ARTICLE IN PRESS

Journal of World Business xxx (xxxx) xxxx

Contents lists available at ScienceDirect

Journal of World Business

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

# State ownership, political ideology, and firm performance around the world

Ruth Aguilera[a,*], Patricio Duran[b], P.P.M.A.R. Heugens[c], Steve Sauerwald[d], Turturea Roxana[e], Marc VanEssen[f]

[a] Northeastern University, United States
[b] Saint Louis Univesrity, United States
[c] Roterdam School of Management, The Netherlands
[d] University of Illinois, Chicago, United States
[e] Aalto University, Finland
[f] University of South Carolina, United States

ARTICLE INFO

*Keywords:*
State capitalism
State ownership
Meta-analysis
Institution-Based view
Political institutions
Public enterprise

ABSTRACT

It is often taken as a stylized fact that state ownership harms the financial performance of firms. Yet we show that this relationship varies greatly across national contexts. We argue that the political ideology of the government, both independently and in conjunction with political institutions (state capacity and political constraint), affects this relationship. We test our hypotheses using meta-analytical techniques on an international sample spanning 53 years and 131 countries. Our research sheds further light on the state ownership – firm performance relationship by highlighting the role of the political ideology of the government, and its interactions with political institutions.

## 1. Introduction

When does state ownership improve firm financial performance? Researchers have long taken it as a truism that state ownership is an inefficient ownership form that reduces firm financial performance (Aharoni, 2008; Estrin, Meyer, Nielsen, & Nielsen, 2016; Lazzarini & Musacchio, 2018; Ramamurti, 1986; Stan, Peng, & Bruton, 2014). Based on agency theory logic, state ownership reduces firm performance because state owners pursue a multitude of objectives, some of which conflict with those of other stakeholders in the firm (Lazzarini & Musacchio, 2018). Alongside business objectives (i.e., objectives aimed at improving firm financial performance), state owners also pursue social objectives (i.e., objectives directed at improving societal welfare) and political objectives (i.e., objectives intended to enhance the interests of politicians, bureaucrats, and special interest groups). Moreover, state owners are also known for ineffective monitoring (Dharwadkar, George, & Brandes, 2000) and implementing risk averse strategies that ultimately reduce firm performance (Tihanyi et al., 2019). Therefore, the majority of prior studies have shown that state ownership is negatively associated with firm performance. This is particularly important considering the pervasiveness of state-owned enterprises (SOEs) and their contribution to the global economy (Cuervo-Cazurra, 2017). SOEs represent 15 % of the largest firms and own 10 % of foreign affiliates worldwide (Kalotay, 2017). In addition, SOEs account for 10 % of global GDP (The Economist, 2012); in China, the country with the largest number of SOEs, these firms are estimated to contribute 23–28 % of national GDP (Zhang & Chunlin, 2019).

Nonetheless, there is reason to believe that not all state owners reduce firm performance to the same extent. In fact, prior studies have noted the existence of multiple variants of state capitalism around the world that may differently affect the financial performance of state-influenced firms (Grosman, Okhmatovskiy, & Wright, 2016; Hennart, Sheng, & Carrera, 2017; Musacchio, Lazzarini, & Aguilera, 2015). In the words of Bremmer, state capitalism is "a form of bureaucratically engineered capitalism particular to each government that practices it" (2010, p. 23). Thus, whereas agency problems and other inefficiencies arising from state ownership may inhibit the performance of state-owned enterprises (SOEs) in certain countries, in other countries SOEs could be given a freer rein and be expected to act more as genuine capitalist enterprises. For example, SOEs in China are classified as either public service (e.g., Shanghai Metro) or commercial (e.g., SAIC Motor), the latter type being encouraged to pursue more explicit profit objectives and deploy effective management practices (The Economist, 2017). Governments in such contexts see enterprises—both public and private—as engines of economic growth. The relationship between state ownership and firm performance might then be decidedly less

* Corresponding author.
*E-mail addresses:* r.aguilera@neu.edu (R. Aguilera), patricio.duran@slu.edu (P. Duran), pheugens@rsm.nl (P.P.M.A.R. Heugens), ssauerw@uic.edu (S. Sauerwald), roxana.turturea@aalto.fi (T. Roxana), Marc.Vanessen@moore.sc.edu (M. VanEssen).

https://doi.org/10.1016/j.jwb.2020.101113
Received 14 January 2019; Received in revised form 29 March 2020; Accepted 29 April 2020
1090-9516/ © 2020 Elsevier Inc. All rights reserved.

negative.

In the present paper, we reconcile this tension between the conventional view that SOEs lag behind private companies in terms of financial performance and the emerging view that SOEs perform better financially by showing that both views have some traction—contingent on the features of the government which controls the SOE. We propose that the political ideology of the government, independently and in conjunction with political institutions, influences the *willingness* and *ability* of governments to use their ownership positions in SOEs to improve the financial performance of firms (Pagano & Volpin, 2005). First, we argue that the political ideology of the executive branch of government determines the willingness of governments to prioritize business goals over social goals in SOEs. Political ideologies are defined as coherent sets of doctrines, principles, and ideals that offer a blueprint for what a desirable social order should look like and how it should be established (cf. Feldman & Johnston, 2014; Jost, Federico, & Napier, 2009). Such ideologies have direct ramifications for state capitalism, as they not only entail idealized government goals (e.g., freedom or equality), but also denote which means are deemed most appropriate for achieving these goals (e.g., free markets or state interventionism). Therefore, we posit that governments will be more motivated to use SOEs for the promotion of business goals in countries with a right-leaning executive (e.g., economic liberals) than in countries with a left-leaning executive (e.g., economic socialists). In such right-leaning contexts, SOEs are expected to behave more like private enterprises, and therefore work towards business objectives aimed at improving firm financial performance.

Second, we argue that political institutions such as *state capacity* and *political constraint* will condition the ability of right-leaning governments to make SOEs pursue business objectives. State capacity refers to the effectiveness of a state in developing and enforcing policy goals (Guillén & Capron, 2016; Hanson & Sigman, 2013), whereas political constraint captures limitations to the discretion political actors have in implementing their policy goals (Henisz, 2000). We propose that under conditions of high state capacity, right-leaning governments will be better able to pursue their ideological agenda and thus push more for the realization of business objectives in SOEs, with positive consequences for firm performance. We also conjecture that higher levels of political constraint will incentivize right-leaning governments to "compromise" and blend business with social objectives in SOEs, with negative consequences for firm performance.

We test our ideas with the help of a theory-building meta-analytic study, which employs data from 193 primary studies, covering 1,831,935 firm-year observations from 131 countries. Specifically, we use meta-analytic regression analysis (MARA) to establish the moderating effects of political ideology, state capacity, and political constraint on the relationship between state ownership and firm financial performance. By combining primary studies from a broad range of countries, our study is one of the most comprehensive cross-national comparative studies of the effects of state capitalism to date.

Our work harbors two contributions. First, to the rich state capitalism literature (i.e., Grosman et al., 2016; Lazzarini & Musacchio, 2018; Musacchio et al., 2015; Okhmatovskiy, 2010; Wood & Wright, 2015), we offer a novel explanation and empirical evidence for the observed variability in SOE financial performance across the globe: the influence of political ideology and political institutions on SOEs. Specifically, we show that SOE financial performance is stronger in right-leaning contexts (i.e., countries ruled by a right-leaning government), where it is less politically acceptable for governments to recur to SOEs for the realization of non-business goals. Second, we contribute to the institution-based view (Peng, Wang, & Jiang, 2008; Peng, Sun, Pinkham, & Chen, 2009) by establishing that the relationship between political ideology and SOE financial performance is significantly conditioned by a country's political institutions (cf. North, 1991). In particular, we show that right-leaning governments, which are normally supportive of business objectives in SOEs, will nonetheless be pushed to accommodate social benefits when political constraint is high (and therefore multiple parties with divergent interests are involved in policy-making). In turn, such ideological concessions will have negative consequences on SOE performance. Overall, our study highlights the dual role of the state as a rule-maker (by shaping political institutions) and player (as owner in SOEs affected directly by political institutions).

## 2. Theory and hypotheses development

### 2.1. State ownership and the financial performance of firms

State ownership entails important advantages for firms, such as "patient capital" for long-term investments, exclusive rights to operate in certain industries or geographical areas, networks with foreign governments, and other resources typically not available to private firms (Lazzarini & Musacchio, 2018). Nonetheless, most prior research has generally found that state ownership is negatively associated with firm financial performance, which suggests that the drawbacks associated with state ownership outweigh the advantages. This research is often based on an agency theoretical logic, and argues that this negative effect is rooted in the limited *willingness* and *ability* of state owners to advance firm financial performance.

First, state ownership may entail agency conflicts that negatively affect the willingness of SOEs to pursue business objectives. A core tenant of agency theory is that conflicts of interest create agency costs that reduce efficiency and ultimately the financial performance of companies. This is because the state owner's interests do not only include business goals that are aligned with the goals of shareholders, but also political and social goals that often are at odds with the business goal of enhancing firm performance (Musacchio & Lazzarini, 2014). In particular, politicians and bureaucrats may use state ownership to pursue political objectives that benefit the ruling government party (Shleifer & Vishny, 1998). This may occur by transferring rents to their political constituents (Inoue, Lazzarini, & Musacchio, 2013). For instance, state owners may push SOEs to enter into financially unsound contractual agreements with private companies, because such private companies can support their re-election (e.g., by making donations to political parties).

Moreover, states may use their ownership position to prioritize social objectives that are expected to benefit society and the electorate at large (Bai & Xu, 2005; Borisova, Fotak, Holland, & Megginson, 2015). While governments typically pursue their societal agenda through regulatory channels, such as taxation and public welfare spending, they may also make use of their ownership positions in companies to enhance social protection. For example, governments often pursue the social goal of low unemployment by maintaining high employment levels in SOEs. Governments can also use their ownership positions in firms to enact social change, particularly when such change may be challenging to realize solely through regulatory means. For instance, partly state-owned Dutch bank ABN-AMRO recently stopped granting loans to tobacco and coal-mining companies due to health and environmental concerns, and actively started lobbying other Dutch banks to follow suit (The Guardian, 2017). Norway introduced gender quotas for the boards of directors of its SOEs with the aim of promoting gender diversity, three years before imposing the same quotas on private firms (Terjesen, Aguilera, & Lorenz, 2015). Second, state owners are also often pictured as less capable owners that expose SOEs to heightened agency problems (Goldeng, Grünfeld, & Benito, 2008). Previous research attributes an important monitoring and activism role to shareholders (Goranova & Ryan, 2014). However, state owners may be less effective at monitoring the firms they own because governments often lack strong monitoring skills (Dharwadkar et al., 2000) or because monitoring responsibilities are distributed across too many bureaucratic units (Lioukas, Bourantas, & Papadakis, 1993). This inefficient monitoring could result in underperforming or rent-seeking managers remaining in leadership positions for prolonged periods of time. Even

when state owners want to replace underperforming managers, they are often less successful than private owners in attracting competent managerial talent (Goldeng et al., 2008). A recent meta-analysis also found that SOEs pursue less risky business strategies than private firms, which partly explains the performance gap between SOEs and private firms, since risk averse strategies are often chosen by less capable owners. For instance, SOEs invest less than private companies in internationalization and R&D, strategies often regarded as risky, but that generally enhance firm performance in the long run (Tihanyi et al., 2019). To summarize, because state owners often pursue social and political objectives, frequently at the expense of business motives, and tend to be less capable owners in terms of monitoring management and implementing competitive strategies, SOEs are expected to trail behind privately-owned firms in terms of financial performance.

### 2.2. State ownership and institutional contingencies

Recent studies further unpack the influence of state ownership on financial performance by considering contingency factors. Some studies examine ownership level contingencies that result in different varieties of state ownership (Bruton, Peng, Ahlstrom, Stan, & Xu, 2015; Grosman et al., 2016; Hennart et al., 2017). For instance, minority state ownership often improves firm performance, because holding the majority of shareholdings in private hands constitutes an effective governance mechanism to constrain the agency problems that typically arise in SOEs (Grosman, Aguilera, & Wright, 2019; Inoue et al., 2013). Some work has also begun to acknowledge the relevance of institutional contingencies (Bruton et al., 2015; Clegg, Voss, & Tardios, 2018; Estrin et al., 2016; Lazzarini & Musacchio, 2018; Musacchio et al., 2015). For instance, Estrin et al. (2016) show that effective formal (e.g., rule of law) and informal institutions (e.g., power distance) reduce agency conflicts in listed SOEs, which then behave more similarly to private enterprises. This research is still in a nascent state, however, primarily due to a dearth of empirical cross-national studies looking at how state owners influence the financial performance of companies. In this paper, we therefore combine multiple single-country studies into one multiple-country study to trace the effects of institutional contingencies on the performance of SOEs.

While there are many institutional forces that may affect how state ownership influences firm financial performance, we follow Kostova's (1997) call to use institutional facets that are specific for the phenomenon studied. Specifically, state ownership is affected by the political patronage of the government in power. For instance, governments may appoint political representatives to the board of directors that may pursue the interests of the state (e.g., the German state of Lower Saxony holds ownership positions in Volkswagen and appoints its prime minister to Volkswagen's board of directors). Additionally, interest group politics and self-interested politicians may interfere in companies with state ownership. Research has shown that there is a wide variance in the role of the state across countries (Fainshmidt, Judge, Aguilera, & Smith, 2018), even within state capitalist countries (Grosman et al., 2016). Key determinants shaping the willingness and abilities of state owners are therefore *political ideology* and *political institutions*.

Government's political ideology is a core determinant defining the variations of state capitalism around the world. There is ample cross-national as well as longitudinal research showing how country-level political ideology (i.e., the political ideology of the government) influences most aspects of economic life. For instance, research has shown that corporations in countries with more right-leaning political ideologies have higher corporate social performance (Ioannou & Serafeim, 2012). In addition, Chilean family firms internationalize more when the national government is right-leaning, because these firms regard the government as more supportive and more aligned with their own values (Duran, Kostova, & van Essen, 2017). We expect that governments with different political ideologies will have different objectives set out for SOEs, and will also adopt varying approaches to accomplish these objectives.

Political institutions are the "rules of the game" that determine the political choices of political actors, including governmental officers and bureaucrats (March & Olsen, 1989). Effective political institutions have many positive effects, such as preventing political actors from extracting private benefits (North, 1990). We propose that political institutions shape the willingness and abilities of governments as corporate owners. Effective political institutions can simultaneously amplify the beneficial effects of state ownership, such as providing resources and support (Inoue et al., 2013), and restrain its negative effects, such as serving the political goals of an entrenched political elite (Acemoglu & Robinson, 2012). We investigate two national-level political institutions that significantly define the political context in which firms are embedded: state capacity (Guillén & Capron, 2016) and political constraint (Henisz, 2000). While political ideology relates to the goals that governments may strive to achieve in SOEs, state capacity and political constraint influence the ability of states to realize such goals. Therefore, we examine how these two political institutions interact with the government's ideology in shaping the performance of SOEs.

