Decentralization also grants local governments political power and various polity tools to intervene in audit firms' operations. For example, local governments can influence audit firms' practices through resource allocation, such as offering or depriving firms of personnel and administration advantages that are largely under their control (Chien, 2010; Li, He, Lan, & Yiu, 2012). In addition, local governments can shape audit firms' practices by influencing customers' selection of auditors, as the government is still the dominant shareholder in most listed and unlisted companies (Wang, Wong, & Xia, 2008). They can also influence audit firms through local Certified Public Accountant institutes, which regulate the licensing and day-to-day operations of audit firms (Tang, 1999). Through all means, local governments' intervention can negatively influence the audit quality of audit firms located in their jurisdictions. Local governments often coerce audit firms to lower their audit quality to facilitate local-listed companies' earnings management (Chan et al., 2006; Chen, Lee, & Li, 2003; Dai, Lau, & Yang, 2000).

We argue that such a negative effect will be more prominent for local than foreign-affiliated audit firms. First, low-quality audit practices pushed by local governments are consistent with local audit firms' identity code. Second, local audit firms in China have historically maintained closer relationships with local governments than foreign-affiliated audit firms have. Indeed, many local audit firms' partners are ex-bureaucrats of the local governments (Hua, Georgakopoulos, Sotiropoulos, & Galanou, 2010). Connections with local governments benefit local audit firms in many respects, such as local client attraction and retention, as well as other administrative advantages. This close relationship with local governments further reduces local audit firms' incentive to resist local government intervention. Third, local audit firms are more locally oriented than foreign-affiliated audit firms (Chan et al., 2006). The lack of mobility reduces their ability to resist customer pressure and local government intervention. Therefore, local auditors in China have incentives to report in accordance with the desires of local bureaucrats, as failure to do so may lead to dissatisfaction from the local government and thus loss of customers (Chan et al., 2006).

In contrast, low-quality audit practices coerced by local governments in China contradict foreign-affiliated audit firms' group norm that is internalized as part of their firm culture, as well as customers' perception of their identity, thus impairing the self-enforcement and customer preference effects. Therefore, foreign-affiliated audit firms are less willing to respond to local government intervention than their local counterparts. Moreover, organizations with a favorable identity tend to enjoy more privileges. Foreign-affiliated identity allows firms to receive more credit for doing tasks, achieve higher social acceptance, and gain stronger social or market control (Phillips & Zuckerman, 2001; Rao et al., 2005), thus shielding them from the negative influence of the local government intervention. Taken together, the influence of government intervention on audit practice will be more salient for local than foreign-affiliated audit firms.

**Hypothesis 3.** *The coercive pressure from local government intervention has a stronger negative effect on the audit quality of local than foreign-affiliated audit firms in the Chinese market.*

#### 2.3.4. A dynamic view of social identity-based reaction to institutional pressures: incorporating customer base expansion

Research has shown that strategic choices are influenced not only by the external institutional environment but also by internal factors such as firm resources and capabilities (Ahlstrom & Bruton, 2006; Ahlstrom, Levitas, Hitt, Dacin, & Zhu, 2014). Internal factors

may grant a firm greater power or autonomy over decision making and, therefore, a greater ability to defy or resist external pressures and constraints (Li & Ding, 2013; Oliver, 1991). Following this argument, we adopt a more dynamic view and examine how an audit firm's growth focuses its social identity-based reaction to institutional pressure. In Hypothesis 1, we proposed that an audit firm in China tends to imitate its own identity group more than the other identity group to determine its audit quality, so as to validate its social identity to the most important external stakeholders (i.e., customers). Such a tendency for validation may become less urgent as the firm expands its customer base.

According to Dittes and Kelley (1956), conformity increases when actors feel insecure in a group. When an audit firm has a low market base, its internal and external legitimacy is not secured because its identity is not widely accepted by customers and it lacks understanding of the market; therefore, it has more incentives to imitate the in-group members' behavior code as a legitimacy indicator. As an audit firm gains more customers, it gains confidence that its identity is accepted by the market. It also accumulates more market-specific knowledge that it can assimilate into its knowledge base to create clearer standards and goals and to offer more customized services. The perceived utility of mimicking the in-group members' practice code then deteriorates (Oliver, 1992). Thus, we propose the following:

**Hypothesis 4a.** *The positive relationship between a foreign-affiliated audit firm's audit quality and its foreign peers' audit quality (proposed in H1a) is weakened when it has a larger customer base in the Chinese market.*

**Hypothesis 4b.** *The positive relationship between a local audit firm's audit quality and its local peers' audit quality (proposed in H1b) is weakened when it has a larger customer base in the Chinese market.*

We expect that cross-identity group imitation will be strengthened as a firm gains a larger customer base. In gaining more customers, an audit firm is more widely accepted by its own market segment, and thus it will find limited potential in exploring this segment. To expand its market boundary, it may encroach on another identity group's market segment by imitating that group's collective wisdom and focus its practice on the new segment's expectations. Moreover, prior research suggests that identity is independent of organizational performance in the current period and thus is relatively stable (Washington & Zajac, 2005). If so, the focal audit firm will not be overly concerned that such cross-group imitation will impair its perceived identity among current customers. Therefore, we argue that a foreign-affiliated audit firm with a larger customer base may mimic local peers while a local firm with a larger customer base may imitate foreign peers to access the upper strand of the market segment. Therefore,

**Hypothesis 5a.** *The positive relationship between a foreign-affiliated audit firm's audit quality and its local peers' audit quality (proposed in H1a) is strengthened when it has a larger customer base in the Chinese market.*

**Hypothesis 5b.** *The positive relationship between a local audit firm's audit quality and its foreign peers' audit quality (proposed in H1b) is strengthened when it has a larger customer base in the Chinese market.*

In Hypothesis 3, we proposed that to maintain its social identity, foreign-affiliated audit firms tend to go against the local government's coercive pressure that misaligns with its identity code while local audit firms tend to conform to the local government's coercive pressure that aligns with its identity code.

When growing the customer base, an audit firm can choose to expand into a limited number of geographic markets or to build up a customer base with a larger geographic diversity. In this hypothesis, we posit that the geographic diversification of the customer base influences the audit firm's vulnerability to the government pressure and, thus, its ability to maintain its social identity.

