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## Research Article

# The global emergence of Chinese multinationals: A resource-based view of ownership and performance

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**Abstract** We apply insights from the resource-based view to better understand the emergence of Chinese multinational companies (MNCs) and to investigate the determinants of their performance. We argue that state ownership and foreign-corporate ownership have played a role in providing Chinese MNCs with access to key resources to improve their performance. Moreover, given the dominant role of government policies in China, Chinese MNCs are more profitable when their ownership structures align more closely with attributes favored by government policies. Our findings provide strong support to our arguments. This study provides new insights into how ownership structure leads to heterogeneity in MNC performance.

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**Keywords:** Chinese MNCs; ownership structure; state ownership; foreign-corporate ownership; the resource-based view; government policies

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## Introduction

Internationalization-process theories (Johanson and Vahlne, 1977) suggest that multinational companies (MNCs) from developing countries that are new entrants to the global marketplace are likely to face enormous challenges as they go abroad (Zaheer, 1995; Barkema and Drogendijk, 2007; Malhotra and Hinings, 2010). These

challenges, such as poor corporate governance and lack of financial support and advanced technology, heighten developing-country MNCs' chances of failure in the global marketplace (Luo and Tung, 2007; Zou and Adams, 2008). Developing-country MNCs are therefore expected to struggle, making it harder for them to become profitable (Liu *et al*, 2008; Morck *et al*, 2008).

However, evidence suggests that with the global emergence of Chinese MNCs, some have been surprisingly successful (Peng, 2003; Yiu *et al*, 2007). The cumulative number of Chinese firms that turned into MNCs quadrupled from approximately 1450 in 2002 to 5900 in 2006. Outward FDI from China to foreign countries increased sixfold, from US\$2.7 billion in 2002 to \$16.24 billion in 2006. Moreover, before 2002, the top 500 Chinese firms were very weak performers in comparison to Fortune Global 500 firms. However, by 2006, the average asset turnover of the top 500 Chinese firms (consisting almost entirely of Chinese MNCs) was higher than that of the Fortune Global 500 (CEC-CEDA, 2006). By 2008, the average return-on-assets (ROA) of the top 500 Chinese firms was 2.32 per cent, compared with 1.22 per cent for the Fortune Global 500 firms (Jiang and Wang, 2009). These statistics suggest that, rather than being weighed down by the enormous difficulties that new entrants would be expected to face, many Chinese MNCs have been surprisingly successful in taking advantage of their newfound freedom to compete in the global market.

What has caused the better-than-expected performance of Chinese MNCs after their emergence into the global market? China has experienced continuous transition in institutions since 1978, which can be mostly traced in Chinese government documents (Deng, 2007; Rui and Yip, 2008; Luo *et al*, 2010; Lu *et al*, 2011). We studied Chinese government official publications to investigate their role in encouraging international expansion and improving the global competitiveness of Chinese firms. We recognized that ownership structure might have been a key differentiating factor in providing access to valuable resources and therefore leading to heterogeneous performance across Chinese MNCs (Liu *et al*, 2011).

On the one hand, ownership structure of Chinese firms and Chinese government policies have, in unison, played a unique role in the emergence of Chinese MNCs. The Chinese government serves as the key controller and allocator of resources in China (Luo, 1995) and this role is clearly reflected in government policies. The 2002 go-global policy encouraged reforms in the ownership structure of Chinese firms (National Congress Report, 2003). For instance, state shareholders have historically expected state-owned companies to focus on social prosperity (for example, job creation) rather than profits. This expectation changed after 2002. State shareholders of Chinese MNCs increasingly recognized that, to be competitive at home and abroad, capitalistic aspirations of profitable performance should be encouraged and MNCs supported, with privileged access to key resources. Further, Chinese MNCs were encouraged to attract foreign-corporate shareholders in order to access resources such as modern technologies, knowledge about international markets and



corporate-governance practices. The access to key resources derived from ownership structure is likely to have provided a basis on which Chinese MNCs could begin to compete in the global marketplace.

On the other hand, the resource-based view (RBV) suggests that resources that are valuable, rare, inimitable and non-substitutable can help firms create sustainable competitive advantages and achieve above-average returns (Barney, 1991). We suggest that, in the context of an emerging market, ownership structure can facilitate firms to acquire key resources and thereby become competitive and profitable. Different types of owners can facilitate access to different types of resources that are critical for improving the global competitiveness of MNCs. Accordingly, extending the RBV, we argue that ownership structure (state ownership and foreign-corporate ownership) has played a role in helping provide Chinese MNCs with the key resources necessary to compete profitably in the global marketplace. Further, we argue that government policies in China can be more favorable to Chinese MNCs with certain attributes, which will therefore moderate the influence of ownership structure on firm performance.

This study contributes to international management research by extending RBV. First, our study suggests that, in the context of an emerging market, different types of owners can enable firms to acquire different types of key resources and thereby help to improve their global competitiveness and performance. Second, we highlight how Chinese government policies have encouraged the state, as owner, to provide larger Chinese MNCs with access to privileged resources. While smaller Chinese MNCs may not benefit from state ownership, larger ones can leverage institutional support and privileged access to resources for greater competitive advantage. Third, we highlight how Chinese government policies have encouraged foreign-corporate owners to invest in Chinese MNCs in industries where access to foreign technologies, knowledge and expertise are critical. Overall, this study enriches RBV by suggesting that competitive advantage derived from access to resources can be a result of the extent to which ownership structures align with and leverage government policies.

## Theory and Hypotheses

### **Background: Past government policies that set the stage for emergence of Chinese MNCs**

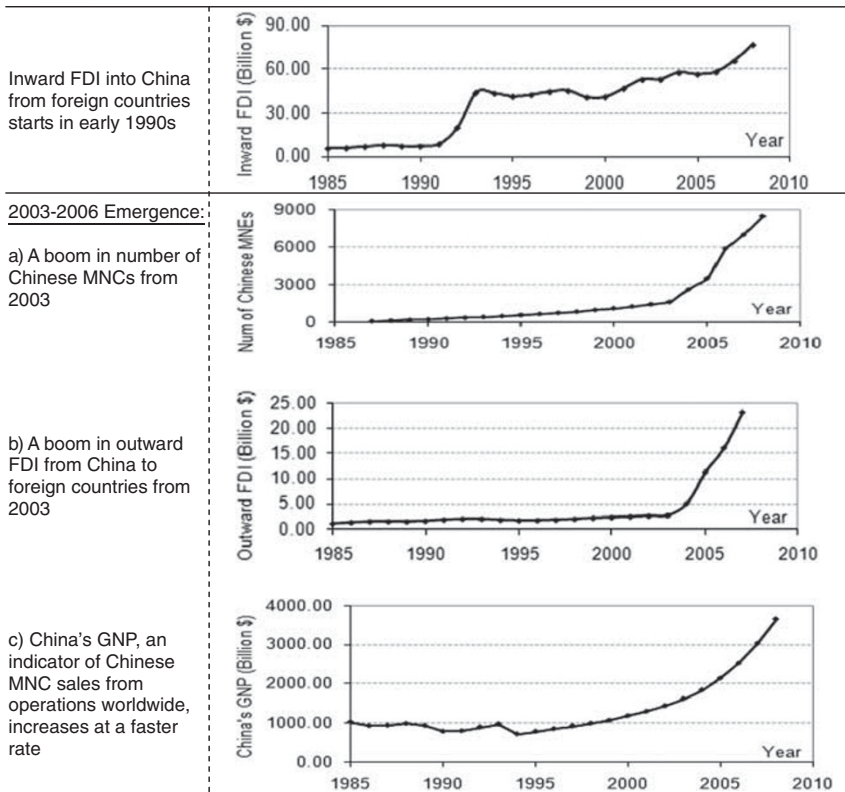
Past policies of the Chinese government have shaped and motivated the expansion strategies of Chinese firms both at home and abroad. Since China's 1978 policy to 'open up' its economy, it has experienced many policy changes that have led to its transition from a closed to an open economy and to economic growth, and improved the competitiveness of Chinese firms (Luo *et al.*, 2010). Importantly, policy initiatives

in the past that were geared toward transforming the role of corporate ownership probably gave China's MNCs the firepower necessary to become profitable global players. As illustrated in Figure 1, from the 1970s China has undertaken several critical policies to reform the corporate ownership of its firms. Its 'open up' policy in 1978 and the subsequent opening of Chinese stock exchanges in early 1990s attracted huge inflows of foreign direct investment (FDI) (Luo and Wang, 2012). After ex-chairman Xiaoping Deng's tour of Southern China in 1992, the transition was accelerated. Following this transition, from 1993, came the transformation of state-owned enterprises (SOEs) into modern corporate structures, which helped increase their efficiency and competitiveness.

