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Are all forms of ownership prone to tunneling? A meta-analysis

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Abstract

Research Question/Issue: This study seeks to extend agency theory in the context of tunneling by exploring how different owner types seek private benefits of control. Specifically, we examine how information asymmetries and board representation create different pressures for tunneling for state-owned, business group-owned, and family-owned firms. We tested our hypotheses with a meta-analytic structural equation model.

Research Findings/Insights: Our findings show that the relationship between ownership and tunneling differs across owner types in terms of both directionality and magnitude. Our study offers a substantial theoretical contribution to the principal–principal problem literature by theorizing and testing variations of the problem among owners. Our study also advances our understanding of the role of ownership in firms.

Theoretical/Academic Implications: Our findings have important theory-building implications for the principal–principal literature. Controlling shareholders have been linked to performance outcomes or to tunneling in general, yet little is known about their comparative propensity to engage in tunneling. Our results, however, highlight that the propensity to engage in tunneling varies substantially among controlling shareholders. Furthermore, in the robustness checks, we disconfirm some of the assumptions of the principal–principal literature. This study demonstrates the need to theorize about specific types of ownership and reassess the core arguments of principal–principal theory.

Practitioner/Policy Implications: This study offers insights for policymakers interested in mitigating the risk of minority shareholders being expropriated by the controlling shareholder. As the key driver of tunneling appears to be access to private information and knowledge of the firm, we offer recommendations on what policymakers can do to minimize the asymmetry of information.

KEYWORDS
Corporate governance, expropriation of minority shareholders, meta-analysis, ownership, principal–principal problem, tunneling

1 | INTRODUCTION

Tunneling, or self-dealing, is an agency problem that occurs when a majority shareholder diverts a firm's wealth at the expense of other shareholders. Tunneling may take in many forms, such as asset transfers or intragroup loans, that aim to hide or remove valuable resources from the firm. The label originated from an incident in the Czech Republic when a firm's assets were literally removed

through an underground tunnel (Johnson, La Porta, Lopes-de-Silanes, & Shleifer, 2000).

Spurred in part by the work of Johnson et al. (2000), there has been a high level of interest in tunneling. However, the theory development on tunneling has been hampered by broad inconsistencies between predictions and empirical results. Although concentrated ownership is generally expected to facilitate tunneling, studies are sharply split between positive and negative findings (e.g., Huyghebaert & Wang, 2012; Jiang, Rao, & Yue, 2015; Lo, Wong, & Firth, 2010; Martins, Schiehll, & Terra, 2017; Peng & Jiang, 2010; Yang & Schwarz, 2016). We looked more closely at this split by applying a more fine-grained conceptualization of ownership and its ensuing effects.

These inconsistencies are due to the fact that studies have focused on the extent of ownership as a driver of tunneling. In contrast, we offer a theoretical framework that explains how tunneling varies systematically across owner categories. Specifically, we examine how a key aspect of the problem—the reason why owners seek the private benefits of control—differs across owner types and its subsequent relationship to tunneling activity. We discuss two reasons for owners to engage in tunneling: extracting the private benefit of control to serve their own interests (i.e., self-serving private benefit) and benefiting other stakeholders, such as constituents, family members, and friends. In the former, the controlling shareholder receives monetary benefits that are used to increase his or her own wealth, whereas in the latter, the extracted benefits are transferred to other stakeholders.

To reconcile the inconsistencies in this large body of research, we conducted meta-analytic structural equation modeling (MASEM). MASEM is a more powerful tool than traditional meta-analyses (MAs), as it allows us to compare the different ownership forms concurrently while also including control variables. This analysis was based on 271 articles, 982 effect size estimates, and a sample of 66,590 observations. The MASEM revealed that tunneling varied substantially across owner types, both in terms of directionality and magnitude. State-owned enterprises (SOEs) have a negative association with tunneling, whereas both business group (BG) ownership and family ownership have a positive relationship with tunneling. This association was largest for family ownership. We then used traditional MA techniques to run several robustness checks, which revealed that the results were unaffected by the time period, research field, or geographic focus of the respective studies.

This study expands our understanding of the role of ownership in organizations and makes several theoretical contributions. In much of the literature, ownership is often related to monitoring and appointments of new board members and top executives or to tunneling in general. In our study, however, we theorize the relationships between owners and their decisions to engage in tunneling. Our first contribution is to explain how and why the relationship between ownership and tunneling varies systematically across ownership types: The owners of large firms have different propensities to engage in tunneling, resulting in different levels of expropriation of minority shareholders. Our findings indicate that the most important driver of tunneling is the degree to which the controlling shareholder has access to and can leverage private information. The findings further

suggest that being a controlling shareholder is a necessary but not a sufficient condition to engage in tunneling. In the end, some types of owners are better than others at resisting engaging in tunneling. Therefore, governance policies regarding the issue—such as minority shareholder protection or board composition—vary in effectiveness based on the nature of the controlling shareholder. Furthermore, this study offers a second contribution to theory by assessing and disconfirming some key assumptions in the principal–principal (PP) literature, namely, the prominence of tunneling in emerging countries and that tunneling decreases as formal institutions develop (Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). Our findings show that tunneling is not dependent on the institutional context of a country but on ownership type. We discuss the implications of our findings in Section 5 of the paper.

