

# A R T I C L E S

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## NEW VARIETIES OF STATE CAPITALISM: STRATEGIC AND GOVERNANCE IMPLICATIONS

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**We analyze the new varieties of state capitalism in the 21st century and explore their implications in terms of both strategic and governance outcomes. We begin by discussing how the current theoretical perspectives conceptualize state-owned enterprises' strategic behavior. Then we introduce a stylized distinction between four broad, new varieties of state capitalism—wholly owned state-owned enterprises, the state as a majority investor, the state as a minority investor, and the state as a strategic supporter of specific sectors—and survey each type within the different theoretical perspectives. Last, we examine firm performance for each type of state capitalism relative to private firms and contingent on country-level institutional contingencies. This article contributes to existing debates on comparative capitalisms and the current role of the state.**

Governments around the world have transformed the well-known model of state capitalism, under which they owned and managed wholly owned state-owned enterprises (SOEs) (Ahroni, 1986; Ramamurti & Vernon, 1991; Trebat, 1983), into new models in which the government works hand in hand with domestic and foreign private investors to develop new strategic capabilities using novel governance arrangements. In these new varieties of state capitalism, governments own either majority or minority equity positions in companies or provide strategic support to private firms using subsidized credit and/or other protections (Musacchio & Lazzarini, 2014).

Although many analysts consider the comeback of state capitalism a dysfunctional consequence of the recent global financial crisis (Bremmer, 2010), in reality the transformation we describe is a by-product of the liberalization and privatization re-

forms that began after the 1980s. For instance, given that privatizations were often partial or incomplete, governments ended up as minority or majority shareholders, or as strategic partners, in a variety of firms across multiple industries. At the same time, by design or by accident, governments transformed the corporate governance of some of their largest SOEs in at least three ways. First, in many SOEs with majority state control (yet not necessarily wholly owned), governments have improved corporate governance practices by listing firms, recruiting independent board members, and enhancing financial reporting. In some of the large flagship SOEs, therefore, these reforms have reduced agency conflicts and attracted minority private investors (Gupta, 2005; Pargendler, Musacchio, & Lazzarini, 2013). Telenor, the Norwegian telecommunications company, and Sinopec, one of China's national oil companies—examples of firms

in which the state is a majority owner—are profitable and are at the top of the global ranking of firms by revenues or assets.

The second transformation in state ownership is the emergence of firms in which the government is a minority shareholder (Inoue, Lazzarini, & Musacchio, 2013). In such firms, the government outsources management to the private sector, keeping cash flow rights and, oftentimes, veto power over key strategic decisions such as mergers through so-called golden shares. For example, in January 2014, the board of private French automobile company Peugeot endorsed a deal whereby Chinese state-owned automaker Dongfeng and the French government would jointly acquire a minority equity stake in Peugeot.

The third transformation in state ownership finds governments acting as strategists by adopting industrial policies targeting particular sectors and firms (Amsden, 2001; Mazzucato, 2011). For example, between 2007 and 2009 the Brazilian firm JBS became the largest meat-packing group in the world by acquiring iconic American meat companies Swift and Pilgrim's Pride—moves made possible thanks to a series of massively subsidized loans from the Brazilian Development Bank, BNDES.

Interestingly, the dominant literature on state-owned enterprises reveals that many of the firms following these new varieties of state capitalism are taking center stage in the global economy and are often performing at least equal to, if not better than, their private counterparts. For instance, the 25 largest SOEs among the top 100 firms in the Fortune Global 500 have an average return on assets of 3.49% and an operating margin of 14%, which is comparable to the 3.44% and 5.7%, respectively, we find among the largest 75 private firms in the world.<sup>1</sup> Table 1 illustrates the diversity of state capitalisms in the world, both in terms of the type of ownership and the vehicles governments use to own and manage these enterprises.

Despite these findings, most research on privatization and state capitalism has focused on studying

the inefficiencies that create such a performance gap between SOEs relative to private firms (Dharwadkar, George, & Brandes, 2000; Doh, Teegen, & Mudambi, 2004; Megginson & Netter, 2001; Ramamurti & Vernon, 1991; Spencer, Murtha, & Lenway, 2005; Trebat, 1983; Yiu, Bruton, & Lu, 2005), what we refer to as “liability of stateness.” Only in a few exceptions has there been an attempt to uncover what determines this performance gap, either by looking at different ownership configurations (Cuervo & Villalonga, 2000; Ramamurti, 2000) or by outlining institutional conditions that may lead to smaller performance gaps (Bartel & Harrison, 2005; Mahmood & Rufin, 2005; Vickers & Yarrow, 1988). As such, the dominant view is that SOEs underperform their private counterparts under almost any circumstance.

Against this backdrop, we still lack a conceptual comprehensive framework to improve our understanding of the fundamental traits of these new forms of state capitalism, as well as their firm-level governance and performance implications. Thus, in this paper we seek to examine under which conditions these new models of state capitalism will mitigate some of the “liabilities of stateness” and lead to improved governance practices and superior performance at the firm level. To do so, we uncover how different institutional voids can alter the performance gap between SOEs and private firms.

Our proposed framework and typology emphasize both the degree and strategic type of state involvement. We rely on the interdisciplinary range of theoretical perspectives to identify and describe the functional traits of four varieties of state participation: traditional wholly owned SOEs, SOEs with majority state capital, SOEs with minority state capital, and a variety of state capitalism in which the state provides strategic support through policies stimulating new firm capabilities and upgrading.

Our contribution, however, is not to merely propose a new typology but mostly to identify the institutional conditions that will affect the performance of each type of state capitalism. We discuss how these combinations shape the existing strategic capabilities/liabilities and corporate governance patterns in our proposed varieties of state capitalism. For instance, we highlight how the institutional environment will determine the degree to which each typology will succeed in reducing traditional agency and political challenges associated with SOEs, and how much it will constrain or

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<sup>1</sup> Calculations made using the 2012 Fortune Global 500 rankings (<http://fortune.com/global500/2012>) and end-of-2012 financials from Capital IQ, available at <http://www.spcapitaliq.com>. Government ownership represents ultimate ownership (i.e., we track ownership in the controlling firms in our sample). Ownership data come from Bureau Van Dijk's Orbis database, available at <https://orbis.bvdinfo.com/version-2015116/home.serv?product=orbisneo>.