The huge flow of FDI into China was perhaps the single most important characteristic of the world's FDI patterns during the 1990s. However, reforms in corporate ownership are not just about attracting inward FDI. They are also about encouraging domestic firms to grow internationally through exports and outward FDI (Child and Rodrigues, 2005; Yiu *et al*, 2007). Driven by trends of globalization and technical innovation, China joined the WTO in 2001 and strongly emphasized a 'go-global' policy in 2002 (National Congress Report, 2003; Buckley *et al*, 2007). The government issued an 'Outbound Investment Guidance Catalogue' in 2004, providing a list of favorable host countries and industries, and stimulated Chinese firms to invest abroad by offering incentives such as preferential access to capital and tax concessions (Hitt *et al*, 2005; Luo *et al*, 2010). The government encouraged Chinese MNCs to focus explicitly on acquiring new competencies, including advanced technologies and brand names, through policies encouraging outward FDI, thereby generating the boom in Chinese MNC activities (Child and Rodrigues, 2005; Buckley *et al*, 2007; Lu *et al*, 2011).

## Ownership structure and firm performance of Chinese MNCs

A firm needs access to appropriate resources in order to succeed in its international expansion (Hitt *et al*, 2006). We argue that both state owner and foreign-corporate owners helped Chinese MNCs to access the resources necessary for establishing competitive advantages. Moreover, Chinese MNCs are more profitable when their ownership structures are aligned closer with attributes favored by government policies. We extend RBV to emphasize that government policies can favor MNCs that operate at certain scales of size (for example, Beyer and Trice, 1979; Luo *et al*, 2010) and technology (for example, Burns and Stalker, 1961; Luo *et al*, 2010). Figure 2 illustrates our theoretical model linking ownership types to firm performance among Chinese MNCs, while emphasizing unique contingencies in the Chinese context. We treat the effect of different types of owners on Chinese MNCs' performance as baseline relationships and focus on contingency effects to investigate the role of government policies in facilitating the profitability of Chinese MNCs.



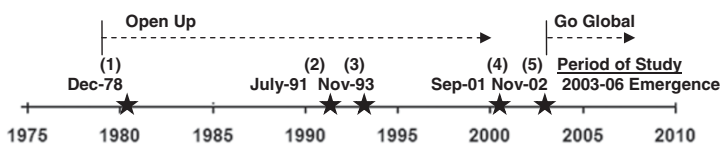
Inward FDI into China from foreign countries starts in early 1990s

2003-2006 Emergence:

a) A boom in number of Chinese MNCs from 2003

b) A boom in outward FDI from China to foreign countries from 2003

c) China's GNP, an indicator of Chinese MNC sales from operations worldwide, increases at a faster rate

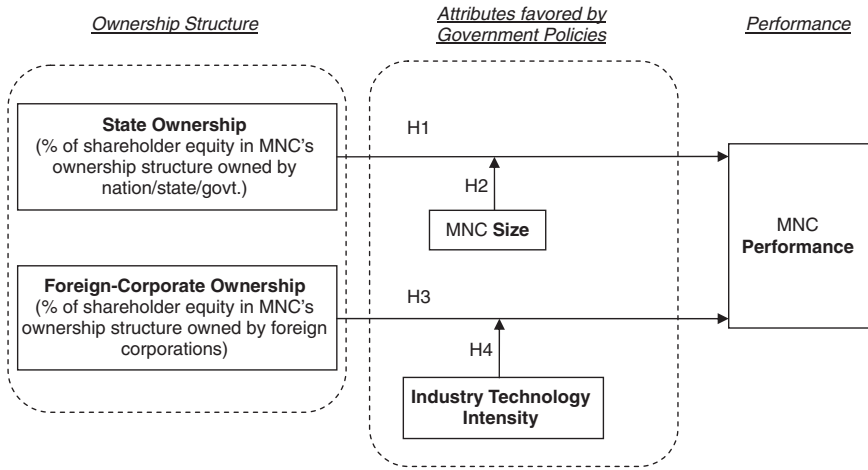


**HISTORICAL MILESTONES – China and Chinese MNCs**

- 1. Dec 1978:
  - In 11<sup>th</sup> National People's Congress, the Chinese government decides to concentrate on economic development, and emphasizes 'open up' (*Kaifang*) policy.
- 2. July 1991:
  - Shenzhen stock exchange opens. This is after Shanghai exchange opened in Dec. 1990.
- 3. Nov 1993:
  - In 14<sup>th</sup> National People's Congress, Chinese government decides to encourage modern enterprise structures. From 1994, state-owned firms start being publicly listed.
- 4. Sep 2001:
  - China enters WTO.
- 5. Nov 2002:
  - In 16<sup>th</sup> National People's Congress, Chinese government emphasizes its strong support for 'go-global' (*Zouchuqu*) policy. The policy facilitates international expansion of Chinese firms leading to fast growth in outward FDI from China.

**Figure 1:** Historical milestones and the emergence of Chinese MNCs.

Notes: Illustrations by authors. Economic data from National Bureau of Statistics, China. All US\$ values adjusted for China's annual inflation, with base year 2000.



**Figure 2:** Theoretical model: Influence of ownership structure on Chinese MNC performance.

*Two major types of equity ownership: The state and foreign corporations*

We recognize that these two types of owners (that is, state shareholders and foreign-corporate shareholders) can provide access to distinct but critical resources that can help Chinese MNCs gain competitive advantages and become profitable when competing in the global marketplace (Table 1).

**Influence of state ownership on firm performance**

*The changing role of state ownership*

Previous studies investigating the state ownership – firm performance relationship have reported inconclusive and sometimes conflicting findings. Some studies suggest a negative effect of state ownership on firm performance (for example, Zou and Adams, 2008), some a positive effect (for example, Dewenter and Malatesta, 2001; Sun *et al*, 2002) and others a non-linear (inverted U-shape) effect (for example, Vaaler and Schrage, 2009). Empirical evidence of these studies is contextual.