### 2.3. The two-way moderating role of political ideology

Political ideology has recently been proposed as a key factor affecting the strategic choices of companies (Briscoe, Chin, & Hambrick, 2014; Chin, Hambrick, & Treviño, 2013; Christensen, Dhaliwal, Boivie, & Graffin, 2015; Duran et al., 2017; Gupta & Wowak, 2017). Political ideology refers to "an interrelated set of attitudes, behaviors, and values about the goals of society and how they should be achieved" (Tedin, 1987, p. 65). At its core, political ideology captures the political beliefs of those in power (Tetlock, 1983), typically portrayed as a left-right distinction (Gupta & Wowak, 2017; Hutton, Jiang, & Kumar, 2015; Briscoe & Joshi, 2017; Jost et al., 2009). Traditionally, the political left supports more salient interventionism of the state in the economy, and strives for political ideals like egalitarianism, a fair distribution of wealth and income, and the enactment and maintenance of a welfare state (2015, Carmines & D'Amico, 2015; Ha, 2012; Maynard & Mildenberger, 2018). In contrast, the political right stands for limited intervention of the state in the economy, the maintenance of class-based distinctions and privileges, limited redistribution of wealth and income, and a lower emphasis on a welfare state (Huber, 1989; Marks, Hooghe, Nelson, & Edwards, 2006).

Prior studies on political ideology generally focused on how the political ideology of corporate leaders in power—such as CEOs and board of directors—affect firm outcomes (Briscoe et al., 2014; Gupta & Wowak, 2017). Only recently, more attention has been given to the ideology of the government in shaping the performance of firms (e.g., Duran et al., 2017). While top administrators in the government affect the behavior of all firms in their territory (e.g., via regulation), they exert a substantial influence over SOEs. The government has several viable venues to enact its political ideology in SOEs. In many countries, state owners either have full discretion, or considerable influence over corporate appointments in SOEs (Lin & Germain, 2003), and may prefer managers and directors similar to themselves in terms of political ideology. But even when governments do not appoint corporate leaders to SOEs directly, they still influence these firms in ways that align with their political ideology (Musacchio et al., 2015). For instance, the ideology of the government may determine how career bureaucrats implement government policies (Clinton, Bertelli, Grose, Lewis, & Nixon, 2012).

We expect that when the executive branch of government represents a right-leaning ideology (as compared to a left-leaning ideology), the detrimental effect of state ownership on firm financial performance will weaken for two reasons. First, right-leaning governments favor supply-side economics, characterized by decreasing regulatory control over the economy and lowering taxes (Willets, 1992). This translates into right-leaning governments refraining from using state ownership as a policy

tool to advance social objectives, as this would increase regulatory control over corporations. Right-leaning governments may also be more motivated to use state ownership as a source of government revenue to complement more "traditional" revenue sources, such as corporate taxes. The revenue generating role of SOEs controlled by right-leaning governments may compensate part of the revenue shortfalls resulting from corporate tax breaks and balanced budgets. Under this logic, state owners in countries ruled by right-leaning governments will use their influence over SOEs to push for strategies aimed at improving financial performance rather than social objectives like high employment levels or social inclusion that would reduce financial performance by transferring rents to other stakeholders.

Second, right-leaning governments may rely to a greater extent on "expected financial returns" than left-leaning governments, when selecting the companies in which to retain or acquire ownership positions. In general, SOEs are less prevalent in countries with right-leaning governments than in countries with left-leaning government (Avsar, Karayalcin, & Ulubasoglu, 2013; Biais & Perotti, 2002; Bortolotti & Faccio, 2009). Because right-leaning governments derive less political benefits from state ownership (since they are less likely to use state ownership to advance objectives popular with the electorate), they are more likely to retain residual ownership positions in firms that they perceive as holding a competitive advantage and could therefore generate favorable financial returns. For instance, right-leaning governments should be less likely to buy ownership in underperforming firms, as a way of "bailing" them out. We therefore hypothesize:

**Hypothesis 1.** In state-owned enterprises, the political ideology of the government moderates the relationship between state ownership and firm performance. More specifically, the negative effect of state ownership on firm performance is weaker in countries with a right-leaning government

### 2.4. The three-way moderating role of political ideology and state capacity

State capacity captures the ability of the state to formulate and enforce official policy goals (Fukuyama, 2013; Guillén & Capron, 2016) and is essential for nation building (Acemoglu, Moscona, & Robinson, 2016). High capacity states are able to elicit compliance from their citizens (e.g., by ensuring tax extraction), provide public services such as medical care and education, and are able to protect their borders and interior security (Berwick & Christia, 2018; Geddes, 1996; Hanson & Sigman, 2013). Low capacity states have limited ability to ensure compliant behaviors and to deliver these public services, and may even experience state failure (Rotberg, 2004) or regime changes (Andersen, Møller, Rørbæk, & Skaaning, 2014). State capacity is independent from the political regime, meaning that both democratic and autocratic states are able to develop and disseminate effective policies, and to manage their implementation (Bäck & Hadenius, 2008; Fukuyama, 2013; Hanson & Sigman, 2013).

We expect that state owners that prioritize business goals in SOEs (i.e., characterized by a right-leaning political ideology) will be even more effective in improving SOE financial performance when state capacity is high. First, state owners in high capacity states with right-leaning ideology may be better able to pursue business objectives in SOEs, because they will meet less resistance from key stakeholders (such as interest groups promoting social and political objectives). High capacity states are more capable of implementing their policy agenda, and consequently are perceived as more legitimate and elicit greater compliance and cooperation from their constituents. Therefore, higher state capacity should translate into greater ability to pursue the business goals that right-leaning governments covet in SOEs, which would improve the financial performance of these firms (Geddes, 1996; Hanson & Sigman, 2013).

Second, state owners in high-capacity states may also be more equipped to implement business objectives in SOEs. High-capacity states have access to skilled and loyal bureaucrats to further their policy goals in SOEs (Berwick & Christia, 2018; Skocpol, 1979). As a result, such states should be better able to monitor SOEs, and ensure that the strategic and innovative behaviors of these firms are aligned with the broader agenda of the state, which in the context of right-leaning governments entails prioritizing the pursuit of business objectives over social objectives in SOEs (Duran et al., 2017). We therefore hypothesize:

**Hypothesis 2.** The moderating effect of right-leaning government ideology on the relationship between state ownership and firm performance strengthens as the country's state capacity increases.

### 2.5. The three-way moderating role of political ideology and political constraint

Political constraint denotes another set of important political institutions, specifically those affecting the policy discretion of political actors (Clegg et al., 2018; Henisz, 2000). Higher levels of political constraint ensure stability in policy-making because the approval and support of multiple political actors is required for policy changes (Garcia-Canal & Guillén, 2008; Holburn & Zelner, 2010; Vaaler & Schrage, 2009). Political constraint often reduces economic uncertainty and provides stability for long-term investments (Holburn & Zelner, 2010; Jiang, Peng, Yang, & Mutlu, 2015; Slangen, 2013). However, political constraint also reduces the ability of the government to address the business and social needs of its various stakeholders. For instance, firms may increasingly invest abroad and remove valuable resources such as employment opportunities from the home country when political constraint at home leads to political stalemates (Witt & Lewin, 2007). Similarly, politically constrained governments may have the will to stop popular but detrimental policies, but often cave when implementing such changes out of fear of playing into the hands of their political opponents (Kanbur & Myles, 1992). The level of political constraint in a country increases with the number of political branches in the government (e.g., two houses in the legislative branch, instead of just one house) and with the number of political parties represented in each branch (the assumption is that the higher the number of parties in a branch, the more difficult it is for a single party to attract majority support in the respective branch for its policies). Political constraint therefore creates a system of checks and balances in policy decision-making; when political constraint is high, a single or a few political actors cannot control decision-making, because they require the support of other political actors.

We expect that political constraint will limit the ability of right-leaning governments to promote business objectives in SOEs, and therefore will weaken the positive effect of right-leaning government ideology on firm performance. First, high levels of political constraint entail political fragmentation, which makes it more difficult for state officials to agree on a policy agenda to meet the evolving financial and strategic needs of SOEs. Political parties will vary in their preferences regarding the role of SOEs in the economy. As a result, in order to avoid political fallout over their interference and influence in SOEs, right-leaning governments may need to accommodate social objectives supported by other political groups and "tone down" their focus on business objectives in SOEs (Lazzarini & Musacchio, 2018). For instance, right-leaning governments may want to implement ideological values such as personal responsibility through management practices such as performance-based compensation contracts in SOEs, but other political actors may use their veto power in a politically constrained political process to attack these pro-business objectives.

Second, even when state officials agree on a policy agenda that emphasizes business objectives in SOEs, high political constraint could still negatively affect the implementation of such an agenda. The political fragmentation entailed by high political constraint could make monitoring SOEs by the state substantially more challenging. On the

one hand, state owners are less accountable to any particularly political party, and may thus be less motivated to engage in high-quality monitoring to begin with. This may allow SOE management to redirect corporate resources of SOEs towards social and political objectives, or even to use them for personal benefit (Ben-Nasr & Cosset, 2014). On the other hand, state owners may experience difficulty even when attempting to provide high-quality oversight. Because the political decision-making process is fragmented, state owners cannot swiftly implement changes when the situation demands it (e.g., replacing a manager who underperformed in regards to business objectives). Therefore, we hypothesize:

**Hypothesis 3.** The moderating effect of right-leaning government ideology on the relationship between state ownership and firm performance weakens as the country's political constraint increases.

## 3. Methods

### 3.1. Literature search and coding

We pursued multiple searches for empirical studies exploring the state ownership – firm performance relationship to provide a comprehensive coverage of the literature. First, we read several review articles (e.g., Grosman et al., 2016; Musacchio et al., 2015) to identify appropriate keywords and to determine our search criteria. Second, we searched two databases, ISI Web of Knowledge and Google Scholar, using the search terms 'government-linked corporation,' 'government-linked company,' 'government ownership,' 'privatization,' 'SOE,' 'state control,' and 'state ownership.' Third, we manually searched for the aforementioned keywords in journals that frequently publish articles related to SOEs in the management, economics, and finance fields. Fourth, we employed a two-way 'snowballing' technique, through which we both backward-traced the cited references and forward-traced the citing articles of a set of influential articles on the focal topic (von Hippel, Franke, & Prügl, 2009). Fifth, we called for unpublished studies through the listservs of both the Academy of Management and the Academy of International Business to reduce concerns about publication bias (Kepes, Banks, McDaniel, & Whetzel, 2012). To be included in the meta-analysis, the retrieved articles must (a) empirically explore the state ownership – firm performance relationship, (b) be written in the English language, and (c) measure state ownership and firm performance either for the same time period or with a time lag for state ownership. We excluded studies with overlapping samples (Wood, 2008), since meta-analytic techniques are sensitive to the assumption of sample independence (Schmidt & Hunter, 2014). We ran a Cook's distance analysis to identify outliers (Viechtbauer & Cheung, 2010). We removed 32 observations from our meta-analytic sample. We finally built a meta-analytic dataset of 193 studies (159 published, 34 unpublished), including 1672 effect sizes (i.e., the partial linear correlation coefficients estimating the state ownership and firm performance relationship) from 131 countries within the 1961–2013 period. The combined sample size consists of 1,831,935 firm observations.

We coded effect sizes, sample size (i.e., number of firm observations), and other variables (such as measurements of state ownership and firm performance, and firm, industry, and governance characteristics) included in our meta-analytic models using a coding protocol (Lipsey & Wilson, 2001). Two authors served as coders. The primary coder coded 193 articles included in the meta-analysis. A second, independent coder coded a random subsample of 502 effect sizes (30 percent of the total number of effect sizes included in the meta-analytic dataset) to evaluate the degree of agreement (inter-rater agreement) in terms of extracting information from primary studies (Stanley et al., 2013). We obtained a high inter-rater agreement of 0.98 (Cohen's k coefficient). Any disagreement in the coding was resolved through consensus (Neville, Byron, Post, & Ward, 2019). The list of studies included in our meta-analysis is available upon request.

### 3.2. Measures

#### 3.2.1. Dependent variable

Our dependent variable *state ownership – firm performance relationship* is the associational strength of the relationship between state ownership and firm performance, as measured by the partial linear correlation coefficient ($r_{xy.z}$) extracted from primary studies (also called the effect size). *State ownership* was operationalized in the primary studies with four mutually exclusive measures: (1) percentage of state ownership (Le & O'Brien, 2010), (2) state full control (Park, Li, & Tse, 2006), (3) state is the largest owner (Thomsen & Pedersen, 2000), and (4) state minority control (Boubakri, Cosset, & Guedhami, 2005). *Firm performance* is a latent construct consisting of four mutually exclusive dimensions (Duran, van Essen, Heugens, Kostova, & Peng, 2019; Miller, Washburn, & Glick, 2013): (1) market-based performance (market-to-book ratio, stock performance, and Tobin's Q), (2) accounting-based performance (EPS, profit, profit margin, ROA, ROE, ROI, ROS, and sales growth), (3) productivity (labor and total factor productivity), and (4) efficiency (technical, operating, and income). We extracted information about state ownership and firm performance from primary papers included in this meta-analysis.

#### 3.2.2. Institutional moderator variables

Our models include three institutional moderator variables: (1) *right-leaning political ideology* is a dummy variable equal to 1 when the economic orientation of the political party of the country's chief executive is center- or right-oriented (i.e., centrist, conservative, Christian democratic, or right-wing political parties) and 0 when it is left-oriented (i.e., communist, socialist, social democratic, or left-wing political parties) for a specific country-year (2015, Cruz, Keefer, & Scartascini, 2016; Ha, 2012; Wang, Feng, Chen, Wen, & Chang, 2019). The ideology of the chief executive is of particular relevance in our context, since in the majority of countries SOEs are under the direct supervision of the exective branch, not other political branches such as the Parliament (usually the Ministry of Finance); (2) *state capacity* is an index composed of 24 indicators that altogether captures the capability (extractive, administrative, and coercive) of state institutions to effectively implement policies (Dorobantu & Müllner, 2019; Guillén & Capron, 2016; Hanson & Sigman, 2013; Williams & Vrabie, 2018); and (3) *political constraint* is an index that measures the extent to which a change in the preferences of a country's institutional actor (the executive or a legislative chamber) may lead to a change in government policy (Henisz, 2000). We gathered the institutional moderators from external sources such as the Database of Political Institutions (DPI) for *political ideologies*, the most widely used database for political ideology due to its high reliability and large cross-country coverage, (Cruz et al., 2016), Hanson and Sigman's (2013) State Capacity Dataset for *state capacity*, and Henisz' (2000) Political Constraint Index (POLCON) set for *political constraint*.

#### 3.2.3. Control variables

Following recent meta-analyses (e.g., Arregle, Duran, Hitt, & van Essen, 2017; Duran, Kammerlander, van Essen, & Zellweger, 2016, 2019), our regression models include several types of control variables. First, we assessed the effect of six study characteristics on the state ownership – firm performance relationship: (a) *published study* to account for the 'file drawer' problem (Rosenthal, 1979); (b) *5-year Web of Science journal impact factor* to assess the effect of journal impact; (c) *median year of sample window* to measure the effect of time; (d) *panel design* to account for research design; (e) *endogeneity check* to evaluate potential endogeneity issues; and (f) *regulated industry* to test industry effects.

Second, we included a set of dummy variables that account for measurement artifacts. We included different types of measurements for state ownership found in the literature including *percentage state ownership*, *state full control*, *state minority control,* and *state is the largest*

*owner* (reference category), and for firm performance including *market-*, *accounting-*, *productivity-*, and *efficiency-based* performance (reference group). We also tested whether firm performance was adjusted for industry or not (reference category) and whether firm performance was logarithmically transformed or not (reference category).