**TABLE 1**  
**Patterns of State Ownership of Firms in a Variety of Countries, c. 2010**

	Firms with the central government as a majority shareholder	Firms with the central government as a minority investor	Listed SOEs as a % of total stock market capitalization	Federal SOEs per million people (majority)	Federal SOEs per million people (minority)	Main government ownership vehicles							
						Direct ownership (ministries)	State-owned holding company	Pension funds	Sovereign wealth fund	Life insurance company	Dev. bank		
Argentina	40			0.9		X							
Australia	12	0	3%	0.5	0	X							
Austria	57	21		6.7	0.1	X							
Belgium	15	0	5%	1.3	0	X							
Bolivia	26			2.6		X	X						
Brazil	247	397	34%	1.2	1.3	X		X					X
Canada	85	15		2.4	0.1	X							
Chile	32			1.8		X	X						
China	17,000		70%	12.4		X	X		X				
Colombia	22		15%	0.5		X							
Czech Rep.	1000	120	5%	95.0	0.0	X	X						
Denmark	17	10		3.0	0.2	X							
Ecuador	24			1.5		X							
Egypt	57	59		0.7	1.6	X							
Finland	36	19	34%	6.6	0.1	X	X						
France	67	33	4%	1.0	0.5	X	X						
Germany	17	20		0.2	5.6	X							
Greece	36	14		3.3	0.1	X							
India	217	404	29%	0.2	10.8	X						X	
Indonesia	142	21	30%	0.6	0.3	X		X					
Italy	21	4	8%	0.3	0.6	X							
Japan	77			0.6		X							
Korea	26	4		0.5	0.3	X							X
Malaysia	52	28	36%	1.7	0.3	X	X						
Mexico	90		0%	0.8		X							
Netherlands	28	16		1.7	0.3	X							
New Zealand	31	3	10%	6.8	0.0	X							
Norway	20	6		3.9	0.1	X		X					
Paraguay	10			1.5		X							
Peru	27			0.9		X	X						
Poland	498	691		12.9	0.1	X							
Russia	7964	1418	40%	54.5	0.0	X							
Singapore	20	31	20%	3.7	0.4	X			X				
Slovak Rep.	60	55		11.1	0.1	X							
South Africa	270			5.0		X							
Spain	25	15		0.5	1.1	X		X					
Sweden	51	7	8%	5.2	0.0	X							
Thailand	60		21%	0.9		X							
Turkey	74	67		1.0	0.9	X							
UK	66	14		1.0	0.2	X		X					
Uruguay	15			4.4		X							
Vietnam	1805	1740		20.1	0.0	X		X					

Source: Compiled by the authors from data in OECD (2005) and Musacchio and Lazzarini (2014), Tables 2–3 and 2–4.

enable governments to intervene in firm-level management. In other words, we contribute a more nuanced framework to analyze the various forms of state capitalism beyond the usual polarized view of state versus private ownership.

### THEORETICAL PERSPECTIVES ON STATE CAPITALISM

In our effort to develop a comprehensive framework to examine the new varieties of state capitalism, we discuss the logic and predicted performance outcomes underlying the four most salient theoretical perspectives accounting for SOEs' strategic behavior. Three of those perspectives (managerial agency, social view, and political view) are related to inherent principal-agent conflicts in a context of state control and imply a negative effect of state involvement on firm-level economic performance. The fourth, the institution-based view, sees the country's institutional environment as a contingency factor that should alter the extent and nature of state involvement in business. We discuss each perspective in turn, and then integrate their contributions within our framework to examine the new varieties of state capitalism.

#### Managerial Agency

Agency theorists have long discussed the problem of delegating decisions to agents whose objectives may be misaligned with those of the principals. In the context of SOEs, several authors have proposed that SOE managers are poorly selected and lack high-powered incentives to pursue efficiency and profitability, at least relative to private firms (Boardman & Vining, 1989; Dharwadkar et al., 2000; La Porta & López-de-Silanes, 1999; Vickers & Yarrow, 1988). Although there is wide variation in the profile of public managers (Schneider, 1991), it is not uncommon to find members of the ruling political coalition in the top management ranks of SOEs. In addition, compensation schemes in the public sector tend not to be linked to economic performance but instead follow bureaucratic criteria such as hierarchy and seniority (Dixit, 2002). Firth, Fung and Rui (2006), for instance, found a low pay-for-performance elasticity in the incentive contracts for Chinese SOE managers.

Complicating matters, many activities in the public sector involve multiple principals dispersed across various domains reflecting distinct interests (Dixit, 2002; Moe, 1984). It is generally unclear to

SOE managers who the relevant principal is. Is it society as a whole, the ruling government, or minority investors who own shares in publicly traded SOEs? Moreover, as in the case of SOE executives, governments are typically tempted to appoint bureaucrats and cronies to serve as board members. This is a problem because, unlike profit-maximizing shareholders of private firms, those appointed board members will have little incentive to scrutinize SOE managers and veto inefficient decisions. Thus, the managerial agency perspective leads to the prediction that an increase in state control will result, on average, in poorly run and inefficient firms—a prediction that has generally been supported by empirical work (for a review, see Megginson & Netter, 2001).

#### Social View

The social view suggests that the government will direct SOEs to pursue social objectives that often clash with firm profitability. For instance, governments may force SOEs to cater to less-profitable customer segments, keep prices low, minimize unemployment, or invest in geographically remote areas (Bai & Xu, 2005; Shirley & Nellis, 1991). If SOEs have other relevant stakeholders and even private shareholders (in the case of listed SOEs, for instance), this entails a form of agency problem because managers will likely face a "double bottom line" involving complex social goals beyond profitability (Bai & Xu, 2005).

Some scholars claim that social goals will be accompanied by mandated low-powered incentives in SOEs. For instance, Williamson (1999) argued that an emphasis on profit maximization, such as excessive resource deployment for cost savings, can hurt the pursuit of probity (rectitude) in public services. In a similar vein, Hart, Shleifer, and Vishny (1997) stressed that state ownership will be desirable when there are quality-based dimensions that are more difficult to measure and enforce in pay-for-performance contracts (e.g., effective student learning in schools). Some projects may also deliver effective results only in the long term, and hence require more patient investors and managers committed to development objectives (Kaldor, 1980; McDermott, 2003). In this sense, although lower-powered incentives in SOEs are expected to negatively affect profitability, they are intended to facilitate the attainment of social goals, which in turn may be part of a broader set of performance dimensions critical to SOEs. In sum, in

the social view, SOEs may be inefficient because they undertake projects with a negative private net present value but a positive social net present value.

### Political View

Also predicting a negative effect of state ownership on firm-level performance, the political view posits that the politicians running SOEs (and their coalitions) will use these firms for direct political gain (Chong & López-de-Silanes, 2005; Cui & Jiang, 2012; La Porta & López-de-Silanes, 1999; Shleifer, 1998). This perspective is related to the managerial agency perspective in the sense that SOE managers may themselves be appointed politicians or political allies. China is an example where managers and directors in state-owned firms tend to be closely tied to the government and to the Communist Party (Lin & Milhaupt, 2011). However, SOEs may also be used to benefit politically connected firms through preferential contracts or cheap capital in response to government pressure. For instance, in a study of emerging markets, Dinç (2005) found that during election years, state-owned banks generally lend more than private banks.

This phenomenon is aggravated by the so-called *soft budget constraint* of SOEs (Kornai, 1979; Lin & Tan, 1999). Abundant and lenient capital from the state will increase the likelihood of misallocation and inefficient bailouts. Namely, SOEs will more likely approve bad investments and use public funds to rescue failed projects. This phenomenon was illustrated in research by Bailey, Huang, and Yang (2011) and Khwaja and Mian (2005), who found that loans from state-owned banks tend to target poorly performing firms in China and Pakistan, respectively. The political view thus predicts that state ownership and state strategic support for private firms will likely be associated with poor firm-level performance because SOEs and state-supported firms will receive capital and protection for reasons other than the inherent financial potential of their own projects (Ades & Di Tella, 1997). In other words, the political view links the inefficiency of SOEs to the fact that they may undertake projects that have a negative private value and even negative or low social value, but that generate political rents to the politicians running SOEs or to their cronies. Additionally, because of the tendency of governments to support or bail out inefficient firms, the moral hazard introduced by these

incentives should lead us to find SOEs underperforming private firms.

