



Shared Governance: Institutional Investors as a Counterbalance to the State in State Owned Multinationals



Xiaoming He^{a,*}, Lorraine Eden^b, Michael A. Hitt^{b,c}

^a Department of Management, School of Economics and Management, Beijing Jiaotong University, Beijing 100044, China

^b Department of Management, TAMU 4221, Mays Business School, Texas A&M University, College Station, TX 77843-4221, United States

^c Texas Christian University, Fort Worth, TX 76129, United States

ARTICLE INFO

Article history:

Received 20 November 2014

Received in revised form 28 December 2015

Accepted 19 January 2016

Available online xxxx

Keywords:

State owned multinationals

State ownership

Institutional investors

International diversification

Home country environment

ABSTRACT

State owned multinational enterprises (SMNEs) are entities that are partly or wholly owned by the state and that engage in foreign direct investment. SMNEs with partial state ownership share equity ownership with private investors, some of which may be institutional investors. We argue that equity ownership by institutional investors can provide a counterweight to state ownership, and their shared governance can improve SMNE strategic decision making on international diversification. Institutional investors, however, need strong formal institutions to perform their shared governance role effectively. Because formal institutions are typically weaker in developing countries, institutional investors likely play a less effective role in SMNEs located in developing countries. We test our arguments on the international diversification decisions of 253 listed SMNEs from 42 home countries over the 2002–2007 period, finding substantial support for our hypotheses. Our study offers new insights on the role of institutional investors in the international diversification of state owned multinationals.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

For many years, international management scholars paid little attention to state owned enterprises (SOEs). This was expected because most state owned enterprises did not engage in foreign direct investment (FDI); their number also declined drastically during the 1990's wave of privatizations and economic liberalization (Aulakh and Kotabe, 2008). Recently, however, state owned enterprises have become active foreign investors and important actors in the global economy. In 2010, there were at least 650 state owned multinationals (SMNEs) with more than 8500 foreign affiliates; more than 40% of these SMNEs were majority owned by their home-country governments (UNCTAD, 2011). FDI by SMNEs was \$US 146 billion in 2010, representing about 11% of world FDI flows (UNCTAD, 2011), and SMNEs now control almost two trillion US dollars in foreign assets (Sauvant and Strauss, 2012).

Cuervo-Cazurra et al. (2014) suggest that more work on SMNEs is not only useful for understanding SMNEs, but can also enrich existing theories of the firm, by integrating theoretical perspectives from both international business and political economy. He et al. (2015) argue that SMNEs are undergoing a renaissance and should receive more attention from international management scholars. Because of their growing importance in international markets, a new stream of research on SMNEs has emerged in recent years (Buckley et al., 2007; Cui and Jiang, 2012; Cuervo-Cazurra et al., 2014; Duanmu, 2014; Estrin et al., 2016; Knutsen et al., 2011; Li et al., 2014; Meyer et al., 2014; Shapiro and Gliberman, 2012). Most of this research has focused on the role of the state in internationalization patterns of SMNEs. Alternatively, the role played by other investors in SMNEs' international activities, in particular institutional investors, has received little attention to date.

* Corresponding author.

E-mail addresses: xmhe@bjtu.edu.cn (X. He), leden@tam.u.edu (L. Eden), mhitt@mays.tamu.edu, m.a.hitt@tcu.edu (M.A. Hitt).

Institutional investors include “bank trusts, insurance companies, investment companies (mutual funds), investment advisors (brokerage firms), pension funds, and endowments with at least \$100 million in equity (Grinstein and Michaely, 2005)” (quoted in Dalton et al., 2008: 29). Institutional investors have dramatically increased their participation in equity markets since the 1980s, especially in developed countries (Gillan and Starks, 2003). For example, institutional investors own approximately 66% of U.S. corporate equity, thereby giving them considerable economic influence (Ferreira and Matos, 2008). Institutional investors have also begun to invest in SMNEs. For instance, in 2007, institutional investors were corporate equity owners in SMNEs headquartered in a variety of home countries, such as Volkswagen (14.66%), ENI (34.21%), Petrolio Brasileiro (27.16%) and Singapore Airlines (31.04%).

When institutional investors are corporate equity owners in SMNEs, they create shared governance with the state. This suggests an important research question: *How does shared governance by institutional investors and the state affect state owned multinationals' governance and strategic decisions?* We expect, first, that the role played by institutional investors in a SMNE is more complex than that in private firms. When shares of a SMNE are publicly traded on a stock exchange, equity participation of institutional investors may create a contest for corporate control that increases the overall complexity of managing the SMNE (Pargendler et al., 2013). At the same time, institutional investors may help constrain opportunistic behavior by the state, by shifting the balance of bargaining power within the SMNE from the state to private owners (Pound, 1992; Useem, 1996).

We therefore argue that equity ownership by institutional investors in SMNEs can provide a counterweight to state ownership. Their shared governance can improve SMNE strategies in areas such as international diversification. Herein, we first examine the baseline relationship between state ownership and international diversification of SMNEs. After clarifying the state's role in international expansion of SMNEs, we introduce institutional investors and examine their moderating influence on shared governance and subsequent strategic decisions in SMNEs' international expansion.

We argue, however, that institutional investors need strong formal institutions to perform their shared governance role effectively. Because formal institutions are typically weaker in developing countries, institutional investors are less effective as a counterweight in SMNEs from developing countries. Thus, we investigate the contingent effect of formal institutions on the influence of institutional investors on firm governance and strategies across different countries. We test our hypotheses on a panel of 253 listed SMNEs from 42 countries over 2002–2007.

Our study enriches research on SMNEs and contributes to international management research in several important ways. First, we incorporate a new influential factor (i.e., the role of institutional investors) to examine SMNEs' corporate governance and international strategies, and thus extend research on SMNEs' international activities. Second, we provide insights into how and why state and institutional investors influence SMNE decision making on international diversification. More generally, we suggest that who owns and how much they own of a firm are important considerations for understanding the relationship between the firm's governance structure and its international strategy. Third, we extend prior research by focusing on the role of institutional investors in countries with varying qualities of formal institutions (Ferreira and Matos, 2008), building on insights from the institution-based view (Peng et al., 2008). Researchers have found that country institutional environments affect the level of influence played by institutional investors in corporate governance of firms (Gillan and Starks, 2003). Our research on the role played by institutional investors of SMNEs from home countries that vary in the quality of their formal institutions provides new evidence for the influence of the interaction between the institutional environment and firm corporate governance. This finding provides the fourth and perhaps the most important contribution of our work. Our research demonstrates the value of agency theory for understanding the strategic behaviors of SMNEs and the influence of complex home country institutional environments on the effects of ownership in these organizations. Therefore, our research suggests that an integration of institutional theory and agency theory is necessary to understand the effects of ownership on corporate strategies. Neither theory alone provides a complete picture of the ownership–strategy relationship. As such, our research extends our understanding of both institutional theory and agency theory through the integration of the two.

2. Theoretical framework and hypotheses

2.1. International activities of SMNEs

Research on international diversification and foreign direct investment (FDI) has been substantial. Scholars argue that international diversification can produce benefits for firms through the exploitation of firm-specific advantages and/or exploration of strategic assets, leading to improved firm performance (Hitt et al., 2014; Hitt et al., 2016). However, international diversification can also be a risky corporate strategy that can negatively affect firm performance by generating structural complexity (Hitt et al., 1997) and liabilities of foreignness (Zaheer, 1995; Zaheer and Mosakowski, 1997).

Hitt et al. (2006) comprehensively reviewed antecedents, moderators and outcomes of international diversification, and suggested that ownership significantly influences firms' international expansion. More recently, Marano et al. (2016) conducted a meta-analysis on the international diversification–performance relationship. The authors investigated multiple factors, among which, ownership types (i.e., ownership concentration, inside ownership, foreign ownership, family ownership) were important influences on firms' internationalization. Because of these studies and others, there is considerable evidence on the key factors that affect international diversification. However, because of the paucity of research on SMNEs and even less research on SMNE internationalization activities, we know little about SMNEs' international diversification strategies.

The current research on international activities of state owned firms has focused on how state ownership influences FDI patterns. For instance, Buckley et al. (2007) suggested that state-owned firms are able to obtain easy funding at below market rates to support their international expansion. Knutsen et al. (2011) indicated that state ownership affects the way host country institutions influence FDI decisions and allows SMNEs to deal better with poor rule of law and corruption. From a political perspective, Cui and Jiang (2012)

extended institutional theory by examining the political ties with home government through its state owners, finding that SMNEs with high levels of state ownership were more likely to choose joint ownership of their foreign subsidiaries. Liang et al. (2015) found that the influence of state ownership on the level of internationalization is increasing for SMNEs perhaps because state ownership helps SMNEs buffer foreign institutional environments (Pan et al., 2014). Duanmu (2014) found that state ownership helped SMNEs cope with expropriation risk in host countries. Meyer et al. (2014) investigated how SMNEs take advantage of state ownership to deal with institutional pressures in host countries, finding that in more developed host countries, SMNEs chose a lower level of equity control than MNEs. Finally, Estrin et al. (2016) provided evidence that stronger normative, regulatory and capital market institutions of control increase the likelihood of SMNEs engaging in international diversification.

However, the role played by institutional investors, a player of growing importance in equity markets globally, in SMNEs has received little attention, despite the fact that their involvement in listed SMNEs is significant.¹ Agency theory suggests that institutional investors, as a form of concentrated ownership, can help mitigate agency problems in firms (Dalton et al., 2008). Herein, we argue that institutional investors can strengthen the positive influence of the state owners while reducing their negative effects, thus at least partially counterbalancing the impact of state participation in SMNEs. Moreover, because the influence of institutional investors varies among different countries, we argue that in SMNEs' international activities, institutional investors function better in developed countries than in developing countries. Below we elaborate the mechanisms.

2.2. The state ownership–international diversification relationship

We begin the theory development by examining the baseline relationship between state ownership and international diversification of SMNEs, initially assuming there is no shared governance with institutional investors. We argue that the relationship between state ownership and international diversification is non-linear because state ownership has two conflicting effects – goal conflict and resource support.