Local governments have a better bargaining position over firms in their sovereignty and can exert coercive pressure on them because they control the important resources vital for firms to maintain and expand operations smoothly. In contrast, a broad geographic customer base may serve as an effective mechanism to shield foreign-affiliated audit firms from such coercive pressure because it increases their bargaining power for two reasons. First, when foreign-affiliated audit firms obtain revenues from customers in multiple regions, they accumulate more market-specific knowledge. With this knowledge, they can gain competitive advantages by adapting, utilizing, and deploying their core service model. A geographically diverse customer base thus reduces firms' need to turn to the local government for key resources such as local talents, information, and policies and allows them to gain more bargaining power (Fagre & Wells, 1982; Lecraw, 1984). Second, firms' bargaining power over the local government also heavily depends on the presence of alternative locations for resource exploitation (Penrose, 1968). A foreign-affiliated audit firm that has limited its business to one geographic area can always divert its portfolio to other regions with more supportive infrastructures, in case it finds the local government not encouraging (e.g., the local government exercises restraint on administration resources). Thus, its dependence on one regional market is reduced, allowing it to enjoy greater bargaining power over the local government. When the foreign-affiliated audit firm is in a better bargaining position, it is better able to act against the government's expectations. However, we argue that local audit firms in the Chinese market are not willing to improve their audit quality even if they have expanded into more areas, because conforming to government expectations enhances the positive self-enforcement and customer preference effects, due to the alignment of its social identity and government expectations. Therefore, we propose the following:

**Hypothesis 6a.** *The negative relationship between the local government's coercive pressure and a foreign-affiliated audit firm's audit quality (proposed in H3) is weakened by its customer geographic diversity in the Chinese market.*

**Hypothesis 6b.** *The negative relationship between the local government's coercive pressure and a local audit firm's audit quality (proposed in H3) is not moderated by its customer geographic diversity in the Chinese market.*

### 3. Methodology

#### 3.1. Sample and data

In this study, we focus on the top 100 audit firms (based on Auditor Ranking by the Chinese Institute of Certified Public Accountants (CICPA)) that have at least one listed customer in a year in China. Given that we are concerned with the audit firms' overall audit quality strategy and performance, we aggregate data for each audit firm. Each observation is an audit firm in a year.

Specifically, we collected observations by following four steps. First, we referred to the Auditor Ranking by the CICPA to obtain the top 100 audit firms in each year in China. We then coded the identity of the audit firms by assessing whether they were affiliated with some international audit network in that year. If a firm was affiliated with an international audit network in a year,

we consider it a foreign-affiliated audit firm in that year; otherwise, it is a local audit firm in that year. Second, we checked the listed companies in each year in the China Stock Market and Accounting Research database (CSMAR), through which we identified whether the focal listed company was audited by one of the top 100 audit firms in that year. Third, we sorted out 22 foreign-affiliated audit firms and 48 local audit firms that were both in the top 100 audit firms list and auditing at least one listed customer in a year in China. Fourth, for each of the audit firms, we aggregate the audit quality received by its listed customer in a year.

For example, Beijing Tianhua Zhongxing was one of the top 100 audit firms from 1999 to 2007. Before 2003, the firm did not have any affiliation with an international audit network and thus was coded as a local audit firm. Beijing Tianhua Zhongxing audited 20 listed companies in 2000. We defined the average of the audit quality Beijing Tianhua Zhongxing provided to the 20 listed customers as the observation for Beijing Tianhua Zhongxing in 2000. In December 2003, Beijing Tianhua Zhongxing joined Baker Tilly International and became one of the top 100 foreign-affiliated audit firms. Beijing Tianhua Zhongxing audited 10 listed companies in 2004. We defined the average of the audit quality Beijing Tianhua Zhongxing provided to the 10 listed companies as the observation for Beijing Tianhua Zhongxing in 2004.

In the end, our sample consisted of 22 foreign-affiliated audit firms (with 87 observations) and 48 local audit firms (with 219 observations) that audited publicly traded companies in China from 2000 to 2007.<sup>4</sup> These publicly traded companies are located in 31 provinces in China and represent a variety of industries.

#### 3.2. Measurement

##### 3.2.1. Dependent variable

**Audit quality.** A large body of the audit research uses discretionary accruals (DAs) as a proxy for audit quality (earnings quality) (Bedard, Hoitash, Hoitash, & Westermann, 2012), under the assumption that financial statements are the products of both the company's management and the company's external auditors (Elshafie & Nyadroh, 2014). Although DAs may not be the perfect measure of audit quality (Francis, 2011), Elshafie and Nyadroh (2014) corroborate the robustness of DAs as a measure for audit quality by showing the significant associations of DAs with two other audit quality measures in the expected directions: restatements of financial statements (Stanley & DeZoort, 2007) and issuing of negative internal control reports (Carey & Simnett, 2006; Knechel & Vanstraelen, 2007).<sup>5</sup>

Jones's (1991) model is the most popular to calculate DAs, and several later models were developed from it. In this study, we adopted the modified Jones model presented by Dechow, Sloan and Sweeney (1995) to obtain the DAs (e.g., Chung, Firth, & Kim, 2002; Firth, Fung, & Rui, 2007; Liu & Lu, 2007). Dechow suggests deducting accounts receivable from sales revenue, assuming that all the changes in accounts receivable are caused by earnings

<sup>4</sup> Every sample audit firm audits some listed customers in our observation years. We obtain the average audit quality of the customers audited by each audit firm in a year, constituting one observation of an audit firm in a year. Each audit firm has up to eight observations, given that our observation period is from 2000 to 2007. In addition, some of the audit firm entered into the top 100 audit firm list or began having listed customers later than 2000, and thus they have fewer than seven observations. As a result, our data are unbalanced panel data, constituting the audit firms from 2000 to 2007.

<sup>5</sup> Restatements of financial statements (Stanley and DeZoort, 2007) and issuing negative internal control reports (Carey and Simnett, 2006) are relatively objective proxies for audit quality. However, these indicators of an audit are not always immediately observable and even may never become known (Wooten, 2003). Therefore, we did not use them as the main proxies.

management. This is because, for managers, it is much easier to manage earnings from accounts receivable than from cash sale income.

$$TA_{\tau} = a_1(1/A_{\tau-1}) + a_2[(\Delta REV_{\tau} - \Delta REC_{\tau})/A_{\tau-1}] + a_3PPE_{\tau}/A_{\tau-1} + \varepsilon_{\tau}, \text{ where}$$

$TA_{\tau}$  = total accrual  $\tau$  = before extraordinary profit  $\tau$  – cash flow from operation  $\tau$

(before extraordinary profit  $\tau$  = total profit  $\tau$  – non-operating revenue  $\tau$  + non-operating cost  $\tau$  – income tax  $\tau$ ),

$\Delta REV_{\tau}$  = sales in year  $\tau$  – sales in year  $\tau-1$ ,

$\Delta REC_{\tau}$  = net receivables in year  $\tau$  – net receivables in year  $\tau-1$ ,

$PPE_{\tau}$  = gross plant property and equipment in year  $\tau$ ,

$CFO_{\tau}$  = cash flow from operation in year  $\tau$ , and

$A_{\tau-1}$  = total assets in year  $\tau-1$ .