### Institution-Based View

In contrast with the previous views, which are theories of the liability of stateness, institution-based arguments suggest that the effect of state ownership on firm performance will depend on country-level features affecting transaction costs and incentives for productive efficiency (North, 1990). Countries have varying levels of institutional development; often, there will be failures or “voids” in product, labor, and financial markets (Khanna & Palepu, 2000; Peng, Sun, Pinkham, & Chen, 2009). For instance, firms in countries in early stages of industrial development or with underdeveloped financial markets face more severe financial constraints, and state capital could potentially fill in those voids (Cameron, 1961; Gerschenkron, 1962). Moreover, state capital can also help fill in voids in product markets by coordinating the local deployment of complementary resources and by supporting activities with high social externalities (Aghion, 2011; Mazzucato, 2000; Rodrik, 2007). Comparative social scholars point out that the early industrial development of many countries was often associated with massive state involvement through SOEs or state-owned development agencies (Amsden, 2001; Evans, 1995; Witt & Redding, 2013).

Thus, there exist institutional contingencies that will affect how wide the performance gap between SOEs and private firms is. In this view, severe institutional voids depress the performance of private firms, and states can become entrepreneurs with the capacity to overcome or fill in such voids. The more severe the institutional voids, the more SOEs will be able to perform closer to private firms; in the extreme, the performance gap could be favorable to SOEs (or closer to zero). For instance, Doh and colleagues (2004) found that private ownership in partially privatized telecom companies increases with the extent of local economic development and market liberalization. Vaaler and Schrage (2009) argued that minority state ownership becomes less important as a signaling device (i.e., private owners have governmental support) when there is political stability in the country. Moreover, using a sample of Brazilian firms, Inoue and colleagues (2013) showed that investments in minority equity positions by the government through the Brazilian development bank (BNDES)

are correlated with significant improvements in financial performance and increases in capital expenditures.

The institution-based view is consistent with research on industrial policy and resource- and innovation-based development in strategic management that explores how public policy affects the development of new capabilities and potentially acts as a new source of performance heterogeneity (Klein, Mahoney, McGahan, & Pitelis, 2013; Mahmood & Rufin, 2005). In this sense, this literature directly informs the benefits of having the state as a strategic partner, providing entrepreneurs with capital and complementary resources such as improved infrastructure, a trained workforce, and cutting-edge research centers (Agarwal, Audretsch, & Sarkar, 2010; Kogut, 1991). The nature and quality of local state policies or industrial policies will thus define whether firms will have true competitive advantage, based on a host of distinctive local resources and capabilities, or whether policies are instead simply devised to artificially shield inefficient firms from external competition (Lazzarini, 2013; Porter, 2008).

In sum, the positive effect of having state ownership to fill institutional voids and implement government capabilities is stronger the larger those voids are and tends to disappear as financial markets grow and the rule of law improves. In other words, institutions will likely act as a contingency, changing the benefits (and risks) of having the state as a relevant stakeholder in capitalist societies. In the final section of this article, we propose how salient these institutional contingent factors (both voids and government capabilities) are to explain the performance gap between private and public enterprises.

### **NEW VARIETIES OF STATE CAPITALISM: A TYPOLOGY**

In this section, we discuss the congruence between the new varieties of state capitalism and the existing theories of state ownership described above. We contribute to the understanding of the forms of state capitalism by identifying four general, stylized types. These are not mutually exclusive: Even if in some countries one typology is more salient than the others, a given country might also host a combination of them. In Table 2, we summarize our comparative analysis across the models of state capitalism, drawing on the three

theoretical perspectives that emphasize the liability of stateness.

### **Wholly Owned SOEs**

This is the most traditional type of government ownership. In this type, governments own and manage SOEs as extensions of the public bureaucracy. The rise of wholly owned SOEs gained momentum in the 19th century when governments stepped in to manage myriad public goods such as mail, water, electricity, and railways (Millward, 2005; Toninelli, 2000). Such SOEs are directly funded and influenced by governments, with limited transparency and autonomy. As such, they are often viewed as a stereotypical form of state ownership with dysfunctional governance traits.

Whether these forms of state ownership make sense depends on the perspective one takes of their role. On one hand, according to the institution-based view SOEs may be necessary when private entrepreneurship is scant and there is need to spur coordinated investments with high social externalities, such as those related to infrastructure, education, and technological research. Yet given the absence of external, for-profit investors and the lower transparency of wholly owned SOEs, other theoretical perspectives suggest that they will be highly subject to severe costs undermining performance. Such negative effects occur through various channels: poor selection of managers, low-powered incentives, and weak monitoring (managerial agency); conflicting goals clashing with profitability (social view); and use of wholly owned SOEs for political gain and bailout (political view). The reforms of wholly owned SOEs, outlined above, and the emergence of new varieties of state capitalism were, in great part, an attempt to respond to those dysfunctional features or liabilities of stateness while at the same time preserving the benefits of having the state as a relevant stakeholder.

### **The State as a Majority Investor**

In this type of state capitalism, the state remains a controlling shareholder but introduces mechanisms to attract private investors. For instance, many SOEs are now publicly listed on stock exchanges and have large institutional investors and improved governance practices such as boards with independent external members, professional managers with technical expertise, enhanced pay-for-performance executive salaries, and improved

**TABLE 2**  
**Theoretical Perspectives and Their Contribution to Understanding the Varieties of State Capitalism**

	Wholly owned state-owned enterprises (SOEs)			
	State as majority investor	State as a minority investor	State strategic involvement	
Managerial agency	Managerial agency problems will be moderate if SOEs have improved governance practices (e.g., boards with independent external members), pay-for-performance executive salaries, and enhanced accounting standards.	Managerial agency problems will be moderate to low, as SOEs with minority state capital are not directly controlled or run by the government.	Managerial agency problems will be low, as the government may support private firms run by professional managers.	
Social view	Managerial agency is likely an important cause of poor performance, given the absence of external, for-profit investors and the lack of improved governance practices in wholly owned SOEs (e.g., boards and executive teams are packed with members of the government). Managers will likely face a “double bottom line” (e.g., social objectives such as low customer prices or higher employment beyond profitability). Mixed, complex objectives will likely undermine the quest for efficiency and profitability.	“Double bottom line” still present, but with an enhanced emphasis on profitability depending on the presence of external, for-profit investors and the existence of improved governance practices that insulate the SOE from excessive governmental influence.	There is likely an emphasis on profitability, subject to policy goals (e.g., state capital supports riskier projects with high social externalities).	
Political view	Use of SOEs for political gain undermines profitability (e.g., SOEs will be run by politically appointed managers and benefit politically connected capitalists). Soft budget constraints are present (governments will likely bail out poorly performing projects).	Soft budget constraints are still present (SOEs with majority state control will hardly go bankrupt). However, improved governance practices may make it more difficult the use of SOEs to support political allies.	There are moderate to hard budget constraints, depending on the extent to which industrial policies have clear performance metrics and “sunset” clauses.	
Institution-based view	The institutional environment will act as a contingency-based factor that will affect performance of each model (see Table 3).			

transparency. For example, about half of the largest national oil companies in the world are publicly listed in their home countries, on the New York Stock Exchange, or both, and they follow governance practices that resemble those of private companies (Musacchio & Lazzarini, 2014).