Third, we tested for potential omitted variables by including 15 dummy variables in the MARAs, which captured whether the regression equation from which we retrieved a given effect size controlled for (a) firm (*firm size*, *firm age*, *firm leverage*, *firm growth*, *firm capital intensity*, and *prior firm performance*), (b) industry (*industry competition*), and (c) governance (*ownership ratio largest shareholder*, *board size*, *board independence*, *CEO duality*, *inside ownership*, *institutional ownership*, *foreign ownership*, and *ownership concentration*) characteristics. Each of these control variables was included in at least 60 out of 1672 effect sizes.

Finally, we controlled for four country-level variables that may affect the relative financial performance of SOEs: (a) *government enterprises and investment* (Fraser Institute), (b) *shareholder protection* (Guillén & Capron, 2016), (c) *market capitalization to GDP* (World Bank), and (d) the overall level of affluence in the economy measured as the *GDP per capita* (World Bank). All control variables classified as study, firm, industry, or governance characteristics were extracted from primary papers included in the meta-analysis. Country-level control variables were collected from external sources. Appendix Table A1 describes the variables included in the analysis.

### 3.3. Analytic strategies

#### 3.3.1. HOMA procedure

We compute the meta-analytic mean effect size between state ownership and firm performance using random-effects Hedges and Olkin-type meta-analysis (HOMA) (e.g., Beugelsdijk, Kostova, Kunst, Spadafora, & van Essen, 2018; Hedges & Olkin, 1985). As mentioned, we used partial correlation coefficients ($r_{xy.z}$). Partial correlations assess the relationship between state ownership ($x$) and firm performance ($y$), given a set of $n$ control variables ($z$), such as those related to firm, industry, and governance characteristics mentioned above. $r_{xy.z}$ can be computed from the $t$-statistics and degrees of freedom obtained from primary studies (Stanley & Doucouliagos, 2012). Random-effects HOMA weighs effect sizes by their inverse variance weight $w$ ($w$ is the inverse of their squared error) (Hedges & Olkin, 1985). This technique also uses $w$ to calculate the standard error of the mean effect size and its corresponding confidence interval. Recent meta-analyses in the field of international business have demonstrated the benefits of exploring $r_{xy.z}$ (Cao, Li, Jayaram, Liu, & Lumineau, 2018; Duran et al., 2019). $r_{xy.z}$ can (a) inform the direction of causality between two variables when original regressions correct for endogeneity, (b) provide insights about nonlinearity when primary studies included squared transformations of linear terms in their regression models, and (c) detect omitted variables bias, by assessing whether the exclusion of particular measures in the original studies provoked systematic distortions of $r_{xy.z}$ (Duran et al., 2019; Stanley & Doucouliagos, 2012). When the focal effect size was measured more than once in a primary study, we included all measurements in our dataset, to improve both parameter significance testing and parameter estimation accuracy (Bijmolt & Pieters, 2001).

#### 3.3.2. MARA procedure

We employed meta-analytical regression analysis (MARA) to test our hypotheses. MARA is a weighted least squares-based technique that assesses the association between effect size and moderator variables (Lipsey & Wilson, 2001; for example, see Mutlu, van Essen, Peng, Saleh, & Duran, 2018). MARA allows us to model the variance in the distribution of effect sizes by incorporating in the meta-analytic regression models country-level institutional variables not included in the primary studies (Arregle et al., 2017). We rely on $r_{xy.z}$ to incorporate dummies for $z$-vector content (firm, industry, and governance characteristics). The effect sizes were weighted by their inverse variance weight to account for differences in the precision across them (Aguinis, Gottfredson, & Wright, 2011; Hedges & Olkin, 1985). As mentioned, we included *right-leaning political ideology*, *state capacity*, and *political constraint* as hypothesized institutional moderators. Effect sizes were matched to the temporally closest available institutional variable based on the primary studies' median sample year (Arregle et al., 2017).

Hypothesis 1 examines the moderator role of political ideology of the government on the state ownership – firm performance relationship. To test this hypothesis, we estimated the following model:

(1) $R_i = \alpha + \beta_1 \textit{Right-leaning political ideology} + \beta_m S_i + y_m D_i + \varphi R_I + Z_i\delta + u_i$

Where $R_i$ is the partial correlation between state ownership and firm performance, $S$ is a vector of study characteristics, $D$ is a vector of measurement artifacts, $R$ is the set of firm, industry, and governance characteristics, and $Z$ is a vector of country-level control variables.

Hypotheses 2 and 3 examine interaction effects between political ideology and state capacity, and between political ideology and political constraint on the state ownership – firm performance relationship. To test these effects, we estimated the following models (2) and (3):

(2) $R_i = \alpha + \beta_1 \textit{Right-leaning political ideology} + \beta_2 \textit{State capacity} + \beta_3 \textit{Right-leaning political ideology x State capacity} + \beta_m S_i + y_m D_i + \varphi R_I + Z_i\delta + u_i$

(3) $R_i = \alpha + \beta_1 \textit{Right-leaning political ideology} + \beta_2 \textit{Political constraint} + \beta_3 \textit{Right-leaning political ideology x Political constraint} + \beta_m S_i + y_m D_i + \varphi R_I + Z_i\delta + u_i$

## 4. Results

We report in Table 1 the $r_{xy.z}$-based random-effects HOMA analyses. Additionally, Table 1 reports the standard error of the mean correlation (SE), the 95 percent confidence interval around the meta-analytic mean (CI 95 %), and two indicators to assess whether the results are homogenous, including the Hedges and Olkin (1985) chi-square test for homogeneity ($Q$ test) and the scale-free index of heterogeneity ($I^2$). The $Q$ statistic is "computed by summing the squared deviations of each study's effect estimate from the overall effect estimate, weighting the contribution of each study by its inverse variance" (Huedo-Medina, Sánchez-Meca, Marín-Martínez, & Botella, 2006, p. 194). The $I^2$ index is computed by dividing the difference between the result of the $Q$ test and its degrees of freedom ($k$ – 1) by the $Q$ value itself (Higgins & Thompson, 2002). It ranges from 0 (low heterogeneity) to 1 (high heterogeneity).

The results in Table 1 suggests a modest but significant negative mean association between state ownership and firm performance (mean $r_{xy.z}$ = -0.01, $p <$ .001). However, the effect size distributions are highly heterogeneous ($I^2$ = 0.83) (Higgins & Thompson, 2002), suggesting the presence of moderators (Geyskens, Krishnan, Steenkamp, & Cunha, 2009). Fig. 1 presents a funnel plot of sample size against effect size that graphically illustrates and confirms the variability in the data. Consequently, we explored potential moderators that explain the great variability in the correlations between state ownership and firm performance including measurement-based, method-based, and country effect moderators, as well as the hypothesized institutional effects.

### 4.1. Measurement-based moderators

We include additional HOMA analyses in Table 1 to assess how different measurements of state ownership and firm performance moderate the mean effect size. We find that the overall negative

**Table 1**
Random-Effects HOMA Results.

| Predictor | Partial linear correlation coefficient ($r_{xy.z}$) | | | | | | |
|---|---|---|---|---|---|---|---|
| | *k* | *N* | Mean | SE | CI 95 % | *Q* test | $I^2$ |
| **State ownership – Firm performance** | 1672 | 1,831,935 | **−.01*** ** | .00 | −.01/-.01 | 10,048.03*** | .83 |
| Endogeneity control | 179 | 228,638 | **.02*** | .01 | .00/.04 | 2,108.65*** | .92 |
| *Nonlinear power quadratic* | | | | | | | |
| Linear term | 95 | 58,570 | **−.03**** | .01 | −.05/-.01 | 539.75*** | .83 |
| Quadratic term | 95 | 58,570 | **.05***** | .01 | .03/.07 | 405.43*** | .77 |
| *State ownership measurements* | | | | | | | |
| Percentage state ownership | 721 | 554,118 | −.01 | .00 | −.01/.00 | 3,178.31*** | .77 |
| State full control | 438 | 888,434 | **−.03***** | .00 | −.04/-.02 | 3,337.62*** | .87 |
| State is the largest owner | 384 | 295,857 | −.01 | .01 | −.02/.01 | 2,645.45*** | .86 |
| State minority control | 129 | 93,526 | **.01*** | .00 | .00/.02 | 206.70*** | .38 |
| *Firm performance measurements* | | | | | | | |
| Market | 447 | 247,693 | **.01*** | .00 | .00/.01 | 1,023.14*** | .56 |
| Accounting | 874 | 837,302 | **−.02***** | .00 | −.02/-.01 | 5,173.07*** | .83 |
| Productivity | 206 | 712,736 | **−.02**** | .01 | −.03/-.01 | 2,595.80*** | .92 |
| Efficiency | 145 | 34,204 | −.02 | .01 | −.04/.10 | 667.02*** | .78 |

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < 0.001$.
*Note*: $k$ = number of samples; $N$ = firm observations; SE = the standard error of the mean correlation; CI 95 % = 95 percent confidence interval around the meta-analytic mean; $Q$ test = Hedges and Olkin (1985) chi-square test for homogeneity; $I^2$ = scale-free index of heterogeneity.

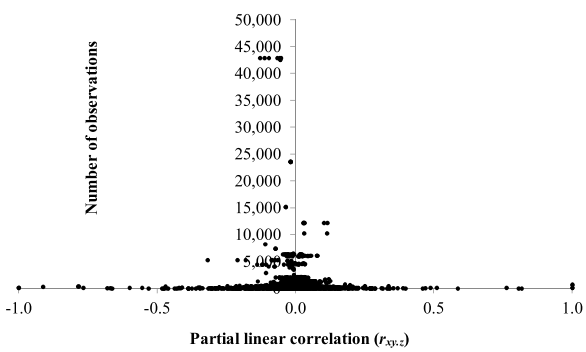


**Fig. 1.** $r_{xy.z}$-Based Funnel Plot of Effect and Sample Sizes.

relationship strengthens (i.e. becomes even more negative) when the state exerts full control over the firm (mean $r_{xy.z}$ = -0.03, $p < .001$). On the contrary, the focal relationship is weakly positive but statistically significant when the state acts as a minority investor (mean $r_{xy.z}$ = 0.01, $p < .05$). These findings are supportive of prior research, which has suggested that minority state ownership offers the benefit of state patronage while keeping the associated costs in check (Inoue et al., 2013; Musacchio et al., 2015). Additionally, the results in Table 1 show that different measurements of firm performance help explain the variability among the effect sizes. We find that the focal relationship is negative when firm performance is measured using accounting- (mean $r_{xy.z}$ = -0.02, $p < .001$) and productivity-based variables (mean $r_{xy.z}$ = -0.02, $p < .01$). However, it becomes positive when performance is captured by market-based measures (mean $r_{xy.z}$ = 0.01, $p < .05$).

### 4.2. Method-based moderators

We check whether the focal relationship is affected by the possible endogeneity of state ownership on firm performance (Inoue et al., 2013). The literature suggests at least two sources of endogeneity. First, at investing, the state can selectively change ownership (Tian & Estrin, 2008) or choose its target firms (Inoue et al., 2013) based on (a) the firm's past and expected performance (Demsetz & Lehn, 1985; Wang, Guthrie, & Xiao, 2012), (b) the strategic advantages the firm could derive from its association with government (Hong, Wang, & Kafouros, 2015), or (c) national security reasons (Ben-Nasr & Cosset, 2014). Second, state ownership resulting from privatization can suffer from multiple sources of selection bias, including the initial privatization of high-performing firms to show that privatization reforms can be successful (Earle & Estrin, 2003; Megginson & Netter, 2001) or, on the contrary, the privatization of poorly performing firms (Claessens & Djankov, 2002). Moreover, the state may allocate privatized firms to specific types of investors (Chen, Firth, & Xu, 2009) or new owners can cherry-pick the most promising firms first (Hanousek, Kočenda, & Svejnar, 2007).

To check for these potential biases, we examined a subsample of 179 effect sizes derived from 28 studies controlling for endogeneity (Churchill & Yew, 2017; Jeong & Harrison, 2017; Ugur, Churchill, & Solomon, 2018). Most of these studies employ two-stages least squares (2SLS) or Arellano-Bond dynamic generalized method-of-moments (GMM) estimation to address endogeneity concerns. Moreover, the instrumental variables used to address endogeneity include *ownership concentration*, *firm's political affiliation*, *SOE loss ratio* (percentage of loss-making SOEs in the industry), *foreign ownership*, *firm risk*, *firm size*, *firm age*, *lagged corporate value*, and *firm leverage*. We find that the SOE-firm performance relationship is positive and significant for the subsample of effect sizes derived from studies controlling for endogeneity (mean $r_{xy.z}$ = 0.02, $p < .05$; see Table 1). Therefore, the focal relationship may be somewhat affected by reverse causality and selection effects. Yet this subsample analysis also reveals some of the qualities of states as corporate owners. We know that state ownership sometimes results from the state having to bail out financially distressed firms. After correcting for these (negative) selection effects, however, the SOE-firm performance relationship is positive and significant, which shows that states can in fact be effective corporate owners that can add value to firms in their own right. Given these findings, we encourage researchers conducting SOE-firm performance studies to correct for endogeneity, since our results show that this may significantly influence the direction and sign of the relationship between state ownership and firm performance (Gupta, 2005).