2 | LITERATURE REVIEW AND HYPOTHESES

2.1 | Tunneling

2.1.1 | What is tunneling?

Tunneling, or self-dealing, is the transfer of resources that benefits controlling shareholders at the expense of minority shareholders (Jiang & Peng, 2011; Johnson et al., 2000). Tunneling can be legal or illegal, depending on the specific actions taken and the host country's legal system. For example, a minority investor in France unsuccessfully sued when a dominant owner steered the business toward a family-owned subsidiary; in this case, the court ruled that the decision was legitimate (Johnson et al., 2000). However, in a case in Taiwan, multiple executives were arrested, and their firm was subsequently delisted following the discovery of tunneling activities (Yang & Schwarz, 2016).

Because tunneling is not directly observable, scholars use a number of proxies to assess its presence. One common indicator is wedge, which is measured by the divergence between the voting rights and cash-flow rights of controlling shareholders. This proxy increases information asymmetry and makes anti-self-dealing regulations less effective (Byun, Choi, Hwang, & Kim, 2013; Liu & Magnan, 2011; Miller, Breton-Miller, & Lester, 2013; Peng & Jiang, 2010). There are also several indirect proxies for the private benefits of control (e.g., Luo, Wan, & Cai, 2012; Zellweger, Kellermanns, Chrisman, & Chua, 2012), as well as accounting measures, such as inter-company transactions, including loans, account receivables, and preferential pricing, which signal the presence of an underlying problem (e.g., Boateng & Huang, 2016; Haß, Johan, & Müller, 2016; Jiang, Lee, & Yue, 2010; Lo et al., 2010; Yang, 2017). Overall, these measures capture the ability of the controlling shareholder to extract private benefits of control.

2.1.2 | What precipitates tunneling?

Agency problems arise when two transaction partners have competing interests and there are no mechanisms in place to constrain

opportunistic behavior. A "principal–agent problem" occurs when the self-interested party has minimal equity at stake, whereas a "PP problem" occurs when both parties hold equity positions. The latter scenario involves controlling shareholders acting opportunistically against noncontrolling shareholders (Young et al., 2008).

Two mechanisms make engaging in tunneling possible. The relevance of these two mechanisms varies based on the reason for the tunneling. In the case of the self-serving private benefits of control, *information asymmetry* is a necessary condition for actors to engage in opportunistic behavior (Eisenhardt, 1989). In the case of self-serving tunneling, the controlling shareholder of a corporation aims to remunerate itself beyond what it is entitled to. Bergh, Ketchen, Orlandi, Heugens, and Boyd (2019) identified a set of factors that can create information asymmetries. First, key information may be unobservable or may have uncertain qualities. For example, some scholars have argued that a firm's true cash flow cannot be accurately estimated by outsiders, and the lack of transparency creates an opportunity for tunneling (Martins et al., 2017). Second, there can be structural barriers to collecting information: Collecting information becomes more complex as a firm grows or becomes more diversified. Larger firms will have more subsidiaries, facilitating the transfer of resources to subunits. This advantage can provide the controlling shareholder with greater access to the firm's cash flow and more options to opaquely tunnel the firm's resources away.

In the case of the non-self-serving private benefits of control, *board representation* is a critical mechanism for the controlling shareholder. Companies engage in non-self-serving tunneling when they need to benefit their stakeholders, such as family and friends (Yang & Schwarz, 2016) or the government (Huyghebaert & Wang, 2012). Board representation reduces board oversight and increases information asymmetries because the board is captured by the controlling shareholder's affiliated directors. Board representation can be used to pressure the board into engaging in tunneling activities in order to favor a desired stakeholder through justifying the action of tunneling with the indirect benefits the firm might receive. Indeed, the percentage of directors affiliated with controlling shareholders tends to be high (Dahya, Dimitrov, & McConnell, 2008): For example, affiliated directors represent 30%–55% of the board members in SOEs (Cheung, Rau, & Stouraitis, 2010; Huyghebaert & Wang, 2012; Lee & Wang, 2017), 21%–53% in family firms (Arosa, Iturralde, & Maseda, 2010; Jones, Makri, & Gomez–Mejia, L. R., 2008; Yeh & Woidtke, 2005), and 20%–25% in BGs (Hearn, Strange, & Piesse, 2017; Pombo & Gutiérrez, 2011). In comparison, the percentage of directors affiliated with shareholders is lower when there is no dominant shareholder —at ~10%–13% (Jones et al., 2008; Mobbs, 2013). A key difference between self-serving and non-self-serving tunneling is that the latter occurs more sporadically than the former does, making it less severe on the company. Shareholders who engage in tunneling to benefit themselves do so more regularly than those who do it to benefit other stakeholders (Atanasov, Black, & Ciccotello, 2014), leading to differences in the relevance of the relationship between tunneling activity and ownership type, as discussed in greater detail below.