Most management scholars would agree that the state's goals, which are typically shaped by national interests such as economic growth and employment, are unlikely to coincide with the profit-based goals of private owners, creating *goal conflict* (Shleifer and Vishny, 1998; Vernon, 1977). The differences between state and private goals create conflicts and management challenges for the SMNE when the state, to further its own goals, exerts influence on the strategic decisions of the SMNE (e.g., Anastassopoulos et al., 1987; Cui and Jiang, 2012; Liang et al., 2015; Luo and Tung, 2007; Pan et al., 2014). Previous researchers have suggested that state ownership generates high agency costs (e.g., Bartel and Harrison, 2005; Park et al., 2006; Zou and Adams, 2008), particularly when the government does not act as a value-maximizing shareholder, but instead uses the SMNE as a vehicle to achieve state goals (Aharoni and Seidler, 1986; Shleifer and Vishny, 1998). These problems are compounded when control over a SMNE is shared by multiple government agencies or regulatory bodies.

The arguments presented above suggest that when the level of state ownership is low or moderate (the state is a minority shareholder), goal conflict between the state and the SMNE's managers are also low. Previous research suggests that misalignment between the goals of the state and those of the managers in a SMNE is less of a problem at low levels of state ownership (Vaalder and Schrage, 2009; Inoue et al., 2013). On the other hand, when the level of state ownership is high (the state has majority or whole ownership), goal conflict is likely to be much more significant. As the majority or sole owner, the state exercises control and is more likely to interfere with the SMNE managers' decision making. Goal conflict becomes a major factor that negatively affects the SMNE's management (Vaalder and Schrage, 2009). For example, goal conflict can hinder SMNE managers from finding and exploiting profitable opportunities outside the home country, therefore deterring international diversification. Even when SMNEs expand into international markets to pursue business opportunities not available at home, divided loyalties within the SMNE are likely to deter the investments needed to be successful in those markets, particularly if international diversification is viewed as causing loss of jobs and higher unemployment at home, thus conflicting with the state's social goals. The state's social goals (e.g., job creation) are therefore likely to drive SMNE decision making.

Alternatively, SMNEs can enjoy several forms of *resource support* from state ownership that benefit SMNE managers. First, the political embeddedness perspective suggests that firms are embedded in social exchange networks with other actors and organizations, and these network ties can provide external resources (Okhmatovskiy, 2010). The state can also be a source of direct support for the SMNE (Bass and Chakrabarty, 2014; Cuervo-Cazurra et al., 2014; Cui and Jiang, 2012; Vaaler and Schrage, 2009; Xiao et al., 2013). The SMNE can use favorable government support, both in the form of favorable policies and incentives, for international expansion (Pan et al., 2014). A positive, future-oriented state focused on economic development, for example, might encourage the international diversification strategies of its SMNEs (Tan, 2002; Le and Buck, 2011). As such, state ownership may provide a signal of financial and political support to SMNEs in their international activities. If SMNEs benefit from the tangible and intangible resource support provided by state ownership, this resource endowment should encourage the SMNE to engage in more international diversification.

The goal conflict effect of state ownership therefore discourages SMNEs from engaging in international diversification while the resource support facilitates this expansion; thus, the two have conflicting effects on international diversification by SMNEs. We expect, however, that the resource support offered by the state to the SMNE for its international expansion is likely to be limited, and

¹ In our sample, the average corporate equity ownership percentage of institutional investors in SMNEs is 23%, supporting the argument of their growing importance in equity markets worldwide.

not to vary much with the level of state ownership, except in special cases.² On the other hand, as the level of state ownership rises, we expect more state interference and goal conflict with SMNE managers. Therefore, at low to moderate levels of state ownership, the benefits of state ownership are likely to exceed the costs to the SMNE; that is, resource support is more influential than goal conflict for SMNE decision making. SMNE managers can make their profit-maximizing international- diversification decisions, viewing the state's role as primarily one of providing resource support for overseas expansion. As a result, SMNE managers are more likely to engage in larger amounts of offshore investments than they would otherwise have done. However, as the level of state ownership rises to higher levels, we expect goal conflict to be more influential and eventually exceed the influence of resource support, deterring further international diversification. Therefore, we hypothesize that:

Hypothesis 1. The state ownership–international diversification relationship for SMNEs has a curvilinear inverted-U shape, positive at low-to-moderate levels of state ownership but negative at high levels of state ownership.

2.3. The counterbalancing role of institutional investors

Institutional investors have become an increasingly common type of concentrated owner, and are growing more active in monitoring and controlling management (e.g., David et al., 2001; Tihanyi et al., 2003). Pursuing investment returns, institutional investors are generally interested in firms that engage in international diversification (Tihanyi et al., 2003). In order to enhance the value of their investments, institutional investors pay attention to firm strategies and are often active in corporate governance, and therefore can be an effective governance mechanism (Gompers and Metrick, 2001; Grinstein and Michaely, 2005).

Prior research suggests that institutional shareholders should also be interested in and support international diversification by state owned multinationals. Moreover, international investors should be able to obtain higher returns from international markets through monitoring SMNE managers' strategies and actions (Young et al., 2008). We argue that the presence of institutional investors as equity owners of a SMNE creates *shared governance* that affects both the *goal conflict* and *resource support* effects of state ownership in ways that favor international diversification by the SMNE.

Looking first at the goal conflict effect of state ownership of SMNEs, the presence of institutional investors as equity owners can help to resolve agency problems through monitoring. Institutional investors are often better able to effectively monitor managers than other types of shareholders, for several reasons (Dalton et al., 2008). First, compared to individual investors, institutional investors have more tools and resources at their disposal for monitoring, and also have a cost advantage (Pound, 1988). Because they invest in a large portfolio of stock, institutional investors devote resources to the management of their funds, e.g., gathering information and professional analysis (Shleifer and Vishny, 1986). Thus, compared to other types of shareholders, institutional investors have greater expertise and resources to monitor managers of those SMNEs.

Second, institutional investors have access to governance support mechanisms (e.g., Institutional Shareholder Services and the Investor Responsibility Research Center Institute) that can augment the effectiveness of their monitoring activities (Grinstein and Michaely, 2005). Because they often have significant equity investments in a firm and their goal is achieve positive investment returns, institutional investors are likely to closely monitor a firm – including a SMNE – in which they have investments, especially if their investment is significant. In doing so, institutional investors can improve an SMNE's performance through effective monitoring of the firm's strategies.

Furthermore, institutional investors sometimes have access to inside information that can help them monitor managers' strategic decisions (Dalton et al., 2008). Information asymmetries between investors and managers are often present in the use of complex strategies (Gomez-Mejia and Balkin, 1992) such as international diversification. When institutional investors have access to inside information, this reduces the level of information asymmetry between them and managers; monitoring of SMNE managers by institutional investors is therefore likely to be more effective.

Moreover, institutional investors in their role as blockholders can exert their voice, monitoring and encouraging SMNE managers to make the decisions that create greater value for shareholders. The presence of institutional ownership should strengthen the support and reduce the concern about the state's interference with an SMNE's international diversification strategy. Lastly, institutional investors can help restrain executives and mitigate the executive power endowed by the state and potential opportunistic actions. We therefore argue that institutional investors through their monitoring can mitigate goal conflict and the agency problems present with high state ownership.

Looking now at the resource support effect of state ownership of SMNEs, we argue that institutional investors can offer a second resource support mechanism to the SMNEs. Previous research suggests that institutional investors provide support for international expansion of multinational enterprises in general (Tihanyi et al., 2003). For instance, the involvement of large institutional investors can help MNEs obtain financial resources for risky international projects (Tihanyi et al., 2003). Thus, institutional investors, by generating financial resources to support FDI, encourage international diversification by the SMNE.

In addition, the presence of institutional investors is a signaling mechanism to the marketplace of better control leading to more efficient SMNE management (Dalton et al., 2008). This signaling can reduce the concern of other investors about misalignment and managers' opportunistic behaviors. Institutional investors, through signaling, therefore provide the SMNE with intangible resources

² One possible exception to this argument could be SMNEs in nationally salient industries (e.g., petroleum and mining), where the state might actively encourage FDI by SMNEs by giving them much larger grants and incentives than other SMNEs. At the same time, state intervention and goal conflicts are likely to be more pronounced for SMNEs in nationally salient industries. Thus, both the benefits (resource support) and costs (goal conflicts) of state ownership are likely to be higher so that Hypothesis 1 should still hold in these industries.

(e.g., reputation, quality control); this signaling effect encourages other investors to purchase equity in the SMNE. For example, institutional investors can help deter the state's demands for inefficient investments that are not in the best interests of private shareholders. Additionally, institutional investors can mitigate opportunistic (e.g. tunneling) behaviors by SMNE managers emboldened by state ownership. We conclude that institutional investors can offer a second resource support mechanism to the state in the form of both tangible and intangible resources for the SMNE.

In sum, we expect the costs of state ownership (goal conflict) to be mitigated and the benefits of state ownership (resource support) to be strengthened through the shared governance provided by institutional investments in SMNEs. Higher levels of institutional ownership should therefore facilitate better decision making and greater international diversification by SMNEs. Thus, the apex of the curvilinear relationship between state ownership and the level of international diversification should shift upward and to the right with the presence of institutional investors. Therefore, we propose that:

Hypothesis 2. Institutional ownership positively moderates the curvilinear relationship between state ownership and international diversification for SMNEs.

2.4. The influence of home country formal institutions

Home country environments can affect the influence of institutional investors on corporate governance (Gillan and Starks, 2003) and the development of corporations (OECD, 2002; UNCTAD, 2007). Using the governance ratings of Credit Lyonnais Securities Asis (CLSA), Standard & Poor's, and Institutional Shareholder Services to cover both developed and developing countries, Doidge et al. (2007), for example, found that country characteristics have a greater influence than firm characteristics on corporate governance. Thus, the influence of institutional ownership on corporate governance is likely to differ across home countries (Gillan and Starks, 2003). We argue that institutional investors play a more positive governance role in SMNEs when home country formal institutions are strong.