Additionally, some authors argue for a non-linear relationship between state ownership and firm performance relationship (e.g., Vaaler & Schrage, 2009). Therefore, we also coded effect sizes from primary studies that empirically tested nonlinear models. Results of Table 1 show that, similar to the overall mean effect size, the linear term is significantly negative (mean $r_{xy.z}$ = -0.03, $p < .01$), whereas the squared term is significantly positive (mean $r_{xy.z}$ = 0.05, $p < .001$),

**Table 2**
Random-Effects HOMA Country-Specific Results.

| Predictor: State ownership - Firm performance | | | | Partial linear correlation coefficient ($r_{xy.z}$) | | | |
|---|---|---|---|---|---|---|---|
| Country | *k* | *N* | Mean | SE | CI 95 % | *Q* test (*p*-value) | $I^2$ |
| Argentina | 16 | 5234 | −.00 | .02 | −.04/.03 | 21.31 | .29 |
| Botswana | 12 | 1620 | .03 | .03 | −.02/.08 | 1.81 | .00 |
| Brazil | 14 | 3661 | .02 | .02 | −.02/.05 | 1.54 | .00 |
| Bulgaria | 4 | 376 | **−.53*** ** | .11 | −.75/-.31 | 13.50*** | .79 |
| Canada | 23 | 3538 | **−.15*** | .07 | −.29/-.01 | 301.38*** | .93 |
| China | 567 | 976,794 | **−.01*** ** | .00 | −.02/-.01 | 2,986.61*** | .81 |
| Czech Rep. | 97 | 25,582 | .01 | .03 | −.04/.06 | 1,549.89*** | .94 |
| France | 65 | 9732 | **−.05*** ** | .01 | −.08/-.03 | 80.68† | .21 |
| Hungary | 12 | 1944 | **−.04**† | .02 | −.09/.00 | .313 | .00 |
| India | 37 | 26,290 | **.04** ** | .01 | .02/.07 | 130.49*** | .72 |
| Indonesia | 24 | 17,036 | −.01 | .01 | −.01/.03 | 19.88 | .00 |
| Iran | 9 | 465 | −.02 | .05 | −.11/.07 | 4.68 | .00 |
| Italy | 8 | 1415 | **.08** ** | .03 | .03/.14 | 4.37 | .00 |
| Japan | 8 | 10,896 | −.01 | .01 | −.03/.01 | 2.73 | .00 |
| Jordan | 18 | 2034 | −.02 | .04 | −.10/.06 | 50.66*** | .67 |
| Kenya | 4 | 216 | −.09 | .07 | −.23/.04 | .00 | .00 |
| Malawi | 8 | 120 | −.14 | .09 | −.32/.04 | 1.24 | .99 |
| Malaysia | 26 | 3772 | **.04*** | .02 | .00/.08 | 34.72† | .29 |
| Mongolia | 21 | 2974 | **.11*** ** | .02 | .08/.15 | 9.74 | .00 |
| Montenegro | 9 | 531 | .01 | .04 | −.07/.10 | 4.04 | .00 |
| Nigeria | 2 | 66 | −.01 | .12 | −.25/.23 | .00 | .00 |
| Norway | 4 | 45,255 | **−.05*** ** | .01 | −.07/-.03 | 13.70*** | .79 |
| Peru | 20 | 840 | −.07 | .05 | −.16/.03 | 35.09* | .46 |
| Poland | 11 | 9078 | **−.06*** | .02 | −.10/-.01 | 11.40 (.33) | .09 |
| Romania | 4 | 853 | **−.18*** | .09 | −.35/-.01 | 17.62*** | .83 |
| Russia | 89 | 91,833 | **−.05*** ** | .01 | −.07/-.04 | 282.32*** | .69 |
| Saudi Arabia | 5 | 375 | .03 | .05 | −.08/.13 | .62 (.96) | .00 |
| Singapore | 26 | 2208 | .00 | .02 | −.04/.05 | 3.71 (1.00) | .00 |
| South Korea | 2 | 694 | .00 | .04 | −.07/.08 | .17 (.68) | .00 |
| Spain | 9 | 7905 | −.02 | .01 | −.04/.01 | 5.36 (.72) | .00 |
| Taiwan | 15 | 10,026 | **−.06*** ** | .01 | −.08/-.04 | 4.63 (.99) | .00 |
| Tanzania | 4 | 140 | **−.17**† | .09 | −.33/.00 | .00 (1.00) | .00 |
| Turkey | 8 | 584 | .14 | .33 | −.51/.79 | 433.24*** | .98 |
| U.K. | 10 | 990 | **.27*** ** | .04 | .20/.34 | 11.04 (.27) | .18 |
| Ukraine | 35 | 12,064 | −.02 | .02 | −.06/.01 | 134.22*** | .75 |
| Vietnam | 82 | 57,222 | **−.01*** | .00 | −.02/-.00 | 87.69 (.29) | .08 |
| (Mixed)[a] | 364 | 497,572 | −.00 | .01 | −.01/.01 | 2,673.02*** | .86 |

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < 0.001$.
*Note*: $k$ = number of samples; $N$ = firm observations; SE = the standard error of the mean correlation; CI 95 % = 95 percent confidence interval around the meta-analytic mean; $Q$ test = Hedges and Olkin (1985) chi-square test for homogeneity; $I^2$ = scale-free index of heterogeneity. State ownership includes: percentage of state ownership, state full control, state is the largest owner, and state minority control. Firm performance includes: market performance, accounting performance, productivity, and efficiency.

[a] Countries covered by studies with a mixed-sample design include: Albania, Algeria, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belarus, Belgium, Belize, Bolivia, Bosnia-Herzegovina, Botswana, Brazil, Bulgaria, Cameroon, Canada, Chile, China Colombia, Costa Rica, Cote d'Ivoire, Croatia, Cyprus, Czech Rep., Denmark, Dominican Rep., Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Gabon, Georgia, Germany, Ghana, Greece, Guatemala, Haiti, Honduras, Hong Kong, Hungary, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kosovo, Kuwait, Kyrgyzstan, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Macau, Macedonia, Madagascar, Malawi, Malaysia, Mauritania, Mexico, Moldova, Mongolia, Montenegro, Morocco, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Oman, Pakistan, Panama, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Saudi Arabia, Scandinavia, Senegal, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Syria, Taiwan, Tajikistan, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, U.A.E., U. K., Ukraine, Uruguay, U.S.A., Uzbekistan, Venezuela, Vietnam, West Bank-Gaza, Yemen, Zambia, and Zimbabwe.

thus indeed suggesting a non-monotonic relationship, with the caveat that the underlying number of effect sizes is small.

### 4.3. Country effect moderators

We also examine how the effect of state ownership on firm performance varies across countries. Therefore, we coded for the country that the data of the primary study come from. Table 2 shows random-effects HOMA country-specific meta-analytic results. The results include information for 36 countries individually, and for 129 countries grouped as 'mixed', based on the information collected from primary studies. In total, we obtained data for 131 countries, because all except two countries for which we managed to compute a country specific effect were also included in one or several mixed samples. We find that the focal relationship is significantly positive in India, Italy, Malaysia, Mongolia, and the U.K. However, the focal relationship is negatively significant in Bulgaria, Canada, China, France, Hungary, Norway, Poland, Romania, Russia, Taiwan, Tanzania, and Vietnam. Finally, the focal relationship is insignificant in Argentina, Botswana, Brazil, Czech Republic, Indonesia, Iran, Japan, Jordan, Kenya, Malawi, Montenegro, Nigeria, Peru, Saudi Arabia, Singapore, South Korea, Spain, Turkey, and Ukraine. The high variability of the mean effect size across countries suggests that the use of country-level meta-analytic moderator analyses is appropriate, as suggested in our hypotheses.

**Table 3**
Random-Effects MARA Results[a].

| Variable | Dependent variable: State ownership – firm performance relationship | | | | |
|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| **Institutional moderators** | | | | | |
| Right-leaning political ideology (H1) | | **.02 (.01)*** | .01 (.01) | **.07 (.01)***** | **.06 (.01)***** |
| State capacity | | | −.03 (.01)* | | −.03 (.01)* |
| Political constraint | | | | .09 (.02)*** | .09 (.02)*** |
| Right-leaning political ideology x State capacity (H2) | | | .00 (.01) | | .02 (.01) |
| Right-leaning political ideology x Political constraint (H3) | | | | **−.13 (.02)***** | **−.13 (.02)***** |
| **Study characteristics** | | | | | |
| Published study | −.01 (.01) | −.01 (.01) | −.00 (.01) | −.00 (.01) | .00 (.01) |
| 5-year Web of Science impact factor | .00 (.00)** | .00 (.00)*** | .00 (.00)*** | .00 (.00)* | .00 (.00)* |
| Median year of sample window | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** |
| Panel design | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** |
| Endogeneity check | .05 (.01)*** | .05 (.01)*** | .05 (.01)*** | .05 (.01)*** | .05 (.01)*** |
| Regulated industry[b] | −.03 (.01)* | −.03 (.01)* | −.03 (.01)** | −.02 (.01)* | −.03 (.01)* |
| **Measurements of state ownership** | | | | | |
| Percentage state ownership | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)** | .02 (.01)** |
| State full control | .00 (.01) | .00 (.01) | .01 (.01) | .00 (.01) | .00 (.01) |
| State minority control | .04 (.01)*** | .04 (.01)*** | .04 (.01)*** | .03 (.01)*** | .03 (.01)*** |
| **Measurements of firm performance** | | | | | |
| Market | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| Accounting | −.00 (.01) | −.00 (.01) | −.00 (.01) | −.01 (.01) | −.01 (.01) |
| Productivity | −.00 (.01) | −.01 (.01) | −.01 (.01) | −.01 (.01) | −.02 (.01) |
| Adjusted for industry | .03 (.01)** | .03 (.01)** | .04 (.01)** | .04 (.01)*** | .04 (.01)*** |
| Logarithmically transformed | −.02 (.01)† | −.01 (.01) | −.02 (.01) | −.02 (.01) | −.03 (.01)* |
| **Firm characteristics**[c] | | | | | |
| Firm size | −.00 (.01) | −.01 (.01) | −.01 (.01) | −.01 (.01) | −.01 (.01) |
| Firm age | −.02 (.01)** | −.01 (.01)* | −.01 (.01)* | −.02 (.01)** | −.02 (.01)** |
| Firm leverage | −.01 (.01) | −.00 (.01) | −.00 (.01) | −.01 (.01) | −.01 (.01) |
| Firm growth | −.04 (.01)*** | −.04 (.01)*** | −.04 (.01)*** | −.04 (.01)*** | −.04 (.01)*** |
| Firm capital intensity | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| Prior firm performance | −.01 (.01)† | −.01 (.01) | −.01 (.01) | −.00 (.01) | −.00 (.01) |
| **Industry characteristics**[c] | | | | | |
| Industry competition | −.04 (.01)*** | −.04 (.01)*** | −.04 (.01)*** | −.03 (.01)** | −.03 (.01)** |
| **Governance characteristics**[c] | | | | | |
| Ownership ratio largest shareholder | −.03 (.01)** | −.03 (.01)** | −.03 (.01)** | −.02 (.01)† | −.02 (.01)† |
| Board size | .02 (.01) | .01 (.01) | .02 (.01) | .01 (.01) | .01 (.01) |
| Board independence | −.04 (.01)** | −.03 (.01)** | −.03 (.01)* | −.03 (.01)* | −.03 (.01)* |
| CEO duality | −.00 (.01) | −.00 (.01) | −.01 (.01) | .00 (.01) | −.00 (.01) |
| Inside ownership | −.01 (.01) | −.01 (.01) | −.01 (.01) | −.01 (.01) | −.01 (.01) |
| Institutional ownership | .00 (.01) | .00 (.01) | .00 (.01) | −.00 (.01) | −.00 (.01) |
| Foreign ownership | −.02 (.01)*** | −.02 (.01)*** | −.02 (.01)*** | −.02 (.01)*** | −.02 (.01)*** |
| Ownership concentration | .01 (.01)* | .02 (.01)* | .01 (.01)* | .02 (.01)** | .02 (.01)** |
| **Country-level control variables** | | | | | |
| Government enterprises and investment | −.00 (.00)* | −.00 (.00)*** | −.00 (.00) | .00 (.00) | .00 (.00) |
| Shareholder protection | −.01 (.00)*** | −.01 (.00)** | −.01 (.00)** | −.00 (.00) | −.00 (.00)† |
| Market capitalization to GDP | .00 (.00)* | .00 (.00)* | .00 (.00)* | .00 (.00)* | .00 (.00)* |
| LN GDP per capita | −.00 (.00) | −.01 (.00)† | .00 (.00) | −.01 (.00)* | −.00 (.00) |
| Constant | −6.11 (1.11)*** | −6.36 (1.12)*** | −5.81 (1.18)*** | −6.62 (1.20)*** | −6.69 (1.23)*** |
| R-square | .09 | .09 | .09 | .10 | .10 |
| *k* | 1672 | 1672 | 1672 | 1672 | 1672 |
| $Q_{model}(p)$ | 251.09*** | 256.94*** | 265.94*** | 297.65*** | 307.00*** |
| $Q_{residual}(p)$ | 2,678.07*** | 2,673.09*** | 2,679.83*** | 2,639.44*** | 2,653.82*** |
| v | .003 | .003 | .003 | .003 | .003 |

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < 0.001$.

[a] Unstandardized regression coefficients are presented with standard errors in parentheses. *k* is the number of samples; *Q* is the homogeneity statistic with its probability in parentheses; *v* is the random effects variance component.

[b] Regulated industries include utilities, telecommunications, transportation, energy, banking, oil, and insurance (Grier, Munger, & Roberts, 1994; Hadani & Schuler, 2013; Werner, 2017).

[c] Variables included in at least 60 (5%) samples. See Appendix Table A1 for variable definitions.

### 4.4. Hypothesis testing

Table 3 presents the MARA results for Hypotheses 1–3. Model 1 reports the results for the control variables. Models 2–4 enter our hypothesized moderator variables (and their interactions) stepwise. Model 5 is the full model. Model 2 shows that *right-leaning political ideology* positively moderates the state ownership – firm performance relationship ($\beta = 0.02$, $p < .05$), thus confirming Hypothesis 1. Therefore, when the ruling party represents a right-leaning ideology, the negative effect of state ownership on firm performance weakens. Model 3 shows that the interaction between *right-leaning political ideology* and *state capacity* is insignificant ($\beta = 0.00$, ns). These results reject the prediction of a potential complementary role of state capacity and political ideology in improving SOE financial performance entailed

by Hypothesis 2. The results in Model 4 demonstrate a negative and significant coefficient for the interaction between *right-leaning political ideology* and *political constraint* on the state ownership – firm performance relationship ($\beta$ = -0.13, $p <$ .001), therefore confirming Hypothesis 3. Thus, there is evidence that high levels of political constraint create obstacles for right-leaning governments to channel SOEs' resources towards financial objectives. Finally, the results presented in Model 5 confirm the predictions captured in Hypotheses 1 and 3.

### 4.5. Control variables

We proceed to discuss the results for control variables based on the full model (Model 5 of Table 3). In terms of methodological moderators, we note a positive and significant effect for primary studies using panel data research designs and for studies published in journals with higher impact factors. Additionally, we find that the focal relationship is becoming less negative over the years, given the significantly positive coefficient for the median year of sampling window variable. We explore this longitudinal dimension more systematically in the additional analyses section below.

In terms of more substantive industry effects, we find that the regulated industry variable, which captures whether an effect size was drawn from a sample that exclusively contains firms operating in regulated industries, negatively moderates the focal relationship. State ownership is therefore more detrimental to firm performance in regulated industries such as transportation, utilities or energy. This finding aligns with the state capitalism literature, which argues that states seek to maintain ownership of firms in regulated industries not to secure profits, but to ensure the delivery of essential services to their citizens. Furthermore, industry competition, which is a dummy variable capturing whether an effect was drawn from a primary study that controls for industry competition, negatively moderates the focal relationship. Our findings thus highlight the importance of accounting for industry characteristics (i.e., competition level, degree of regulation/deregulation, et cetera) in future SOE studies.

We also include several controls accounting for measurement artifacts in the measurement of state ownership and firm performance. We find a positive moderating effect when state ownership is measured with a dummy variable indicating that the state is a minority owner. This suggests that the negative effect of state ownership on firm performance is largely driven by cases in which the state is a dominant owner, and thus has more leeway to make the SOE pursue social objectives. Also, we found that the dummy variable that captures whether the firm performance measure was adjusted for industry positively moderates the focal relationship, which suggests that state ownership tends to be concentrated in competitive industries and in industries with poor performance track records. Moreover, when the firm performance measure was logarithmically transformed, the state ownership – firm performance relationship was negatively moderated, indicating that the measurement of the focal effect is somewhat sensitive to outliers. In terms of *z*-vector content, Model 5 of Table 3 shows that firm age, firm growth, ownership ratio largest shareholder, board independence and foreign ownership all negatively moderate the focal relationship, whereas ownership concentration positively moderates the focal relationship. It is therefore desirable to include all of these variables as controls in future primary studies on the state ownership – firm performance relationship, in order to rule out potential omitted variable bias.