We standardize the reverse of the DAs (measured by the absolute value of the residual from this model) as the proxy for audit quality (i.e., the higher the value, the better is the audit quality). We then calculate the mean of the audit quality of all the customers served by audit  $i$  in year  $t$ .

$$\text{audit quality}_{i,t} = \frac{\sum_{j=1}^n \text{audit quality}_{j,t}}{n}.$$

### 3.2.2. Independent variables

**Mimetic pressure.** Mimetic pressures occur when firms adopt a practice by imitating competitors (Soares-Aguiar & Palma-Dos-Reis, 2008). In general, prior studies have measured mimetic pressure by using the frequency of adopting one practice by competitors (Haveman, 1993; Henisz & Delios, 2001; Westphal, Gulati, & Shortell, 1997), by successful or similar competitors (Haveman, 1993; Henisz & Delios, 2001) or by using perceived success of adopters (Teo, Wei, & Benbasat, 2003). All these measures for mimetic pressures are based on the adoption of a certain practice, which tends to have clear-cut adoption criteria, such as entry into a market (e.g., Henisz & Delios, 2001) and adoption of quality control program (e.g., Westphal et al., 1997), or some corporate governance practice, such International Financial Reporting Standards (e.g., Davis, 1991).

In our study, a focal audit firm observes its peers in the same identity group and mimics their audit quality. Most accounting studies define audit quality as some variation of the market-assessed joint probability that a given auditor will both detect a breach in the customer's accounting system, and report the breach (DeAngelo, 1981). This definition suggests that audit quality is a continuous construct, with higher value indicating that audit firms provide greater assurance of faithful representation of financial statements. Because DAs have no such clear cutoff to differentiate high/low audit quality, we cannot obtain the accurate frequency of adopting high/low audit quality. Instead, we take the average of peer audit firms' audit quality to proxy the mimetic pressure, with the rationale that an audit firm will mimic its peers by referring to their average audit quality as a benchmark and delivering above-average audit quality. The higher the average audit quality, the more peers are adopting high-quality audit practices, and thus the higher is the peer pressure of providing better audit quality. Specifically, we measure *foreign (domestic) peers' audit quality* in province  $j$  in year  $t$  by the average audit quality of the customers located in that province and audited by other foreign-affiliated audit firms (local audit firms) (excluding the focal audit firm).

**Normative pressure: professionalism.** Prior studies suggest that professional associations play an important role in diffusing practice (DiMaggio & Powell, 1983). Building on this argument, Han and Koo (2010) measure the normative pressure from

professionalism according to whether the firm's human resource personnel are members of a related association. Given that professional associations in the accounting sector play a significant role in legitimating accounting practices (Greenwood et al., 2002), we follow Han and Koo's approach and include the number of accountants who have Certified Public Accountant certificates, and thus gained membership from the CICPA, as the measure of *professionalism*.

**Coercive pressure: government intervention in province.** In developing countries where government agencies still exert significant influences and constraints on business practices (Park & Luo, 2001), coercive pressures are more likely to arise from governments. Governments may exert constraints on firms in various ways, such as implementing numerous regulations, setting up complicated process when giving licenses and permits, and so on. The more constraints the government applies to firms, the longer firms must spend in dealing with the government and the related constraints. For example, firms may need to spend time complying with regulations, lobbying for benefits, and negotiating tax payments or bribes (Gupta & Abed, 2002).

With this rationale, some studies have used the time firms spent on government issues to measure the government control and constraints on firms. For example, the World Bank Group's (2011) enterprise survey evaluates government constraints on private sectors by investigating time spent with tax officials to obtain licenses and permits and the associated red tape on firm operations. Similarly, in the database of the Marketization Index for China's Provinces, Fan, Wang, and Zhang (2001) developed an index based on the survey of business executives (i.e., "How much time do you have to allocate to deal with the government in order to keep your business going?") to measure the government control over the project permission, licensing, and so on. We therefore adopted the measure from Fan and Wang's (1999, 2006) index to measure the government intervention, which has been widely used in the literature as a measure for government intervention in provinces in China (e.g., Du, Lu & Tao, 2008). Given that one audit firm may have customers in more than one province, we calculate the mean of government intervention of the provinces in which the focal audit firm has at least one customer to measure the overall government-intervention level faced by the focal audit firm.

### 3.2.3. Moderating variables

**Foreign-affiliated audit firm (FAA).** We code this variable as 1 if an audit firm is affiliated with one of the international audit firms' networks or associations and 0 otherwise (the firm is a local firm).

**Audit firm's customer geographic concentration.** We measure this variable by the geographic Herfindahl index of its customer size in province  $i$  using the following formula:

Geographic Concentration Herfindahl Index $_i$  =

$$\sum_{i=1}^n \left( \frac{\text{Size of listed clients in province}_i}{\sum_{i=1}^n (\text{Size of listed clients in province}_i)} \right)^2.$$

Prior studies have used the Herfindahl index to evaluate companies' geographic distribution of operations on a scale that ranges from completely homogeneous distribution in one location



**Table 3**  
Descriptive statistics and correlation matrix (N=306).

	1	2	3	4	5	6	7	8	9	10	11
1 Audit quality	1										
2 FAA	-0.06	1									
3 Professionalism	-0.01	0.27*	1								
4 Foreign peer audit quality	0.04	0.09*	0.17*	1							
5 Local peer audit quality	0.19*	0.14*	0.15*	0.19*	1						
6 Government intervention	-0.12*	-0.13*	-0.13*	-0.14*	-0.35*	1					
7 Customer base	-0.07*	0.00	0.25*	-0.01	0.04	0.02	1				
8 Geographic concentration	0.08*	-0.24*	-0.43*	-0.06	-0.05	-0.09*	-0.20*	1			
9 Average customer size	0.09*	0.37*	0.42*	0.14*	0.18*	-0.15*	0.17*	-0.40*	1		
10 Industry specialization	0.10*	0.24*	0.32*	0.06	0.08	-0.13*	0.48*	-0.20*	0.30*	1	
11 Audit firm age	-0.06	0.22*	0.06	0.05	0.12*	-0.17*	0.29*	0.0*	0.16*	0.29*	1
Mean	0.07	0.28	154.01	0.06	0.06	5.03	18.27	0.54	20.96	1.91	11.24
SD	0.02	0.45	89.76	0.02	0.01	1.77	11.36	0.28	0.87	1.22	7.02
Min	0.01	0	47	0.00	0.03	0.86	1.50	0.07	19.11	1	-7
Max	0.15	1	564	0.20	0.13	9.99	79.33	1.00	25.13	7.33	26

\*Correlation is significant at the 0.05 level (2-tailed).