There are many examples of companies in which the government is a majority shareholder and there is significant variation in their performance, compared with other SOEs or with private firms. Such examples include relatively successful national champions such as oil giants Gazprom and Rosneft from Russia, Petrobras from Brazil, and Sinopec and CNOOC from China. In banking there are the big four Chinese banks (ICBC, Bank of China, Agricultural Bank of China, and China Construction Bank), which over time have had mixed results; the more stable Russian banks Sberbank and VTB; the inefficient State Bank of India and Bank Baroda in India; and the relatively best performer Banco do Brasil, from Brazil. In telecommunications there are firms with majority state capital such as Singapore Telecom, Qatar Telecom, Axiata (Malaysia), and Telnor (Norway); in utilities there are giants such as *Électricité de France* and Abu Dhabi National Energy Company (United Arab Emirates).

The type where the state is a majority investor but introduces mechanisms to attract private investors addresses, at least in principle, many of the agency, social, and political problems associated with wholly owned SOEs. For example, the presence of external, for-profit investors and improved governance practices should curb the government's temptation to use SOEs to pursue social objectives at the expense of profitability as well as governmental pet projects executed by SOEs for political gain. This is consistent with empirical evidence showing that partially privatizing SOEs helps improve performance. Gupta (2005), for instance, found that listing and selling minority stakes to private investors increased the performance of SOEs in India compared to non-listed firms wholly owned by the state (for a review see Megginson, 2005, pp. 106–107).

However, contingent on the governance and institutional environment in which SOEs are embedded, agency problems and governmental interference may remain as major liabilities of stateness. Pargendler and colleagues (2013) compared three national oil companies with varying governance traits: Mexico's Pemex (a wholly owned SOE) and Brazil's Petrobras and Norway's Statoil (both listed SOEs where the state is a majority investor). Al-

though Petrobras and Statoil have outperformed Pemex in many dimensions, Petrobras has been relatively more subject to political interference than Statoil. In 2012, for instance, the Brazilian government forced Petrobras to keep the price of gasoline low to control inflation, even though this pricing policy severely damaged the company's cash flow.

Another advantage of the state as majority investor is that government can partner with the private sector to undertake projects that the private sector would typically not pursue alone. When institutional voids are pervasive, especially in capital and product markets, having the government as a partner to provide capital and coordinate the supply of crucial inputs can help to develop projects that the private sector could not fund. Think, for instance, of the development of the steel industry in Brazil, where the government partnered with private investors to create the National Steel Company and the mining firm Vale. The government coordinated the supply of the main inputs (iron ore) and the production of intermediary goods (steel), and created an integrated domestic steel market (Dean, 1969).

In sum, the majority shareholder model might mitigate some of the liabilities of stateness by helping governments and private investors to overcome institutional voids, but will work more successfully when there is a legal framework protecting the rights of minority shareholders in such investments and when there are government capabilities to regulate such enterprises.

### State as a Minority Investor

This type is a more nuanced, hybrid form of ownership in which privately run firms are supported by minority state capital in the form of debt or equity. In this ownership type, management control is in private hands and, therefore, the problems identified by the managerial agency, social, and political perspectives are expected to be relatively less salient. At the same time, minority state capital can help support riskier, longer-term private projects that would otherwise remain unfunded. In other words, the minority model can activate latent capabilities at the firm level when there are institutional voids in capital markets (Inoue et al., 2013; Rodrik, 1995).

Governments hold and manage their minority equity investment through several channels, including direct stakes in partially privatized firms



and indirect stakes through state-owned vehicles such as sovereign wealth funds and pension funds. For instance, governments in Europe kept minority equity positions in Deutsche Telecom, France Telecom, Telia Sonera (Sweden), ENI (Italy's national oil company), GDF (France's energy giant), Finmeccanica (Italy's defense contractor), and Renault. This grants them the ability to keep tabs on the management of such firms, most commonly through their golden shares or using other indirect forms of political pressure.

In other parts of the world, minority equity positions are managed by holding companies or asset management firms controlled by the government. In India, for example, the Life Insurance Corporation manages diverse governmental shareholdings, with around \$50 billion invested as of September 2011. In Malaysia, the asset manager Kazana Nasional Berhad manages state holdings in more than 70 firms. It is not unusual to have the national development bank acting as an asset manager. This is the case in Brazil, where BNDESPAR, the asset management arm of the development bank BNDES, holds hundreds of minority investments in domestic firms, and in Korea, where the development bank KDB holds equity in a handful of firms. In the Middle East, state-owned holding companies such as Mubadala in Abu Dhabi and Dubai World in Dubai hold both majority and minority equity positions in a large portfolio of firms.

Despite all the advantages of this type of state capitalism, under certain conditions there might be room for residual interference by the government even in cases where the state is a minority investor. Consistent with the political view, Musacchio and Lazzarini (2014) argued that residual interference will likely happen when firms with minority state equity have rents that can be exploited by the ruling government (e.g., rents from natural resources or public concessions) and when there is collusion between minority actors. An example is Brazil's Vale, a privatized mining firm. In 2009 Vale suffered from governmental meddling facilitated by a collusion of state-related actors (BNDES and pension funds of SOEs) that, together, held more than 60% of the firm's voting shares.

Firms that have governments as minority shareholders tend to have tighter budget constraints than when the government is the sole owner or a majority shareholder. Still, the possibility of credit misallocation and moral hazard because of implicit bailouts cannot be ignored. This should be particularly true in the case of firms that are singled out

as national champions (Ades & Di Tella, 1997; Falck, Gollier, & Woessmann, 2011). Those champions will likely be seen as "too big to fail" and therefore receive extended support from governments. Political connections may also dictate which firms will receive preferential access (Claessens, Feijen, & Laeven, 2008), and it is possible that certain firms will seek subsidized capital even in cases where they are not financially constrained (Lazzarini, Musacchio, Bandeira-de-Mello, & Marcon, 2015). In sum, having the government as a minority shareholder is a qualitatively different type of state ownership than when it acts as majority investor. Because the management is undertaken by the private sector, following private-sector practices, the agency and social views should be mitigated, and according to how developed institutions are, residual political intervention could also be tamed.

### State Strategic Involvement

In this model of state intervention, the state acts as a country-level catalyzer of private entrepreneurship. Although strategic involvement can be in the form of minority capital—typically through development and state-owned banks—the major thrust of this model is the creation of industrial policies to foster new firm capabilities. The South Korean model of development is perhaps the most celebrated example of state-led industrialization (Amsden, 1989; Rodrik, 1995). It involves private groups (i.e., the *chaebols*) supported by a mix of "horizontal" policies benefiting multiple sectors (e.g., investments in basic education and science) complemented by "vertical" (targeted) policies to stimulate diversification into new activities (e.g., subsidies and temporary protection to infant industries). Similarly, in Chile, new industries such as fish farming were promoted through the joint effort of business associations and state-related actors such as Corfo, Chile's state-owned development institution, and Fundación Chile, a semi-public foundation (Agosin, Larraín, & Grau, 2010).