Despite China’s economic transition over the past few decades, many publicly listed companies still have substantial state ownership (Park *et al*, 2006). Prior studies suggest that state ownership hurts firm performance because of agency problems arising from conflicts of interest between the state and managers, lack of accountability and problems with monitoring of managers (Park *et al*, 2006; Zou and Adams, 2008; Liu *et al*, 2011). However, the role of state ownership in Chinese MNCs may be changing in connection with the government’s go-global policy, and

**Table 1:** Owners as providers of resources that can create competitive advantages

<i>Resource category</i>	<i>Resource types</i>	<i>Provider</i>	<i>Key arguments in the literature</i>
Privileged resources	Government support and protection	State owner	<ul style="list-style-type: none"> <li>• Chinese government provides institutional support to state-owned firms (Green and Liu, 2005)</li> <li>• Chinese government provides ‘state support for managerial initiatives’ and shows ‘commitment to firm success’ (Vaaler and Schrage, 2009, pp. 621, 624)</li> <li>• Chinese government gives ‘institutional support’ to state-owned firms (Luo <i>et al.</i>, 2010, p. 72)</li> <li>• State owner provides ‘institutional support and government underwriting’ because of state involvement in firms (Luo and Tung, 2007, p. 484)</li> <li>• ‘Government support can grant firms resource advantages in overseas investment’ (Cui and Jiang, 2012, p. 267)</li> </ul>
	Resources such as raw materials and financial resources	State owner	<ul style="list-style-type: none"> <li>• State-owned firms can easily access key resources from their state owner (Green and Liu, 2005)</li> <li>• ‘A high level of state ownership indicates a high level of resource dependence on the home-country government’ and ‘Chinese firms with high levels of state ownership depend heavily on the home-country government for critical resource input and police support’ (Cui and Jiang, 2012, p. 269)</li> <li>• Chinese government gives ‘financial support’ to enterprises to go abroad and state-owned firms enjoyed more support than other firms (Luo <i>et al.</i>, 2010, pp. 75, 77).</li> </ul>





**Table 1:** (Continued)

<i>Resource category</i>	<i>Resource types</i>	<i>Provider</i>	<i>Key arguments in the literature</i>
Market resources	Advanced technology	Foreign-corporate owners	<ul style="list-style-type: none"><li>• Foreign-corporate investors can transfer advanced technology to the firm (Belderbos, 2003)</li><li>• ‘Companies with larger foreign shareholdings ... have superior access to technical ... resources’ (Douma <i>et al</i>, 2006, p. 643)</li><li>• In order to enjoy preferable policies, foreign investors are required to share knowledge on new and/or advanced technologies (Luo, 1995)</li></ul>
	Knowledge about international markets and corporate governance	Foreign-corporate owners	<ul style="list-style-type: none"><li>• Foreign-corporate investors bring benefits in technology and market access to Chinese firms (Buckley <i>et al</i>, 2002)</li><li>• Companies with larger foreign shareholdings are ‘endowed with superior managerial capital’ that can ‘translate into superior performance’ (Douma <i>et al</i>, 2006, p. 643)</li><li>• Board representatives of foreign shareholders may facilitate international knowledge transfer and enhance monitoring (Reuer <i>et al</i>, 2011)</li></ul>





thus we expect the state ownership – firm performance relationship for Chinese MNCs to be positive.

To be more efficient and to compete with domestic and international competitors, state-owned companies were ‘reformed and transformed’ (Tan and Peng, 2003, p. 1254). Increasingly, state shareholders are becoming a source of valuable resources and positive support rather than detrimental agency problems (Green and Liu, 2005; Vaaler and Schrage, 2009). First, the presence of state ownership sends a positive signal to various stakeholders that a Chinese MNC will have government support and protection when facing uncertainties/risks in the global marketplace (Sun *et al.*, 2002; Luo *et al.*, 2010). Greater state ownership implies greater government support and protection, whereas domestic and foreign competitors lacking state ownership will suffer a competitive disadvantage (Green and Liu, 2005). Second, government involvement can help Chinese MNCs gain priority access (over domestic and foreign competitors) to various valuable resources (for example, raw materials, locations, financial capital) both inside and outside China, which are necessary for the success of international expansion (Rui and Yip, 2008; Luo *et al.*, 2010; Cui and Jiang, 2012). For instance, the government provides ‘institutional support and government underwriting’ to state-owned Chinese MNCs as they explore international markets (Luo and Tung, 2007, p. 484). Third, having the government as owner can open new avenues for Chinese MNCs – they are provided with greater access and insight into investment and business opportunities across the world (Green and Liu, 2005; Luo *et al.*, 2010). Thus, state shareholders can help improve the profitability of Chinese MNCs.

**Hypothesis 1:** Among Chinese MNCs, those with greater state-ownership in their ownership structure are likely to show greater firm performance.

#### *Firm size as a moderator*

During the 1996 industrial reform efforts in China, the federal government decided to focus on and retain control of large firms for more efficient resource allocation (CCCPC, 1999). In 1997, a Chinese government council formally endorsed a policy advocated by the State Economic and Trade Commission, which was called ‘seize the big and free the small’ (SBFS) – which means to improve the governance of large SOEs<sup>1</sup> while reducing control over small firms (Wang, 2008, p. 164). As such, medium- and small-sized SOEs were mostly privatized, while more resources were provided to large SOEs to improve their capabilities and make them larger and more competitive (Green and Liu, 2005). Helping improve the performance of large MNCs became a priority for state shareholders because successful Chinese MNCs would contribute to China’s prestige and visibility across the world (Green and Liu, 2005). Further, state shareholders are more inclined to support larger MNCs because of the wider influence that larger MNCs can have on society and the

economy (Wang *et al*, 2012). For instance, state shareholders realize that (i) larger MNCs pay more taxes, especially when profitable, and (ii) larger MNCs enable greater job creation across their entire value chain (consisting of the entire range of distributors and suppliers). Hence, larger Chinese firms have been better able to obtain institutional support from the government.

The Chinese government takes advantage of state policies to make large Chinese firms increase their strategic competitiveness, expand into international markets, and eventually become globally competitive MNCs (Guest and Sutherland, 2010). Thus, the formation of resource-rich cross-industry cross-region conglomerates that can serve as national champions and compete in foreign markets was encouraged in China (Nolan, 2001; Sutherland, 2003). Taking advantage of institutional support from the government and their linkages to foreign corporations, Chinese MNCs have invested in creating a portfolio of strategic assets across the world (Sutherland, 2009; Yiu, 2011). We argue that under the SBFS policy, Chinese MNCs are more profitable when greater state ownership is complemented with large firm size. This improved profitability is because Chinese government policies favor large SOEs, enabling the SOEs to obtain valuable and rare resources and become competitive in the global market (Sutherland, 2009; Guest and Sutherland, 2010; Luo *et al*, 2010; Yiu, 2011).

On the one hand, initiated by the SBFS policy, state shareholders can be a willing source of access to privileged resources for larger Chinese MNCs. First, the presence of state ownership sends a positive signal to various stakeholders (such as suppliers, customers, creditors and other shareholders) that the Chinese MNC will have government support and protection when facing uncertainties/risks in foreign markets (Luo *et al*, 2010). Greater state ownership implies greater government support and protection, whereas domestic and foreign competitors that lack state ownership will suffer a competitive disadvantage (Green and Liu, 2005). For instance, Chinese MNCs can easily secure loans from state-owned banks (Carney *et al*, 2011). Second, government involvement can help them gain priority access (over domestic and foreign competitors) to various resources (for example, raw materials, locations, financial capital) both inside and outside China, necessary for the success of international expansion (Sutherland, 2009; Luo *et al*, 2010; Cui and Jiang, 2012). For instance, the government provides ‘institutional support and government underwriting’ to state-owned Chinese MNCs as they explore foreign markets (Luo and Tung, 2007, p. 484). Third, having the Chinese government as owner can open new avenues for Chinese MNCs – they are provided with greater access and insight into investment and business opportunities across the world (Green and Liu, 2005; Luo *et al*, 2010). Finally, larger state-owned Chinese MNCs have received preferential opportunities to establish joint ventures with MNCs from developed countries. The foreign partners have found the larger state-owned Chinese MNCs attractive because of their privileged linkages with the Chinese government and institutions. Such preferential opportunities and privileged linkages are a major source of competitive advantage (Luo, 1995; Yiu, 2011).



On the other hand, with the implementation of the SBFS policy, the government has been loosening its control over small SOEs since 1997. Because of lower interference by the government in the operations of small firms, small firms make their own strategic decisions and take full responsibility for their own profits and losses (Wang, 2008). At the same time, because these small state-owned MNCs began to be privatized gradually (Meyer, 2011), they increasingly lack the government support and access to resources that would be helpful in facing global competition (Green and Liu, 2005). Hence, it is likely that the existence of state ownership does not influence a small MNC's performance.