Owners can engage in one, the other, or both types of tunneling simultaneously. In the latter case, the relationship between tunneling and ownership is the strongest because it is affected by both reasons for tunneling. In the next section, we develop a theoretical framework that explains why tunneling activity will differ systematically across ownership types.

2.2 | Ownership

One challenge in synthesizing prior works is the diversity of owner types discussed in different studies. There are several types of possible owners, each of which has a distinct set of goals and priorities (Boyd & Solarino, 2016) and differing implications for both the underlying rationale and the extent of tunneling associated with each type. We present a set of testable propositions, from the weakest to the strongest association, to capture these differences.

2.2.1 | State-owned enterprises

Despite the declining involvement of government in business since the 1980s, SOEs are still common, even in mature economies. The majority of research on SOEs has explored the effects of ownership on their performance, primarily in the context of emerging economies (Boyd & Solarino, 2016). In part, this reflects the argument that state ownership may buffer weak institutions associated with emerging economies (Inoue, Lazzarini, & Musacchio, 2013). The benefit of strong government ties, however, can be offset by the competing goals of state or national interests. Indeed, a state can leverage its direct ownership in SOEs as an alternative means of benefiting particular constituents (Okhmatovskiy, 2010). The state will pressure SOEs to contribute to employment, growth, equity, regional development, social care, and other areas (Ding, Zhang, & Zhang, 2007; Shen & Lin, 2009). Indeed, state ownership is associated with value-destroying-related party transactions that aim to tunnel resources out of the SEOs (Cheung, Jing, Lu, Rau, & Stouraitis, 2009; Jiang et al., 2015; Lee & Xiao, 2004) to benefit their constituents; thereby, the SOEs engage in non-self-serving tunneling.

First, because their financing largely depends on other state-owned sources of financing, SOEs are less constrained by market forces than other forms of ownership, have less need to listen to other shareholders' needs compared with any other ownership form, and are less constrained by supporting the state's noneconomic goals. Second, compared with other types of firm, the careers and rewards of SOE managers largely depend on whether they succeed in fulfilling government goals (Milhaupt & Lin, 2013; Wang, Hong, Kafouros, & Wright, 2012). Many managers are also themselves politicians or bureaucrats affiliated with the controlling political party (Fan, Wong, & Zhang, 2007). Consequently, managers extract benefits from the firm to benefit particular political constituencies (Shleifer, 1998; Shleifer & Vishny, 1997). Indeed, politicians have an incentive to transfer value from listed SOEs to entities owned by or affiliated with

the state in order to redeploy that value to specific stakeholders, thus benefiting the state consensus. Specifically, politicians' goals are dictated by their public interests (Shleifer & Vishny, 1994, 1997), and to meet these goals, they will subsidize other underperforming SOEs or make transfers to the central government to finance social policies, ensure that their constituents are satisfied, and thereby improve their chances of reelection or reappointment by engaging in tunneling activities in order to favor the government (Huyghebaert & Wang, 2012). Finally, SOEs tunnel resources sporadically when the government needs funding for specific projects. For example, during the 2008 financial crisis, ENI, the Italian state-controlled energy company, transferred €200 million to the ENI Foundation: This money was used to finance a government-sponsored social care program. Because most of the ENI board members were state-affiliated directors, it was easier for the SOE to approve tunneling to benefit the government, thus representing an instance of non-self-serving tunneling. This led to our first hypothesis:

Hypothesis 1. State ownership is positively associated with tunneling activities.

2.2.2 | Business group ownership

A BG is a set of firms that are ostensibly independent. These firms are coordinated by a central actor to achieve mutual objectives. Coordination happens through multiple ties, including ownership, economic means, and/or social relations (Khanna & Rivkin, 2001; Yiu, Lu, Bruton, & Hoskisson, 2007). These independent companies are often listed on the stock market themselves and have client–supplier relationships among them. The specific structure of BGs varies widely across regions, and BGs can be found in both emerging and mature economies, but all BGs have a centralized actor and share a common group objective (Yiu et al., 2007). For these reasons, we discuss all of them as a single ownership category.[1]

In some emerging economies, most BGs are family controlled. The key difference between a family firm and a BG lies in the structure of the organization and in the business in which the family firms operate. In family firms, only the holding tends to be listed, and subsidiaries are directly managed firms, whereas in BGs, multiple firms are listed and are coordinated and not controlled by a central actor. At the same time, family firms tend to invest more than BGs do in unrelated businesses to hedge the risk for the family wealth and have fewer within-subsidiary client–supplier relationships than BGs do.

Controlling shareholders of BGs are less prone to engaging in tunneling for non-self-serving purposes than SOEs are, but they are more prone to engaging in self-serving tunneling. First, BG owners will contribute toward supporting state goals until these goals are beneficial for the BG itself, but the size and geographical scope of BGs make them less dependent on state or local community support. Second, as mentioned above, BGs have fewer affiliated directors, thereby reducing the chances of the board being influenced by different stakeholders' interests.