Consistent with the institution-based view, Aghion (2011) offered a framework in which policies reduce the costs to undertake innovation projects and revamp latent capabilities. The state can fill in voids directly (e.g., tax breaks for new R&D activity) or indirectly through the provision of country- and industry-level resources such as top universities and specialized research centers (Lazzarini, 2013). Given the emphasis on private

entrepreneurship, managerial agency conflicts will therefore be much less consequential than in the models where the state is a majority investor. In addition, although firms are encouraged by the state to pursue riskier projects with high social externalities, entrepreneurs will essentially seek to make a profit given the incentive structure by the state policies in place (Cimoli, Dosi, Nelson, & Stiglitz, 2009; Pack & Saggi, 2006).

Nevertheless, this type of state capitalism also entails risks associated with the liability of state-ness. In an environment where the state is strategically involved in business activity, rent-seeking incumbents will have incentives to request unjustified support and extended protection (Grossman & Helpman, 1994; Krueger, 1990). Therefore, a key issue is not only which firms or industries will be targeted, but also how governments will monitor and discontinue failed experiments. Rodrik (2004), for instance, suggested that policies should have “sunset clauses” creating a credible commitment to cease support programs if the targeted projects are found to be unsuccessful.

In light of our proposed typology and the previously discussed theoretical perspectives, we seek to move forward the debate on state capitalism within strategic management and comparative corporate governance. We can no longer look at the category of “state” as a monolithic ownership type and assume that all SOEs will always suffer from the liabilities of stateness (and consequently underperform private firms). Instead, as we discuss in the next section, we need to identify the institutional conditions that allow different forms of state-owned enterprises to reach performance levels comparable to those of private firms.

## COUNTRY-LEVEL CONDITIONS AND THE, NEW VARIETIES OF STATE CAPITALISM

In this section, we examine how each of the four firm types would perform given different institutional contingencies. In Table 3 we summarize the conditions under which each form of state ownership may lead SOEs to have a narrower or better performance gap relative to private firms. That is, we examine the contingencies that make each variety of state ownership more likely to reduce its liability of stateness and achieve better performance (in our case less performance gap relative to private firms).

Based on our review of the literature, we propose three country-level conditions that should influence the effectiveness of each model of state capitalism: voids in production factor markets, voids in local capital markets, and key government capabilities, each independently affecting the extent and nature of governmental intervention. As a caveat, in our analysis we take political decisions as given; that is, it is not our objective to explain why a given country opts for a given type of state intervention while other countries create mechanisms to stimulate private entrepreneurship with restrained temptation to follow political objectives.

### Voids in Production Factor Markets

In early development stages, countries typically lack basic infrastructure and valuable country-level resources such as a trained workforce and complementary production inputs. For instance, developing steel mills requires efficient transportation infrastructure, ports, and sources of energy as well as raw materials and production machinery. Although some inputs can be successfully imported, the

**TABLE 3**  
**Contingencies That Will Reduce the Performance Gap Between Each of the New Varieties of State Capitalism and the Performance of Private Firms**

Private firms vs.	Wholly owned SOEs	State as majority investor	State as a minority investor	State strategic involvement
<b>Country-level conditions</b>				
Voids in production factor markets	Pervasive voids; basic infrastructure and productive resources missing	High to moderate voids	Moderate voids	Moderate to low voids
Voids in capital markets	High (failure in capital markets is pervasive)	High to moderate voids, with protections for private minority shareholders	Moderate voids and protections for government as minority shareholder	Moderate to high voids
Key government capabilities	Technical bureaucracy running SOEs (restrained patronage)	Checks and balances against governmental interference in SOEs	Checks and balances against residual interference	Technical bureaucracy in charge of industrial policy (restrained cronyism)

country may simply lack local capabilities to structure complex production chains (Hirschman, 1958). In those conditions, some authors have suggested that a “big push” by the government is warranted (Murphy, Shleifer, & Vishny, 1989; Rosenstein-Rodan, 1943). Having the government as a majority investor may generate the push needed to get such coordinated projects started. Following this logic, many authors note that the rapid development of many “late industrializers” in Latin America and South Asia was associated with the presence of majority-owned SOEs establishing complementary investments that supplied raw materials and intermediary goods to the local industries (Amsden, 1989; Di John, 2009; Jones & Sakong, 1980; Trebat, 1983).

When voids in production factor markets are progressively mitigated, new entrepreneurs will become more willing to take the risks to revamp existing activities and engage in new businesses. Yet at moderate levels of industrial development, private firms may be reluctant to “discover” new latent capabilities (Hausmann & Rodrik, 2003). For instance, firms may foresee an opportunity in information technology services, but they will find out whether the opportunity truly exists only if they invest in that activity and learn. And if they are successful, they will likely generate positive externalities to other firms in the form of knowledge spillovers and new market opportunities. In other words, social benefits may easily surpass the individual, private gains from entrepreneurship. This logic suggests that the models where the state is a minority investor and where the state is a strategic partner can help spur entrepreneurial effort to promote new capabilities in moderate stages of development where the basic production factors are present but further local upgrading is required (McDermott, Corredoira, & Kruse, 2009). Even when there are few local production voids, the state can act as a strategic partner to promote new investment in activities that generate high positive externalities, such as environment-friendly technology (Mazzucato, 2011).

### **Voids in Local Capital Markets**

We argue that the development of local capital markets will affect the benefits of state involvement in business. When capital markets are shallow, not only will private entrepreneurs have limited access to capital, but investors will have few mechanisms to obtain company-level information to monitor en-

trepreneurs (Dyck & Zingales, 2004; Nenova, 2006). When capital markets are extremely shallow, as when the local environment faces extreme voids in factors of production, it will be difficult to attract private capital to large projects. Hence, wholly owned SOEs may be required at least in early stages of development.

When capital markets are moderately developed, existing private firms may be incentivized with minority state capital or other forms of state support, especially when they have opportunities to revamp latent capabilities, but they are also financially constrained. For instance, the development of railway infrastructure in Europe and Latin America in the 19th century relied heavily on partial government ownership and subsidies to private investors. That is, governments had to limit the downside risk of large projects to encourage private investors to enter into them.

Obviously, the model in which the state is a minority investor or a strategic partner providing loans to private firms requires governance practices that protect minority investors, including the government, against the expropriation of private investors. For instance, Giannetti and Laeven (2009) and Inoue and colleagues (2013) found that the positive effect of minority equity investments by the government on financial performance of private firms—via pension funds and development banks, respectively—is reduced when target firms belong to business groups. This is because firms in business groups are less financially constrained or because state capital can be “tunneled” within pyramids to support failing internal units (Bae, Kang & Kim, 2002; Bertrand, Mehta, & Mullainathan, 2002). When capital markets become highly developed, however, the benefits of any form of state capital will diminish and private ownership will be more likely observed (Bortolotti, Fantini, & Siniscalco, 2004).

The model where the state is a majority investor is particularly intriguing because it can help solve capital market failures and incentivize private investors to partner with the government when voids in capital markets are high to moderate. Yet this form of state ownership will require, perhaps paradoxically, more sophisticated capital markets and corporate governance institutions to protect the private minority investors who are partnering with the government. Without a certain level of transparency, protection for minority shareholders, and rule of law (e.g., so that minority shareholders can sue the government and win), investors will be

reluctant to invest in opaque SOEs that are not shielded against governmental interference and expropriation.