Therefore, we suggest that, favored by the SBFS policy, firm size acts as a moderator of the influence of state ownership on firm performance. In large-sized Chinese MNCs, the presence of state shareholders will prove to be most beneficial.

**Hypothesis 2:** Firm size moderates the influence of state ownership on the performance of Chinese MNCs. The influence is more strongly positive when firm size is large.

## **Influence of foreign-corporate ownership on firm performance**

### *Foreign-corporate ownership*

Foreign investors in China can be divided into two broad categories: *indirect* and *corporate*. While foreign indirect investors (FIIs) have been allowed in China since late 2002, foreign-corporate investors have been investing in China since the stock exchanges opened in the early 1990s. FIIs are portfolio investors such as hedge funds, insurance companies, pension funds and mutual funds (Wilkins, 1999). In the stock markets of developing countries such as China, FIIs normally have a relatively short-term outlook, engaging in frequent buying/selling of stocks for short-term capital gains (Wilkins, 1999). In contrast, foreign-corporate investors tend to have a long-term outlook and share organizational resources and abilities with firms in which they invest. The Chinese government recognizes the difference between indirect and corporate investors and accordingly constrains the participation of FIIs with regulative barriers while encouraging the participation of foreign-corporate shareholders (US Government, 2006).

Chinese MNCs gain valuable resources from foreign-corporate shareholders about international opportunities, technologies, and corporate-governance practices to become globally competitive (Belderbos, 2003; Luo and Wang, 2012). The process of gaining valuable resources involves (i) obtaining access to specialized and tacit information about highly advanced technologies and (ii) the appointment of board members and consultants who are highly knowledgeable about corporate-governance practices and international markets (Buckley *et al*, 2002; Douma *et al*, 2006; Reuer *et al*, 2011). RBV literature suggests that tacit knowledge is a source of competitive

advantage (Barney, 1991; Hitt *et al*, 2006) – Chinese MNCs can learn such knowledge from foreign-corporate owners. Further, the presence of reputable foreign-corporate shareholders sends positive signals to the Chinese MNC's various stakeholders (suppliers, customers, creditors and other investors) (David *et al*, 2006). Given these benefits, exits by foreign-corporate investors are often interpreted as a signal of dissatisfaction with management, leading to 'a snowballing effect' (David *et al*, 2006, p. 593) with a drop in share prices and potential firing of top managers (Kaplan, 1994). Accordingly, we suggest that the interests of foreign-corporate investors are aligned with the long-term success of their Chinese MNC investees and that this alignment helps Chinese MNCs improve profitability.

**Hypothesis 3:** Among Chinese MNCs, those with greater foreign corporate ownership in their ownership structure are likely to show better firm performance.

#### *Industry technology intensity as a moderator*

China greatly released restrictions on inward foreign investment to attract foreign-corporate investors following Xiaoping Deng's, 1992 Southern tour speech. Attracted by China's big market, foreign-corporate investors initially chose to invest in traditional low-technology industries with stable returns and foreseeable risks (Wang, 2008). To attract foreign investment into Chinese high-technology industries, the government initiated various policies, including the 'Provisions to encourage foreign investment' into high-technology industries, described below (Luo, 1995). Given that the Chinese government has different policies to cope with foreign-corporate investors in high- versus low-technology industries (Luo, 1995), industry technology intensity is an important moderator variable. We argue that in rapidly changing high-technology industries, Chinese MNCs benefit more from foreign-corporate shareholders. This benefit arises because foreign-corporate shareholders are a source of knowledge on modern corporate-governance practices, international markets and the latest technologies (Zahra *et al*, 2000; Douma *et al*, 2006). Such knowledge serves as critical resources for Chinese MNCs in fast-changing technology-intensive industries (Burns and Stalker, 1961; Cheng and Bolon, 1993; Hitt *et al*, 2011).

First, Chinese MNCs in industries with high-technology intensity usually compete in the rough waters of fast-cycle markets, whereas Chinese MNCs in industries with low-technology intensity usually compete in the calm waters of slow-cycle markets (Hitt *et al*, 2011). Chinese MNCs in high-technology industries (such as computers, electronics and pharmaceutical) confront severe competition in a rapidly changing environment, where the modern corporate-governance practices (Douma *et al*, 2006; Reuer *et al*, 2011) and knowledge of international markets (Zahra *et al*, 2000; Buckley *et al*, 2002) provided by foreign-corporate shareholders become highly



critical for profitability. In contrast, Chinese MNCs in low-technology industries confront moderate competition in a relatively stable environment. The knowledge provided by foreign-corporate shareholders is less critical in this context.

Second, the Chinese government recognizes that, in order to improve and upgrade China's industrial infrastructure, foreign-corporate investors are more required in high-technology than low-technology industries (Luo, 1995). The competitive advantage of Chinese firms in low-technology industries is primarily derived from their knowledge of widely available technologies coupled with low production costs in China. However, Chinese MNCs in high-technology industries lack access to advanced technologies and thus are less competitive in foreign markets. The Chinese government recognizes these issues and does not provide much encouragement to foreign-corporate investors in low-technology industries, but does strongly encourage foreign-corporate shareholders to share information with Chinese MNCs in high-technology areas such as telecommunications, automotive and biotech (Luo, 1995). For instance, the 'Provisions to encourage foreign investment' announced by the State Council states that foreign investment in advanced-technology products and projects can enjoy (i) reduced corporate income tax, that is, 10–24 per cent, compared with 33 per cent for others (ii) reduced land-use fees (iii) 'priority' in the use of water and electricity. Moreover, the 'Policies on tariff to encourage foreign investment', promulgated by the Chinese General Administration of Customs, state that for foreign investment in high-technology industries, equipment or related technologies that cannot be produced in China are exempt from customs duties. In sum, we expect that industry technology intensity will positively moderate the association between foreign-corporate ownership and Chinese MNC performance.

**Hypothesis 4:** Industry technology intensity moderates the influence of foreign corporate-ownership on the performance of Chinese MNCs. The influence is more strongly positive when industry technology intensity is high.

## Methods

### Sample

China's outward foreign direct investment (OFDI) became strikingly notable to the world after 2002 (Luo *et al.*, 2010). Because the purpose of this study is to investigate the influence of Chinese MNCs' ownership structure on their performance during the emergence period, we created a unique 4-year longitudinal panel data set for the years 2003 through 2006. This sample period of 2003–2006 was suitable to investigate the emergence of Chinese multinationals in the global market for various reasons. One is that it was relatively stable, comprising no significant institutional

**Table 2:** Data sources for variables

<i>Variables</i>	<i>Data source</i>
1. Firm performance (ROA)	CSMAR
2. Locations	National Statistics Bureau of China
3. Age (# years since founding)	Annual reports
4. Product diversification	Annual reports
5. Intellectual capital	Annual reports
6. Organizational slack	CSMAR
7. International experience	Annual reports and company Websites
8. Internationalization	Annual reports
9. State ownership	Annual reports
10. Foreign-corporate ownership	Annual reports
11. Firm size	CSMAR
12. Technology intensity	National Statistics Bureau of China

changes. Before 2003, China was experiencing uncertainty and dramatic institutional changes, especially with regard to OFDI (CCPIT, 2007). Pre-2003 government policies (WTO entry, go-global policy and so on) set the scene for the global emergence of Chinese MNCs during 2003–2006. Further, given that 2003–2006 was stable, it was prudent for us to avoid the volatile 2007–2008 global financial crisis period, which greatly skewed the financials of many firms and would make the context inconsistent with the stable pre-crisis period.