At the same time, we expect that the potential for controlling shareholders to abuse information asymmetries is higher in BGs than in SOEs, as the organizational structure of BGs gives them an advantage when it comes to engaging in tunneling. BGs have a higher degree of unrelated diversification, which is intentionally designed to spread business risk across different industries: The controlling shareholder of a BG seeks to exploit market opportunities and will create a number of related business units to achieve such a purpose (Chang & Hong, 2002). The size and diversification of BGs generate a more complex organizational structure that allows for intragroup business transactions (e.g., goods, services, and capital). The latter are exploited to divert private benefits to controlling shareholders by diverting resources to companies in which they own more cash-flow rights (Ang, Cole, & Lin, 2000; Bae, Kang, & Kim, 2002; Chang, 2003).

BGs are thus ideally placed to engage in self-serving tunneling because (a) a controlling shareholder can arrange inter-company deals more easily than other types of owners and (b) due to within-group client–supplier relationships, other shareholders face many more hurdles in attempting to trace such inter-company transfers and assess whether they are genuine or are being used to tunnel resources. This is especially true as wedges (the difference between cash-flow and control rights) increase (Bae et al., 2002; Khanna & Yafeh, 2007). Therefore, because BGs are more prone to engaging in self-serving tunneling, whereas SOEs are more prone to engaging in non-self-serving tunneling, we postulate that

Hypothesis 2. Business groups will have a stronger association with tunneling than state-owned enterprises.

2.2.3 | Family ownership

Family firms are the most common form of ownership in all regions of the world (Astrachan & Shanker, 2003; Claessens, Djankov, & Lang, 2000; La Porta, Lopez-de-Silanes, & Shleifer, 1999). Such firms are not limited to small or medium enterprises, as firms controlled by their founder or a descendant of the founder dominate stock exchanges worldwide (La Porta et al., 1999). Family firms represent a unique type of ownership: Their long-term orientation should facilitate the pursuit of effective strategies and firm performance, but family interests interfere with how the business functions (Gómez-Mejía, Takacs Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007). Family firms engage in both self-serving and non-self-serving tunneling.

In regard to the former, family firms fulfill the social recognition needs of the controlling family (Cennamo, Berrone, Cruz, & Gómez-Mejía, 2012; Gómez-Mejía, Makri, & Larraza-Kintana, 2010): Family members care about the prestige that they have in their local communities and the external image they project to external stakeholders (Craig & Dibrell, 2006) and are therefore willing to divert part of the firm's resources to benefit their stakeholders, such as local communities or governments, to reinforce their status. This is because the identity of the family owner is so closely tied to that of

the organization that external stakeholders perceive the firm as an extension of the family itself, connecting its name and reputation to the product it sells (Bingham, Dyer, Smith, & Adams, 2011). For example, studies have found that controlling families in polluting industries are more likely to adopt environmentally friendly practices than nonfamily firms (Berrone, Cruz, Gómez-Mejía, & Larraza-Kintana, 2010). Other cases revealed that controlling families will, at times, tunnel resources away from the firm to fulfill the needs of some stakeholders. For instance, the owner of Wrightbus diverted over £15 million in company resources to a local church in 6 years, driving the company into administration (BBC, 2019; Simpson, 2019). Because the board was captured by family members and their affiliates, non-self-serving tunneling that benefited the firm's image was more likely to happen.

At the same time, family firms desire the self-serving private benefits of control and often appoint family members as company officers to provide them with an informational advantage over other shareholders. These information advantages can be used to expropriate minority shareholders (Anderson & Reeb, 2003; Lemmon & Lins, 2003). Such an information advantage, alongside multiple voting-right share structures, creates incentives and the opportunities to exploit other shareholders, providing the family with benefits beyond what it would expect given the family's equity share in the company. Finally, the family derives its income from the firm itself but not from its stock price. Therefore, family members are not averse to tunneling, which negatively affects a firm's market valuation (Claessens et al., 2000; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002; Lins, 2003). Furthermore, the family control over the firm makes the latter not subject to the market for corporate control, thereby removing a constraining factor on the family members' behavior. Therefore, family firms have the incentive and the opportunity to tunnel resources to fulfill the needs of external stakeholders (who are engaging in non-self-serving tunneling), as well as the opportunity and the access to the necessary information that gives them an advantage in engaging in self-serving tunneling. This leads to the following hypothesis:

Hypothesis 3. Family ownership will be more strongly associated with tunneling than state-owned enterprises and business groups.

3 | METHODOLOGY

3.1 | Sample and coding

To create the MASEM correlation matrix, we conducted a structured content analysis by sampling a set of prominent journals in management, international business, accounting, economics, and finance over 39 years (1980–2019). We searched Web of Science, Scopus, and Google Scholar for the keywords "principal–principal," "private benefits of control," "wedge," "control divergence," "pyramidal structure," "tunnelling," "tunneling," "self-dealing," "business group ownership," "BG ownership," "state own*," "SOE," and "family ownership" in the

title, keywords, or abstract. This resulted in 2,136 results for Web of Science, 548 for Scopus, and we manually searched the first 40 pages of Google Scholar. As a second step, we removed sources that appeared in more than one database. Third, we manually examined each of the abstracts and retained the articles that were relevant to the study, totaling 693 articles. We erred in the direction of including a source that may not be relevant, rather than excluding a source that may be relevant. We then identified empirical articles that reported the relevant statistics for computing meta-analytic effect sizes (correlations or t-tests). We did not search for unpublished papers, as the "file drawer problem" has been found to have minimal influence on the outcome of MAs (Dalton, Aguinis, Dalton, Bosco, & Pierce, 2012). The final sample comprised 271 articles,[2] producing a total of 982 effect sizes and a harmonic mean of 66,590 observations. Although MAs can be affected by sample dependence across individual studies, this potential concern is mitigated by three aspects of our sample: our use of a 39-year time horizon, sampling across multiple disciplines, and the broad range of geographic regions in our article pool. All articles were coded by a single expert rater. A second rater coded a subset of articles to assess reliability. The overall reliability was 1.