**Table 4**  
Results of RE regression analysis of identity on audit quality (dependent variable: audit quality) (N=306).

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
FAA * foreign peer audit quality		<b>0.31**</b> (0.31)				<b>0.26**</b> (0.26)
FAA * local peer audit quality			-0.07 (-0.07)			-0.06 (-0.06)
FAA * professionalism				<b>0.24**</b> (0.24)		<b>0.22**</b> (0.22)
FAA * government intervention					0.07 (0.07)	0.10 (0.1)
FAA	-0.09 (-0.09)	-0.13 (-0.13)	-0.09 (-0.09)	-0.09 (-0.09)	-0.09 (-0.09)	-0.12 (-0.12)
Professionalism	0.08+ (0.08)	0.04 (0.04)	0.08+ (0.08)	-0.05 (-0.05)	0.08+ (0.08)	-0.06 (-0.06)
Foreign peer audit quality	0.001 (0.001)	-0.04 (-0.04)	-0.01 (-0.01)	-0.01 (-0.01)	-0.01 (-0.01)	-0.05 (-0.05)
Local peer audit quality	0.06+ (0.06)	0.06+ (0.06)	0.08* (0.08)	0.06+ (0.06)	0.07+ (0.07)	0.08* (0.08)
Government intervention	-0.04 (-0.04)	-0.04 (-0.04)	-0.04 (-0.04)	-0.03 (-0.03)	-0.05 (-0.05)	-0.04 (-0.04)
Customer base	-0.02 (-0.02)	-0.01 (-0.01)	-0.02 (-0.02)	-0.02 (-0.02)	-0.02 (-0.02)	-0.02 (-0.02)
Geographic concentration	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.02 (0.02)
Average customer size	0.16* (0.16)	0.19* (0.19)	0.16* (0.16)	0.13+ (0.13)	0.16* (0.16)	0.15+ (0.15)
Industry specialization	0.04 (0.04)	0.05 (0.05)	0.04 (0.04)	0.03 (0.03)	0.04 (0.04)	0.04 (0.04)
Audit firm age	0.001 (0.01)	0.001 (0.01)	0.001 (0.01)	0.001 (0.01)	0.001 (0.01)	0.002 (0.01)
Year 2000	0.21 (0.21)	0.37+ (0.37)	0.21 (0.21)	0.26 (0.26)	0.20 (0.2)	0.38+ (0.38)
Year 2001	0.23 (0.23)	0.33+ (0.33)	0.24 (0.24)	0.27 (0.27)	0.23 (0.23)	0.36* (0.36)
Year 2002	0.25+ (0.25)	0.27+ (0.27)	0.26+ (0.26)	0.21 (0.21)	0.25+ (0.25)	0.22 (0.22)
Year 2003	0.11 (0.11)	0.14 (0.14)	0.12 (0.12)	0.09 (0.09)	0.10 (0.1)	0.11 (0.11)
Year 2004	0.01 (0.01)	0.04 (0.04)	0.02 (0.02)	0.00 (0)	0.00 (0)	0.02 (0.02)
Year 2005	0.07 (0.07)	0.10 (0.1)	0.08 (0.08)	0.09 (0.09)	0.06 (0.06)	0.10 (0.1)
Year 2006	-0.03 (-0.03)	0.01 (0.01)	-0.01 (-0.01)	0.00 (0)	-0.03 (-0.03)	0.03 (0.03)
Constant	-3.59* (-3.59)	-4.23** (-4.23)	-3.53* (-3.53)	-2.95+ (-2.95)	-3.57* (-3.57)	-3.41* (-3.41)
Wald $\chi^2$	26.32+	39.23**	27.26+	36.36**	26.98+	48.81***
R-within	0.08	0.13	0.08	0.14	0.08	0.17
Between	0.10	0.10	0.12	0.05	0.12	0.08
Overall	0.07	0.08	0.08	0.06	0.08	0.09

The entries in the table are regression coefficients with standard errors in parentheses. Year 2007 is the base year.

\*\*\*p < 0.001, \*\*p < 0.01, \* p < 0.05, +p < 0.1.

to completely heterogeneous distribution of external activities in different regions/countries (Bühner, 1987; Cummins, Weiss, Xie, & Zi, 2010; Elango, Ma, & Pope, 2008). The higher the Herfindahl index, the more geographically concentrated the customers are. The lower the Herfindahl index, the more geographically diverse the customers are.

*Customer base.* We calculate customer base as the total number of listed customers of an auditor in province *i* in year *t*.

### 3.2.4. Control variables

In addition to the main independent and moderating variables, we control for audit firms' age. Local audit firms with a longer history in the Chinese market are more likely to believe that catering to local customers is a strong determinant of service retention rates and additional service purchase. Therefore, we expect the age of a local audit firm to have a negative effect on audit quality. We measure industry specialization of the auditor as the number of industries in which the focal audit firm is a specialist. To

identify whether the focal audit firm *i* is an industry specialists, we obtain its market share in industry *k* (based on China Securities Regulatory Committee industry category). We consider audit firm *i* a specialist if its market share in a particular industry exceeds a cutoff point of 15% (Deltas & Doogar, 2004). Previous audit literature has shown that audit firms specialized in a certain industry can offer high-quality audit service because of their expertise and deep knowledge of the regulatory frame in that industry (Hogan & Jeter, 1999; Palmrose, 1986). Therefore, we expect that an auditor that is a specialist in at least one industry provides audit service of higher standard. We also control for the average customer size audited by the focal audit firm in a year, with each customer's size measured by the logarithm of the sales (e.g., Ohlson, 1980; Titman & Wessels, 1988). Finally, we have year dummies to control for any event in a year that could influence audit quality—for example, the gradual change of business culture and institutional environment—but cannot be captured by other variables. Considering the time lag, the independent variables and control variables take the values in the prior year.

**Table 5**  
Random effects: Results of moderating effect of customer base and customer geographic concentration (dependent variable: audit quality).