The school of new institutional economics suggest that formal institutions consist of explicit rules and codified standards, such as regulatory and economic institutions, that shape the "rules of the game" (North, 1990). The purpose of formal institutions is to deal with and/or resolve problems in society; essentially formal institutions regulate organizational activities, help to stabilize the political process, and maintain the availability of resources for economic activities (Holmes et al., 2013). Thus, the effectiveness of formal institutions influences SMNEs' corporate governance and strategic behaviors (Kaufmann et al., 2009). Institutions matter for corporate governance because they affect the costs and benefits to firms that have good governance practices (Doidge et al., 2007). Country-level practices such as legal protection for minority investors, mandatory disclosure requirements, and a strong financial system can improve a firm's access to capital markets and lower its cost of funds. Thus, the confluence of multiple formal institutions affects the firms' practices and the actors that invest in them (Batjargal et al., 2013).

The formal institutional environment in developed countries is generally considered to be efficient with well-established rules and regulations. The set of formal institutions facilitate the development and use of market support organizations. For instance, in the United States, the Investor Responsibility Research Center Institute and Institutional Shareholder Services provide governance support that enables institutional investors to more effectively monitor managers (Dalton et al., 2008). In addition, developed economies commonly have a number of formal institutions that promote open and transparent markets with rules that guide and govern firm operations in these markets. Such market support institutions underpin institutional investors and provide them with the tools to perform their roles effectively.

Formal institutions in developing economies are typically weaker (Guillen, 2000; Guler and Guillen, 2010; Hoskisson et al., 2000; Khanna and Palepu, 2000; Khanna and Rivkin, 2001; Peng et al., 2008; Chakrabarty, 2009). They suffer from multiple market imperfections, including lack of capital market regulations and poor property rights protection (Khanna and Rivkin, 2001; Guillen, 2000; Young et al., 2008). For instance, Khanna and Palepu (2000) argue that, in developing countries, government policies may not be stable, regulations may not be investor oriented, there often are few systems to protect property rights, and frequently there is a lack of transparency through information disclosure when contracting in the markets.

The literature suggests that weaker institutions in developing countries affect firm strategies (Guler and Guillen, 2010; Hoskisson et al., 2000; Khanna and Palepu, 2000; Khanna and Rivkin, 2001; Li et al., 2012; Peng et al., 2008; Chakrabarty, 2009). In countries with poor quality regulatory institutions and weak rule of law (Kaufmann et al., 2009), institutional investors encounter challenges in finding efficient intermediaries, thereby increasing the difficulty of effectively monitoring firm managers (Kim et al., 2009). Specific kinds of intermediaries, including institutional investors, are less likely to be available (Spulber, 1996). Firms may therefore be unable to commit to higher quality corporate governance practices, such as external verification of income disclosures, because they are unavailable or unreliable. As a result, firms in developing countries are less likely to invest in good governance mechanisms because the benefits do not justify the costs (Doidge et al., 2007). Weak formal institutions also affect other firm strategies. Li et al. (2012), for example, found that weak rule of law in developing countries made foreign partners more reluctant to share valuable knowledge.

We therefore expect differences in the quality of home country institutions to affect the role and value of institutional investors in the shared governance of SMNEs. Weak formal institutions reduce the effectiveness of institutional investors as monitors and counterweights to the state's role in SMNEs. The state is also likely to play a stronger role in corporate governance of SMNEs where formal institutions are weak; thus, the ability of institutional investors to monitor SMNEs is also likely to be mitigated because of the strong voice of government. As a result, we expect institutional investors in developing countries to be less effective at monitoring and in reducing goal conflict in SMNEs.

Moreover, many developing countries lack political stability. Without political stability, a firm may experience and suffer from an unstable business environment. Institutional investors are also likely to suffer from policy instability, especially when such instability creates uncertainty for businesses and therefore harms firm value in the equity markets (Doh et al., 2004). Political and business instability should negatively affect the willingness of institutional investors to invest in and contribute resources to SMNEs; thus, the resource support provided by institutional investors to SMNEs is likely to be less.

These arguments suggest that the configurations of regulatory, political and other formal institutions that exist in developed and developing economies influence the governance of firms and especially SMNEs. The complex set of institutions influence the ownership patterns of SMNEs, the manner in which these firms respond to stakeholders and the effectiveness of stakeholder actions in the governance of the firm (Hitt, 2016). In specific, we expect the ability of institutional investors to reduce goal conflict and provide resource support for SMNEs to be weaker in developing than in developed home countries. Therefore:

Hypothesis 3. The positive moderating effect of institutional ownership on the state ownership–international diversification relationship is weaker for SMNEs from developing countries than for SMNEs from developed countries.

3. Methodology

3.1. Sample selection

Bureau van Dijk's ORBIS database was used to build our sample of state owned multinationals for the time period 2002–2007. The total number of SMNEs in the ORBIS database was 379 firms. We define a SMNE as a firm with at least 10% state ownership and at least one majority-owned foreign affiliate. Excluding the banking industry due to the differences in accounting rules relative to other industries, our initial sample size was reduced to 278 firms (Table 1). Our sample is also limited by missing ownership data for some SMNEs. The international diversification literature suggests that a one-year lag best reflects a typical planning cycle (e.g., Geringer et al., 2000), and we accordingly incorporate a one-year lag between the independent and moderator variables and the dependent variable. In our final sample, we have 1265 firm-year observations with 253 SMNEs located in 42 countries during 2002–2007.

3.1.1. Sample selection bias

Because our sample is restricted and nonrandom, the sample has the potential for selection bias that can affect the relationships between independent and dependent variables. We tested for sample selection bias using Wooldridge's (2002) modified Heckman test (i.e., two-stage approach) for panel datasets (Ndofo et al., 2011). The inverse-Mills ratio (Lambda) is not statistically significant

Table 1
Listed non-financial state owned multinationals, 2007.

Home country	No. of SMNEs	% of SMNEs	DEV ¹	Country	No. of SMNEs	% of SMNEs	DEV ¹
Malaysia	30	10.8%	0	Cayman Islands	2	0.7%	0
China	23	8.3%	0	Croatia	2	0.7%	0
South Africa	22	7.9%	0	Czech	2	0.7%	0
India	19	6.8%	0	Japan	2	0.7%	1
Norway	18	6.5%	1	Luxembourg	2	0.7%	1
Denmark	15	5.4%	1	UK	2	0.7%	1
France	13	4.7%	1	Bahrain	1	0.4%	0
Singapore	13	4.7%	1	Belgium	1	0.4%	1
Germany	12	4.3%	1	Brazil	1	0.4%	0
Canada	9	3.2%	1	Egypt	1	0.4%	0
Italy	9	3.2%	1	Hong Kong	1	0.4%	1
USA	9	3.2%	1	Indonesia	1	0.4%	0
Finland	8	2.9%	1	Jordan	1	0.4%	0
Korea	8	2.9%	0	Kenya	1	0.4%	0
Sweden	7	2.5%	1	Kuwait	1	0.4%	0
Poland	6	2.2%	0	Monaco	1	0.4%	1
United Arab Emirates	5	1.8%	0	Morocco	1	0.4%	1
Saudi Arabia	4	1.4%	0	Oman	1	0.4%	0
Thailand	4	1.4%	0	Pakistan	1	0.4%	0
Australia	3	1.1%	1	Philippines	1	0.4%	0
Bulgaria	3	1.1%	0	Qatar	1	0.4%	0
Greece	3	1.1%	1	Russia	1	0.4%	0
Switzerland	3	1.1%	1	Taiwan	1	0.4%	0
Austria	2	0.7%	1	Venezuela	1	0.4%	0
Subtotal	248	89.2	14	Subtotal	30	10.8	7
Total²	278	100.0	21				

Notes:

1. Categorizing developed countries and developing countries, 1 = Yes and 0 = No.

2. In the ORBIS database, there were 278 non-financial SMNEs in 2007 (among which 134 were from developed countries) from 48 countries, among which 21 were developed countries.

(0.06, $p < 0.52$), which suggests that selection bias due to nonrandom selection of state involvement in SMNEs is not a concern in our sample. We also adopted alternative techniques to test the robustness of our results described in our section on robustness tests.

3.2. Measures

Data on the independent, dependent and most control variables were gathered from Bureau van Dijk's ORBIS database and the Economist Intelligence Unit (EUI) database.

3.2.1. International diversification

Use of multiple measures of international diversification is recommended (Hitt et al., 2006; Sullivan, 1994). Following prior research, we measure the depth of international diversification (Depth) by combining three widely used measures (the arithmetic average of the three items): (1) the ratio of foreign sales to total sales (foreign sales ratio: FSTS); (2) the ratio of foreign assets to total assets (foreign assets ratio: FATA); (3) the ratio of overseas subsidiaries to total subsidiaries (foreign subsidiary ratio: OSTS) (e.g., Hitt et al., 2006; Sanders and Carpenter, 1998; Sullivan, 1994; Tihanyi et al., 2003). These indicators are reflective of the firm's international strategy as they capture measurable dimensions of international diversification without causing changes in the variable.³ The results of a factor analysis suggest that these three individual variables load on the same factor. The factor loadings for the three measures are 0.83 (FSTS), 0.84 (FATA), and 0.67 (OSTS); the Cronbach's alpha for the factor is 0.79. In our robustness tests, we also created a measure of breadth of international diversification and found consistent results.

3.2.2. Institutional ownership

We measure institutional ownership as the extent to which institutional investors are represented in the ownership of the SMNE, captured by the number of institution-owned shares as a percentage of the total shares outstanding for the SMNEs (Gedajlovic and Shapiro, 1998; Hoskisson et al., 2002; Tihanyi et al., 2003). Following Grinstein and Michaely's (2005) definition of institutional investors, we calculated the annual percentage of institutional ownership.

3.2.3. State ownership

We measure state ownership of the SMNE by the percentage of equity ownership as represented by state shares relative to the total shares outstanding of the firm (Cui and Jiang, 2012; Vaaler and Schrage, 2009). In our robustness tests, we also test a dummy variable for state ownership, coded as 1 if the SMNE is majority owned by the state and 0 otherwise; our approach is similar to Cui and Jiang (2012) who use a dummy variable if the ultimate owner of the Chinese SMNE is the Chinese government or one of its agencies.