At the country-level, we note that the negative relationship between state ownership and firm performance becomes weaker when countries exhibit more development of the stock market but stronger in higher shareholder protection countries. The results suggest that the financial performance of SOEs is sensitive to market-supporting institutions (Mutlu et al., 2018).

### 4.6. Additional analyses

We performed several additional analyses to further contextualize and nuance our findings. First, we tested an alternative measure of political ideology (see Berdiev et al., 2012; Wang et al., 2019). *Right-leaning Ideology2* is measured by multiplying the ideology of the ruling party by the percentage of seats this party holds in the legislature (Parliament), or in the lower house in the case of a bicameral legislative system. A right-leaning ruling party that also enjoys large representation in Parliament will arguably be better able to implement its political agenda. We ran the same analyses as those reported in Table 3, but now using the right-leaning ideology2 measure instead of the original right-leaning ideology measure. The results remain largely consistent. Specifically, the effect of right-leaning ideology2 is positive and significant in Models 2, 3 and 4, and positive but insignificant in Model 1. Thus, these new results confirm Hypothesis 1. Our findings also confirm Hypothesis 3, as right-leaning ideology2 * political constraint has a negative significant coefficient in Models 3 and 4. As in our original analyses, Hypothesis 2 was rejected in these additional analyses (see Appendix Table A2).

Second, in order to capture longer-term and more globally systemic developments in terms of prevailing political ideologies, we split our meta-analytic dataset into three political eras: (a) State dirigisme (1973 – 1988), (b) Neoliberalism (1989 – 2007), and (c) Neo-statism (2008-present). *State dirigisme* captures the era from the 1973 oil crisis up to the fall of the Berlin wall in 1989; an era in which many states sought greater control over the economy by backing national champions and by engaging in what has been labeled 'new protectionism': raising tariffs and taking measures against trade liberalization (Horstmann and Markusen, 1986). *Neoliberalism* captures the era between 1989 and 2007, in which privatization and trade liberalization were clearly on the ascent, and in which many states transformed their economic systems from state socialism to market capitalism (Jessop, 2002). *Neo-statism* captures the current era, starting with the global financial crisis of 2008, in which states increasingly regained control over the corporate sector and renationalized ailing firms (Cuervo-Cazurra, Inkpen, Musacchio, & Ramaswamy, 2014). Overall, our contention that a right-leaning political ideology weakens the negative effect of state ownership on firm performance receives the strongest support in the Neo-statism era (see Appendix Table A3). These results are intuitive, in that the heightened level of state involvement in the economy in this era is likely to aggravate the effects of political ideology on the strategy and performance of SOEs.

Third, we investigated the effects of potential endogeneity issues in our analyses. In part, we mitigated potential reverse causality issues by including in our meta-analytic sample only effect sizes using either lagged or same-year measures of state ownership in relation to firm performance measurements (e.g., Oxelheim & Randøy, 2005; Post & Byron, 2015). In addition, we included the control variable *endogeneity check* in the meta-analytic regression models reported in Table 3 (Karna, Richter, & Riesenkampff, 2016). This dummy takes the value of 1 if the focal effect size was derived from a study correcting for potential endogeneity (e.g., using instrumental variables or two-stage

least squares regression) and 0 otherwise. This approach has been widely used before in meta-analyses in the management field (e.g., Duran et al., 2016, 2019; Marano, Arregle, Hitt, Spadafora, & van Essen, 2016; Schwens et al., 2018). Models 1–5 of Table 3 confirm that controlling for endogeneity positively affects the focal relationship. We checked the robustness of the results reported in Table 3 after excluding the 179 effect sizes correcting for endogeneity. The results remain consistent across all models (see Appendix Table A4).

Finally, we broke down the HOMA results reported in Table 1 concerning the subsample of 179 partial linear correlation coefficients that were derived from studies controlling for endogeneity by political eras. We find a positive and significant mean relationship between state ownership and firm performance in the *Neoliberal political* era when controlling for endogeneity ($r_{xy.z} = 0.02$; $p < .05$; k = 176; see Appendix Table A5). The results could be driven by state owners working more effectively with private investors in different ownership arrangements such as partial/minority ownership. We also find that the focal relationship becomes insignificant in the *Neo-statistism* era, with the caveat that only three out of the 223 effect sizes from this political era indeed controlled for endogeneity. Finally, no effect sizes controlled for endogeneity in the *State dirigisme* political era. Overall, the results suggest that future primary studies must take corrective measures against endogeneity concerns.

## 5. Discussion

### 5.1. Theoretical contributions

The first contribution we make is to the state capitalism literature (Boardman & Vining, 1989; Lin, Cai, & Li, 1998; Okhmatovskiy, Suhomlinova, & Tihanyi, 2018). In recent years, scholars in this area have begun to unpack the effect of state ownership on firm performance. Most scholars interested in exploring this relationship have focused on internal contingencies, mostly ownership-based factors (Boardman & Vining, 1989; Bruton et al., 2015; Grosman et al., 2016; Inoue et al., 2013). Aligned with Inoue et al. (2013), we also find that the harmful effect of state ownership appears to be strongest at high levels of state ownership. Minority state ownership seems to benefit firm performance, suggesting that low levels of state ownership may provide firms with benefits such as preferential access to resources and networks and increased legitimacy, while keeping the agency costs that are typically associated with state ownership at bay. The harmul effect of state ownership on firm performance also seems to decrease over time, suggesting that SOEs are becoming more business-oriented over time and better able to compete head-to-head with private firms. Increasingly, however, state capitalism scholars are also acknowledging the external contingency influence of institutions (Bruton et al., 2015; Clegg et al., 2018; Estrin et al., 2016; Musacchio et al., 2015). In this paper, we contribute to this latter effort by offering novel explanations for the observed variability in SOE financial performance. We show that the political ideology of the government influences the state ownership – firm performance relationship, and that this effect is further affected by the embeddedness of the SOE in political institutions capturing state capacity and political constraint. Moving forward, SOE scholarship thus needs to consider the political environment in which SOEs operate more explicitly. Past research in political science has long argued that political institutions are a key determinant to economic and social prosperity (Acemoglu & Robinson, 2012; Acemoglu et al., 2016). It is time for similar arguments to be introduced into our discourse on SOE performance.

Second, we contribute to the institution-based view (IBV) by showing *how* political ideology shapes the relationship between state ownership and firm performance (Peng et al., 2008). Specifically, we argue and show that political ideology and political institutions form interdependent institutional arrangements that highlight the dual function of the state. On the one hand, states establish the political institutions that set the political "rules of the game" for all firms in the nation state. On the other hand, state owners are affected by the very same political institutions they help create and sustain. Our study shows that political institutions are an important yet often overlooked factor in how government ideologies shape firm performance.

In line with current best practice recommendations (Aguilera & Grøgaard, 2019), we show that understanding the effect of one type of institution (political ideology) is dependent on other types of institutions (i.e., state capacity and political constraint). Especially the three-way moderation effect of political ideology and political constraint is revealing. Low levels of political constraint further reduce the already negative relationship between ownership by states with left-leaning executive branches of government and firm financial performance, whereas high levels of political constraint improve the financial performance of firms with left-leaning ownership influences. A stronger separation of political powers thus makes it more difficult for left-leaning governments to divert SOE resources to social and political goals. The opposite is true for firms owned by states with right-leaning executive branches. Here, low levels of political constraint lead to even stronger performance, whereas high levels of constraint weaken the focal relationship. It appears that while right-leaning governments seek to prioritize business objectives, the political fragmentation entailed by high political constraint pushes these governments to "compromise" with other political factions, which results in the "blending" of business and social objectives.

We did not find conclusive evidence for the three-way moderation involving political ideology and state capacity, which suggests that state capacity may trigger conflicting behaviors in SOEs. On the one hand (aligned with our Hypothesis 2), high state capacity should have conferred right-leaning governments additional power to steer SOEs towards business objectives, and consequently improve firm performance. On the other hand, high state capacity also suggests that the state apparatus established itself as legitimate and powerful authority that is rarely questioned by political actors such as voters or private parties such as other shareholders in SOEs. Under such conditions, it may be tempting for parties of *any* ideological orientation to pursue political objectives in SOEs at the expense of firm performance. This may be because the authority and ability of the state to govern SOEs may not be questioned, thus lowering the motivation to pursue business objectives in SOEs. Some research supports this latter view. Guillén and Capron (2016) found that strong states withstand normative pressures to follow business-friendly practices such as protecting shareholder rights. Similarly, Heugens, Sauerwald, Turturea, and van Essen, (2019) found that state owners treat minority shareholders better than other owners in term of extracting less private benefits of control, but this effect is weakened in countries that are high on state capacity.

### 5.2. Future research

A first point of departure for future research is our finding that the political ideology of the executive branch of government is an important contingency variable determining the financial performance of

SOEs across the globe. However, by extension we also believe that political ideology is bound to influence other facets of the strategic behavior of SOEs, perhaps in ways similar to how political ideology has been found to affect the strategic behavior of other types of companies, such as the internationalization of family firms (Duran et al., 2017). We encourage researchers to reflect on other aspects of SOE strategy that may be influenced by political ideology.

Second, we highlight the importance of political constraint in shaping the way states intervene in the economy. While prior research often emphasized the relevance of this political institution in influencing the behavior of foreign companies (Garcia-Canal & Guillén, 2008; Jiang et al., 2015), our study brought empirical support to the contention that political constraint interacts in interesting ways with political ideology. Specifically, right-leaning state owners seem to be constrained by the checks-and-balances of the political system, even when attempting to push for business objectives in SOEs. Left leaning owners are restricted in their ability to push for social objectives in SOEs by the same checks-and-balances of the political system, which actually benefits the performance of these SOEs. Future research may examine the tradeoffs between political authority (i.e., low political constraint) and political checks-and-balances (i.e., high political constraint) in similar ways that strategic management research has examined the "double-edged" sword that comes with powerful CEOs (Finkelstein & D'Aveni, 1994).

Third, we have presented findings and arguments on the effects of political ideology on the performance of SOEs, which have the potential to advance SOE research in international business. However, we have restricted ourselves to an analysis of the financial performance implications of owner ideology, and we have made no attempts to qualify the management and governance choices made by governments for ideological reasons. Previous studies suggest that this might nonetheless be desirable, since a right-leaning (or conservative) ideology may lead to problematic governance outcomes such as higher CEO pay (Gupta & Wowak, 2017), higher gender pay gap (Briscoe & Joshi, 2017), higher litigation risks related to civil, labor, and environmental issues (Hutton et al., 2015), and lower investments in social causes (Chin et al., 2013). All of these issues may trigger distinct political problems for societies and ultimately the government in power.

Fourth, research on the ideology of SOEs may benefit from considering recent political waves such as populist politicians and parties as these trends may change the economic orientation of established political parties. Populist movements often emerge out of dissatisfaction of social groups (e.g., blue collar workers in the U.S. Midwest). As such, populist movements may influence the "social objectives" of political parties. For instance, President Trump's "Buy American and Hire American" policy could be viewed as promoting "social objectives" at the expense of business objectives (e.g., open trade and globalization), which are a core business value of conservative parties such as the Republican Party. As we have shown in this paper, social objectives that deviate from the business interests of SOEs may reduce firm performance. However, while many high profile populist movements in countries such as the US and Brazil are associated with conservative (right-leaning) ideologies, future research may also examine populist movements from the left. Populist political strategies have also been applied by left-leaning administrations, such as the Franklin D. Roosevelt U.S. administration during the Great Depression in the 1930s (Rodrik, 2018).

Lastly, our meta-analysis reveals that few studies have addressed potential endogeneity bias and model specification error when studying the SOE-firm performance relationship. This is important because our results show that the focal relationship may be subject to endogeneity and omitted variable bias. Therefore, we encourage scholars to deal with these biases by using multiple econometric approaches to address endogeneity and by including key control variables in multivariate regressions to mitigate omitted variable bias (Roberts & Whited, 2013). Since current research offers no clear consensus regarding the most appropriate empirical approach to address endogeneity (Reeb, Sakakibara, & Mahmood, 2012) and to identify valid instruments (Semadeni, Withers, & Trevis Certo, 2014), we second Wolfold and Siegel (2019)'s recommendations to employ multiple techniques. For example, Boubakri, El Ghoul, Guedhami, and Megginson, (2018) address endogeneity using multiple approaches, including omitted correlated variables analysis, instrumental variable estimation, propensity score matching, and Heckman sample selection. Furthermore, the results of Table 3 help researchers in making informed choices concerning the control variables they need to select in order to reduce omitted variable bias in future studies. The minimum efficient vector of control variables should at least include firm age, firm growth, industry competition, the ownership percentage of the largest shareholder, board independence, foreign ownership, and ownership concentration. All these variables significantly moderate the SOE– firm performance relationship across all models.

## 6. Conclusion

In the present study, we have developed novel arguments on how political ideology and political institutions shape the objectives states pursue in SOEs, and their ability to implement such objectives, in ways that ultimately affect the financial performance of these firms. Our meta-analytic study, which aggregates results from 193 primary studies on SOEs situated in 131 countries, found a small negative effect of state ownership on firm financial performance, and high heterogeneity across countries in the size and direction of this effect. We found strong evidence that the prevailing political ideology as well as the extant political institutions in a country strongly influence both the willingness and the ability of state owners to pursue business and social goals. More specifically, SOEs show stronger performance in contexts typified by right-leaning governments than in contexts characterized by left-leaning governments. In addition, SOEs exhibit even better performance when the right-leaning ideology of the government is accompanied by a low level of political constraint. These findings have important implications. First, the behavior of SOEs cannot be fully understood without grasping the political institutional context in which these firms are embedded. Second, political institutions do not operate in isolation, and can either complement or undermine one another in fostering SOEs that can compete head-to-head with private companies in domestic or foreign markets.