	Foreign-affiliated audit firms (OBS: 87)				Local audit firms (OBS: 179)			
	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
Foreign peer audit quality * customer base		<b>-0.33**</b> (-0.33)				<b>0.09*</b> (0.09)		
Local peer audit quality * customer base			-0.16 (-0.16)				-0.04 (-0.04)	
Government intervention* geographic concentration				<b>-0.32**</b> (-0.32)				0.02 (0.02)
Professionalism	<b>0.17**</b> (0.17)	0.20** (0.20)	0.18** (0.18)	0.24* (0.24)	-0.10 (-0.10)	-0.09 (-0.09)	-0.11+ (-0.11)	-0.10 (-0.10)
Foreign peer audit quality	0.09 (0.09)	0.001 (0.001)	0.09 (0.09)	0.29** (0.29)	<b>-0.05+</b> (-0.05)	-0.06* (-0.06)	-0.06+ (-0.06)	-0.05+ (-0.05)
Local peer audit quality	0.01 (0.01)	0.03 (0.03)	-0.03 (-0.03)	-0.07 (-0.07)	<b>0.07+</b> (0.07)	0.08* (0.08)	0.08* (0.08)	0.08+ (0.08)
Government intervention	0.13 (0.13)	0.15 (0.15)	0.15 (0.15)	-0.53 (-0.53)	-0.01 (-0.01)	-0.02 (-0.02)	-0.01 (-0.01)	-0.02 (-0.02)
Customer base	0.26+ (0.26)	0.36** (0.36)	0.24+ (0.24)	-0.39+ (-0.39)	0.01 (0.01)	0.03 (0.03)	0.03 (0.03)	0.02 (0.02)
Geographic concentration	0.42*** (0.42)	0.44*** (0.44)	0.43*** (0.43)	0.23 (0.23)	-0.16* (-0.16)	-0.16* (-0.16)	-0.16* (-0.16)	-0.17* (-0.17)
Average customer size	0.19** (0.19)	0.22** (0.22)	0.19** (0.19)	0.1 (0.1)	0.24* (0.24)	0.23* (0.23)	0.23* (0.23)	0.24* (0.24)
Industry specialization	-0.01 (-0.01)	-0.05 (-0.05)	0 (0)	0.2+ (0.2)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)
Audit firm age	0.00 (0)	0.01 (0.01)	0 (0)	0.03 (0.03)	0 (0)	0 (0)	0 (0)	0 (0)
Year 2000	0.20 (0.20)	0.44 (0.44)	0.29 (0.29)	0.22 (0.22)	0.77** (0.77)	0.82** (0.82)	0.77** (0.77)	0.77** (0.77)
Year 2001	0.46 (0.46)	0.61 (0.61)	0.52 (0.52)	-0.1 (-0.1)	0.65** (0.65)	0.71** (0.71)	0.65** (0.65)	0.64** (0.64)
Year 2002	0.01 (0.01)	0.06 (0.06)	0.07 (0.07)	0.25 (0.25)	0.36* (0.36)	0.41* (0.41)	0.35* (0.35)	0.36* (0.36)
Year 2003	0.07 (0.07)	0.09 (0.09)	0.14 (0.14)	0.53 (0.53)	0.16 (0.16)	0.21 (0.21)	0.16 (0.16)	0.16 (0.16)
Year 2004	-0.10 (-0.10)	-0.17 (-0.17)	-0.03 (-0.03)	0.48+ (0.48)	0.05 (0.05)	0.1 (0.1)	0.04 (0.04)	0.05 (0.05)
Year 2005	-0.02 (-0.02)	-0.08 (-0.08)	0.08 (0.08)	0.24 (0.24)	0.13 (0.13)	0.16 (0.16)	0.13 (0.13)	0.12 (0.12)
Year 2006	0.00 (0)	-0.11 (-0.11)	0.2 (0.2)	0.22 (0.22)	0.03 (0.03)	0.07 (0.07)	0.05 (0.05)	0.02 (0.02)
Constant	-4.12** (-4.12)	-4.79** (-4.79)	-4.13** (-4.13)	-3.22 (-3.22)	-5.25 (-5.25)	-5.23* (-5.23)	-5.15* (-5.15)	-5.23* (-5.23)
Wald $\chi^2$	35.7**	50.97***	37.74**	3.64***	35.23**	40.21**	36.13**	35.09**
R-within	0.30	0.32	0.33	0.54	0.10	0.13	0.10	0.10
Between	0.30	0.56	0.28	0.00	0.38	0.34	0.40	0.39
Overall	0.34	0.42	0.35	0.04	0.26	0.25	0.28	0.27

The entries in the table are regression coefficients with standard errors in parentheses. Year 2007 is the base year. \*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05, +p < 0.1.

### 3.3. Statistical approach

We use random-effects (RE) models to test our hypotheses for four reasons. First, the Hausman test confirms no systematic differences between the fixed-effects (FE) model and the RE model in our sample. Second, the RE model enables us to control for time-invariant variables (e.g., province), whereas the FE model will drop these (Christensen, 2002). Third, the RE model allows the effects of the omitted variables to be absorbed into the random effect, thereby reducing potential bias in the estimates of the fixed effects (Agresti, 2002; Enright, 2009; Train, 2003). Fourth, the RE model can be generalized to a longer time span, while the FE model cannot (Lee & Park, 2006; Li & Greenwood, 2004).

## 4. Results

### 4.1. Main results

Table 3 shows the means, standard deviations, and bivariate correlations for the variables. The variance inflation factors for the regression models are below 1.75, indicating no serious multicollinearity problems (Neter, Wasserman, & Kutner, 1990).

Table 4 reports the results of the effects of the institutional pressures for audit firms. In Model 1, we include only the main effects of the concerned variables. From Models 2–5, we include the interactions between FAA and each type of institutional pressure, respectively. We report the results in Model 6 including all the interactions, with the results remaining largely the same.

In Hypothesis 1a, we predict that the audit quality of foreign peers in the same region has a stronger influence on a foreign-affiliated than a local audit firm's audit quality. In Model 6, the interaction between FAA and foreign peer quality is positively significant ( $\beta = 0.26, p < 0.01$ ), though neither of the main effects is significant. Such results provide support for Hypothesis 1a by showing that the foreign peer quality has a positive influence on a foreign auditor's audit quality, but it does not influence a local auditor's quality.

In Hypothesis 1b, we predict that the audit quality of local peers in the same region has stronger influence on a local than a foreign-affiliated audit firm's audit quality. The results in Model 6 show that the main effect of *local peer audit quality* is positively significant ( $\beta = 0.08, p < 0.05$ ). The interaction term between *local peer audit quality* and FAA is not significant. These results suggest that local peer quality has the same effect on both foreign and local auditors. Thus, Hypothesis 1b is not supported. Combining the results, we conclude that only foreign-affiliated audit firms refer to foreign peers, whereas both foreign-affiliated and local audit firms refer to local peers to adjust their audit quality. We attribute this result to the likelihood that foreign-affiliated audit firms suffer from liability of foreignness and newness when bringing in new accounting standards. They may refer to the local behavior codes to adapt their audit quality. However, we find the foreign peer's audit quality ( $\beta = 0.26, p < 0.01$ ) has a greater impact on a foreign-affiliated audit firm's audit quality than on local peers' audit quality ( $\beta = 0.08, p < 0.05$ ), with the difference at a significant level ( $diff = 0.18, p < 0.05$ ). These results suggest that foreign-affiliated audit firms refer to foreign peers more than to local peers to determine their audit quality strategy.