3.2.4. Institution effectiveness

We applied nuanced institutional variables to acknowledge institutional differences across countries. We adopted Kaufmann et al. (2009)'s⁴ five dimensions (i.e., voice accountability, political stability, government effectiveness, regulatory quality and rule of law) to measure the effectiveness of formal institutions in a country; this measure has been widely adopted by researchers to address and explain different facets of international firm behaviors based on the theoretical bases of the new institutional economics school (Cuervo-Cazurra and Genc, 2008). Consistent with He and Cui (2012), we found that the five variables load on one factor and thus composed an index that we call Institution Effectiveness. In our robustness tests, we also adopted a dummy variable to test country differences and found consistent results.

We include control variables at the firm, industry and country levels to rule out alternative explanations for the hypotheses. First, we control for organizational slack due to its influence on the potential for firms to engage in international diversification (Tan and Peng, 2003). We use a firm's unabsorbed slack as measured by its current ratio (Chen et al., 2007). Second, firm size can influence international activity (Dunning and Lundan, 2008) because larger firms may have more resources to invest in foreign operations. We measured firm size (size) as the total number of employees in a firm, and used its logarithmic transformation to account for a skewed distribution. Third, we control for the firm's capital structure by measuring leverage as debt divided by total sales. Previous studies suggest that firms may expand internationally to mitigate their problems (e.g., debt) in domestic markets (Doukas and Travlos, 1988). Fourth, we include firm age (age), defined as the number of years since the year of a firm's founding, transformed into its natural logarithm. In addition, industry dummies are included to control industry effects and differences in national salience of SMNEs in different industries; we coded 1 for natural resources; 2 for manufacturing; 3 for services; 4 for high technology; and 0 for all other industries.

Because economic conditions of countries can influence firms' international strategies (Barkema and Drogendijk, 2007; Wooster, 2006), we include country-level controls using data from the Economist Intelligence Unit (EIU) database (Zickar and Slaughter, 1999). First, GDP is used as a proxy for country size, transformed into its natural logarithm (Vaaler and Schrage, 2009). Large countries typically provide larger domestic markets for firms to explore business opportunities so that outward FDI may not be as large as FDI from small countries. GDP per capita (GDP/capita), also transformed into its natural logarithm, is used to control for the level of economic development (Cuervo-Cazurra and Dau, 2009). SMNEs from wealthier countries may be more willing to engage in FDI to exploit their

³ Factor analysis and Cronbach's alpha are sufficient to control for unidimensionality and reliability (Diamantopoulos and Siguaw, 2006).

⁴ Cuervo-Cazurra and Genc (2008) adopted the five dimensions of Kaufmann, Kraay, and Mastruzzi (2003), while Kaufmann et al. (2009) is an extension version of Kaufmann et al. (2003).

Table 2

Descriptive statistics for firm-level and country-level variables.

Variable	Mean	SD	1	2	3	4	5	6	7	8
1 Tobin's q	1.91	3.27								
2 Depth	1.12	0.76	0.11							
3 Breadth	1.63	1.04	0.09	0.45						
4 State ownership	0.29	0.22	0.12	−0.11	−0.09					
5 Institutional ownership	0.23	0.18	0.11	0.10	0.20	−0.21				
6 Leverage	0.56	0.18	−0.06	−0.09	0.13	−0.04	0.10			
7 Current ratio	1.67	1.52	−0.07	−0.07	−0.07	−0.13	−0.04	−0.46		
8 Age	32.00	32.73	0.19	−0.02	0.18	−0.04	0.11	0.07	−0.06	
9 Size	8.58	1.82	0.41	0.09	0.28	0.25	−0.04	0.21	−0.25	0.15
	Mean	SD	1	2	3	4	5			
1 Depth	1.12	0.76								
2 Breadth	1.63	1.04	0.45							
3 GDP	6.39	1.36	−0.06	−0.13						
4 GDP per capita	9.67	0.91	0.05	0.27	−0.37					
5 OFDI/GDP	29.01	29.72	0.24	0.19	−0.44	0.51				
6 Institution effectiveness	3.59	0.81	0.12	0.13	0.08	0.10	0.07			

Note:

- All values greater than 0.08 or less than −0.08 are significant at 0.05. N = 1265 for 253 firms during 2002 to 2007.
- Factor loadings of depth: FSTS 0.83; FATA 0.84; OST5 0.67. Cronbach's alpha: 0.79.
- Factor loadings of breadth: NFC 0.89; NFS 0.95. Cronbach's alpha: 0.78.
- Breadth, size, GDP and GDP/capita are transformed using logs.

competitive advantages. Finally, we control for outward FDI flows as a percent of GDP since “higher FDI intensity may reflect better institutions and a healthier economy” (Wooster, 2006: 184).

3.3. Endogeneity

An endogeneity problem may exist when changes in the outcome variable cause changes in the independent variables (Baum et al., 2003). In our theory development, the current level of international diversification of the SMNE is not expected to influence the state or institutional investors' preference for subsequent international diversification. To test our assumption of non-endogeneity, the instrumental variables we chose were two industry dummies to proxy the natural resources and high tech industries and advertising intensity as a proxy for firm visibility, which are related to state and institutional ownership, but may not be related to international diversification (Hamilton and Nickerson, 2003). The results of the Durbin–Wu–Hausman test suggest that endogeneity is not a potential problem for this study; the chi-square is not statistically significant at 0.92 ($p < 0.34$) for state ownership and at 0.66 ($p < 0.42$) for institutional ownership. Therefore, the empirical results of the endogeneity test were consistent with our theoretical arguments.

4. Results

Table 2 presents the summary statistics and the intercorrelations for Level-1 and Level-3 variables. The maximum variance inflation factor (VIF) was 4.16 with a mean VIF of 1.69,⁵ well below the cutoff of 10, indicating no major multicollinearity problems.⁶

A Hausman test was applied to test whether a fixed or random effects regression would be more appropriate. The result of the Hausman test ($p < 0.86$) suggests that random effects analysis is an appropriate technique. Hierarchical Linear Modeling (HLM) models were used for the cross-section time-series panel data set with multiple (3) levels (t-th repeated measured nested within i-th firms, and i-th firms nested within j-th countries) (O'Connell and McCoach, 2008; Osgood and Smith, 1995). Testing the null models, we obtained considerably larger interclass correlations (ICCs) than 0.15, suggesting the HLM method is appropriate for hypothesis tests in this study (Hox, 2010); that is, both between Level-2 dyads (0.77, $p < 0.001$; ICC = 0.54) and between Level-3 dyads (0.44, $p < 0.001$; ICC = 0.18) variances are statistically significant. Moreover, as shown in Table 3, differences in years in all models are statistically significant ($p_{sd(residual)} < 0.001$), suggesting that year effects exist in our results.

⁵ VIF values here refer to values of the first three models with the full sample.

⁶ Mean centering is a classical method to deal with interaction effects (Aiken and West, 1991). However, recent research suggests that mean centering may not help with the potential multicollinearity (Brambor et al., 2005; Echambadi and Hess, 2007). We also conducted two sets of empirical analysis (with mean centering vs. without mean centering) and found no significant difference in significance. Thus, we chose not to mean center variables in our empirical analysis, which resulted in the outcomes shown in Table 3. When interpreting empirical results, we caution readers to keep this in mind.

Table 3
Shared governance and international diversification of SMNEs.

	Model 1	Model 2	Model 3	Model 4 ¹ (country comparison)	
				Developed	Developing
<i>Fixed effects</i>					
Constant	−3.56*** (1.02)	−4.10** (1.23)	−3.52** (1.21)	−1.34 (2.90)	0.92 (1.56)
Current ratio (CR)	0.03 (0.04)	0.03 (0.04)	0.03 (0.04)	−0.03 (0.06)	−0.07 (0.07)
Leverage	0.51 (0.30)	0.40 (0.30)	0.52 (0.30)	0.24 (0.47)	0.30 (0.45)
Size	0.26*** (0.08)	0.27** (0.08)	0.26*** (0.08)	0.10 (0.06)	−0.01 (0.05)
Age	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)	−0.01 (0.01)	−0.01 (0.01)
GDP	0.07 (0.08)	0.09 (0.08)	0.08 (0.08)	0.04 (0.09)	0.20 (0.39)
GDP/capita	0.42** (0.14)	0.42** (0.13)	0.42** (0.13)	0.11 (0.42)	−0.12 (0.68)
OFDI/GDP	0.01 (0.01)	0.06+ (0.03)	0.06 (0.03)	0.03 (0.06)	0.10** (0.04)
State ownership (SO)	−0.78* (0.33)	2.30* (0.96)	1.42* (0.69)	2.53* (1.34)	−2.09 (1.43)
Institutional ownership (IO)	0.85** (0.26)	0.81** (0.26)	0.82* (0.40)	1.82* (0.95)	0.42 (0.97)
State ownership squared		−4.13*** (1.20)	−2.67*** (0.82)	−1.26* (0.64)	−3.47 (2.52)
Institutional ownership * state ownership			−2.31* (1.14)	−0.74 (1.26)	1.99 (2.56)
Institutional ownership * state ownership squared			4.98* (2.43)	8.39** (3.11)	−2.51 (3.48)
Industry dummies included					
<i>Random effects</i>					
Sd(country)	0.36**	0.36**	0.35**	0.24	0.07
Sd(firm)	0.65***	0.65***	0.65***	0.67***	0.63***
Sd(residual)	0.52***	0.51***	0.51***	0.24***	0.26***
Wald Chi-square	105.98***	119.38***	126.24***	22.97+	19.52+
LR	201.57***	205.10***	209.73***	216.82***	84.48***

Note:

1. The total number of sample firms is 253 to test [Hypothesis 1](#) and [Hypothesis 2](#). The number of sample firms from developed countries is 128; the number from developing countries is 125.