3.2 | Measurement

3.2.1 | Ownership

We categorized ownership forms into separate owner types, following Boyd and Solarino's (2016) study: *SOEs* are most frequently defined as a categorical variable, but some studies have measured this variable as the percentage of equity held by the local or national government. *Family-owned firms* are operationalized in multiple ways, including the degree of equity held, various ownership thresholds (e.g., 5%, 15%, 25%, or 50% of equity), or by dichotomous measures. *BGs* have also been operationalized in multiple ways, including the percentage of group ownership, group affiliation (dummy variable), and the presence of corporate blockholders. We coded the ownership categories based on the original paper's definition and as mutually exclusive categories.

3.2.2 | Tunneling

Because tunneling is not directly observable, we relied on the variables that other researchers have used as a proxy. These variables are intercompany transactions (e.g., Boateng & Huang, 2016; Huyghebaert & Wang, 2012), wedge (e.g., Liu & Magnan, 2011; Peng, Wei, & Yang, 2011), measures of the private benefit of control (e.g., Luo et al., 2012; Zellweger et al., 2012), and other receivables scaled as the percentage of total assets (ORECTAs; e.g., Jiang et al., 2010).

3.2.3 | Control variables

MASEM allows researchers to include control variables, which help to rule out alternative explanations (Bergh et al., 2016; Combs,

Crook, & Rauch, 2019). We included three control variables: firm size, firm leverage, and institutional investors. *Firm size* is often associated with organizational complexity, which in turn might facilitate tunneling opportunities. It has been measured as the (log) number of employees or total assets. *Firm leverage* can constrain the ability of the controlling shareholder to engage in tunneling. *Institutional investors* are pervasive in the global landscape and are considered as being able to exert a direct influence through their "voice" and an indirect influence through their "exit" managerial behaviors (Appel, Gormley, & Keim, 2016; Edmans, 2014). We collected data on the presence of pressure-resistant investors (PRIs) (Brickley, Lease, & Smith, 1988). PRIs do not have ongoing business relations with their holdings, and these include mutual funds, hedge funds, and pension funds. By definition, their arm's-length relationship can raise concerns and challenge management (David, Hitt, & Gimeno, 2001). These owners influence firm performance and strategies by engaging in both formal (Bharath, Jayaraman, & Nagar, 2013) and informal negotiations with the board and executives (Appel et al., 2016). PRIs, for example, can pressure the board to replace an underperforming CEO (Brav, Jiang, Partnoy, & Thomas, 2008; Del Guercio, Seery, & Woidtke, 2008) or limit executive compensation (Brav et al., 2008; Ertimur, Ferri, & Muslu, 2010). They can also extend their influence by obtaining board seats, thus further increasing their voice (Klein & Zur, 2009). PRIs are measured by the overall equity held by all investors or by the largest PRIs.

3.3 | Analysis

MASEM is a combination of an MA and structural equation modeling (SEM; Carney, Gedajlovic, Heugens, Van Essen, & Van Oosterhout, 2011; van Essen, Otten, & Carberry, 2012). The MA allows researchers to synthesize research findings into a single effect size (Schmidt & Hunter, 2014), providing several benefits, including better and more precise estimates of the relationship in the population than single-country studies would do. The effect size reflects the magnitude and direction of the association between the two variables. MASEM allows us to use a correlation matrix made by individual MAs as the input for an SEM model, thereby allowing us to include controls for other variables in the model and estimate the model fit for the entire model. The individual MAs for the correlation matrix were

conducted using the Comprehensive Meta-Analysis software (Borenstein, Hedges, Higgins, & Rothstein, 2005). We used Mplus 8 (Muthén & Muthén, 2017) for all structural models reported in the manuscript. The harmonic mean is the average of the number of observations for each pairwise correlation in the dataset and is the recommended value to be used in structural equation models. For this study, this value was 66,590.

4 | RESULTS

Table 1 presents the meta-analytic correlation matrix used for our analysis with no adjustments (e.g., the reliability is set to 1.0). Hypotheses 1-3 proposed that the effect on tunneling would vary according to the owner type. The first step of our analysis was, therefore, to treat ownership as a latent construct, with SOEs, BGs, and family firms as multiple indicators of a common dimension. Institutional investors and firm size were included as separate dimensions. This model did not converge despite multiple iterations, indicating that this configuration was not supported by the data. We proceeded by testing the MASEM, treating each ownership form as distinct from the others. Table 2a presents the standardized MASEM results with the adjustments for measurement reliability set to 0.80. The correlations with the reliability set to 1.0 —a more conservative test— are presented in Table 2b.