The process of data collection was as follows. First, lists of all publicly traded firms were obtained from the Shanghai and Shenzhen stock exchanges in China. Second, the UNCTAD definition of a MNC was used to select ‘multinational’ firms, that is, a firm should have one or more foreign affiliates to be regarded as a MNC (UNCTAD, 2002). Third, to guarantee that the firms publicly listed on these Chinese stock exchanges were actually ‘Chinese’, it was additionally verified that the original owners of these firms were Chinese entities (government or individuals/families). Fourth, detailed data on measures were collected for these publicly traded firms from multiple sources, including the China Stock Market and Accounting Research (CSMAR) database, annual reports and company Websites. Our final sample consisted of longitudinal panel data for 248 Chinese MNCs. Data sources for our variables are described in Table 2.

## Measure for dependent variable

### *Firm performance*

Consistent with previous studies on international diversification (Hitt *et al*, 1997), we used ROA to measure firm performance. An accounting-based measure like ROA



was more appropriate than market-based measures for measuring performance, primarily because market-based performance measures assume stock-market efficiency, which may not hold in the case of the fledgling Chinese stock markets (Zahra *et al.*, 2000). We obtained this data from the CSMAR database.

### Measures for predictor variables

#### *State ownership (per cent)*

This was measured as the percentage of equity shares of the Chinese MNC owned by the Chinese government (Tan and Peng, 2003; Park *et al.*, 2006; Vaaler and Schrage, 2009; Liu *et al.*, 2011). This data was hand-collected from annual reports.

#### *Foreign-corporate ownership (per cent)*

This was measured as the percentage of equity shares of the Chinese MNC owned by foreign-corporate shareholders. This data was hand-collected from annual reports (Douma *et al.*, 2006).

Note that in addition to state and foreign-corporate owners, shares in a Chinese MNC can be owned by various domestic Chinese entities, such as mutual funds, trusts, and individuals/families, and by FIIs. Hence, a correlation between state ownership and foreign-corporate ownership variables is unlikely, and the inclusion of both state and foreign-corporate ownership in a regression equation is unlikely to cause multicollinearity problems.

### Measures for moderator variables: Attributes favored by government policies

#### *Firm size*

Gross revenue is a widely-used measure of firm size (Hitt *et al.*, 1997). We measured firm size using gross revenue (rather than number of employees or total assets) in the regressions to assure independence of variables and prevent multicollinearity issues. It was measured in thousands of dollars and log-transformed to normalize its skewed distribution. Data on gross revenue was obtained from the CSMAR database.

#### *Industry technology intensity*

We measured industry technology intensity as a ratio. The numerator was the total (industry-level) technology investment in the MNC's industry, which comprised industry-wide investment into R&D activities such as fundamental research, practical research and experimental development. The denominator was the total industry assets, which comprised industry-wide owned or controlled economic resources (NBS, 2006). We obtained the data from the National Statistical Bureau of China.

## Measures for control variables

Many empirical studies on international diversification have focused on developed-country MNCs, such as from Japan and the United States. In contrast, this study focuses on MNCs from a large developing country, China. Accordingly, this study controlled for variables that have been consistently found important by previous studies on developed-country MNCs.

### *Location*

Approximately 11 per cent of our sample is from western China, 17 per cent from central China and 72 per cent from eastern China. We included dummy variables to control for location because MNCs located in the eastern part of China are likely to benefit from their proximity to the coast, ports and US market. In comparison, MNCs located in the central and western parts of China would not receive such benefits.

### *Product diversification*

Previous research suggests that product diversity influences firm performance (Hitt *et al*, 1997; Chakrabarty, 2015) and was therefore included as a control variable. It was calculated using the traditional product diversity entropy (PDT) score, defined as  $PDT = \sum_i [P_i * \ln(1/P_i)]$ , where  $P_i$  is the sales attributed to segment  $i$  and  $\ln(1/P_i)$  is the weight given to each segment, or the natural logarithm of the inverse of its sales. This measure considers both the number of segments in which a firm operates and the proportion of total sales each segment represents (Hitt *et al*, 1997). Data for this variable was obtained from annual reports.

### *Intellectual capital*

Intellectual capital of employees was included as a control variable because it was found to be positively related to MNC performance (Cheng and Bolon, 1993; Hitt *et al*, 1997; Chakrabarty and Wang, 2012). It was measured as the firm's R&D expenses (in thousands of dollars) per employee (Chakrabarty and Wang, 2012). Data for this variable was hand-collected from annual reports.

### *Organizational slack*

Organizational slack has significant impact on firm performance (Tan and Peng, 2003; Iyer and Miller, 2008) and thus was included as a control variable. This was measured as the equity-to-debt ratio in the firm's capital structure, which is the ratio of total equity raised from shareholders in stock markets to total debt borrowed from creditors (Tan and Peng, 2003). Data was obtained from the CSMAR database.





### *International experience*

International experience represents the number of years of accumulating international knowledge gained by exposure and ‘learning by doing’ (Zahra *et al.*, 2000). The length of international experience was measured by the number of years since a firm had first sold products abroad. It was log-transformed to normalize its skewed distribution. Data for this variable was hand-collected from annual reports and Chinese MNC Websites.

### *Age*

We controlled for the age of a firm, measured as the total number of years since foundation. We included it as a control to draw a distinction between it and the international experience variable (Zahra *et al.*, 2000). Data for this variable (that is, founding year) was hand-collected from annual reports of Chinese MNCs.

### *Internationalization*

The level of internationalization is commonly measured as the ratio of sales in foreign markets to total sales (Geringer *et al.*, 1989; Hitt *et al.*, 2006). Foreign operations of Chinese MNCs largely focus on the marketing and sales of goods. Though some production activity can happen in the foreign country, production mostly happens in China (Luo, 1995). In accordance with the internationalization literature, ‘foreign sales’ is measured as the revenue generated from sales of goods in foreign markets by a Chinese MNC irrespective of the location of production (Tallman and Li, 1996). This ratio is ‘a good relative indicator’ and a widely-used measure for the level of a firm’s internationalization (Geringer *et al.*, 2000, p. 61). The literature suggests multiple measures on internationalization (see Hitt *et al.* (2006) for a good review). However, because of limitations in data availability, we adopted the measure of FSTS. Data was obtained from annual reports.

## **Endogeneity tests**

Statistically, the possibility of endogeneity between ownership structure and firm performance may result in misleading coefficients (Wooldridge, 2002). When independent variables are related to error terms of the dependent variable, the OLS coefficients will be biased (Basche, 2008). We used the Durbin-Wu-Hausman test to check for the possibility of endogeneity (Wooldridge, 2002). Instrumental variables adopted in the test were advertising intensity of Chinese MNCs as a proxy for firm visibility and industry dummies to proxy the natural resources and high-technology industries for owner preference, which are related to ownership structure, but may not relate to firm performance (Hamilton and Nickerson, 2003). Our results suggest no evidence of endogeneity, with non-significant  $\chi^2$  values ( $P = 0.54$  for state ownership

and  $P = 0.62$  for foreign-corporate ownership). Therefore, we are confident in applying the panel data analysis technique to test our proposed hypotheses.

## Results

We measured the independent variables using data for the 3-year period 2003–2005. To indicate the direction of influence, the independent variables lag behind the dependent variable by 1 year. Hence, the dependent variable was measured using data for the 3-year period 2004–2006. We used White's test to investigate the potential for heteroskedasticity, the result of which ( $\chi^2 = 34.19$ ,  $P = 0.13$ ) suggests that standard errors are not biased.

Table 3 reports the means, standard deviations and correlations. The mean value of state ownership is 26.93 per cent, which implies that many of the sampled firms are under strong governmental influence. However, not all firms are state-owned. In all 53.6 per cent (133 out of 248 firms) of our sampled firms have zero state ownership. The remaining 46.4 per cent (115) have state ownership, 25.5 per cent (63) over 40 per cent. Hence, our sample has a healthy balance of non-state-owned and state-owned firms.

As shown in Table 4, the variables were entered in hierarchical models: control variables (Model 1), predictor variables (Model 2), moderator variables (Model 3) and 2-way interaction terms (Model 4).