2. The full model with the interaction of Institutional Effectiveness (IE) is $ID = a_1 + a_2CR + a_3Leverage + a_4Size + a_5Age + a_6SO + a_7IO + a_8IE + a_9SO*IO + a_{10}IE*IO + a_{11}IE*SO + a_{12}SO^2 + a_{13}IE*SO^2 + a_{14}SO^2*IO + a_{15}IE*IO*SO^2$. Results can be obtained from the authors.

+ $p < 0.10$.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

4.1. Results of our hypothesis tests

We first test the baseline relationship ([Hypothesis 1](#)), which predicts a non-linear relationship between state ownership and international diversification. In [Table 3](#), the coefficient for the first-order term (2.30, $p < 0.05$) is positive and statistically significant; the coefficient for the squared term (−4.13, $p < 0.001$) (the threshold is 27%) is also statistically significant and negative, as expected. The results provide support for [Hypothesis 1](#).

[Hypothesis 2](#) suggests that institutional ownership has a positive moderating effect on the relationship between state ownership and international diversification. The curve depicting this relationship should therefore move upward and to the right, reflecting the positive effect on the state ownership–international diversification relationship. Two interaction terms (institution * state and institution * state²) were added in the analytical model to test [Hypothesis 2](#). [Table 3](#) shows that the interaction term with the first-order term (state ownership) is negative and statistically significant (−2.31, $p < 0.05$), and the interaction term with the second-order term (state ownership squared) is positive and statistically significant (4.98, $p < 0.05$). These results provide support for [Hypothesis 2](#), suggesting that institutional investors improve the quality of corporate governance of SMNEs.

To further understand the moderation effect, we graphed the relationship between state ownership and international diversification in [Fig. 1](#), showing the impact of institutional ownership at one standard deviation above and below the mean ([Cohen et al., 2002](#)). [Fig. 1\(a\)](#) shows that the relationship is an inverted-U shape. When institutional ownership is one standard deviation below its mean, international diversification rises as state ownership rises, reaching a maximum of nearly .25 when state ownership is 0.27. Past that

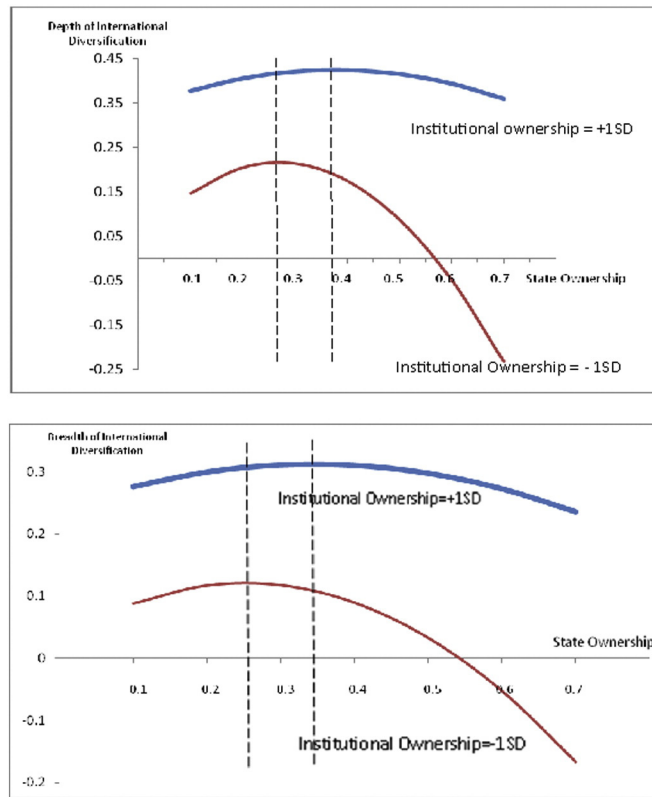


Fig. 1. (a) Institutional ownership as a moderator of the state ownership–international diversification (depth) relationship. (b) Institutional ownership as a moderator of the state ownership–international diversification (breadth) relationship.

threshold level, as state ownership rises, international diversification drops off sharply reaching zero when state ownership is close to 0.6. In contrast, at a high level of institutional ownership (+1SD), the inverted-U relationship between state ownership and international diversification moves upward and to the right (the threshold point of state ownership is 0.37) and becomes flatter, providing strong support for the positive moderating effect of institutional ownership on the state ownership–international diversification relationship proposed in [Hypothesis 2](#).

[Hypothesis 3](#) predicts that the home country environment is an important influence on the relationships between state and institutional ownership and international diversification. Developed countries have strong formal institutions that improve the monitoring ability of institutional investors, strengthening their shared governance role relative to the state in SMNE. Weak formal institutions and institutional voids in developing countries, on the other hand, shift bargaining power from institutional investors to the state, giving the state a stronger role in SMNE governance. We therefore expect greater international diversification of SMNEs from developed countries compared to those from developing countries due to the more robust role played by institutional investors in countries with stronger institutions. Using Institution Effectiveness as the moderator, we obtain positive and statistically significant results for its moderating effect on the institutional ownership \times the state ownership–international diversification relationship (2.83, $p < 0.01$).⁷ However, because it is a fourth-order term, the coefficient of which is difficult to understand, we decided to test [Hypothesis 3](#) by using subsamples (i.e., SMNEs from developed countries vs. SMNEs from developing countries), as shown in Model 4.

Based on these results, we split our dataset by running cluster analysis to group the sample countries into developed and developing countries, assuming developed countries have better formal institutions than developing countries. We further conduct analyses on the two subsamples of developed and developing countries. Support is found for the positive moderating effect (8.39, $p < 0.01$) for SMNEs from developed countries, and, as expected, no moderation effect is found for institutional investors in SMNEs from developing countries (-2.51 , n.s.).

Next, following the technique suggested by [Cohen et al. \(2002\)](#) and used by [Hitt et al. \(2004\)](#), we examine differences between the two subsamples. We compare the coefficients obtained in our HLM analyses by adjusting the standard errors of coefficients (Adj STE) using the formula:

$$\text{Adj STE} = (\text{STD DV}/\text{STD IV}) \times \text{STE IV}$$

⁷ The full model with the interaction of Institutional Effectiveness (IE) is $ID = a_1 + a_2CR + a_3Leverage + a_4Size + a_5Age + a_6SO + a_7IO + a_8IE + a_9SO*IO + a_{10}IE*IO + a_{11}IE*SO + a_{12}SO^2 + a_{13}IE*SO^2 + a_{14}SO^2*IO + a_{15}IE*IO*SO^2$. Due to the complexity of this model, we chose to conduct subsample tests rather than report the results in [Table 3](#). Results can be obtained from the authors upon request.

where STD refers to standard deviation, STE refers to standard error, state-ownership is the independent variable and depth of diversification is the dependent variable (IV). The Z score compares coefficients across the two subgroups using the following formula (where DEV stands for developed country and DEVG for developing country):

$$z = (Bi\ DEV - Bi\ DEVG) / \left((ADJ\ STEiDEV)^2 - (ADJ\ STEiDEVG)^2 \right)^{1/2}.$$

The relevant z statistic for international diversification is positive and statistically significant ($z = 1.99$; $p < 0.05$), suggesting that for SMNEs from developed countries, institutional ownership has a stronger moderation effect on the state ownership–international diversification relationship than for those from developing countries. Hypothesis 3 receives support. Thus, the overall results imply that institutional ownership functions more effectively for SMNEs from developed countries than for SMNEs from developing countries; that is, in developed countries with well-established intermediaries, institutional investors can more effectively perform their monitoring function as the firm engages in international diversification. On the other hand, in developing countries without strong and efficient institutions, institutional investors have less ability to monitor firms' international strategies.

4.2. Robustness tests

We completed four additional analyses to check the consistency and robustness of our findings.⁸ First, to ensure the robustness of our results to potential sample selection bias, we also ran our analyses using a sample that included 253 randomly selected non-banking listed firms with zero state ownership. Those results are shown in Table 4; they depict no substantive differences from the results of the analyses with our original sample and thus confirm that no sample selection bias exists in this study.

Second, we used a dummy variable for state ownership to examine the effects when the SMNE is majority owned by the state (Cui and Jiang, 2012). We do not find statistically significant results for Hypothesis 1, partly because the threshold points for the relationships occur around 30% of state ownership, potentially cancelling out the effects for our proposed relationship (Hypothesis 1). Thus, we conclude that to measure state ownership by its portion in the ownership structure provides a more appropriate test of the relationships because this measure is more fine-grained and precise than the coarse-grained categorical variable.

Third, to alternatively distinguish country differences in formal institutions when testing Hypothesis 3, we created a dummy variable coded as 1 for developed countries and zero for all others (see Table 1 for this coding). Using the dummy variable as the moderator in each equation, we obtain positive and statistically significant results for the moderating effect on the institutional ownership \times the state ownership–international diversification relationship (4.12, $p < 0.01$), which produces results consistent with our initial test.

Fourth, as an alternative to the level of international diversification measure, we used the breadth of international diversification (Breadth) by combining two widely used measures: (1) the number of foreign countries in which the firm has affiliates (NFC) and (2) the number of foreign subsidiaries (NFS) (Reuer and Leiblein, 2000; Zahra et al., 2000).⁹ We found results in all relationships that were consistent with our original findings, providing further support for our hypothesis tests. In Fig. 1(b) we graph the relationship between state ownership and breadth of international diversification, showing the impact of institutional ownership at one standard deviation above and below the mean. The graph is very similar to that of Fig. 1(a) on the depth of international diversification, again providing support to our findings.

5. Discussion and conclusion

5.1. Outcomes

The influence of institutional investors on SMNEs' strategies and their implementation across countries has received little attention to date in prior research. We suggest that institutional investors can provide needed balance to state participation in SMNEs' international expansion. Our findings provide substantial support for our hypotheses; i.e., the counterbalancing role of institutional investors to state owners in SMNEs' international activities and the important influence of home country environment.

State owned multinationals, by definition, have some degrees of equity ownership by the state. But, state involvement is a two-edged sword for the SMNE. On one hand, the state's goals often conflict with the goals of SMNE managers and this conflict hampers the firm's international strategy. On the other hand, when the state is an owner, it provides resources useful for supporting international expansion. At low levels of state ownership, the resource support likely outweighs the potential goal conflict, but when state ownership is higher, goal conflicts are greater, eventually overwhelming the positive effect of resource support. Our empirical tests confirmed these expectations.