## Appendix A

**Table A1**
Study-Level and Country-Level Variables Included in the Meta-Analysis.

| Variable | Description | Sources |
|---|---|---|
| State ownership – firm performance relationship | The associational strength (i.e., the effect size) of the relationship between state ownership and firm financial performance measured by the partial linear correlation coefficient ($r_{xy.z}$). State ownership includes four measurements: (1) percentage of state ownership, (2) state full control, (3) state is the largest owner, and (4) state minority control. Firm performance is a latent construct consisting of four dimensions: (1) market-based performance (market-to-book ratio, stock performance, and Tobin's Q), (2) accounting performance (EPS, profit, profit margin, ROA, ROE, ROI, ROS, and sales growth), (3) productivity (labor and total factor productivity), and (4) efficiency (technical, operating, and income). | Primary studies |
| ***Institutional moderators*** | | |
| Right-leaning political ideology | Dummy variable equal to 1 when the economic orientation of the political party of the country's chief executive is center- or right-oriented and 0 when it is left-oriented for a specific country-year. Right-leaning parties are defined as conservative, Christian democratic, or right-wing. Center-leaning parties are defined as centrist. Left-leaning parties are defined as communist, socialist, social democratic, or left-wing. | Database of Political Institutions (DPI) (Cruz et al., 2016) |
| State capacity | An index composed by 24 indicators that altogether captures the capability (extractive, administrative, and coercive) of state institutions to effectively implement policies. The indicators include: administration and civil service count, administrative efficiency, anocracy, bureaucratic quality, census frequency, civil service confidence, contract-intensive money, effective implementation of government decisions, efficiency of revenue mobilization, fractal borders, military personnel, military spending, monopoly of the use of force, mountainous terrain, political terror scale, quality of budgetary and financial management, quality of public administration, relative political capacity, statistical capacity, tax evasion, taxes on income, taxes on international trade, total tax revenue, and index of Weberianness. | Hanson and Sigman (2013)'s State Capacity Dataset |
| Political constraint | A continuous variable that measures the extent to which a change in the preferences of a country's institutional actor (the executive or a legislative chamber) may lead to a change in government policy. It ranges from 0 (political discretion) to 1 (political constraint). | Henisz (2000)'s Political Constraint Index (POLCON) |
| Right-leaning political ideology2 | Right-leaning political ideology multiplied by the proportion of seats of the ruling party in the legislature, or in the case of bicameral legislatures, the seats in the lower house. This variable captures the possibility of a ruling party to make to make decisions (Wang et al., 2019). | Database of Political Institutions (DPI) (Cruz et al., 2016) |
| ***Study characteristics*** | | |
| Published study | Dummy variable equal to 1 if the study was published in a journal and 0 otherwise. | Primary studies |
| 5-year Web of Science impact factor | 5-year Web of Science impact factor for journal in which the study was published. | Primary studies |
| Median year of sample window | The median year of study sample window. | Primary studies |
| Panel design | Dummy equal to 1 if the research design employed in the study was longitudinal/panel and 0 cross-sectional. | Primary studies |
| Endogeneity check | Dummy equal to 1 if the effect size is estimated while controlling for potential endogeneity (e.g., instrumental variables, two-stage least squares regressions) and 0 otherwise. | Primary studies |
| Regulated industry | Dummy variable equal to 1 if the primary study's sample was solely based on any regulated industry including utilities, telecommunications, transportation, energy, banking, oil, and insurance (Grier et al., 1994; Hadani & Schuler, 2013; Werner, 2017) and 0 otherwise. | Primary studies |
| ***Firm characteristics*** | | |
| Firm size | Dummy equal to 1 if the effect size is estimated while controlling for firm size and 0 otherwise. | Primary studies |
| Firm age | Dummy equal to 1 if the effect size is estimated while controlling for firm age and 0 otherwise. | Primary studies |
| Firm leverage | Dummy equal to 1 if the effect size is estimated while controlling for firm leverage and 0 otherwise. | Primary studies |
| Firm growth | Dummy equal to 1 if the effect size is estimated while controlling for firm growth and 0 otherwise. | Primary studies |
| Firm capital intensity | Dummy equal to 1 if the effect size is estimated while controlling for firm capital intensity and 0 otherwise. | Primary studies |
| Prior firm performance | Dummy equal to 1 if the effect size is estimated while controlling for firm prior performance and 0 otherwise. | Primary studies |
| ***Industry characteristics*** | | |
| Industry competition | Dummy equal to 1 if the effect size is estimated while controlling for the level of industry competition of the primary study's sample and 0 otherwise. | Primary studies |
| ***Governance characteristics*** | | |
| Ownership ratio largest shareholder | Dummy equal to 1 if the effect size is estimated while controlling for the ownership ratio of the largest shareholder and 0 otherwise. | Primary studies |
| Board size | Dummy equal to 1 if the effect size is estimated while controlling for board size and 0 otherwise. | Primary studies |
| Board independence | Dummy equal to 1 if the effect size is estimated while controlling for board independence and 0 otherwise. | Primary studies |
| CEO duality | Dummy equal to 1 if the effect size is estimated while controlling for CEO duality and 0 otherwise. | Primary studies |
| Inside ownership | Dummy equal to 1 if the effect size is estimated while controlling for the level of ownership of firm insiders and 0 otherwise. | Primary studies |
| Institutional ownership | Dummy equal to 1 if the effect size is estimated while controlling for institutional ownership and 0 otherwise. | Primary studies |
| Foreign ownership | Dummy equal to 1 if the effect size is estimated while controlling for foreign ownership and 0 otherwise. | Primary studies |
| Ownership concentration | Dummy equal to 1 if the effect size is estimated while controlling for the level of ownership concentration and 0 otherwise. | Primary studies |
| ***Country characteristics*** | | |
| Government enterprises and investment | The extent to which countries use government enterprises rather than private enterprises to produce goods and services. The measure is based on the number, composition, and share of output supplied by SOEs and government investment as a share of total investment. | Fraser Institute |
| Shareholder protection | The level of protection of minority shareholders against the actions of large shareholders and/or management and in the event of a change in corporate control in a country. The measure includes legal provisions such as power of the general meeting for the facto changes, agenda-setting power, anticipation of shareholder decision facilitated, prohibition of multiple voting rights, independent board members, feasibility of directors' dismissal, private enforcement of directors' duties (derivative suit), shareholder action against resolutions of the general meeting, mandatory bid, and disclosure of major share ownership. It ranges from 0 (low protection) to 10 (high protection). | Guillén and Capron (2016) |
| Market capitalization to GDP | Market capitalization of listed domestic companies as percentage of the country's GDP. Market capitalization is calculated as the share prices times the number of shares outstanding for listed domestic companies in a country. | WorldBank |
| LN GDP per capita | Natural logarithm of the country's gross domestic product (current US$) divided by midyear population. | WorldBank |

**Table A2**
Random-Effects MARA Results[a].

| Variable | Dependent variable: State ownership – firm performance relationship | | | |
|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 4 |
| **Institutional moderators** | | | | |
| Right-leaning political ideology2 | .01 (.01) | **.04 (.02)*** | **.09 (.02)***** | **.09 (.02)***** |
| State capacity | | −.01 (.01) | | −.00 (.01) |
| Political constraint | | | .10 (.02)*** | .10 (.02)*** |
| Right-leaning political ideology2 x State capacity | | **−.05 (.02)*** | | −.02 (.02) |
| Right-leaning political ideology2 x Political constraint | | | **−.24 (.03)***** | **−.21 (.04)***** |
| **Study characteristics** | | | | |
| Published study | −.01 (.01) | −.00 (.01) | −.00 (.01) | .00 (.01) |
| 5-year Web of Science impact factor | .00 (.00)*** | .00 (.00)** | .00 (.00) | .00 (.00) |
| Median year of sample window | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** |
| Panel design | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** |
| Endogeneity check | .05 (.01)*** | .05 (.01)*** | .04 (.01)*** | .04 (.01)*** |
| Regulated industry[b] | −.03 (.01)* | −.03 (.01)** | −.02 (.01)* | −.03 (.01)* |
| **Measurements of state ownership** | | | | |
| Percentage state ownership | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** |
| State full control | .00 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| State minority control | .04 (.01)*** | .04 (.00)*** | .03 (.01)*** | .04 (.01)*** |
| **Measurements of firm performance** | | | | |
| Market | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| Accounting | −.00 (.01) | −.00 (.01) | −.01 (.01) | −.01 (.01) |
| Productivity | −.01 (.01) | −.01 (.01) | −.02 (.01) | −.02 (.01) |
| Adjusted for industry | .03 (.01)** | .04 (.01)*** | .04 (.01)*** | .04 (.01)*** |
| Logarithmically transformed | −.02 (.01) | −.02 (.01)† | −.02 (.01)† | −.02 (.01)† |
| **Firm characteristics**[c] | | | | |
| Firm size | −.00 (.01) | −.00 (.01) | −.00 (.01) | −.00 (.01) |
| Firm age | −.02 (.01)* | −.02 (.01)* | −.02 (.01)** | −.02 (.01)** |
| Firm leverage | −.00 (.01) | −.01 (.01) | −.01 (.01)† | −.01 (.01)† |
| Firm growth | −.04 (.01)*** | −.04 (.01)*** | −.04 (.01)** | −.04 (.01)*** |
| Firm capital intensity | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| Prior firm performance | −.01 (.01) | −.01 (.01) | −.01 (.01) | −.00 (.01) |
| **Industry characteristics**[c] | | | | |
| Industry competition | −.04 (.01)*** | −.05 (.01)*** | −.03 (.01)*** | −.04 (.01)*** |
| **Governance characteristics**[c] | | | | |
| Ownership ratio largest shareholder | −.03 (.01)** | −.02 (.01)* | −.02 (.01) | −.01 (.01) |
| Board size | .02 (.01) | .02 (.01) | .02 (.01) | .02 (.01) |
| Board independence | −.04 (.01)** | −.04 (.01)** | −.04 (.01)** | −.03 (.01)** |
| CEO duality | −.00 (.01) | .00 (.01) | .01 (.01) | .00 (.01) |
| Inside ownership | −.01 (.01) | −.01 (.01) | −.01 (.01) | −.01 (.01) |
| Institutional ownership | .00 (.01) | .00 (.01) | −.01 (.01) | −.01 (.01) |
| Foreign ownership | −.02 (.01)*** | −.02 (.01)*** | −.02 (.01)** | −.02 (.01)*** |
| Ownership concentration | .01 (.01)* | .01 (.01)* | .02 (.01)** | .02 (.01)** |
| **Country-level control variables** | | | | |
| Government enterprises and investment | −.00 (.00)† | −.00 (.00) | .00 (.00)† | .00 (.00)* |
| Shareholder protection | −.01 (.00)*** | −.01 (.00)* | −.00 (.00)* | −.00 (.00) |
| Market capitalization to GDP | .00 (.00)* | .00 (.00)** | .00 (.00)*** | .00 (.00)*** |
| LN GDP per capita | −.00 (.00) | .01 (.00) | −.00 (.00) | .00 (.00) |
| Constant | −6.23 (1.12)*** | −4.39 (1.24)*** | −7.00 (1.20)*** | −6.31 (1.28)*** |
| R-square | .09 | .09 | .11 | .11 |
| $k$ | 1672 | 1672 | 1672 | 1672 |
| $Q_{model}(p)$ | 251.61*** | 267.04*** | 308.77*** | 314.89*** |
| $Q_{residual}(p)$ | 2,675.51*** | 2,674.59*** | 2,626.76*** | 2,643.54*** |
| v | .003 | .003 | .003 | .003 |

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < 0.001$.

[a] Unstandardized regression coefficients are presented with standard errors in parentheses. $k$ is the number of samples; $Q$ is the homogeneity statistic with its probability in parentheses; $v$ is the random effects variance component.

[b] Regulated industries include utilities, telecommunications, transportation, energy, banking, oil, and insurance (Grier et al., 1994; Hadani & Schuler, 2013; Werner, 2017).

[c] Variables included in at least 60 (5%) samples. See Appendix Table A1 for variable definitions.

**Table A3**
Random-Effects MARA Results by Political Eras[a].

| Variable | Model 1 (State dirigisme) | Model 2 (Neoliberalism) | Model 3 (Neo-statism) |
|---|---|---|---|
| **Institutional moderators** | | | |
| Right-leaning political ideology | −.56 (.33)† | .00 (.01) | .09 (.04)* |
| **Study characteristics** | | | |
| Published study | .04 (.14) | .00 (.01) | .06 (.05) |
| 5-year Web of Science impact factor | −.02 (.02) | .00 (.00)** | −.02 (.04) |
| Median year of sample window | .02 (.02) | .00 (.00)*** | .01 (.01) |
| Panel design | −.05 (.08) | .02 (.01)*** | .01 (.07) |
| Regulated industry[b] | −.02 (.17) | −.02 (.01)* | .15 (.19) |
| **Measurements of state ownership** | | | |
| Percentage state ownership | .54 (09)*** | −.00 (.01) | −.00 (.01) |
| State full control | .32 (.06)*** | −.02 (.01)*** | −.01 (.08) |
| State minority control | .34 (.11)** | .03 (.01)* | −.01 (.01) |
| **Measurements of firm performance** | | | |
| Market | .07 (.07) | −.02 (.01) | .03 (.02) |
| Accounting | .02 (.05) | −.03 (.01)* | −.00 (.01) |
| Productivity | −.13 (.10) | −.03 (.01)* | .06 (.06) |
| Adjusted for industry | −.09 (.09) | −.00 (.01) | .21 (.11)† |
| **Firm characteristics**[c] | | | |
| Firm size | −.05 (.06) | −.00 (.01) | −.12 (.14) |
| Firm age | .35 (.13)** | −.01 (.01) | −.02 (.08) |
| Prior firm performance | .02 (.20) | −.01 (.01) | .00 (.01) |
| **Governance characteristics**[c] | | | |
| Inside ownership | .28 (.21) | .01 (.01) | −.18 (.09)* |
| Foreign ownership | −.24 (.27) | −.01 (.01) | −.13 (.04)*** |
| **Country-level control variables** | | | |
| Government enterprises and investment | — | −.00 (.00) | .00 (.00) |
| Constant | −32.26 (44.27) | −4.23 (1.25)*** | −24.87 (21.23) |
| R-square | .66 | .04 | .70 |
| *k* | 108 | 1331 | 233 |
| $Q_{model}(p)$ | 181.35*** | 90.90*** | 257.18*** |
| $Q_{residual}(p)$ | 94.39 | 2,248.84*** | 111.25 |
| v | .006 | .004 | .000 |

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < 0.001$.

[a] Unstandardized regression coefficients are presented with standard errors in parentheses. *k* is the number of samples; *Q* is the homogeneity statistic with its probability in parentheses; *v* is the random effects variance component.

[b] Regulated industries include utilities, telecommunications, transportation, energy, banking, oil, and insurance (Grier et al., 1994; Hadani & Schuler, 2013; Werner, 2017).

[c] Variables included in at least 60 (5%) samples.