In Hypothesis 1, we proposed that state ownership is positively related to tunneling. SOEs showed a negative and significant effect ($\gamma = -0.043$, $p = .001$). Consequently, Hypothesis 1 is not supported.

In Hypothesis 2, we postulated that the association between BG ownership and tunneling is stronger than that between state ownership and tunneling. The BG's effect is positive and significant ($\gamma = 0.073$, $p < .001$). Furthermore, the confidence interval does not overlap with that of the SOEs ($-0.045/-0.039$ and $0.070/0.076$ for SOEs and BGs, respectively), supporting Hypothesis 2.

In Hypothesis 3, we assert that the association between family ownership and tunneling is stronger than that for SOEs and BGs. Family firms showed the largest effect, with an effect size of 0.237 ($p < .001$). Additionally, we found that there was no overlap between the confidence interval of the relationship between the ownership types and tunneling (confidence interval: 0.234/0.239). Thereby, the MASEM results indicate that Hypothesis 2 and Hypothesis 3 are

TABLE 1 The MASEM correlation matrix

State ownership		26; 89,747	17; 30,715	37; 216,984	77; 437,729	25; 245,128	38; 151,963
Family ownership	−0.18		25; 72,965	49; 270,645	106; 666,187	37; 95,800	41; 239,459
BG ownership	−0.01	0.01		40; 82,048	66; 527,160	20; 57,072	24; 90,929
Pressure-resistant investor ownership	−0.13	−0.12	0.01		129; 388,283	22; 57,226	32; 35,341
Size	0.14	−0.05	0.19	0.10		78; 262,343	66; 369,365
Self-dealing	−0.02	0.12	0.05	−0.10	0.02		18; 40,031
Leverage	0.02	−0.03	0.09	0.02	0.06	0.06	

Note: The observed correlation is below the diagonal; the number of effect sizes (*K*) and observations (*n*) for each meta-analysis is above the diagonal.
Abbreviations: BG, business group; MASEM, meta-analytic structural equation modeling.

TABLE 2 Summary of the MASEM results for ownership and principal–principal conflicts

	Estimate	SE	Est./SE	Two-tailed p value
(a) Reliability set at 0.80				
Dependent variable: Tunneling				
Family ownership	0.237	0.001	210.99	<.001
BG ownership	0.073	0.001	64.09	<.001
State ownership	−0.042	0.001	−35.62	<.001
Institutional investor ownership	−0.203	0.001	−178.02	<.001
Firm size	0.058	0.001	48.99	<.001
Leverage	0.127	0.001	111.68	<.001
R^2	0.130	0.000	72.74	<.001
(b) Reliability set at 1.0				
Dependent variable: Tunneling				
Family ownership	0.113	0.001	92.08	<.001
BG ownership	0.035	0.001	28.29	<.001
State ownership	−0.020	0.001	−15.95	<.001
Institutional investor ownership	−0.097	0.001	−78.69	<.001
Firm size	0.028	0.001	22.21	<.001
Leverage	0.061	0.001	50.19	<.001
R^2	0.030	0.001	174.97	<.001

Note: Estimates are standardized coefficients.
Abbreviations: BG, business group; MASEM, meta-analytic structural equation modeling; SE, standard error.

supported. Finally, our statistical controls are significant: Tunneling is negatively associated with the presence of institutional investors ($\gamma = −0.203$, $p < .001$), positively associated with firm size ($\gamma = 0.058$, $p < .001$), and positively associated with firm leverage ($\gamma = 0.127$, $p < .001$).

4.1 | Robustness checks

We ran supplementary analyses to assess the robustness of our findings using 82 effect size estimates and 398,000 observations from 50 studies. First, we ran a traditional MA using the ownership form as a moderator. Table 3 presents the results of our bivariate MA, including the results of a fixed versus random effect comparison. The Q value is high and significant, confirming that the population correlation differs across studies and that a random effects model should be used for the analysis. The results are qualitatively similar to the MASEM results. Second, we checked for the presence of publication bias and found that it was not an issue, as many published studies reported null or minimal effects. We also computed Orwin's fail-safe N. Reducing our effect size estimates to zero would require an additional 74 unpublished studies. Overall, it seems that publication bias should not be a concern.

TABLE 3 Meta-analysis results for ownership and tunneling

	Observation (n)	Number of effect sizes (K)	Point estimate	Lower limit	Upper limit	z value	p value	Q value	df (Q)	p value	I^2	τ^2	SE	Variance	τ
(a) Fixed versus random effects analysis															
Fixed effect analysis	398,000	82	−0.11	−0.11	−0.10	−67.63	<.001	30888.07	81.00	.00	99.74	0.08	0.03	0.00	0.29
Random effects analysis	398,000	82	0.09	0.030	0.154	2.881	.004								
(b) Random effects analysis															
Family ownership Hypothesis 1	95,800	37	0.17	0.08	0.26	3.57	<.001								
BG ownership Hypothesis 2	57,072	20	0.11	−0.02	0.24	1.65	.09								
State ownership Hypothesis 3	245,128	25	−0.04	−0.15	0.08	−0.68	.49								
Total between								7.93	2.00	.02					

Abbreviation: BG, business group.