When there are high to moderate voids in capital markets, government majority ownership is more suitable for starting certain large projects. But as capital markets develop, private capital should be easier to deploy, and the performance gap between SOEs and private firms should widen again. That is, as capital markets develop, the liability of state-ness outweighs the benefits of having state capital financing an enterprise (see Table 3).

Why then are SOEs with government majority ownership so prevalent even in countries with relatively developed financial markets? A possible explanation is that in some sectors deemed as “strategic” (e.g., natural resource industries), governments may become reluctant to privatize, or they may face strong public opposition to privatization. Thus, some SOEs may coexist with private firms and even benefit from the capitalization and information benefits of well-developed capital markets.

### Key Government Capabilities

We define government capabilities as the differential ability that some governments have to devise policies that promote new resource accumulation, accompanied by credible mechanisms to monitor the outcomes of policies that curb dysfunctional political interference (Honadle, 1981; Lazzarini, 2013). That is, we argue that sophistication of the government bureaucracy, especially the bureaucrats and managers in charge of designing and executing the strategic plans of SOEs, will also influence the size of the performance gap between SOEs and private firms. For instance, in the case of wholly owned SOEs, as in other public bureaucracies, a critical condition is the presence of professional, handpicked managers (Trobat, 1983; Wilson, 1989). The success of state-led development strategies in South Asia is often credited to the presence of technical bureaucrats and SOE employees recruited through highly competitive entrance tests (Amsden, 1989; Wade, 1990; Witt & Redding, 2013).

Such technical bureaucracy is expected not only to develop distinct competencies over time but also to insulate SOEs from the pressure of patronage. Similar logic applies to the model involving state strategic involvement. Industrial policies must be selected and monitored by a technical bureaucracy in charge of policy making: insulated state agencies

that keep a dialogue with the private sector while at the same time avoiding dysfunctional interference (Amsden, 1989; Evans, 1995). Otherwise, state policies will be a vehicle of cronyism, with subsidies and protection for firms in return for their support of particular politicians and parties (Haber, 2002; Krueger, 1990).

In the models where the state is a majority or minority investor, governments should create an institutional setting that includes checks and balances against outright government interference in SOEs (and against residual interference when the state has a minority stake). That is, governments with a more capable bureaucracy and with a better institutional setting are better equipped to reduce the liabilities of state-ness and the performance gap vis-à-vis private companies.

In listed SOEs with majority state control and minority private investment, interference by politicians needs to be restrained both inside the corporation through improved governance practices and outside the corporation through independent regulation and legal enforcement. For instance, interference in Norway’s Statoil has been curtailed not only through effective governance but also through the presence of a strong, independent regulatory agency, the Norwegian Petroleum Directorate (NPD), which is packed with technical bureaucrats (Thurber & Istad, 2010). In their study of European utilities, Bortolotti, Cambini, and Rondi (2013) confirmed that the market value of SOEs is positively affected by effective regulation. Strong antitrust regulation guaranteeing a level playing field for both SOEs and private firms competing in the same industry can also help. For instance, research finds that intra-industry competition has a positive effect on SOE performance (e.g., Bartel & Harrison, 2005).

In the model where the state is a minority investor, there should also be checks and balances against residual governmental interference—as there exists the risk that governments will use indirect channels to influence firms. As noted before, residual interference can occur when there is collusion of state-related actors with minority stakes or even when private owners strategically align with the government. Also, through regulatory power or particular governance features such as golden shares, governments should be able to persuade managers of private firms to follow discretionary social or political objectives. Again, independent regulatory bodies and effective governance practices to avoid collusion will be key to creating checks and balances against residual interference.

To be sure, effective regulation should also positively affect the model of pure private ownership; privatization without effective regulation can lead to excessive monopoly rents and even low quality in important service dimensions (Wallsten, 2001).

### CONCLUDING REMARKS

State capitalism in the 21st century challenges the conventional, polarized view of state versus private ownership. Many SOEs with majority state control are now publicly listed, with professional management and improved governance practices attracting a host of private investors interested in rents from natural resources or projects linked with the state. Many private firms have also funded their investments with debt or minority equity from state-related investors. Not less important, states have also strategically devised policies to create country- and industry-level resources facilitating private entrepreneurship. All of these forms are present around the world, both in rich and poor countries, and in most cases they coexist. Yet thus far, scholars have devoted scant attention to how these new forms of state involvement can affect governance and firm-level performance.

We do not argue, however, that these new models have always improved performance. Agency problems and discretionary political interference, identified by the early literature on state ownership, remain important threats to the performance of SOEs and private firms affected by state policies. They bring in a liability of stateness. Yet simply advocating privatization as a “solution” can be immaterial because many governments (and their constituencies) remain reluctant to privatize firms in nationally strategic sectors. Instead, we contend that a more useful exercise is to uncover factors that can explain heterogeneity in the performance of firms affected by distinct models of state involvement. In this article, we integrate multiple theoretical perspectives and offer a novel institution-based contingency framework that not only identifies the major traits of the new models of state capitalism but also proposes a host of country-level conditions that should help overcome the liability of stateness and in doing so narrow the performance gap between new state capitalism firms and private firms.

Moving forward, a more nuanced examination of the various models of state capitalism can also have important practical implications. For instance, what are the competitive implications of the new forms of state capitalism? Can private firms suc-

cessfully compete with state-backed national champions and state-owned multinational corporations? Private firms will face formidable challenges to expand when massive governmental support leads champions to overinvest in their sectors. In this environment, private firms need not assess only the extent of governmental interference but also the channels of state support (such as development banks or other sources of state capital).

Our framework also helps inform private investors in SOEs. When the state is a majority investor, private funds should understand that political pressure and the pursuit of a double bottom line will always be part of the equation. Yet this does not mean that investors should shy away from SOEs. These firms often participate in large public projects and control valuable local resources. Instead, investors should monitor trends in institutional conditions that could lead to more or less intervention. Our framework clearly suggests that there is much heterogeneity in performance at the country and firm level, thus creating conditions for profitable investment in underpriced SOEs embedded in environments where government interference is trending downward.

Several questions remain unanswered and invite further research. For instance, what is the effect of these new models on other outcomes not discussed here, such as innovation or projects with high social impact? Do SOEs always do what government wants, or do they pursue their own strategies? We also argued that the vehicles of state involvement come in various forms and shapes. Beyond state agencies, governments have variously used public pension funds, life insurance companies, sovereign wealth funds, state-owned holding companies, and so forth. How do those channels work and differ from each other? We hope that our framework will help future research to elucidate these and other questions raised by the recent reinvention of state capitalism.