With regard to Hypothesis 1, the results suggest that the main effect of state ownership on firm performance is not significant ( $\beta = -0.010$ ,  $P > 0.10$  in Model 2). However, consistent with Hypothesis 2, state ownership has a strongly positive influence on firm performance when firm size is high ( $\beta = 0.154$ ,  $P < 0.05$  in Model 4). As shown in Figure 3(a), the influence of state ownership on firm performance is positive (simple slope = 0.0004,  $P = 0.04$ ) when firm size is high. In contrast, state ownership has a negative influence on firm performance when firm size is low (simple slope =  $-0.0005$ ,  $P = 0.03$ ). This implies that state ownership is beneficial for large but detrimental for small Chinese MNCs.

Consistent with Hypothesis 3, results suggest that Chinese MNCs with greater foreign-corporate ownership are likely to show better firm performance ( $\beta = 0.241$ ,  $P < 0.001$  in Model 2). Further, this association is significantly moderated by industry technology intensity ( $\beta = 0.104$ ,  $P < 0.05$  in Model 4), which is consistent with Hypothesis 4. As shown in Figure 3(b), the influence of foreign-corporate ownership on firm performance is more strongly positive when industry technology intensity is high (simple slope = 0.002,  $P = 0.0005$ ). In contrast, when industry technology intensity is low, foreign-corporate ownership does not help improve firm performance (simple slope =  $-0.0001$ ,  $P = 0.87$ ). This implies that relying on foreign-corporate ownership is beneficial for Chinese MNCs operating in industries with high levels of technology intensity.

**Table 3:** Descriptive statistics and correlations

<i>Variables</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>
<i>Dependent variable</i>															
1. Firm performance (ROA)	0.04	0.04	1.00	—	—	—	—	—	—	—	—	—	—	—	—
<i>Controls</i>															
2. Location: West China	0.11	0.32	-0.02	1.00	—	—	—	—	—	—	—	—	—	—	—
3. Location: Central China	0.17	0.38	-0.09	-0.16	1.00	—	—	—	—	—	—	—	—	—	—
4. Location: East China	0.72	0.45	0.09	-0.57	-0.72	1.00	—	—	—	—	—	—	—	—	—
5. Age (# years since founding)	9.78	7.13	-0.04	-0.02	-0.11	0.11	1.00	—	—	—	—	—	—	—	—
6. Product diversification	0.91	0.46	0.07	-0.07	-0.01	0.06	0.18	1.00	—	—	—	—	—	—	—
7. Intellectual capital	0.06	0.19	-0.05	-0.08	-0.08	0.12	0.10	-0.01	1.00	—	—	—	—	—	—
8. Organizational slack	1.77	3.82	0.08	0.01	0.08	-0.07	-0.07	-0.06	-0.03	1.00	—	—	—	—	—
9. International experience (log years)	2.33	0.42	0.08	-0.13	-0.14	0.21	0.22	0.01	0.02	0.06	1.00	—	—	—	—
10. Internationalization	0.37	0.24	0.01	0.08	0.05	0.18	0.17	-0.05	-0.02	0.14	0.06	1.00	—	—	—
<i>Predictors</i>															
11. State ownership (%)	26.93	25.66	-0.04	0.17	0.08	-0.18	0.00	-0.04	0.00	0.12	-0.13	0.16	1.00	—	—
12. Foreign-corporate ownership (%)	3.30	9.42	0.24	-0.08	-0.08	0.12	0.11	-0.06	0.01	0.00	0.17	0.18	-0.07	1.00	—
<i>Moderators</i>															
13. Firm size (log of thousands \$)	0.88	0.68	-0.01	-0.03	-0.10	0.11	0.37	0.07	0.55	-0.12	0.10	0.04	0.20	0.11	1.00
14. Technology intensity (ratio)	0.01	0.01	-0.10	-0.03	0.05	-0.02	-0.05	-0.10	0.28	0.14	-0.08	0.12	0.00	-0.05	-0.02

*Notes:* Sample size  $N=744$  firm-years, comprising 248 Chinese MNCs. The dependent variable is lagged ahead of the independent variables by 1 year (in the 4-year sample of 2003–2006). The independent variables are for the years 2003–2005, whereas the dependent variable is for the years 2004–2006. Correlations are significant at  $P<0.05$  when coefficients are 0.125.



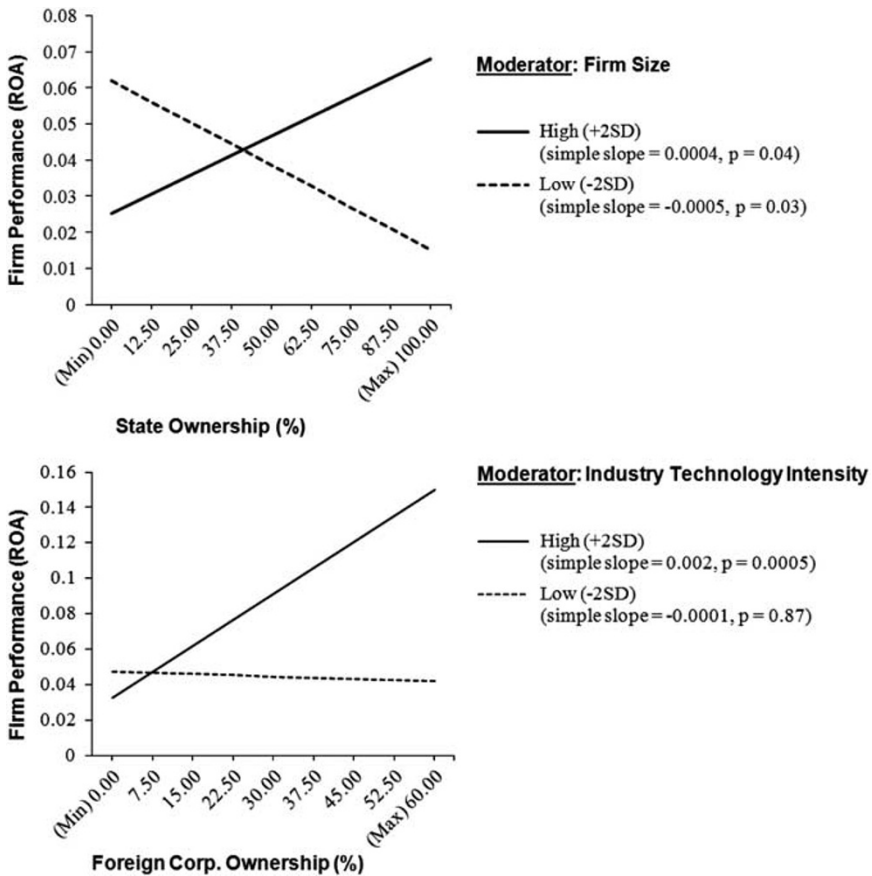
**Table 4:** Influence of ownership structure on Chinese MNC performance

<i>Dependent variable:</i>	<i>Panel data regressions: Standard parameter estimates <math>\beta</math></i>				
<i>Firm performance (ROA)</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Support</i>
	<i>Controls</i>	<i>Predictors</i>	<i>Moderators</i>	<i>2-way interactions</i>	
<i>Controls</i>					
Location dummies (East, West, Central)	✓	✓	✓	✓	—
Age	-0.068	-0.090	-0.093	-0.123*	—
Product diversification	0.083	0.103†	0.096†	0.083	—
Intellectual capital	-0.049	-0.045	-0.023	0.003	—
Organizational slack	0.086	0.090	0.101†	0.121	—
International experience	0.082	0.045	0.040	0.067	—
Internationalization	0.035*	0.036*	0.033*	0.030*	—
<i>Predictors</i>					
H1: State ownership %	—	-0.010	-0.013	-0.022	No
H3: Foreign-corporate ownership %	—	0.241***	0.239***	0.230***	Yes
<i>Moderators</i>					
Firm size	—	—	0.001	-0.030	—
Industry technology intensity	—	—	-0.077	-0.056	—
<i>Interaction terms</i>					
H2: State ownership % $\times$ firm size	—	—	—	0.154*	Yes
H4: Foreign-corporate ownership % $\times$ technology intensity	—	—	—	0.104*	Yes
Fit statistics $R^2$	0.0430	0.1112	0.1177	0.1540	—
Change between models $\Delta R^2$	—	0.0682	0.0065	0.0363	—
Wald statistic	—	18.25	1.74	10.06	—
<i>P</i> -value	—	0.0001	0.4196	0.0066	—

\*\*\* $P \leq 0.001$ , \*\* $P \leq 0.01$ , \* $P \leq 0.05$ , † $P \leq 0.10$  (two-tailed tests).