Alternatively, when institutional investors are involved in the ownership of SMNEs, they create shared governance with the state, which in turn weakens goal conflict between the state and the SMNE's managers and helps to provide additional resources that can be

⁸ Results can be obtained from the authors.

⁹ Both measures are transformed by the natural log to guarantee the assumption for a normal distribution as a continuous variable. After transformation, we checked the distribution, which showed that the assumption was satisfied. The results of a factor analysis suggest that the two individual variables load on the same factor. The factor loadings for the two measures are 0.89 (NFC), 0.95 (NFS); the Cronbach's alpha for the factor is 0.78.

Table 4

Results by the sample of 253 SMNEs and 253 non-state owned MNEs.

	Model 1	Model 2	Model 3	Model 4 (country comparison)	
				Developed	Developing
<i>Fixed effects</i>					
Constant	−0.89 (1.02)	−1.10* (0.53)	−0.32 (0.42)	2.91* (1.44)	−5.79* (2.42)
Current ratio	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)	0.01 (0.01)	0.01 (0.01)
Leverage	0.03 (0.07)	0.04 (0.08)	0.05 (0.08)	0.19 (0.14)	0.06 (0.08)
Size	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.03* (0.02)	0.05*** (0.01)
Age	0.00 (0.00)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
GDP	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	−0.07 (0.06)	0.06* (0.03)
GDP/capita	0.01 (0.02)	0.01 (0.02)	0.01 (0.02)	0.20* (0.10)	0.48* (0.22)
OFDI/GDP	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)	0.01 (0.01)
State ownership	−0.12* (0.07)	0.18+ (0.11)	−0.01 (0.01)	0.21 (0.32)	−0.07 (0.21)
Institutional ownership	0.12* (0.05)	0.09* (0.05)	0.03 (0.05)	0.11 (0.11)	0.29+ (0.16)
State ownership squared		−0.47** (1.20)	−0.31+ (1.72)	−0.50 (0.30)	0.01 (0.01)
Institutional ownership * state ownership			1.07 (0.73)	1.22 (1.31)	0.98 (0.82)
Institutional ownership * state ownership squared			1.96*** (0.59)	2.85** (0.92)	1.22 (0.81)
Industry dummies included					
<i>Random effects</i>					
Sd(country)	0.14* 0.26***	0.15* 0.27***	0.15* 0.27***	0.01 0.27***	0.11** 0.22***
Sd(firm)	0.18***	0.19***	0.19***	0.21***	0.16***
Sd(residual)	85.48**	89.99**	101.87***	31.81**	33.11***
Wald Chi-square	563.71***	567.69***	574.01***	168.64***	368.65***
LR					

Note:

+ p < 0.10.

* p < 0.05.

** p < 0.01.

*** p < 0.001.

used by the SMNE to help implement an international strategy. The results support the expectation that institutional ownership is a useful governance mechanism to monitor managers and support successful corporate strategies (Dalton et al., 2008). Essentially, institutional investors help to mitigate the potential agency problems from goal conflict that can occur in SMNEs with a significant level of state ownership. Because institutional investors pursue potential investment returns and encourage international expansion (Tihanyi et al., 2003), their involvement provides tangible and intangible resource support thereby encouraging international diversification by SMNEs. Therefore, both effective governance and resource support encourage international diversification; thus, international investors serve as a positive force in the operation of SMNEs.

Importantly our research demonstrated the influence of the institutional environment on governance in SMNEs. Our study showed that the positive influence of institutional ownership was stronger in developed countries than in developing countries. Institutional investors are hampered by the lack of strong formal institutions in developing countries, such as weak stock market regulations and inadequate transparency-enhancing regulations, probably because several formal institutions (e.g., economic, regulatory, political) play an important role in effective corporate governance. Institutional investors experience difficulties participating effectively in the governance of the firms in which they invest that are home based in countries with weak formal institutions. Thus, we conclude that strong formal institutions are critically important for institutional investors to function effectively in the shared governance (both monitoring and resource support roles) of SMNEs, providing additional evidence for the earlier insights of Vaaler and Schrage (2009).

5.2. Theoretical implications

Our study contributes to research on SMNEs' international activities in a couple of ways. First, this study demonstrates how institutional investors balance state participation in SMNEs as they diversify internationally. Agency theory researchers have argued that different types of owners have dissimilar interests and thus also demonstrate unique effects on corporate strategy (e.g., Chung and

Luo, 2008; Hoskisson et al., 2002). Moreover, studies of ownership structures primarily investigate the direct influence of institutional investors, family shareholding, and inside shareholding on a firm's corporate strategies (Dalton et al., 2008). Aguilera and Crespi-Cladera (2016) argue for more research on ownership structures in global corporate governance. In fact, they suggest that future research should examine the role of diverse large-block shareholders in conjunction with the role of institutions to better understand the cross-national diversity of corporate governance.

In answer to Aguilera and Crespi-Cladera (2016)'s call and in contrast to prior research, we examine the effects of two large blockholders, the state and institutional investors, on firms' international strategies. We argue that state ownership is a double-edged sword for SMNEs as both a cost (goal conflict) and a benefit (resource support). Institutional investors provide additional resource support and, through their monitoring, weaken state-SMNE goal conflict, thus exerting a positive influence on SMNEs' international strategies. Therefore, our study extends agency theory by considering interrelationships among different types of ownership (i.e., institutional and state ownership) in corporate governance of a unique form of organization, the SMNE. We show that who owns and how much they own matters in our understanding of the relationship between corporate ownership structure and corporate strategy.

Second, we incorporate an institution-based view when investigating the role of institutional investors in various countries in SMNEs. Previous research suggests that country institutions have unique influences on FDI (Holmes et al., 2013; Wan and Hoskisson, 2003; Shinkle and Kriauciunas, 2010). We argue that the home country's institutional environment is an important contextual factor that influences the role that institutional investors can play – both in terms of monitoring and as a resource counterweight to the state – in a SMNE's corporate governance and strategy. It matters where the SMNE's home base is located and the institutional environment in which SMNEs operate and in which institutional investors act. Marano et al. (2016) argue that firms are commonly embedded in their home country institutions suggesting that these institutions are likely to affect the governance of these firms and their strategic actions.

Our study suggests that in home countries with strong formal institutions, institutional investors play an important role in corporate governance of SMNEs and have positive influence on strategy formulation and implementation (e.g., international strategies); whereas the influence of institutional investors in the governance of SMNEs from developing countries is neutralized due to weak formal institutions. While previous research describes the differences in the role of institutional investors in different countries (e.g., Ferreira and Matos, 2008), our study provides further theoretical explanations on why such differences exist and thus adds new evidence to the institution-based view research. Importantly, our study suggests the importance of institutional complexity. Based on calls in recent research (e.g., Batjargal et al., 2013; Marano et al., 2016), we examined the collective effect of institutional environments. Combined stronger and higher quality institutions had positive effects on the corporate governance of SMNEs whereas, the joint effects of weaker and lower quality formal institutions constrain the effectiveness of corporate governance thereby allowing agency problems to accumulate. Therefore, our research suggests that to fully understand the effects of ownership on corporate strategies, it is necessary to integrate institutional theory and agency theory. Neither theory alone provides a complete picture of the ownership-strategy relationship. As such, our research extends our understanding of both institutional theory and agency theory through the integration of the two.

5.3. Managerial relevance

Our theory and empirical findings provide significant implications for managers, especially those of SMNEs. First, we find that state participation in SMNEs has overall benefits at moderate levels of state ownership. Because the state can be a source of both direct (financing) and indirect (political connections) resource support, managers of SMNEs should take advantage of support to facilitate their international expansion. Meanwhile, managers of SMNEs should also recognize the costs of state ownership, such as inefficient resource allocation that can hinder international expansion (and possibly other valuable strategies as well). If SMNE managers can take advantage of resource support from the state while minimizing the costs of goal conflicts that come with the state's voice in strategy formation, managers are more likely to develop and effectively implement successful international strategies. If they are able to do this, the managers of the SMNE will benefit from the higher performance that results from the better strategies.

Second, SMNE managers should realize the benefits that institutional investors can provide as a balance or counterweight to state participation. Pursuing investment returns, institutional investors try to effectively monitor the corporate governance of firms in which they choose to invest. We provide evidence that institutional ownership is an effective corporate governance mechanism, which can strengthen the support from the state while mitigating costs because of state participation. Thus, managers should perhaps try to recruit institutional investors and then work with them to formulate and implement effective international expansion strategies.

Third, managers should pay close attention to the home country institutional environment. SMNEs exist in both developed and developing countries. Our findings show that, due to weak formal institutions in developing countries, institutional investors cannot effectively counterbalance state participation in SMNEs' international strategy formulation and implementation. Thus, managers must understand their institutional environments and act accordingly in managing the relationships with different types of owners.

5.4. Limitations and future research

Our study also has some limitations. First, our dataset is limited to publicly listed and traded state multinationals in the ORBIS database during 2002–2007. Excluding SMNEs in the banking industry due to its idiosyncratic industry-focused regulations, we obtained a sample of 253 SMNEs. UNCTAD (2011), however, estimates suggest there were more than 650 SMNEs worldwide in 2010.¹⁰ International management scholars are therefore encouraged to search for additional data sources to expand their sample

¹⁰ Some of these firms may have had temporary state ownership due to state bailouts during and after the 2008 global financial crisis (e.g. General Motors).

size when conducting future research on SMNEs. Our study was a longitudinal analysis using a six-year window, which was limited by the lack of historical ORBIS data. A longer time period would enable a more complete picture of SMNEs' structures and strategies and how they change over time, especially with changes in state ownership and governance.