In Hypothesis 2, we predict that professionalism pressure influences foreign-affiliated audit firms more than local audit firms. In Model 6, the main effect of *professionalism* is not significant, while the interaction between FAA and *professionalism* is positively significant ( $\beta = 0.22, p < 0.01$ ). These results provide support for Hypothesis 2.

In Hypothesis 3, we predict that local government intervention has a stronger negative effect on the audit quality of local than

foreign-affiliated audit firms. In Model 6, none of the main effects of FAA, government intervention, or their interaction term show significant results. Thus, Hypothesis 3 is not supported.

We then separated our sample into foreign-affiliated audit firms and local audit firms to test Hypotheses 4 and 5 regarding the simultaneous effect of identity and customer base. Testing the hypotheses using two subsamples respectively allows us to avoid including three-way interactions (identity, customer base, and institutional pressure), which will lead to serious multicollinearity with our small sample size. Table 5 presents the results, with Models 7–10 for the foreign-affiliated audit firms and Models 11–13 for the local audit firms.

In Hypothesis 4a, we predict that a larger customer base will weaken the imitation of a foreign-affiliated audit firm's audit quality to its foreign peers. In Model 8 for the foreign sample, the interaction between foreign peer quality and a foreign auditor's customer base shows negative significance ( $\beta = -0.33, p < 0.01$ ). The main effect of foreign peer quality is not significant. These results provide support for Hypothesis 4a, suggesting that foreign-affiliated audit firms tend to mimic their peers less after they accumulate a larger customer base. The results also imply that though foreign auditors' social identity serves as a crucial link between within-group mimicry and organizational practice, the link is weakened as organizations develop more competitive advantages than other organizations in the same social group.

Hypothesis 4b predicts that a larger customer base will weaken the imitation of a local audit firm's audit quality to its local peers. In Model 13 for the local sample, the interaction between local peer quality and a local auditor's customer base is included but not significant. The main effect of local peer quality is positive ( $\beta = 0.08, p < 0.05$ ). The results do not provide support for Hypothesis 4b. They suggest that even after local audit firms have gained a larger market base, they do not abandon their local peers as a benchmark. Such results give evidence to firms' conservative attitudes when engaging in cross-group imitation, particularly for those with a less favorable identity.

Hypothesis 5a posits that the positive relationship between a foreign-affiliated audit firm and its local peers will be strengthened by a larger customer base. In Model 9 for the foreign sample, the main effect of a foreign auditor's customer base is marginally significant ( $\beta = 0.24, p < 0.1$ ), while neither the main effect of local peer quality nor the interaction is significant. The results do not provide support for Hypothesis 5a.

Hypothesis 5b proposes that the positive relationship between a local audit firm and its foreign peers will be strengthened by a larger customer base. In Model 12 for the local sample, the interaction between foreign peer quality and a local auditor's customer base shows positive significance ( $\beta = 0.09, p < 0.05$ ). The main effect of foreign peer quality is negative ( $\beta = -0.06, p < 0.05$ ). The results provide support for Hypothesis 5b, suggesting that as the local audit firms accumulate more customers, they are capable of abandoning their previous identity code by mimicking the other identity group's practices. However, if they are not capable enough (e.g., they do not have a large enough market base), they will be more conservative by keeping in line with their group code.

In Hypothesis 6a, we predict that the negative relationship between the local government's coercive pressure and a foreign-affiliated audit firm's audit quality will be weakened by its customer geographic diversity. In Model 10 for the foreign sample, the interaction between government intervention and the foreign audit firm's customer geographic concentration is negatively significant ( $\beta = -0.32, p < 0.01$ ). This result provides support for Hypothesis 6a, suggesting that as foreign audit firms have a concentrated geographic customer base, they are subject to more local government pressure. As a result, they will be forced to abandon their identity code and reduce their audit quality. When

they accumulate customers in more geographic areas, they do not need to comply as much with the local government pressure and thus can maintain their foreign identity.

In Hypothesis 6b, we predict that the negative relationship between the local government's coercive pressure and a local audit firm's audit quality will not be moderated by its customer geographic diversity. In Model 14 for the local sample, the interaction between government intervention and the local audit firms' customer geographic concentration shows no significant result. Thus, Hypothesis 6b is well supported.

One notable finding is that government intervention does not exert a significant influence on local audit firms' audit quality, no matter whether the firms have a diverse or concentrated geographic customer portfolio, while government intervention matters more for foreign-affiliated audit firms, particularly when their customers are concentrated in limited regional markets (as Model 10 shows). The results do not provide support for our prediction in Hypothesis 3. We speculate that the actual influence of coercive pressure may depend on the deviation between an organization's own behavior codes and authority expectations. For foreign-affiliated auditors, their behavioral codes deviate from the local government's expectations, and thus they are forced to adapt their practices more. However, local audit firms' behavior codes are consistent with what the local government desires, due to their long-standing business culture and resource endowment. Thus, the influence of government intervention may not be detected given that local audit firms voluntarily follow the same codes stipulated by government.

For the control variables, the average customer size is positively significant in all the models, suggesting that audit firms tend to offer higher audit quality for firms with higher sales. This could be because large firms are in the spotlight, and thus they have more incentives to report with higher quality to maintain a good reputation. Industry specialization shows a positive sign in Model 10, confirming our prediction that audit firms specializing in some industries can offer high-quality audit service.

#### 4.2. Robustness test

Our empirical examination may be subject to potential endogeneity because an auditor's social identity may be influenced by its historical performance and strategy (Washington & Zajac, 2005), which in turn may determine its audit quality strategy. To remove the potential endogeneity, we regress FAA on auditors' historical performance (customer base) and strategy (customer size, customer geographic concentration, and industry specialization) using the logit model (Wiersema & Zhang, 2012). The residuals are highly correlated with FAA (correlation = 0.92;  $p < 0.001$ ) but not with the regressors. Thus, they can be considered the component of social identity that is uncorrelated with the historical performance and strategy factors but influences audit quality decision. We then use the residuals to proxy FAA and run the same analysis in Table 2. The results are consistent with what we found previously.