*Notes:* Sample size  $N = 744$  firm-years, comprising 248 Chinese MNCs. The dependent variable is lagged ahead of the independent variables by 1 year (in the 4-year sample 2003–2006). The independent variables are for the years 2003–2005, whereas the dependent variable is for the years 2004–2006. All variables were centered and standardized. To test for between-firm variance, the between-effect estimator is used in the panel data regressions. Tests were conducted to rule out problems of heteroskedasticity and endogeneity. Maximum Variance Inflation Factor = 1.71, indicating no evidence of multicollinearity.

The between-effect estimator is used in the panel data regressions to test for between-firm variance. Our focus is on Chinese MNCs during 2003–2006 (that is, after Chinese WTO entry and go-global policy), and particularly on why certain Chinese MNCs had a competitive advantage during this go-global period. Our intent was to investigate the question of what characteristics enabled a Chinese MNC to perform better than its peers during the go-global period. Empirically, this implies the need to test for between-firm variance. In panel data regressions, between-firm variance can be tested using either a random-effects estimator or a between-effects estimator (in contrast, a fixed-effects estimator is not suitable for our purpose, because it tests for within-firm and not between-firm variance). Accordingly, we ran our panel data regressions using both random-effects and between-effects estimator (SAS, 2008, p. 1337). Results were similar with these estimators. However, the Hausman test ( $m = 40.4$ ,  $P < 0.01$ ) found the random-effect estimator to be inefficient. Consequently, the remaining plausible option for testing and interpreting between-firm variance was the between-effects estimator. Hence, Table 3 reports regression coefficients of panel data analysis using the between-effects estimator.



**Figure 3:** The influence of ownership structure on firm performance. (a) (Hypothesis 2): State ownership $\times$ firm size; (b) (Hypothesis 4): Foreign-corporate ownership $\times$ technology intensity.

### Robustness tests

Using a single combined measure of ownership, we carried out robustness tests to assess the validity of the directions of the moderating effects. The combined measure was calculated as the natural log of the ratio of state ownership percentage to foreign-corporate ownership percentage. The results on the one-tailed directional tests are presented in Table 5. The combined information from the moderated regression results tells us about the directional effects of state ownership relative to foreign-corporate ownership; that is, the larger the firm size, the more positive the relationship between the ownership ratio and performance. First, when firm size is high,

**Table 5:** Directional robustness test with a single combined measure of ownership (state-to-foreign ownership ratio)

<i>Dependent variable:</i>	<i>Panel data regressions: Standard parameter estimates <math>\beta</math></i>			
<i>Firm performance (ROA)</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
	<i>Controls</i>	<i>Predictors</i>	<i>Moderators</i>	<i>2-way interactions</i>
<i>Controls</i>				
Location dummies (East, West, Central)	✓	✓	✓	✓
Age	-0.090†	-0.082†	-0.075	-0.081
Product diversification	0.103*	0.093*	0.088†	0.088†
Intellectual capital	-0.045	-0.047	-0.012	0.001
Organizational slack	0.090 †	0.068	0.074 †	0.092 †
International experience	0.047	0.045	0.038	0.052
Internationalization	0.041*	0.039*	0.038*	0.035*
<i>Predictor</i>				
State-to-foreign ownership ratio	—	-0.375**	-0.367*	-0.360**
<i>Moderators</i>				
Firm size	—	—	-0.034	-0.043
Industry technology intensity	—	—	-0.063	-0.059
<i>Interaction Terms</i>				
Ownership ratio×firm size	—	—	—	0.088 †
Ownership ratio×technology intensity	—	—	—	-0.085 †
Fit statistics $R^2$	0.1112	0.1371	0.1415	0.1576
Change between models $\Delta R^2$	—	0.0259	0.0044	0.0161
Wald statistic	—	7.13	1.19	4.46
<i>P</i> -value	—	0.0076	0.2761	0.05375

\*\*\* $P \leq 0.001$ , \*\* $P \leq 0.01$ , \* $P \leq 0.05$ , † $P \leq 0.10$  (one-tailed tests).

*Notes:* Sample size  $N = 744$  firm-years, comprising 248 Chinese MNCs. The dependent variable is lagged ahead of the independent variables by 1 year (in the 4-year sample of 2003–2006). The independent variables are for the years 2003–2005, whereas the dependent variable is for the years 2004–2006. All variables were centered and standardized.

State-to-foreign ownership ratio is calculated as:  $\log_e\left[\frac{(\text{state ownership \%})}{((\text{foreign-corporate ownership \%})+1)}+1\right]$ . Given that we are testing directional relationships in this particular set of regressions as part of robustness tests, we use one-tailed tests.

greater state ownership relative to foreign ownership will lead to greater firm performance ( $\beta = 0.088$ ,  $P = 0.072$ ). This finding is consistent with our theory that the Chinese government helps big MNCs. Second, when industry technology intensity is high, greater foreign-corporate ownership relative to state ownership will lead to greater firm performance ( $\beta = -0.085$ ,  $P = 0.068$ ); that is, the higher the industry technology intensity, the more negative the relationship between the ratio



variable of ownership and performance. This means that in high-technology industries, Chinese MNCs that are more state-owned than foreign-owned are worse off. In other words, in high-technology industries, Chinese MNCs would have been better off if they had more foreign corporate than state ownership, because the key resources they needed were high-technology resources that foreign investors can provide, which is consistent with our theory. These directional patterns of the moderation effects in Table 5 essentially replicate the patterns established in Table 4 and thereby provide more clarity about the relationships examined.

## Discussion

Prior research suggests that MNCs from developing countries that are new entrants to the global marketplace can expect to face enormous difficulties as they seek competitive advantages outside their domestic comfort zone. However, many Chinese MNCs have been profitable after China joined the WTO and launched its go-global policy in 2002 (Chen and Tan, 2012). Our main findings suggest that, subsequent to the go-global policy, Chinese MNCs having certain ownership structures and certain distinctive attributes have been better able to access resources by taking advantage of government policies.

First, with firm size held constant at its average value, state ownership did not seem to have a significant influence on MNC performance. However, its influence became apparent after firm size was allowed to act as a moderator. Given that government policies used firm size to discriminate among SOEs with regard to providing privileged access to resources, the manner in which state ownership influences performance becomes contingent on firm size. Second, greater foreign-corporate ownership results in significantly better performance for Chinese MNCs, but the association is much stronger in industries with high-technology intensity. Chinese government policies, again, play an important role in enabling this mechanism. The policies actively attract foreign-corporate shareholders and encourage resource transfer from foreign-corporate shareholders to Chinese firms in industries with high (rather than low) technology intensity. In sum, we found that Chinese MNCs whose ownership structure (state ownership and foreign-corporate ownership) more closely matched certain attributes favored by government policies (size and technology) were more likely to be profitable. We discuss theoretical and managerial implications below.