### REFERENCES

- Ades, A., & Di Tella, R. (1997). National champions and corruption: Some unpleasant interventionist arithmetic. *Economic Journal*, 107(443), 1023–1042.
- Agarwal, R., Audretsch, D., & Sarkar, M. B. (2010). Knowledge spillovers and strategic entrepreneurship. *Strategic Entrepreneurship Journal*, 4(4), 271–283.
- Aghion, P. (2011). Some thoughts on industrial policy and growth. In O. Falck, C. Gollier, & L. Woessmann

- (Eds.), *Industrial policy for national champions* (pp. 13–30). Cambridge, MA: MIT Press.
- Agosin, M. R., Larraín, C., & Grau, N. (2010). *Industrial policy in Chile* (RES Working Paper 4695). Washington, DC: Inter-American Development Bank.
- Ahroni, Y. (1986). *The evolution and management of state owned enterprises*. Cambridge, MA: Ballinger Publishing.
- Amsden, A. H. (1989). *Asia's next giant: South Korea and late industrialization*. New York: Oxford University Press.
- Amsden, A. H. (2001). *The rise of "the rest": Challenges to the West from late-industrializing economies*. Oxford, UK: Oxford University Press.
- Bae, K.-H., Kang, J.-K., & Kim, J.-M. (2002). Tunneling or value added? Evidence from mergers by Korean business groups. *Journal of Finance*, 57(6), 2695–2740.
- Bai, C.-E., & Xu, L. C. (2005). Incentives for CEOs with multitasks: Evidence from Chinese state-owned enterprises. *Journal of Comparative Economics*, 33(3), 517–539.
- Bailey, W., Huang, W., & Yang, Z. (2011). Bank loans with Chinese characteristics: Some evidence on inside debt in a state-controlled banking system. *Journal of Financial and Quantitative Analysis*, 46(6), 1795–1830.
- Bartel, A. P., & Harrison, A. E. (2005). Ownership versus environment: Disentangling the sources of public-sector inefficiency. *Review of Economics and Statistics*, 87(1), 135–147.
- Bertrand, M., Mehta, P., & Mullainathan, S. (2002). Ferreting out tunneling: An application to Indian business groups. *Quarterly Journal of Economics*, 117(1), 121–148.
- Boardman, A. E., & Vining, A. R. (1989). Ownership and performance in competitive environments: A comparison of the performance of private, mixed, and state-owned enterprise. *Journal of Law and Economics*, 32(1), 1–33.
- Bortolotti, B., Cambini, C., & Rondi, L. (2013). Reluctant regulation. *Journal of Comparative Economics*, 41(3), 804–829.
- Bortolotti, B., Fantini, M., & Siniscalco, D. (2004). Privatisation around the world: Evidence from panel data. *Journal of Public Economics*, 88(1–2), 305–332.
- Bremmer, I. (2010). *The end of the free market: Who wins the war between states and corporations?* New York: Portfolio/Penguin.
- Cameron, R. E. (1961). *France and the economic development of Europe*. Princeton, NJ: Princeton University Press.
- Chong, A., & López-de-Silanes, F. (Eds.). (2005). *Privatization in Latin America: Myths and reality*. Washington, DC: World Bank and Stanford University.
- Cimoli, M., Dosi, G., Nelson, R., & Stiglitz, J. E. (2009). Institutions and policies shaping industrial development: An introductory note. In M. Cimoli, G. Dosi, & J. E. Stiglitz (Eds.), *Industrial policy and development: The political economy of capabilities accumulation* (pp. 19–38). Oxford, UK: Oxford University Press.
- Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics*, 88(3), 554–580.
- Cuervo, A., & Villalonga, B. (2000). Explaining the variance in the performance effects of privatization. *Academy of Management Review*, 25(3), 581–590.
- Cui, L., & Jiang, F. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. *Journal of International Business Studies*, 43(3), 264–284.
- Dean, W. (1969). *The industrialization of São Paulo, 1880–1945*. Austin: Published for the Institute of Latin American Studies by the University of Texas Press.
- Dharwadkar, B., George, G., & Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective. *Academy of Management Review*, 25(3), 650–669.
- Di John, J. (2009). *From windfall to curse? Oil and industrialization in Venezuela, 1920 to the present*. University Park, PA: Penn State University Press.
- Dinç, I. S. (2005). Politicians and banks: Political influences on government-owned banks in emerging markets. *Journal of Financial Economics*, 77(2), 453–479.
- Dixit, A. (2002). Incentives and organizations in the public sector: An interpretative review. *Journal of Human Resources*, 37(4), 696–727.
- Doh, J. P., Teegen, H., & Mudambi, R. (2004). Balancing private and state ownership in emerging markets' telecommunications infrastructure: Country, industry, and firm influences. *Journal of International Business Studies*, 35(3), 233–250.
- Dyck, A., & Zingales, L. (2004). Private benefits of control: An international comparison. *Journal of Finance*, 59(2), 537–600.
- Evans, P. (1995). *Embedded autonomy: States and industrial transformation*. Princeton, NJ: Princeton University Press.
- Falck, O., Gollier, C., & Woessmann, L. (2011). Arguments for and against policies to promote national champions. In O. Falck, C. Gollier, & L. Woessmann

- (Eds.), *Industrial policy for national champions* (pp. 3–9). Cambridge, MA: MIT Press.
- Firth, M., Fung, P. M. Y., & Rui, O. M. (2006). Corporate performance and CEO compensation in China. *Journal of Corporate Finance*, 12(4), 693–714.
- Gerschenkron, A. (1962). *Economic backwardness in historical perspective*. Cambridge, MA: Harvard University Press.
- Giannetti, M., & Laeven, L. (2009). Pension reform, ownership structure, and corporate governance: Evidence from a natural experiment. *Review of Financial Studies*, 22(10), 4091–4127.
- Grossman, G. M., & Helpman, E. (1994). Protection for sale. *American Economic Review*, 84(4), 833–850.
- Gupta, N. (2005). Partial privatization and firm performance. *Journal of Finance*, 60(2), 987–1015.
- Haber, S. (2002). Introduction: The political economy of crony capitalism. In S. Haber (Ed.), *Crony capitalism and economic growth in Latin America: Theory and evidence* (pp. xi–xxi). Stanford, CA: Hoover Institution Press.
- Hart, O. D., Shleifer, A., & Vishny, R. W. (1997). The proper scope of government: Theory and an application to prisons. *Quarterly Journal of Economics*, 112(4), 1127–1161.
- Hausmann, R., & Rodrik, D. (2003). Economic development as self-discovery. *Journal of Development Economics*, 72(2), 603–633.
- Hirschman, A. O. (1958). *The strategy of economic development*. New Haven, CT: Yale Economic Press.
- Honadle, B. W. (1981). A capacity-building framework: A search for concept and purpose. *Public Administration Review*, 41(5), 575–589.
- Inoue, C. F. K. V., Lazzarini, S. G., & Musacchio, A. (2013). Leviathan as a minority shareholder: Firm-level performance implications of equity purchases by the government. *Academy of Management Journal*, 56(6), 1775–1801.
- Jones, L., & Sakong, I. (1980). *Government, business, and entrepreneurship in economic development: The Korean case*. Cambridge, MA: Harvard University Press.
- Kaldor, N. (1980). Public or private enterprise—The issue to be considered. In W. J. Baumol (Ed.), *Public and private enterprises in a mixed economy* (pp. 1–12). New York: St. Martin's.
- Khanna, T., & Palepu, K. (2000). The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, 43(3), 268–285.
- Khwaja, A. I., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *Quarterly Journal of Economics*, 120(4), 1371–1411.
- Klein, P. G., Mahoney, J. T., McGahan, A. M., & Pitelis, C. N. (2013). Capabilities and strategic entrepreneurship in public organizations. *Strategic Entrepreneurship Journal*, 7(1), 70–91.
- Kogut, B. (1991). Country capabilities and the permeability of borders. *Strategic Management Journal*, 12(S1), 33–47.
- Kornai, J. (1979). Resource-constrained versus demand-constrained systems. *Econometrica*, 47(4), 801–819.
- Krueger, A. O. (1990). Government failures in development. *Journal of Economic Perspectives*, 4(3), 9–23.
- La Porta, R., & López-de-Silanes, F. (1999). The benefits of privatization: Evidence from Mexico. *Quarterly Journal of Economics*, 114(4), 1193–1242.
- Lazzarini, S. G. (2013). Strategizing by the government: Can industrial policy create firm-level competitive advantage? *Strategic Management Journal*, 36, 97–112.
- Lazzarini, S. G., Musacchio, A., Bandeira-de-Mello, R., & Marcon, R. (2015). What do state-owned development banks do? Evidence from Brazil, 2002–2009. *World Development*, 66, 237–253.
- Lin, J. Y., & Tan, G. (1999). Policy burdens, accountability, and the soft budget constraint. *American Economic Review*, 89(2), 426–431.
- Lin, L.-W., & Milhaupt, C. J. (2013). *We are the (national) champions: Understanding the mechanisms of state capitalism in China*. *Stanford Law Review*, 697–760.
- Mahmood, I. P., & Rufin, C. (2005). Government's dilemma: The role of government in imitation and innovation. *Academy of Management Review*, 30(2), 338–360.
- Mazzucato, M. (2000). *Firm size, innovation, and market structure: The evolution of industry concentration and instability*. Cheltenham, UK, and Northampton, MA: Edward Elgar.
- Mazzucato, M. (2011). *The entrepreneurial state*. London: Demos.
- McDermott, G. A. (2003). *Embedded politics: Industrial networks and institutional change in postcommunism*. Ann Arbor, MI: University of Michigan Press.
- McDermott, G. A., Corredoira, R. A., & Kruse, G. (2009). Public-private institutions as catalysts of upgrading in emerging market societies. *Academy of Management Journal*, 52(6), 1270–1296.
- Meggison, W. L. (2005). *The financial economics of privatization*. New York: Oxford University Press.
- Meggison, W. L., & Netter, J. M. (2001). From state to market: A survey of empirical studies of privatization. *Journal of Economic Literature*, 39(2), 321–389.