Additionally, we tested for possible moderators, including the disciplinary focus, the time period of the articles, and the level of development of the country. The results of these analyses are reported in Table 4. First, we examined whether effect sizes differed systematically based on the research field. Table 4a presents the results of the comparisons for finance, international business, and management publications. We did not find sufficient articles from economics or accounting to include in this comparison. Although effect sizes appeared larger for management-based articles, the Q value of 1.19 was not significant ($p = .55$), demonstrating that these differences were not statistically meaningful. Second, we split the sample in half to compare more recent versus older studies. As indicated in Table 4b, this moderation test produced a Q value of 0.46, which was again nonsignificant. As an alternative test for temporal effects, we also ran a meta-regression of the year of publication as a predictor of effect size magnitude. As shown in Table 4c, the slope coefficient was also nonsignificant ($p = .64$). Then, we tested whether the effect would systematically differ between emerging and advanced nations, as previous studies have suggested that tunneling is more likely to occur in less developed institutional environments (Young et al., 2008). We excluded studies mixing advanced and emerging nations from our analysis. As shown in Table 4d, the moderation effect by the level of institutional development was not significant ($Q = 0.40$). Finally, we assessed whether regulations could worsen or lessen tunneling (Table 4e). We employed the Guillén and Capron (2016) Shareholder Protection Index, which measures the state's capacity to implement shareholder protection rules.[3] The results indicate that the state's capacity to implement shareholder protection rules does not moderate the ability of the controlling shareholders to engage in tunneling. Overall, the results from the robustness checks increase our confidence in the findings of our main analysis.

5 | DISCUSSION

PP problems and tunneling have been widely discussed in the literature, and conventional corporate governance assumes that concentrated ownership will be a source of tunneling (Young et al., 2008). However, to date, there has been no differentiation according to the type of owner nor for the motives for engaging in tunneling. Although the theoretical prediction for expropriation is quite clear, the empirical findings are mixed, and there is less agreement about which specific kind of ownership could lead to the highest level of expropriation; these circumstances call for a more fine-grained theorization of the PP problems.

We discuss the existence of two reasons for controlling shareholders to engage in tunneling and map these reasons against the different types of controlling shareholders. First, we clarified the reasons owners engage in tunneling: Controlling shareholders engage in tunneling to benefit themselves or their stakeholders. Benefiting themselves implies continuous rather than sporadic tunneling, thereby making it more severe. Second, we discussed how not all controlling shareholders weigh up their reasons for engaging in tunneling equally.

Benefiting their stakeholders is important in the context of state ownership and family ownership, whereas benefiting themselves is important in BG ownership and family ownership. On the basis of this rationale, we developed a set of hypotheses arguing that tunneling is more strongly associated with certain types of concentrated ownership. Our results demonstrated that the three types of concentrated ownership did not lead to the same level of expropriation of minority shareholders. The pattern of relationships differs across owner types: State ownership does not seem to be related to the expropriation of minority shareholders. Family ownership generally strengthens conflict, whereas BG ownership yielded weaker findings, even though both of these ownership types were, on average, positively related to tunneling. These disparate findings suggest that rather than assuming the existence of a general predisposition to (or not to) expropriate minority shareholders, scholars should theorize the relationship between tunneling and each type of owner in their analyses.

Our findings indicate that the most important driver of tunneling is the degree to which the controlling shareholder has access to and can leverage private information. Because of their size and structure, BGs have the opportunity to engage in tunneling because of the large gap in information between insiders (controlling shareholders and managers) and outsiders (institutional investors). Family firms managed by family members have access to private information and can thus exploit tunneling opportunities more effectively, even in the presence of less complex ownership structures. In the presence of asymmetrical information, the stakeholder-serving component of tunneling strengthens the ownership–tunneling relationship, as in the case of family owners, whereas its absence weakens it, as in the case of SOEs. The state as the controlling shareholder has the conditions for engaging in tunneling. Yet having the opportunity to do so does not automatically translate into engaging in tunneling. SOEs must fulfill their party ambitions, but the firms might also be subject to hard budget constraints and public opinion scrutiny (Okhmatovskiy, 2010), and the tension between party ambitions and public scrutiny mitigated tunneling. Future studies should examine under what conditions the state engages in tunneling.

These findings have important theory-building implications for the PP literature. Ownership, especially controlling ownership, has been seen as mostly passive and has generally been linked to performance outcomes with weak effect sizes (Boyd & Solarino, 2016). Our results, however, highlight that tunneling has a significant effect on firms and suggest that controlling shareholders actively lead firms to engage in tunneling activities.

The MASEM analysis further evidenced that institutional investors play an important role in mitigating tunneling. Prior studies have shared the assumption that institutional investors would only suffer losses from tunneling (e.g., Dyck & Zingales, 2004; Johnson et al., 2000; Mitton, 2002; Young et al., 2008). Our findings suggest that institutional investors are capable of mitigating the tunneling problem in the presence of concentrated ownership.