Another concern is that in contrast with the manufacturing sector, firms in the service industry must stay in close contact with customers and adapt to their requirements (Carman & Langeard, 1980). Thus, it is unlikely that they can maintain identical levels for all customers and over different periods despite best efforts (Li, 2004). Simply examining our theoretical prediction using aggregated data at the audit level will miss the information of the customers' influence. Thus, we follow previous literature in finance and use customer-level data to test the robustness of the results (Becker, DeFond, Jambalvo, & Subramanyam, 1998; DeAngelo, 1981; Krishnan, 2003). The customer-level test enables us to control for individual customers' characteristics (e.g., return on

assets, leverage, state ownership, age) and, thus, to filter out the influence of their preferences. In general, the results are consistent with those from the audit firm-level tests (owing to limited space, we do not report them).

## 5. Discussion and conclusions

### 5.1. Theoretical implication

This study is the first to examine the role of social identity in shaping a firm's response to institutional pressures. Despite research efforts to discern the influence of institutional pressures on organizational practice (Greenwood & Suddaby, 2006; Lounsbury, 2002; Marquis & Lounsbury, 2007; Purdy & Gray, 2009), a social explanation of how organizations respond to institutional pressures differently is still lacking. To close the gap, we introduce the concept of social identity to differentiate several identity groups and argue that organizations will respond to institutional pressures according to their perceived social identities. Specifically, we use the sample of audit firms in China from 2000 to 2007 to assess their audit service quality under institutional pressures. We posit and test multiple predictions regarding (1) whether the audit quality strategies the audit firms employ as a response to institutional pressures vary across different identity groups and, (2) as an audit firm develops a larger and geographically diverse customer base, whether its identity-based strategy as a response to institutional forces is fine-tuned. Our study has important implications for the institutional literature and literature on international convergence-divergence.

First, our study contributes to the literature of organizational practice under institutional pressures. There is little consensus on whether firm practices are unitary or heterogeneous among organizations facing institutional pressures (Greenwood & Suddaby, 2006; Lounsbury, 2002; Marquis & Lounsbury, 2007; Purdy & Gray, 2009). We attribute the inconclusive results to a lack of differentiation between numerous social groups within a population. After differentiating two social groups on the basis of firms' COO, we show the scenario that even one type of institutional pressure prescribes only one course; not all firms take the course to the same extent. For example, our findings suggest that though normative pressure from professional networks pushes audit firms to offer high-quality audit service, only foreign-affiliated audit firms conform to that pressure, while local audit firms do not. Our study also addresses the scenario that different institutional pressures prescribe contradictory courses. For example, local government coercive pressure urges audit firms to offer low-quality audit service. In contrast, normative pressure from professional networks pushes audit firms to offer high-quality audit service. Experiencing these contradictory institutional pressures, audit firms choose the one that aligns with their social identity. In addition, our study addresses the scenario that one type of institutional pressure prescribes multiple courses. In our study, such mimetic pressure comes from two groups of audit firms. The group of foreign-affiliated audit firms offers high-quality audit service, while the group of local audit firms offers low-quality audit service. Facing such conflicting mimetic pressure, audit firms will only mimic the members of their own social identity group. In all three scenarios, our study confirms that institutional pressure itself may not be able to fully explain why a firm chooses one course over another. When facing discrepant pressures or even one pressure, firms also use their social identity to screen the best course. Thus, we draw attention to the social mechanisms underpinning the isomorphic process and explicate how firms' social identity constrains their reactions to institutional pressure through self-enforcement and consumer preference effects.

Second, our study features a dynamic approach to theorize organizational practices under institutional and social pressures. In particular, we suggest that an individual firm's customer base expansion can attenuate social identity's impact on its practice. Both the foreign-affiliated and local audit firms initially focus on and defend their own market segment by keeping in line with their own group code. However, as they gain a larger and more geographically diverse customer base, foreign-affiliated audit firms show differentiation with their foreign peers by deviating from their original group code. Thus, they are able to get more customers from other market segments. Similarly, local audit firms with a larger customer base also try to imitate their foreign peers by offering better audit quality service so that they can have a better chance of reaching the upper strand of the market. As customer base expansion weakens the effect of social identity in the isomorphic process, the adoption of more convergent practices across identity groups can be expected. Taken together, our study suggests that social identity and firm growth (in terms of customer base expansion) are two important contingent factors to reconcile the debates between unitary practice and heterogeneous practices in the isomorphic process.

Third, our study also contributes to the ongoing international convergence–divergence debate in management and international business literature. For example, Brandau et al. (2013) note that this line of literature indicates the dominance of pressures (including the pressures of globalization, information technologies, and transnational trade agreements) that lead to convergence over drivers that encourage divergence (e.g., national and corporate culture, national legislation and institutions) in the field of comparative management accounting. They give evidence of convergent management accounting structures and practices in German and Brazil. Björkman et al. (2008) show the convergence of HRM found in local Chinese firms with those of European firms in China. These results are well within expectations as the practices they examined are more of a legitimacy concern than market concern (i.e., these practices tend to be internal and do not influence the organizations' market response directly). We offer different insights when investigating a more market-related strategy (i.e., audit quality) that serves as a selling point for the audit industry in emerging economies such as China. By using the archival data of foreign-affiliated and local audit firms in China, we are able to examine the international convergence–divergence in audit quality. We reveal the limited convergence toward standardized audit service quality in China due to audit firms' concern with signaling their social identities, which serve as an important marketing cue to cater to their target market segment. In this sense, the convergence–divergence decision is actually an adaptive strategy carrying significant marketing implication for both foreign and local players.

Last, we bridge the management and international business literature streams by examining how local and foreign firms respond to institutional pressures differently. International business literature has established that the strategy and practice of foreign firms are influenced by the institutional pressures in the host country (e.g., Owens, Palmer, & Zueva-Owens, 2013; Park & Ghauri, 2015; Svendsen & Haugland, 2011; Zhu & Qian, 2015). These streams have also found that institutional pressures shape local firms' practices (e.g., Cheng & Yu, 2008; Slack & Hinings, 1994). However, little is still known about whether foreign and local firms respond to institutional pressures in the same way. We bridge this gap by showing that foreign-affiliated audit firms and local audit firms respond to the same institutional pressures in different ways, owing to their perceived social identity.