## Theoretical implications

Our study focuses on the emergence of Chinese MNCs following the government's go-global policy in 2002 and extends the RBV by investigating the role of ownership

structure in providing MNCs with access to resources. Further, we find that some predictors (for example, product diversification and intellectual capital) that have been shown to be important in prior research on developed-country MNCs were not important for Chinese MNCs during their emergence. This finding bolsters our argument that a new way of thinking based on an extension of RBV is needed to understand the emergence and performance heterogeneity of Chinese MNCs during this period. It lends credence to our argument that new insights can be gained by viewing ownership structure in terms of how it can provide an MNC with access to resources.

Our study provides new insights and evidence that extend and enrich RBV literature, answering the call for new theoretical development in international management (Cheng *et al*, 2011). First, our study enriches RBV by investigating the specific role of state ownership in providing access to resources to Chinese MNCs. Previous research tells us that state ownership negatively influences firm performance because of the presence of agency problems (Luo, 1995; Zou and Adams, 2008). However, we found that the association between state ownership and firm performance is contingent on firm size, where firm size is a major criterion in Chinese government policies. Because of the government's 'seize the big, free the small' policy, state ownership is unlikely to help improve the performance of small Chinese MNCs. Small MNCs would be unable to derive favorable treatment in terms of access to resources from state shareholders. In contrast, state ownership has a significantly positive influence on the performance of large Chinese MNCs, because their performance is representative of national competitiveness and thus the state shareholders enthusiastically support the resource needs of large MNCs. Hence, our article extends RBV to provide new insights about the role of state ownership in Chinese MNCs by emphasizing the role of government policies in providing access to resources.

Second, our study enriches RBV by investigating the role of foreign-corporate shareholders in the Chinese context. Such shareholders were important sources of information about international markets and modern technologies, which proved useful for Chinese firms venturing abroad. The Chinese government announced policies to attract more foreign participation in high-technology rather than low-technology industries. Owing to policies favoring the channeling of foreign knowledge into high-technology industries, Chinese MNCs in high-technology industries could compensate for their inadequacies by accessing resources from foreign-corporate shareholders. Thus, we extended RBV to understand the role of foreign-corporate ownership in providing Chinese MNCs with access to resources and to emphasize the role of Chinese government policies in encouraging such resource transfer.

In addition, in the public policy literature, the role of government policies in national economic growth has been widely discussed (Cameron, 1978; Rebelo, 1990). Compared with various emerging countries, Chinese government policies





have been relatively more successful in helping its MNCs to access resources and compete in the global marketplace (Peng, 2003). In the context of China, the SBFS policy encourages state shareholders to offer privileged access resources to the larger state-owned MNCs (Wang, 2008). Moreover, policies on corporate-ownership reforms encourage foreign-corporate owners to transfer knowledge in specific industries, that is, high-technology industries (Luo, 1995). With the support of government policies, Chinese MNCs have undergone ownership transformation, expanded into competitive international markets, and found success (Yiu *et al*, 2007). This study contributes to the literature on public policy and emerging economies by emphasizing the importance of government policies in the success of Chinese MNCs.

### **Implications for managerial practice**

China is one of the world's major developing countries and joined the WTO in 2001. We believe that many of our arguments regarding Chinese MNCs can be extended to MNCs from other developing countries. Managers should understand how institutions, government policies and firms interact to create a positive situation and necessary boundary conditions. Our findings provide insights to managers on how MNCs from developing countries can leverage favorable government policies to increase their ability and turn into profitable global players. The key takeaway point is that MNCs whose ownership structures are more closely aligned with government policies – policies that enable the inflow of resources into the MNCs – are more likely to be successful in achieving profitability.

Although firms from developing countries are entering foreign markets as latecomers, they can overcome market obstacles and technological barriers with support from state shareholders and foreign-corporate shareholders (Luo *et al*, 2010; Cui and Jiang, 2012). State shareholders in developing countries with socialist traditions have typically expected their MNCs to focus on social prosperity (in terms of job creation and so on), conflicting with the need to run at a profit. However, through implementation of favorable policies in recent times, the state, as the shareholder of Chinese MNCs, is increasingly supporting managers toward realizing aspirations of profitable performance. This is especially true for large Chinese MNCs, because their success in beating global competition is viewed by state shareholders as contributing to their country's prestige and visibility worldwide.

Further, Chinese MNCs that attract foreign-corporate shareholders are more likely to be successful because foreign shareholders can provide access to resources. Effective government policies can attract foreign shareholders not only to provide information about corporate-governance practices and international markets, but also to provide access to modern technologies in both tangible and intangible forms, thereby helping Chinese MNCs to increase their global competitiveness. Such resource access is particularly useful for Chinese MNCs competing in the rough

waters of high-technology industries. For example, the Chinese MNC Suzhou Good-Ark Electronics Co. Ltd has foreign-corporate ownership of 28 per cent in its ownership structure and has become the world's largest maker of diodes, with 89 per cent of the worldwide market share. Thus, it is suggested that managers of MNCs from emerging countries should take advantage of government policies to secure unique resources from different types of owners to improve performance and global competitiveness.

### **Limitations and future research**

This study has several limitations and thus leaves space for future research. First, in this study, we adopted UNCTAD's definition of MNCs. However, Sutherland and Anderson (2015) clearly state that OFDI to Hong Kong and/or OFDI to THOFCs (that is, tax havens and off-shore financial centers) commonly exist in samples of recent research. The inclusion of these special-purpose enterprises (SPEs), well documented in the fourth edition of the OECD Benchmark Definition of FDI, creates biases in Chinese OFDI data when understanding Chinese MNC activities. Thus, future research should take care to exclude SPEs to avoid creation of FDI data biases in order to accurately understand Chinese MNCs.

Second, the purpose of this study is to investigate how government policies encourage Chinese firms to compete in international markets by helping different types of owners of those firms to secure unique resources and make them competitive globally. Thus, we focused on testing the effects of ownership types and the moderating role of government policies while only leaving foreign presence as a control. Future research may consider introducing an alternative comparator group, that is, other listed firms that are not MNCs, to see whether the policies are specifically beneficial for MNCs, as opposed to all domestic firms.

Third, private ownership is another important ownership type that may bring key resources to Chinese MNCs for profitability; this study did not investigate its role. For the two government policies we focused on, the SBFS policy is specifically designed for SOEs, while the policies on industrial preference were largely designed to attract foreign investment, especially during the designated time period. Thus, we did not include private ownership in our investigation. Nevertheless, it may be meaningful for future research to compare large privately-owned Chinese firms with large Chinese SOEs.

Lastly, our data are gathered from the Shanghai and Shenzhen Stock Exchanges during the period of 2003–2006, that is, our sample size is not big, and the time period is not long. Thus, we need to be conservative when we make generalizations from our findings in terms of theoretical and managerial implications. However, as discussed at the beginning, evidence suggests the global emergence of Chinese MNCs occurred primarily after 2002. Although the time period of our article is not



long, it can be considered adequate to conduct a longitudinal analysis of the phenomenon (Cohen *et al.*, 2002). Moreover, we adopted listed companies as our samples in this article, because it is not feasible to gather sufficient data for unlisted firms. However, the number of our total observations is 744, which is adequate for strategic management research (Boyd *et al.*, 2005). Nevertheless, future research might extend the sample over a longer period and/or apply a larger sample size to make our results more generalizable.

## Conclusion

When a developing country like China liberalizes and encourages its firms to internationalize, these firms face strong competition from existing players in international markets and many are likely to fail. We have extended the RBV to develop an analytical framework to explore why many Chinese MNCs have, however, been able to become successful and notable in the global marketplace. We conclude that Chinese MNCs that better align with and leverage Chinese government policies to obtain access to resources can derive greater benefits from their owners to improve firm performance and global competitiveness. Thus, this study generates new insights about China's business and international competitiveness – the presence of equity holders helps to improve performance when their presence fits the MNC's context.

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## Note

1 The Chinese government views 'big' SOEs as business groups or firms with the potential to become business groups (Nolan, 2001; Sutherland, 2003).

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