**Table A4**
Random-Effects MARA Results Excluding Effect Sizes Controlling for Endogeneity[a].

| | Dependent variable: State ownership – firm performance relationship | | | | |
|---|---|---|---|---|---|
| Variable | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| **Institutional moderators** | | | | | |
| Right-leaning political ideology (H1) | | .02 (.01)** | .03 (.01)** | .08 (.01)*** | .07 (.01)*** |
| State capacity | | | −.01 (.01) | | −.02 (.01) |
| Political constraint | | | | .10 (.02)*** | .10 (.02)*** |
| Right-leaning political ideology x State capacity (H2) | | | −.01 (.01) | | .00 (.01) |
| Right-leaning political ideology x Political constraint (H3) | | | | −.15 (.02)*** | −.14 (.02)*** |
| **Study characteristics** | | | | | |
| Published study | −.01 (.01)† | −.01 (.01) | −.01 (.01) | −.00 (.01) | −.00 (.01) |
| 5-year Web of Science impact factor | .01 (.00)*** | .01 (.00)*** | .01 (.00)*** | .00 (.00)*** | .00 (00)** |
| Median year of sample window | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** | .00 (.00)*** |
| Panel design | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** |
| Regulated industry[b] | −.02 (.01) | −.02 (.01) | −.02 (.01)† | −.01 (.01) | −.02 (.01) |
| **Measurements of state ownership** | | | | | |
| Percentage state ownership | .02 (.01)*** | .02 (.01)*** | .02 (.01)*** | .02 (.01)** | .02 (.01)*** |
| State full control | .00 (.01) | .00 (.01) | .01 (.01) | −.00 (.01) | .00 (.01) |
| State minority control | .04 (.01)*** | .04 (.01)*** | .04 (.01)*** | .03 (.01)*** | .04 (.01)*** |
| **Measurements of firm performance** | | | | | |
| Market | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| Accounting | −.02 (.01) | −.01 (.01) | −.02 (.01) | −.02 (.01)* | −.02 (.01)* |
| Productivity | −.01 (.01) | −.01 (.01) | −.02 (.01) | −.02 (.01)† | −.02 (.01)† |
| Adjusted for industry | .03 (.01)* | .03 (.01)* | .03 (.01)** | .03 (.01)** | .03 (.01)** |
| Logarithmically transformed | −.03 (.01)** | −.02 (.01)† | −.03 (.01)* | −.03 (.01)* | −.03 (.01)* |
| **Firm characteristics**[c] | | | | | |
| Firm size | −.00 (.01) | −.01 (.01) | −.00 (.01) | −.01 (.01) | −.01 (.01) |
| Firm age | −.01 (.01)* | −.01 (.01) | −.01 (.01) | −.02 (.01)* | −.01 (.01)* |

(*continued on next page*)

**Table A4** (*continued*)

| Variable | Dependent variable: State ownership – firm performance relationship | | | | |
|---|---|---|---|---|---|
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| Firm leverage | .01 (.01) | .01 (.01) | .01 (.01) | .00 (.01) | .00 (.01) |
| Firm growth | −.05 (.01)*** | −.05 (.01)*** | −.05 (.01)*** | −.05 (.01)*** | −.05 (.01)*** |
| Firm capital intensity | −.01 (.01) | −.01 (.01) | −.01 (.01) | −.00 (.01) | −.05 (.01)*** |
| Prior firm performance | −.01 (.01)† | −.01 (.01) | −.01 (.01) | −.00 (.01) | −.00 (.01) |
| **Industry characteristics**[c] | | | | | |
| Industry competition | −.03 (.01)*** | −.04 (.01)*** | −.04 (.01)*** | −.03 (.01)** | −.03 (.01)** |
| **Governance characteristics**[c] | | | | | |
| Ownership ratio largest shareholder | −.03 (.01)** | −.03 (.01)** | −.02 (.01)* | −.01 (.01) | −.01 (.01) |
| Board size | .02 (.01) | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| Board independence | −.04 (.01)** | −.03 (.01)* | −.03 (.01)* | −.03 (.01)* | −.03 (.01)* |
| CEO duality | .00 (.01) | .00 (.01) | .00 (.01) | .00 (.01) | .00 (.01) |
| Inside ownership | −.02 (.01)* | −.02 (.01)* | −.02 (.01)* | −.02 (.01)† | −.02 (.01)† |
| Institutional ownership | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01) |
| Foreign ownership | −.01 (.01) | −.01 (.01) | −.01 (.01)† | −.01 (.01)* | −.01 (.01)** |
| Ownership concentration | .01 (.01) | .01 (.01) | .01 (.01) | .01 (.01)† | .01 (.01)* |
| **Country-level control variables** | | | | | |
| Government enterprises and investment | −.00 (.00)* | −.00 (.00) | −.00 (.00) | .00 (.00) | .00 (.00) |
| Shareholder protection | −.01 (.00)* | −.00 (.00)* | −.00 (.00) | .00 (.00) | −.00 (.00) |
| Market capitalization to GDP | .00 (.00)** | .00 (.00)* | .00 (.00)* | .00 (.00)* | .00 (.00)* |
| LN GDP per capita | −.00 (.00) | −.01 (.00)* | .00 (.00) | −.01 (.00)** | −.00 (.00) |
| Constant | −5.19 (1.10)*** | −5.53 (1.11)*** | −4.50 (1.18)*** | −5.40 (1.19)*** | −5.27 (1.23)*** |
| R-square | .10 | .10 | .10 | .12 | .12 |
| *k* | 1493 | 1493 | 1493 | 1493 | 1493 |
| $Q_{model}(p)$ | 244.63*** | 252.43*** | 262.94*** | 301.65*** | 307.80*** |
| $Q_{residual}(p)$ | 2,312.29*** | 2,307.96*** | 2,311.24*** | 2,270.74*** | 2,284.94*** |
| v | .002 | .003 | .003 | .003 | .003 |

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < 0.001$.

[a] Unstandardized regression coefficients are presented with standard errors in parentheses. *k* is the number of samples; *Q* is the homogeneity statistic with its probability in parentheses; *v* is the random effects variance component.

[b] Regulated industries include utilities, telecommunications, transportation, energy, banking, oil, and insurance (Grier et al., 1994; Hadani & Schuler, 2013; Werner, 2017).

[c] Variables included in at least 60 (5%) samples. See Appendix Table A1 for variable definitions.

**Table A5**
Random-Effects HOMA Results by Political Eras.

| Predictor | Partial linear correlation coefficient ($r_{xy.z}$) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All political eras | | | State dirigisme (1973 – 1988) | | | Neoliberalism (1989 – 2007) | | | Neo-statism (2008-present) | | |
| | *k* | *N* | Mean (SE) | *k* | *N* | Mean (SE) | *k* | *N* | Mean (SE) | *K* | *N* | Mean (SE) |
| **State ownership – Firm performance** | 1672 | 1,831,935 | −.01 (.00)*** | 108 | 29,697 | −.04 (.02)* | 1331 | 1,599,287 | −.01 (.00)*** | 233 | 202,951 | .01 (.00)* |
| Non-endogeneity control | 1493 | 1,603,297 | −.01 (.00)*** | 108 | 29,697 | −.04 (.02)* | 1155 | 1,374,739 | −.02 (.00)*** | 230 | 198,860 | .01 (.00)** |
| Endogeneity control | 179 | 228,638 | .02 (.01)* | | | | 176 | 224,548 | .02 (.01)* | 3 | 4091 | −.04 (.06) |

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < 0.001$.
*Note*: $k$ = number of samples; $N$ = firm observations; SE = the standard error of the mean correlation.

## References

Acemoglu, D., & Robinson, J. (2012). *Why nations fail: The origins of power, prosperity, and poverty*. New York: Crown Business.
Acemoglu, D., Moscona, J., & Robinson, J. A. (2016). State capacity and American technology: Evidence from the nineteenth century. *The American Economic Review, 106*(5), 61–67.
Aguilera, R. V., & Grøgaard, B. (2019). The dubious role of institutions in international business: A road forward. *Journal of International Business Studies, 50*(1), 20–35.
Aguinis, H., Gottfredson, R. K., & Wright, T. A. (2011). Best-practice recommendations for estimating interaction effects using meta-analysis. *Journal of Organizational Behavior, 32*(8), 1033–1043.
Aharoni, Y. (2008). The performance of state-owned enterprises. In P. A. Toninelli (Ed.). *The rise and fall of state-owned enterprise in the Western world* (pp. 49–72). Cambridge: Cambridge University Press.
Andersen, D., Møller, J., Rørbæk, L. L., & Skaaning, S.-E. (2014). State capacity and political regime stability. *Democratization, 21*(7), 1305–1325.
Arregle, J.-L., Duran, P., Hitt, M. A., & van Essen, M. (2017). Why is family firms' internationalization unique? A meta-analysis. *Entrepreneurship Theory and Practice, 41*(5), 801–831.
Avsar, V., Karayalcin, C., & Ulubasoglu, M. A. (2013). State-owned enterprises, inequality, and political ideology. *Economics and Politics, 25*(3), 387–410.
Bäck, H., & Hadenius, A. (2008). Democracy and state capacity: Exploring a J-shaped relationship. *Governance, 21*(1), 1–24.
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.
Berdiev, A. N., Kim, Y., & Chang, C. P. (2012). The political economy of exchange rate regimes in developed and developing countries. *European Journal of Political Economy, 28*(1), 38–53.
Ben-Nasr, H., & Cosset, J.-C. (2014). State ownership, political institutions, and stock price informativeness: Evidence from privatization. *Journal of Corporate Finance, 29*, 179–199.
Berwick, E., & Christia, F. (2018). State capacity redux: Integrating classical and experimental contributions to an enduring debate. *Annual Review of Political Science, 21*(1), 71–91.
Beugelsdijk, S., Kostova, T., Kunst, V. E., Spadafora, E., & van Essen, M. (2018). Cultural distance and firm internationalization: A meta-analytical review and theoretical

implications. *Journal of Management, 44*(1), 89–130.
Biais, B., & Perotti, E. (2002). Machiavellian privatization. *The American Economic Review, 92*(1), 240–258.
Bijmolt, T. H. A., & Pieters, R. G. M. (2001). Meta-analysis in marketing when studies contain multiple measurements. *Marketing Letters, 12*(2), 157–169.
Boardman, A. E., & Vining, A. R. (1989). Ownership and performance in competitive environments: A comparison of the performance of private, mixed, and state-owned enterprises. *The Journal of Law & Economics, 32*(1), 1–33.
Borisova, G., Fotak, V., Holland, K., & Megginson, W. L. (2015). Government ownership and the cost of debt: Evidence from government investments in publicly traded firms. *Journal of Financial Economics, 118*(1), 168–191.
Bortolotti, B., & Faccio, M. (2009). Government control of privatized firms. *The Review of Financial Studies, 22*(8), 2907–2939.
Boubakri, N., Cosset, J.-C., & Guedhami, O. (2005). Liberalization, corporate governance and the performance of privatized firms in developing countries. *Journal of Corporate Finance, 11*(5), 767–790.
Boubakri, N., El Ghoul, S., Guedhami, O., & Megginson, W. L. (2018). The market value of government ownership. *Journal of Corporate Finance, 50*, 44–65.
Bremmer, I. (2010). *The end of the free market: Who wins the war between states and corporations?* New York, NY: Portfolio.
Briscoe, F., & Joshi, A. (2017). Bringing the boss's politics in: Supervisor political ideology and the gender gap in earnings. *The Academy of Management Journal, 60*(4), 1415–1441.
Briscoe, F., Chin, M. K., & Hambrick, D. (2014). CEO ideology as an element of the corporate opportunity structure for social activists. *The Academy of Management Journal, 57*(6), 1786–1809.
Bruton, G. D., Peng, M. W., Ahlstrom, D., Stan, C., & Xu, K. (2015). State-owned enterprises around the world as hybrid organizations. *The Academy of Management Perspectives, 29*(1), 92–114.
Cuervo-Cazurra, Alvaro, Inkpen, Andrew, Musacchio, Aldo, & Ramaswamy, Kannan (2014). Governments as owners: State-owned multinational companies. *Journal of International Business Studies,* 919–942.
Cao, Z., Li, Y., Jayaram, J., Liu, Y., & Lumineau, F. (2018). A meta-analysis of the exchange hazards–Interfirm governance relationship: An informal institutions perspective. *Journal of International Business Studies, 49*(3), 303–323.
Carmines, E. G., & D'Amico, N. J. (2015). The new look in political ideology research. *Annual Review of Political Science, 18*(1), 205–216.
Chen, G., Firth, M., & Xu, L. (2009). Does the type of ownership control matter? Evidence from China's listed companies. *Journal of Banking & Finance, 33*(1), 171–181.
Chin, M. K., Hambrick, D. C., & Treviño, L. K. (2013). Political ideologies of CEOs: The influence of executives' values on corporate social responsibility. *Administrative Science Quarterly, 58*(2), 197–232.
Christensen, D. M., Dhaliwal, D. S., Boivie, S., & Graffin, S. D. (2015). Top management conservatism and corporate risk strategies: Evidence from managers' personal political orientation and corporate tax avoidance. *Strategic Management Journal, 36*(12), 1918–1938.
Churchill, S. A., & Yew, S. L. (2017). Are government transfers harmful to economic growth? A meta-analysis. *Economic Modelling, 64*, 270–287.
Claessens, S., & Djankov, S. (2002). Privatization benefits in Eastern Europe. *Journal of Public Economics, 83*(3), 307–324.
Clegg, L. J., Voss, H., & Tardios, J. A. (2018). The autocratic advantage: Internationalization of state-owned multinationals. *Journal of World Business, 53*(5), 668–681.
Clinton, J. D., Bertelli, A., Grose, C. R., Lewis, D. E., & Nixon, D. C. (2012). Separated powers in the United States: The ideology of agencies, presidents, and congress. *American Journal of Political Science, 56*(2), 341–354.
Cruz, C., Keefer, P., & Scartascini, C. (2016). *The database of political institutions 2015 (DPI2015).* Washington, D.C: Inter-American Development Bank Retrieved from http://publications.iadb.org/handle/11319/7408. Cuervo-Cazurra, A. (Ed.). 2017. State-owned multinationals: Governments in global business. Springer.
Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *The Journal of Political Economy, 93*(6), 1155–1177.
Dharwadkar, R., George, G., & Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective. *The Academy of Management Review, 25*(3), 650–669.
Dorobantu, S., & Müllner, J. (2019). Debt-side governance and the geography of project finance syndicates. *Journal of Corporate Finance, Corporate Governance in Multinational Enterprises, 57*, 161–179.
Duran, P., Kammerlander, N., van Essen, M., & Zellweger, T. (2016). Doing more with less: Innovation input and output in family firms. *The Academy of Management Journal, 59*(4), 1224–1264.
Duran, P., Kostova, T., & van Essen, M. (2017). Political ideologies and the internationalization of family-controlled firms. *Journal of World Business, 52*(4), 474–488.
Duran, P., van Essen, M., Heugens, P. P. M. A. R., Kostova, T., & Peng, M. W. (2019). The impact of institutions on the competitive advantage of publicly listed family firms in emerging markets. *Global Strategy Journal, 9*(2), 243–274.
Earle, J. S., & Estrin, S. (2003). Privatization, competition, and budget constraints: Disciplining enterprises in Russia. *Economics of Planning, 36*(1), 1–22.
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. *Journal of World Business, 51*(2), 294–307.
Fainshmidt, S., Judge, W. Q., Aguilera, R. V., & Smith, A. (2018). Varieties of institutional systems: A contextual taxonomy of understudied countries. *Journal of World Business, 53*(3), 307–322.
Feldman, S., & Johnston, C. (2014). Understanding the determinants of political ideology: Implications of structural complexity. *Political Psychology, 35*(3), 337–358.
Finkelstein, S., & D'Aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *The Academy of Management Journal, 37*(5), 1079–1108.
Fukuyama, F. (2013). What is governance? *Governance, 26*(3), 347–368.
Garcia-Canal, E., & Guillén, M. F. (2008). Risk and the strategy of foreign location choice in regulated industries. *Strategic Management Journal, 29*(10), 1097–1115.
Geddes, B. (1996). *Politician's dilemma.* Retrieved fromBerkeley, CA: University of California Press. http://www.ucpress.edu/book.php?isbn=9780520207622.
Geyskens, I., Krishnan, R., Steenkamp, J.-B. E. M., & Cunha, P. V. (2009). A review and evaluation of meta-analysis practices in management research. *Journal of Management, 35*(2), 393–419.
Goldeng, E., Grünfeld, L. A., & Benito, G. R. G. (2008). The performance differential between private and state owned enterprises: The roles of ownership, management and market structure. *Journal of Management Studies, 45*(7), 1244–1273.
Goranova, M., & Ryan, L. V. (2014). Shareholder activism: A multidisciplinary review. *Journal of Management, 40*(5), 1230–1268.
Grier, K. B., Munger, M. C., & Roberts, B. E. (1994). The determinants of industry political activity, 1978-1986. *The American Political Science Review, 88*(4), 911–926.
Grosman, A., Aguilera, R. V., & Wright, M. (2019). Lost in translation? Corporate governance, independent boards and blockholder appropriation. *Journal of World Business, 54*(4), 258–272.
Grosman, A., Okhmatovskiy, I., & Wright, M. (2016). State control and corporate governance in transition economies: 25 years on from 1989. *Corporate Governance an International Review, 24*(3), 200–221.
Guillén, M. F., & Capron, L. (2016). State capacity, minority shareholder protections, and stock market development. *Administrative Science Quarterly, 61*(1), 125–160.
Gupta, N. (2005). Partial privatization and firm performance. *The Journal of Finance, 60*(2), 987–1015.
Gupta, A., & Wowak, A. J. (2017). The elephant (or donkey) in the boardroom: How board political ideology affects CEO pay. *Administrative Science Quarterly, 62*(1), 1–30.
Ha, E. (2012). Globalization, government ideology, and income inequality in developing countries. *The Journal of Politics, 74*(2), 541–557.
Ha, E. (2015). The impact of democracy, government ideology, and globalization on social spending in less developed countries. *International Journal of Comparative Sociology, 56*(5), 338–365.
Hadani, M., & Schuler, D. A. (2013). In search of El Dorado: The elusive financial returns on corporate political investments. *Strategic Management Journal, 34*(2), 165–181.
Hanousek, J., Kočenda, E., & Svejnar, J. (2007). Origin and concentration. *The Economics of Transition, 15*(1), 1–31.
Hanson, J. K., & Sigman, R. (2013). *Leviathan's latent dimensions: Measuring state capacity for comparative political research. Working paper.* Retrieved fromAnn Arbor, MI: University of Michigan. http://papers.ssrn.com/abstract=1899933.
Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis.* Orlando: Academic Press.
Henisz, W. J. (2000). The institutional environment for multinational investment. *Journal of Law, Economics, & Organization, 16*(2), 334–364.
Hennart, J.-F., Sheng, H. H., & Carrera, J. M. (2017). Openness, international champions, and the internationalization of Multilatinas. *Journal of World Business, 52*(4), 518–532.
Heugens, P., Sauerwald, S., Turturea, R., & van Essen, M. (2019). Does state ownership hurt or help minority shareholders? International evidence from control block acquisitions. *Global Strategy Journal* (in press).
Higgins, J. P. T., & Thompson, S. G. (2002). Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine, 21*(11), 1539–1558.
Holburn, G. L. F., & Zelner, B. A. (2010). Political capabilities, policy risk, and international investment strategy: Evidence from the global electric power generation industry. *Strategic Management Journal, 31*(12), 1290–1315.
Horstmann, I. J., & Markusen, J. R. (1986). Up the average cost curve: Inefficient entry and the new protectionism. *Journal of International Economics, 20*(3-4), 225–247.
Hong, J., Wang, C., & Kafouros, M. (2015). The role of the state in explaining the internationalization of emerging market enterprises. *British Journal of Management, 26*(1), 45–62.
Huber, J. D. (1989). Values and partisanship in left-right orientations: Measuring ideology. *European Journal of Political Research, 17*(5), 599–621.
Huedo-Medina, T. B., Sánchez-Meca, J., Marín-Martínez, F., & Botella, J. (2006). Assessing heterogeneity in meta-analysis: Q statistic or I2 index? *Psychological Methods, 11*(2), 193–206.
Hutton, I., Jiang, D., & Kumar, A. (2015). Political values, culture, and corporate litigation. *Management Science, 61*(12), 2905–2925.
Inoue, C. F. K. V., Lazzarini, S. G., & Musacchio, A. (2013). Leviathan as a minority shareholder: Firm-level implications of state equity purchases. *The Academy of Management Journal, 56*(6), 1775–1801.
Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies, 43*(9), 834–864.
Bob. Jessop, The future of the capitalist state. Cambridge: Polity.
Jeong, S.-H., & Harrison, D. A. (2017). Glass breaking, strategy making, and value creating: Meta-analytic outcomes of women as CEOs and TMT members. *The Academy of Management Journal, 60*(4), 1219–1252.
Jiang, Y., Peng, M. W., Yang, X., & Mutlu, C. C. (2015). Privatization, governance, and survival: MNE investments in private participation projects in emerging economies. *Journal of World Business, 50*(2), 294–301.
Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology, 60*(1), 307–337.
Kalotay, K. (2017). *State-owned multinationals: An emerging market phenomenon? (December 9,2017).* Available at SSRN: https://ssrn.com/abstract=3091541 orhttps://doi.org/10.2139/ssrn.3091541.