The findings of this study also suggest some promising research venues for future research. We have studied the impact of state and institutional investors on international diversification by SMNEs. However, we expect that who and what they own affects other decision-making by SMNEs, including decisions such as product diversification, HRM decisions and CSR involvement. The theoretical arguments and empirical approach taken in this paper should provide a useful roadmap for scholars to examine other important strategies of SMNEs. Second, previous studies have suggested that analysis of SMNEs' corporate strategies can help scholars understand the influence of state ownership on state owned firms that compete with private multinationals in the same market (Thomas, 1986). More recent studies have begun to investigate this phenomenon (e.g., Meyer et al., 2014). Thus, scholars could further investigate differences in international strategies of SMNEs and MNEs.

Third, our study has not examined the implications of international diversification by SMNEs for their performance. Thus, our research can be extended to examine the performance outcomes of international strategies employed by SMNEs perhaps comparing the performance outcomes of those strategies used by SMNEs home based in countries with strong and with weak institutional environments. Lastly, an interesting research question is whether it matters which comes first: a SOE that shifts from a domestic to a multinational enterprise, or an MNE that shifts from being a wholly private firm to one with partial state ownership. We expect strategic and structural trajectories of these two organizations are likely to be different as they become hybrid SMNEs, suggesting several potentially valuable future research questions.

5.5. Conclusion

Our findings suggest that institutional investors can play an important role as a counterbalance to the state in the corporate governance of state owned multinationals and their international diversification decisions. We also find that the positive moderating effect of institutional investors in the shared governance of SMNEs is stronger in home countries with more well-developed formal institutions. Therefore, this study provides valuable insights on SMNEs' international activities and advances our understanding of state shareholders and institutional investors in global markets.

References

- Aguilera, R.V., Crespi-Cladera, R., 2016. Global corporate governance: on the relevance of firms' ownership structure. *J. World Bus.* 51, 50–57.
- Aharoni, Y., Seidler, L.K., 1986. Foreign subsidiaries of state-owned enterprises: host country responses. In: Negandhi, A.R., Thomas, H., Rao, K.L.K. (Eds.), *Multinational Corporations and State-owned Enterprises: A New Challenge in International Business*. JAI, London, VI, pp. 151–161.
- Aiken, L.S., West, S.G., 1991. *Multiple regression: Testing and interpreting interactions*. Sage, Newbury Park, CA.
- Anastassopoulos, J.-P., Blanc, G., Dussauge, P., 1987. *State-Owned Multinationals*. Wiley, Chichester.
- Aulakh, P.S., Kotabe, M., 2008. Institutional changes and organizational transformation in developing economies. *J. Int. Manag.* 14, 209–216.
- Barkema, H.G., Drogendijk, R., 2007. Internationalising in small, incremental or larger steps? *J. Int. Bus. Stud.* 38, 1132–1148.
- Bartel, A.P., Harrison, A.E., 2005. Ownership versus environment: disentangling the sources of public-sector inefficiency. *Rev. Econ. Stat.* 87, 135–147.
- Bass, A.E., Chakrabarty, S., 2014. Resource security: competition for global resources, strategic intent, and governments as owners. *J. Int. Bus. Stud.* 45, 961–979.
- Batjargal, B., Hitt, M.A., Tsui, A.S., Arregle, J.L., Webb, J.W., Miller, T., 2013. Institutional polycentrism, entrepreneurs' social networks, and new venture growth. *Acad. Manag. J.* 56, 1024–1049.
- Baum, C.F., Schaffer, M.E., Stillman, S., 2003. Instrumental variables and GMM: Estimation and testing. *Stata J.* 3 (1), 1–31.
- Brambor, T., Clark, W.R., Golder, M., 2005. Understanding interaction models: improving empirical analyses. *Polit. Anal.* 14, 63–82.
- Buckley, P.J., Clegg, L.J., Cross, A.R., Liu, X., Voss, H., Zheng, P., 2007. The determinants of Chinese outward foreign direct investment. *J. Int. Bus. Stud.* 38, 499–518.
- Chakrabarty, S., 2009. The influence of national culture and institutional voids on family ownership of large firms: a country level empirical study. *J. Int. Manag.* 15, 32–45.
- Chen, M., Su, K., Tsai, W., 2007. Competitive tension: the awareness–motivation–ability perspective. *Acad. Manag. J.* 50 (1), 101–118.
- Chung, C.-N., Luo, Y., 2008. Institutional logics or agency costs: the influence of corporate governance models on business group restructuring in emerging economies. *Organ. Sci.* 19, 766–784.
- Cohen, P., Cohen, J., West, S.J., Aiken, L.S., 2002. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Erlbaum, Hillsdale, NJ.
- Cuervo-Cazurra, A., Dau, L.A., 2009. Promarket reform and firm profitability in developing countries. *Acad. Manag. J.* 52, 1348–1368.
- Cuervo-Cazurra, A., Genc, M., 2008. Transforming disadvantages into advantages: developing-country MNEs in the least developed countries. *J. Int. Bus. Stud.* 39, 957–979.
- Cuervo-Cazurra, A., Inkpen, A., Musacchio, A., Ramaswamy, K., 2014. Governments as owners: state-owned multinational companies. *J. Int. Bus. Stud.* 45, 919–942.
- Cui, L., Jiang, F., 2012. State ownership effect on firms' FDI ownership decisions under institutional pressure: a study of Chinese outward-investing firms. *J. Int. Bus. Stud.* 43, 264–284.
- Dalton, D.R., Hitt, M.A., Certo, T.S., Dalton, C.M., 2008. The fundamental agency problem and its mitigation: independence, equity, and the market for corporate control. In: Walsh, J.P., Brief, A.P. (Eds.), *Acad. Manag. Ann.* 1, 1–64.
- David, P., Hitt, M.A., Gimeno, J., 2001. The role of institutional investors in influencing R&D. *Acad. Manag. J.* 44, 144–157.
- Diamantopoulos, A., Sigauw, J.A., 2006. Formative versus reflective indicators in organizational measure development: a comparison and empirical illustration. *Brit. J. Manag.* 17, 263–282.
- Doh, J., Teegen, H., Mudambi, R., 2004. Balancing private and state ownership in emerging markets telecommunications infrastructure: country, industry, and firm influences. *J. Int. Bus. Stud.* 35, 233–250.
- Doidge, C., Karolyi, G.A., Stulz, R.M., 2007. Why do countries matter so much for corporate governance. *J. Financ. Econ.* 86, 1–39.
- Doukas, J., Travlos, N.G., 1988. The effect of corporate multinationalism on shareholders' wealth: evidence from international acquisitions. *J. Financ.* 43, 1161–1175.
- Duanmu, J., 2014. State-owned MNCs and host country expropriation risk: the role of home state soft power and economic gunboat diplomacy. *J. Int. Bus. Stud.* 45, 1044–1060.
- Dunning, J.H., Lundan, S.M., 2008. *Multinational Enterprises and the Global Economy*. second ed. Edward Elgar Publishing Limited, Cheltenham U.K.
- Echambadi, R., Hess, J.D., 2007. Mean-centering does not alleviate collinearity problems in moderated multiple regression models. *Mark. Sci.* 26 (3), 438–445.
- Estrin, S., Meyer, K.E., Nielsen, B.B., Nielsen, S., 2016. Home Country Institutions and the Internationalization of State Owned Enterprises: A Cross-country Analysis. *J. World Bus.* 51 (2), 294–307.
- EIU, 2010. Economist Intelligence Unit. www.eiu.com.