- Millward, R. (2005). *Private and public enterprise in Europe: Energy telecommunications and transport* (pp. 1830–1990). Cambridge, UK: Cambridge University Press.
- Moe, T. M. (1984). The new economics of organization. *American Journal of Political Science*, 28(4), 739–777.
- Murphy, K. M., Shleifer, A., & Vishny, R. W. (1989). Industrialization and the big push. *Journal of Political Economy*, 97(5), 1003–1026.
- Musacchio, A., & Lazzarini, S. G. (2014). *Reinventing state capitalism: Leviathan in business, Brazil and beyond*. Cambridge, MA: Harvard University Press.
- Nenova, T. (2006). Control values and changes in corporate law in Brazil. *Latin American Business Review*, 6(3), 1–37.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge, UK: Cambridge University Press.
- OECD. (2005). *OECD guidelines on corporate governance of state-owned enterprises*. Paris: Author.
- Pack, H., & Saggi, K. (2006). Is there a case for industrial policy? A critical survey. *World Bank Research Observer*, 21(2), 267–297.
- Pargendler, M., Musacchio, A., & Lazzarini, S. G. (2013). In strange company: The puzzle of private investment in state-controlled firms. *Cornell International Law Journal*, 46(3), 569–610.
- Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. (2009). The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives*, 23(3), 63–81.
- Porter, M. E. (2008). *On competition: Updated and extended edition*. Cambridge, MA: Harvard Business School Press.
- Ramamurti, R. (2000). A multilevel model of privatization in emerging economies. *Academy of Management Review*, 25(3), 525–550.
- Ramamurti, R., & Vernon, R. (1991). *Privatization and control of state-owned enterprises*. Washington, DC: World Bank.
- Rodrik, D. (2004). *Industrial policy for the twenty-first century* (CEPR Discussion Paper 4767). London: Centre for Economic Policy Research.
- Rodrik, D. (2007). *One economics, many recipes: Globalization, institutions, and economic growth*. Princeton, NJ: Princeton University Press.
- Rodrik, D., Grossman, G., Norman, V. (1995). Getting interventions right: How South Korea and Taiwan grew rich. *Economic Policy*, 10(20), 55–107.
- Rosenstein-Rodan, P. N. (1943). Problems of industrialization of Eastern and South-Eastern Europe. *Economic Journal*, 53(210/211), 202–211.
- Schneider, B. R. (1991). *Politics within the state: Elite bureaucrats and industrial policy in authoritarian Brazil*. Pittsburgh, PA: University of Pittsburgh Press.
- Shirley, M., & Nellis, J. (1991). *Public enterprise reform: The lessons of experience*. Washington, DC: Economic Development Institute of the World Bank.
- Shleifer, A. (1998). State versus private ownership. *Journal of Economic Perspectives*, 12(4), 133–150.
- Spencer, J. W., Murtha, T. P., & Lenway, S. A. (2005). How governments matter to new industry creation. *Academy of Management Review*, 30(2), 321–337.
- Thurber, M. C., & Istad, B. T. (2010). *Norway's evolving champion: Statoil and the politics of state enterprise* (Working Paper 92). Stanford, CA: Program on Energy and Sustainable Development, Stanford University.
- Toninelli, P. A. (2000). The rise and fall of public enterprise: The framework. In P. A. Toninelli (Ed.), *The rise and fall of public enterprise in the Western world* (pp. 3–24). Cambridge, UK: Cambridge University Press.
- Trebat, T. J. (1983). *Brazil's state-owned enterprises: A case study of the state as entrepreneur*. Cambridge, UK: Cambridge University Press.
- Vaaler, P. M., & Schrage, B. N. (2009). Residual state ownership: Policy stability and financial performance following strategic decisions by privatizing telecoms. *Journal of International Business Studies*, 40(4), 621–641.
- Vickers, J., & Yarrow, G. (1988). *Privatization: An economic analysis*. Cambridge, MA: MIT Press.
- Wade, R. (1990). *Governing the market: Economic theory and the role of government in East Asian capitalism*. Princeton, NJ: Princeton University Press.
- Wallsten, S. J. (2001). An econometric analysis of telecom competition, privatization, and regulation in Africa and Latin America. *Journal of Industrial Economics*, 49(1), 1–19.
- Williamson, O. E. (1999). Public and private bureaucracies: A transaction cost economics perspective. *Journal of Law Economics and Organization*, 15(1), 306–342.
- Wilson, J. O. (1989). *Bureaucracy: What government agencies do and why they do it*. New York: Basic Books.
- Witt, M. A., & Redding, G. (2013). Asian business systems: Institutional comparison, clusters and implications for varieties of capitalism and business systems theory. *Socio-Economic Review*, 11(2), 265–300.



Yiu, D., Bruton, G. D., & Lu, Y. (2005). Understanding business group performance in an emerging economy: Acquiring resources and capabilities in order to prosper. *Journal of Management Studies*, 42(1), 183–206.



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