Kanbur, S. M. R., & Myles, G. D. (1992). Policy choice and political constraints. *European Journal of Political Economy, 8*(1), 1–29.
Karna, A., Richter, A., & Riesenkampff, E. (2016). Revisiting the role of the environment in the capabilities–Financial performance relationship: A meta-analysis. *Strategic Management Journal, 37*(6), 1154–1173.
Kepes, S., Banks, G. C., McDaniel, M., & Whetzel, D. L. (2012). Publication bias in the organizational sciences. *Organizational Research Methods, 15*(4), 624–662.
Kostova, T. (1997). Country institutional profiles: Concept and measurement. *Academy of Management Proceedings, 1997*(1), 180–184.
Lazzarini, S. G., & Musacchio, A. (2018). State ownership reinvented? Explaining performance differences between state-owned and private firms. *Corporate Governance an International Review, 26*(4), 255–272.
Le, T. V., & O'Brien, J. P. (2010). Can two wrongs make a right? State ownership and debt in a transition economy. *Journal of Management Studies, 47*(7), 1297–1316.
Lin, X., & Germain, R. (2003). Organizational structure, context, customer orientation, and performance: Lessons from Chinese state-owned enterprises. *Strategic Management Journal, 24*(11), 1131–1151.
Lin, J. Y., Cai, F., & Li, Z. (1998). Competition, policy burdens, and state-owned enterprise reform. *The American Economic Review, 88*(2), 422–427.
Lioukas, S., Bourantas, D., & Papadakis, V. (1993). Managerial autonomy of state-owned enterprises: Determining factors. *Organization Science, 4*(4), 645–666.
Lipsey, M. W., & Wilson, D. (2001). *Practical meta-analysis.* Thousand Oaks, CA: Sage.
Marano, V., Arregle, J.-L., Hitt, M. A., Spadafora, E., & van Essen, M. (2016). Home country institutions and the internationalization-performance relationship: A meta-analytic review. *Journal of Management, 42*(5), 1075–1110.
March, J. G., & Olsen, J. P. (1989). *Rediscovering institutions: The organizational basis of politics.* New York: Free Press.
Marks, G., Hooghe, L., Nelson, M., & Edwards, E. (2006). Party competition and European integration in the East and West: Different structure, same causality. *Comparative Political Studies, 39*(2), 155–175.
Maynard, J. L., & Mildenberger, M. (2018). Convergence and divergence in the study of ideology: A critical review. *British Journal of Political Science, 48*(2), 563–589.
Megginson, W., & Netter (2001). From state to market: A survey on empirical studies on privatization. *Journal of Economic Literature, 39*(2), 321–339.
Miller, C. C., Washburn, N. T., & Glick, W. H. (2013). The myth of firm performance. *Organization Science, 24*(3), 948–964.
Musacchio, A., & Lazzarini, S. G. (2014). *Reinventing state capitalism: Leviathan in business, Brazil and beyond.* Cambridge: Harvard University Press.
Musacchio, A., Lazzarini, S. G., & Aguilera, R. V. (2015). New varieties of state capitalism: Strategic and governance implications. *The Academy of Management Perspectives, 29*(1), 115–131.
Mutlu, C. C., van Essen, M., Peng, M. W., Saleh, S. F., & Duran, P. (2018). Corporate governance in China: A meta-analysis. *Journal of Management Studies, 55*(6), 943–979.
Neville, F., Byron, K., Post, C., & Ward, A. (2019). Board independence and corporate misconduct: A cross-national meta-analysis. *Journal of Management, 45*(6), 2538–2569.
North, D. C. (1990). *Institutions, institutional change and economic performance.* Cambridge: Cambridge University Press.
North, D. C. (1991). *Institutions. Journal of Economic Perspectives, 5*(1), 97–112.
Okhmatovskiy, I. (2010). Performance implications of ties to the government and SOEs: A political embeddedness perspective. *Journal of Management Studies, 47*(6), 1020–1047.
Okhmatovskiy, I., Suhomlinova, O., & Tihanyi, L. (2020). Legacy of the state: Prior shared experience and survival of spin-offs from restructured state enterprises. *Journal of Management, 46*(4), 503–529.
Oxelheim, L., & Randøy, T. (2005). The Anglo-American financial influence on CEO compensation in non-Anglo-American firms. *Journal of International Business Studies, 36*(4), 470–483.
Pagano, M., & Volpin, P. F. (2005). The political economy of corporate governance. *The American Economic Review, 95*(4), 1005–1030.
Park, S. H., Li, S., & Tse, D. K. (2006). Market liberalization and firm performance during China's economic transition. *Journal of International Business Studies, 37*(1), 127–147.
Peng, M. W., Wang, D. Y. L., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies, 39*(5), 920–936.
Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. (2009). The institution-based view as a third leg for a strategy tripod. *The Academy of Management Perspectives, 23*(3), 63–81.
Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *The Academy of Management Journal, 58*(5), 1546–1571.
Ramamurti, R. (1986). Public entrepreneurs: Who they are and how they operate. *California Management Review, 28*(3), 142–158.
Reeb, D., Sakakibara, M., & Mahmood, I. P. (2012). From the Editors: Endogeneity in international business research. *Journal of International Business Studies, 43*(3), 211–218.
Roberts, M. R., & Whited, T. M. (2013). *Endogeneity in empirical corporate finance. Handbook of the economics of finance*, *2*, Elsevier493–572.
Rodrik, D. (2018). Is populism necessarily bad economics. *AEA Papers and Proceedings, 108*, 196–199.
Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin, 86*(3), 638–641.
Rotberg, R. I. (Ed.). (2004). *When states fail: Causes and consequences.*. Princeton, N.J: Princeton University Press.
Schmidt, F. L., & Hunter, J. E. (2014). *Methods of meta-analysis: Correcting error and bias in research findings* (3rd ed.). Thousand Oaks, CA: Sage.
Schwens, C., Zapkau, F. B., Bierwerth, M., Isidor, R., Knight, G., & Kabst, R. (2018). International entrepreneurship: A meta-analysis on the internationalization and performance relationship. *Entrepreneurship Theory and Practice, 42*(5), 734–768.
Semadeni, M., Withers, M. C., & Trevis Certo, S. (2014). The perils of endogeneity and instrumental variables in strategy research: Understanding through simulations. *Strategic Management Journal, 35*(7), 1070–1079.
Shleifer, A., & Vishny, R. W. (Eds.). (1998). *The grabbing hand: Government pathologies and their cures.*. Cambridge, MA: Harvard University Press.
Skocpol, T. (1979). *States and social revolutions.* Cambridge, MA: Cambridge University Press.
Slangen, A. H. L. (2013). Greenfield or acquisition entry? The roles of policy uncertainty and MNE legitimacy in host countries. *Global Strategy Journal, 3*(3), 262–280.
Stan, C. V., Peng, M. W., & Bruton, G. D. (2014). Slack and the performance of state-owned enterprises. *Asia Pacific Journal of Management, 31*(2), 473–495.
Stanley, T. D., & Doucouliagos, H. (2012). *Meta-regression analysis in economics and business.* New York: Routledge.
Stanley, T. D., Doucouliagos, H., Giles, M., Heckemeyer, J. H., Johnston, R. J., Laroche, P., et al. (2013). Meta-analysis of economics research reporting guidelines. *Journal of Economic Surveys, 27*(2), 390–394.
Tedin, K. L. (1987). Political ideology and the vote. *Research in Micropolitics, 2*(1), 63–94.
Terjesen, S., Aguilera, R. V., & Lorenz, R. (2015). Legislating a woman's seat on the board: Institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics, 128*(2), 233–251.
Tetlock, P. E. (1983). Cognitive style and political ideology. *Journal of Personality and Social Psychology, 45*(1), 118–126.
The Economist (2012). *Special report: State capitalism. The Economist: 1–18. The Economist. 2017, July 22. Reform of China's ailing state-owned firms is emboldening them*January 21. Retrieved from. The Economisthttps://www.economist.com/finance-and-economics/2017/07/22/reform-of-chinas-ailing-state-owned-firms-is-emboldening-them.
The Guardian (2017). *Dutch bank bans loans to tobacco industry on health grounds.* July 6. Retrieved fromThe Guardianhttps://www.theguardian.com/world/2017/jul/06/dutch-bank-refuses-loans-to-tobacco-industry-on-health-grounds.
Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal, 21*(6), 689–705.
Tian, L., & Estrin, S. (2008). Retained state shareholding in Chinese PLCs: Does government ownership always reduce corporate value? *Journal of Comparative Economics, 36*(1), 74–89.
Tihanyi, L., Aguilera, R. V., Heugens, P., van Essen, M., Sauerwald, S., Duran, P., et al. (2019). State ownership and political connections. *Journal of Management, 45*(6), 2293–2321.
Ugur, M., Churchill, S. A., & Solomon, E. (2018). Technological innovation and employment in derived labour demand models: A hierarchical meta-regression analysis. *Journal of Economic Surveys, 32*(1), 50–82.
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.
Viechtbauer, W., & Cheung, M. W.-L. (2010). Outlier and influence diagnostics for meta-analysis. *Research Synthesis Methods, 1*(2), 112–125.
von Hippel, E., Franke, N., & Prügl, R. (2009). Pyramiding: Efficient search for rare subjects. *Research Policy, 38*(9), 1397–1406.
Wang, J., Guthrie, D., & Xiao, Z. (2012). The rise of SASAC: Asset management, ownership concentration, and firm performance in China's capital markets. *Management and Organization Review, 8*(2), 253–281.
Wang, Q.-J., Feng, G.-F., Chen, Y. E., Wen, J., & Chang, C.-P. (2019). The impacts of government ideology on innovation: What are the main implications? *Research Policy, 48*(5), 1232–1247.
Werner, T. (2017). Investor reaction to covert corporate political activity. *Strategic Management Journal, 38*(12), 2424–2443.
Willets, D. (1992). Modern conservatism. *The Political Quarterly, 63*(4), 413–421.
Williams, C., & Vrabie, A. (2018). Host country R&D determinants of MNE entry strategy: A study of ownership in the automobile industry. *Research Policy, 47*(2), 474–486.
Witt, M. A., & Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies, 38*(4), 579–594.
Wolfolds, S. E., & Siegel, J. (2019). Misaccounting for endogeneity: The peril of relying on the Heckman two-step method without a valid instrument. *Strategic Management Journal, 40*(3), 432–462.
Wood, J. A. (2008). Methodology for dealing with duplicate study effects in a meta-analysis. *Organizational Research Methods, 11*(1), 79–95.
Wood, G., & Wright, M. (2015). Corporations and new statism: Trends and research priorities. *The Academy of Management Perspectives, 29*(2), 271–286.
Zhang, & Chunlin (2019). *How much do state-owned enterprises contribute to China's GDP and employment? (Chinese).* Washington, D.C: World Bank Group. http://documents.worldbank.org/curated/en/390691565249400884/How-Much-Do-State-Owned-Enterprises-Contribute-to-China-s-GDP-and-Employment.