## 5.2. Managerial implication

The findings of this study have several implications for managers of firms in emerging markets. First, our results suggest that not only the institutional factors but also organizational identity matters for organizational change management. Thus, managers should make decisions based on perceived organizational identity. A decision that conflicts with customers' perceived identity (e.g., the lower audit quality of foreign-affiliated audit firms and higher audit quality of local audit firms) may impair firms' performance. Second, our study offers insights into the defense mechanism in managing international operation risks, particularly political risks. Prior studies suggest that in a host country, firms must trade off between complying with government authority for resources and keeping the desired level of autonomy (Andersson, Forsgren, & Holm, 2002; Bonardi & Keim, 2005; Rugman, 1998; Zhang, 2006). Our findings suggest that geographic diversification serves as an effective defensive mechanism against coercive pressures from local governments. By doing so, firms can gain greater bargaining power and maintain their autonomy. Our study also offers insight for policy makers. We explain why the central government's efforts to improve audit service succeed with some audit firms but fail with others. A potential reason is that voluntary response to institutional pressures is only effective when the pressure is consistent with focal firms' perceived identity. Our findings suggest that policies should vary to address firms with different identities.

## 5.3. Limitations and future research avenues

We also acknowledge a few limitations of this study. First, our findings are more salient in the context of China and other similar emerging markets than in developed countries. The institutional environment in China is similar to that in other emerging economies, but quite different from the West (Bruton & Ahlstrom, 2003). In those emerging economies, on the one hand, there is significant international pressure by various institutes (e.g., the advanced capitalist governments, the World Bank, the World Trade Organization, big audit firms, the Financial Accounting Standards Board and accounting professions, venture capitalists) to harmonize International Accounting Standards and International Financial Reporting Standards (Ezzamel & Xiao, 2011) and to improve audit quality. On the other hand, customers in emerging economies such as China demand lower audit quality for various reasons. For example, Ball, Robin, and Wu (2003) reveal that in Malaysia and Thailand where economic-related ethnic tension is critical and family control dominates, firms controlled by ethnic minority Chinese have both political and family incentives to reduce the demand for public disclosure and to avoid reporting large profits or timely loss recognition. The underdeveloped legal and corporate governance systems facilitate such practices (Yoshikawa, Zhu, & Wang, 2014). Using data of 1507 listed firms across eight emerging countries, Memis and Cetenak (2012) show that even Big 4 auditors do not constrain the earnings management incentives in emerging countries with under-developed legal systems. In this sense, the convergence and divergence of audit quality is a common issue faced by China and all other emerging economies, whereas this might not be the case in developed countries where the corporate governance system is well developed (Yoshikawa et al., 2014).

Another institutional characteristic unique in China is the intense intervention of local governments in audit firms' operations through resource allocation or by influencing customers' selection of auditors (Chien, 2010; Li et al., 2012; Wang et al., 2008). This can negatively influence the audit quality of audit firms located in their jurisdictions. This allows us to examine how the coercive pressure from local government intervention affects audit

firms' behavior. While in developed countries where a relatively free market dominates, the findings regarding Hypothesis 3 may not be applicable.

In addition, defining an audit firm's identity based on its COO is especially salient for firms in developing countries. As illustrated previously, foreign-affiliated audit firms (from developed countries) and local audit firms (from an emerging market) are different in many respects, including their behavior codes, rankings, audit fee, and performance. Conversely, foreign-affiliated audit firms and local audit firms in a developed country may not show such substantial difference because both formed their codes in a corporate governance system in which transparency and high audit quality tend to be the norm. Therefore, the finding that social identity based on COO moderates the relationship between institutional pressures and firms' practices should be more noticeable in emerging markets. In this sense, by using the archival data of audit firms from China, we contribute to the institutional literature by extending the geographic reach of empirical research to emerging economies (DiMaggio and Powell, 1983; Henisz & Delios, 2001), which shows substantial institutional difference from developed countries.

Second, our results for Hypotheses 3 and 5 may be more generalizable to large economies, which often have more than one layer of institutional arrangements (e.g., China, India, and Indonesia in Asia; Mexico in Latin America; Nigeria in Africa) as a result of decentralization (Farvacque-Vitkovic & Kopanyi, 2014). In large countries, the central government decentralizes power to the local governments to a greater or lesser degree to enable them to develop local policies. Local governments can therefore become a major force that shapes organizations' habitat, and as such geographic diversification could become an instrument to cope with the pressure from local governments.

Third, our definition of social identity of audit firms is different from most prior studies, which label audit firms as Big 4 and non-Big 4. In general, these study report that Big 4 audit firms deliver better quality than non-Big 4 firms in emerging economies, confirming the divergence of audit quality within one emerging economy (Al-Ajmi, 2008; Choi & Wong, 2002; DeFond, Francis, & Wong, 2000; Houqea, Monemb, & van Zijla, 2012). In our study, instead of using only Big 4 and non-Big 4, we also analyzed the domestic auditors that ally with international audit networks and grouped them together with the Big 4 branches (all of them are foreign-affiliated audit firms, as compared with pure local audit firms). Given that the leading international audit networks have member accounting firms all over the world (e.g., RSM International had representations in 120 countries as of December 2015), future studies could adopt our definition of audit firms' identity and test the convergence and divergence of audit quality in other emerging economies.

Fourth, social identity is flexible rather than fixed in the long run. The foreign-affiliated and local audit firms in our study held a fixed organizational identity during our sample period, but they might change identities in the future. For example, foreign affiliations may choose to shed their international cover and label themselves as domestic again. Moreover, although our study shows that a larger and more diverse customer base may weaken the effect of social identity and push firms toward more convergent practices (i.e., in the form of foreign-affiliated audit firms lowering their audit quality and local audit firms improving their audit quality), we do not know whether one practice (e.g., middle-level audit quality) will eventually dominate the field due to the short study period in this article. Therefore, future studies could extend our sample period and take a more dynamic view to examine how organizational identities influence institutional changes and the convergence process in the long run.

Last, our measure of mimetic pressure is not perfect. Ideally, we should use restatements of financial statements (Stanley & DeZoort, 2007) or ongoing concerns (Carey & Simnett, 2006) as relatively objective proxies for audit quality to check the robustness of the results. However, as mentioned, these indicators of an audit are not always immediately observable (Wooten, 2003), particularly in China where the intermediary market is not perfect (Chan et al., 2008; Khanna & Palepu, 2000) and the corporate governance system is not well-developed (Yoshikawa et al., 2014). For example, according to the CSMAR database, from 2000 to 2007, among all 10,515 listed companies' reports, there are 9322 clean standard audit options. Thus, the cost of using such a measure might be the loss of large amounts of information. Given the unavailability of a better proxy of mimetic pressure, we used the average of peer audit firms' audit quality to measure mimetic pressure. As mentioned in our methodology, the audit quality proxied by DAs is a relative concept. However, future study could work on a better measure for mimetic pressure for audit quality.

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