- Ferreira, M.A., Matos, P., 2008. The colors of investors' money: the role of institutional investors around the world. *J. Financ. Econ.* 88, 499–533.
- Gedajlovic, E., Shapiro, D., 1998. Management and ownership effects: evidence from five countries. *Strateg. Manag. J.* 19, 533–552.
- Geringer, J.M., Tallman, S., Olsen, D.M., 2000. Product and international diversification among Japanese multinational firms. *Strateg. Manag. J.* 21, 51–80.
- Gillan, S.L., Starks, L.T., 2003. Corporate governance, corporate ownership, and the role of institutional investors: a global perspective. *J. Appl. Financ.* 13, 4–23.
- Gomez-Mejia, L.R., Balkin, D.B., 1992. Determinants of faculty pay: an agency theory perspective. *Acad. Manag. J.* 35, 921–955.
- Gompers, P.A., Metrick, A., 2001. Institutional investors and equity prices. *Quart. J. Econ.* 116, 229–259.
- Grinstein, Y., Michaely, R., 2005. Institutional holdings and payout policy. *J. Financ.* 60, 1389–1426.
- Guillen, M.F., 2000. Business groups in emerging economies: a resource-based view. *Acad. Manag. J.* 43, 362–380.
- Guler, I., Guillen, M.F., 2010. Institutions and the internationalization of US venture capital firms. *J. Int. Bus. Stud.* 41, 185–205.
- Hamilton, B.H., Nickerson, J.A., 2003. Correcting for endogeneity in strategic management research. *Strateg. Organ.* 1, 51–78.
- He, X., Cui, L., 2012. Can strong home country institutions foster the internationalization of MNEs? *Multinatl. Bus. Rev.* 20, 352–375.
- He, X., Eden, L., Hitt, M.A., 2015. The renaissance of state-owned multinationals. *Thunderbird Int. Bus. Rev.* <http://dx.doi.org/10.1002/tie.21711>.
- Hitt, M.A., 2016. International strategy and institutional environments. *Cross. Cult. Strategic Manag.* (in press).
- Hitt, M., Ahlstrom, D., Dacin, T., Levitas, E., Svobodina, L., 2004. The institutional effects on strategic alliance partner selection in transition economies: China vs. Russia. *Organ. Sci.* 15 (2), 173–185.
- Hitt, M.A., Hoskisson, R.E., Kim, H., 1997. International diversification: effects on innovation and firm performance in product-diversified firms. *Acad. Manag. J.* 40, 767–798.
- Hitt, M.A., Ireland, R.D., Hoskisson, R.E., 2014. *Strategic Management: Competitiveness and Globalization*. 11th ed. Mason, OH, South-Western.
- Hitt, M.A., Li, D., Xu, K., 2016. International strategy: from local to global and beyond. *J. World Bus.* 51, 58–73.
- Hitt, M.A., Tihanyi, L., Miller, T., Connelly, B., 2006. International diversification: a review of recent research on antecedents, moderators, and outcomes. *J. Manag.* 32, 831–867.
- Hoskisson, R.E., Eden, L., Lau, C.M., Wright, M., 2000. Strategies in emerging countries. *Acad. Manag. J.* 43, 249–267.
- Hoskisson, R., Hitt, M., Johnson, R., Grossman, W., 2002. Conflicting voices: the effects of institutional ownership heterogeneity and internal governance on corporate innovation strategies. *Acad. Manag. J.* 45, 697–716.
- Holmes, R.M., Miller, T., Hitt, M.A., Salmador, M.P., 2013. The interrelationships among informal and formal institutions and inward foreign direct investments. *J. Manag.* 39, 531–566.
- Hox, J.J., 2010. *Multilevel Analysis: Techniques and Applications*. Lawrence Erlbaum Associates, Inc., Mahwah, NJ.
- Inoue, C.F.K., Lazzarini, S.G., Musacchio, A., 2013. Leviathan as a minority shareholders: firm-level implications of equity purchases by the state. *Acad. Manag. J.* 56, 1775–1801.
- Kaufmann, D., Kraay, A., Mastruzzi, M., 2003. *Governance Matters III: Governance Indicators 1996–2002*. World Bank, Washington, DC.
- Kaufmann, D., Kraay, A., Mastruzzi, M., 2009. *Governance Matters VI: Aggregate and Individual Governance Indicators 1996–2008*. World Bank, Geneva.
- Khanna, T., Palepu, K., 2000. The future of business groups in emerging markets: long-run evidence from Chile. *Acad. Manag. J.* 43, 268–285.
- Khanna, T., Rivkin, J.W., 2001. Estimating the performance effects of business groups in emerging markets. *Strateg. Manag. J.* 22, 45–74.
- Kim, H., Hoskisson, R., Kim, H., Cannella, A., 2009. Principal–principal agency theory: ownership conflict and complementarity regarding international diversification. Working Paper.
- Knutsen, C.H., Rygh, A., Hveem, H., 2011. Does state ownership matter? Institutions' effect on foreign direct investment revisited. *Bus. Polit.* 13, 1–33.
- Le, T.V., Buck, T., 2011. State ownership and listed firm performance: a universally negative governance relationship? *J. Manag. Gov.* 15, 227–248.
- Li, D., Miller, S.R., Eden, L., Hitt, M., 2012. The impact of rule of law on market value creation of local alliance partners in BRIC countries. *J. Int. Manag.* 18, 305–321.
- Li, M.H., Cui, L., Lu, J., 2014. Varieties in state capitalism: outward FDI strategies of central and local state-owned enterprises from emerging economy countries. *J. Int. Bus. Stud.* 45, 980–1004.
- Liang, H., Ren, B., Sun, S.L., 2015. An anatomy of state control in the globalization of state-owned enterprises. *J. Int. Bus. Stud.* 46, 223–240.
- Luo, Y., Tung, R., 2007. International expansion of emerging market enterprises: a springboard approach. *J. Int. Bus. Stud.* 38, 481–498.
- Marano, V., Arregle, J.L., Hitt, M.A., Spadafora, E., Essen, M.V., 2016. Home country institutions and the internationalization–performance relationship: a meta-analytic review. *J. Manag.* (in press).
- Meyer, K.E., Ding, Y., Li, J., Zhang, H., 2014. Overcoming distrust: how state-owned enterprises adapt their foreign entries to institutional pressures abroad. *J. Int. Bus. Stud.* 45, 1005–1028.
- Ndofor, H.A., Sirmon, D.G., He, X., 2011. Firm resources, competitive actions and performance: investigating a mediated model with evidence from the in-vitro diagnostics industry. *Strategic Manag. J.* 32 (6), 640–657.
- North, D., 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge University Press, Cambridge, U.K.
- O'Connell, A.A., McCoach, D.B., 2008. *Multilevel Modeling of Educational Data*. Information Age Publishing, Inc., Washington DC.
- OECD, 2002. *Foreign Direct Investment for Development: Maximizing Benefits, Minimizing Costs*. OECD, Paris.
- Okhmatovskiy, I., 2010. Performance implications of ties to the government and SOEs: a political embeddedness perspective. *J. Manag. Stud.* 47, 1020–1047.
- Osgood, D.W., Smith, G.L., 1995. Applying hierarchical linear modeling to extended longitudinal evaluations: the Boys Town follow-up study. *Eval. Rev.* 19, 3–38.
- Pan, Y., Teng, L., Supapol, A.B., Lu, X., Huang, D., Wang, Z., 2014. Firms' FDI ownership: the influence of government ownership and legislative connections. *J. Int. Bus. Stud.* 45, 1029–1043.
- Park, S.H., Li, S., Tse, D.K., 2006. Market liberation and firm performance during China's economic transition. *J. Int. Bus. Stud.* 37, 127–147.
- Pargendler, M., Musacchio, A., Lazzarini, S.G., 2013. In strange company: the puzzle of private investment in state-controlled firms. Harvard Business School Working Paper, No. 13-071, February 2013.
- Peng, M., Wang, D., Jiang, Y., 2008. An institution-based view of international business strategy: a focus on emerging economies. *J. Int. Bus. Stud.* 39, 920–936.
- Pound, J., 1988. Proxy contests and the efficiency of shareholder oversight. *J. Financ. Econ.* 20, 237–265.
- Pound, J., 1992. Beyond takeovers: politics comes to corporate control. *Harv. Bus. Rev.* 70 (2), 83–93.
- Reuer, J.J., Leiblein, M.J., 2000. Downside risk implications of multinationality and international joint ventures. *Acad. Manag. J.* 43, 203–214.
- Sanders, W.G., Carpenter, M.A., 1998. Internationalization and firm performance: the roles of CEO compensation, top team composition, and board structure. *Acad. Manag. J.* 41 (2), 158–178.
- Sauvant, K.P., Strauss, J., 2012. State-controlled entities control nearly US\$ 2 trillion in foreign assets. *Columbia FDI Perspect.* 64 (4).
- Shapiro, D., Gliberman, S., 2012. The international activities and impacts of state-owned enterprises. *Sovereign investment: Concerns and policy reactions* 98–144.
- Shleifer, A., Vishny, R., 1986. Large shareholders and corporate control. *J. Polit. Econ.* 94, 461–488.
- Shleifer, A., Vishny, R., 1998. *The Grabbing Hand: Government Pathologies and Their Cures*. Harvard University Press, Cambridge, MA.
- Shinkle, G.A., Kriaucunas, A.P., 2010. Institutions, size, and age in transition economies: implications for export growth. *J. Int. Bus. Stud.* 41, 267–286.
- Spulber, D.F., 1996. Market microstructure and intermediation. *J. Econ. Perspect.* 10, 135–152.
- Sullivan, D., 1994. Measuring the degree of internationalization of a firm. *J. Int. Bus. Stud.* 25, 325–342.
- Tan, J., 2002. Impact of ownership type on environment, strategy, and performance: evidence from China. *J. Manag. Stud.* 39, 333–354.
- Tan, J., Peng, M., 2003. Organizational slack and firm performance during economic transitions: two studies from an emerging economy. *Strateg. Manag. J.* 24, 1249–1263.
- Thomas, H., 1986. Strategic management and state-owned enterprises. In: Negandhi, A.R., Thomas, H., Rao, K.L.K. (Eds.), *Multinational corporations and state-owned enterprises: A new challenge in international business*, V1. JAI, London, pp. 106–127.
- Tihanyi, L., Johnson, R.A., Hoskisson, R.E., Hitt, M.A., 2003. Institutional ownership differences and international diversification: the effects of boards of directors and technology opportunity. *Acad. Manag. J.* 46, 195–211.
- UNCTAD, 2007. *World Investment Report 2007: Global Players from Emerging Markets*. UNCTAD, Geneva.
- UNCTAD, 2011. *World Investment Report 2011: Non-Equity Modes of International Production and Development*. UNCTAD, Geneva.
- Useem, M., 1996. *Investor Capitalism: How Money Managers are Changing the Face of Corporate America*. Basic Books, New York.

- Vaaler, P.M., Schrage, B.N., 2009. Residual state ownership, policy stability and financial performance following strategic decisions by privatizing telecoms. *J. Int. Bus. Stud.* 40, 621–641.
- Vernon, R., 1977. *Storm over the Multinationals*. Harvard University Press, Cambridge Massachusetts.
- Wan, W.P., Hoskisson, R.E., 2003. Home country environments, corporate diversification strategies, and firm performance. *Acad. Manag. J.* 46, 27–45.
- Wooldridge, J.M., 2002. *Econometric Analysis of Cross Section and Panel Data*. MIT Press, Cambridge, MA.
- Wooster, R.B., 2006. US companies in transition economies: wealth effects from expansion between 1987 and 1999. *J. Int. Bus. Stud.* 37, 179–195.
- Xiao, S.S., Jeong, I., Moon, J.J., Chung, C.C., Chung, J., 2013. Internationalization and performance of firms in China: moderating effects of governance structure and the degree of centralized control. *J. Int. Manag.* 19, 118–137.
- Young, M.N., Peng, M.W., Ahlstrom, D., Bruton, G.D., Jiang, Y., 2008. Corporate governance in emerging economies: a review of the principal–principal perspective. *J. Manag. Stud.* 45, 196–220.
- Zaheer, S.A., 1995. Overcoming the liability of foreignness. *Acad. Manag. J.* 38, 341–363.
- Zaheer, S.A., Mosakowski, E., 1997. The dynamics of the liability of foreignness: a global study of survival in financial services. *Strateg. Manag. J.* 18, 439–463.
- Zahra, S.A., Ireland, D.R., Hitt, M.A., 2000. International expansion by new venture firms: international diversify, mode of market entry, technological learning and performance. *Acad. Manag. J.* 43, 925–950.
- Zickar, M.J., Slaughter, J.E., 1999. Examining creative performance over time using hierarchical linear modeling: an illustration using film directors. *Hum. Perform.* 12, 211–230.
- Zou, H., Adams, M.B., 2008. Corporate ownership, equity risk and returns in the People's Republic of China. *J. Int. Bus. Stud.* 39, 1149–1168.