Finally, the robustness checks test for a number of assumptions in the literature. Theory-testing exercises (Colquitt & Zapata-Phelan, 2007) are important for advancing theory because they assess

TABLE 4 Meta-analysis moderation tests

(a) Disciplinary bias

Random effects analysis	Observation (n)	Number of studies (K)	Point estimate	Lower limit	Upper limit	z value	p value	Q value	df (Q)	p value
Finance	58,844	16	0.065	−0.087	0.214	0.833	.405	1.187	2.000	.552
International business	254,928	44	0.096	0.004	0.187	2.045	.041			
Management	27,144	15	0.179	0.023	0.327	2.238	.025			

(b) Time effect: Median split (median year = 2013)

Random effects analysis	Observation (n)	Number of studies (K)	Point estimate	Lower limit	Upper limit	z value	p value	Q value	df (Q)	p value
≤2013	105,779	42	0.071	−0.018	0.159	1.557	.120	0.456	1.000	.500
>2013	292,221	40	0.115	0.024	0.204	2.471	.013			

(c) Time effect: Regression by year of publication

Method of moments	Point estimate	SE	Lower limit	Upper limit	z value	p value
Slope	0.004	0.009	−0.014	0.023	0.475	.634
Intercept	−8.884	18.880	−45.889	28.120	−0.471	.638

(d) Geographical effect: Comparison of effect sizes between advanced and emerging countries

Random effects analysis	Observation (n)	Number of studies (K)	Point estimate	Lower limit	Upper limit	z value	p value	Q value	df (Q)	p value
Developed countries	117,369	30	0.13	0.04	0.22	2.74	.01	0.71	1.00	.40
Emerging countries	275,745	45	0.08	0.00	0.15	2.06	.04			

(e) State's capacity: Shareholder Protection Index

Method of moments	Point estimate	SE	Lower limit	Upper limit	z value	p value
Slope	−0.012	0.030	−0.072	0.047	−0.400	.689
Intercept	0.183	0.199	−0.207	0.573	0.922	.357

Note: We also have publications from economics and accounting, but they are too few to run a meaningful analysis. Studies mixing developed and emerging countries were excluded.

the boundaries of a theory or, as in our case, the importance and consistency of effect size across multiple independent variable–dependent variable relationships. In particular, we tested whether the effect differed systematically between emerging and advanced nations, as previous studies have suggested that tunneling is more likely to occur in less developed institutional environments (Young et al., 2008). We did not find a meaningful difference between the two environments. Similarly, the state's capacity to implement shareholder protection rules does not seem to mitigate tunneling either. Another robustness check revealed that the magnitude of effect sizes does not change over time, again suggesting that the effect size of tunneling did not change over the 39-year period we examined, regardless of the improvement in the institutional environment in terms of minority shareholder protection, the rule of law, and so forth. These robustness checks suggest that assumptions about the role of the institutional environment need to be reassessed.

5.1 | Policy implications

Our results indicate that it is possible to draw some counterintuitive policy implications regarding board composition. As the key driver of tunneling appears to be access to private information and knowledge of the firm, a possible solution to mitigating tunneling would be to employ more long-tenured directors. This is at odds with current trends. In recent years, countries have tended to limit the tenure of outside directors (Bonini, Deng, Ferrari, & John, 2017). Shorter mandates for directors increase the independence of the board but also the asymmetry of information between the directors themselves and the CEOs affiliated with the controlling shareholder. Long-tenured directors have extensive firm-specific knowledge, and removing them would cost the board knowledge about the company and the past behaviors of the controlling shareholder, making tunneling harder to identify and prevent. Some proxy advisory firms have started advocating for changes in how tenure rules for directors are applied (see, e.g., Institutional Shareholders Service, 2017). Therefore, we call for deeper reflection on how information asymmetries within a company board can be reduced.

The MA and MASEM are useful statistical tools with which to synthesize a disparate body of literature. As such, this methodology can help solve controversies and identify novel boundary conditions. A meta-analytic study is also useful for identifying underexplored areas of the literature and for setting up the stage to build future studies.

5.2 | Future research opportunities

On the basis of our discussion above, we identified several possible research opportunities. First, we found a substantial degree of heterogeneity in the effects within ownership types. Future studies should explore under what conditions PP problems are more (or less) serious for each ownership form. Such research is needed to unpack effect sizes and continue testing theories in order to provide a more robust

starting point for theorization and to increase the scientific validity of theories (Miner, 2003). Further theorizing about the domain of owner conflicts is needed and must not assume homogeneity across owners. Some work has been done in this area (e.g., Appel et al., 2016), but more is needed. Future studies should look at how different types of owners are linked to other forms of PP conflicts. Peng and Sauerwald (2013), in their analysis of the forms of PP conflicts, included tunneling, the adoption of inefficient firm strategies, nepotism, and excessive compensation for affiliated executives. As we have demonstrated that the relationship between ownership and tunneling varies among ownership types, future studies could replicate our approach to assess whether the relationship among ownership types and the other forms of PP problems differs systematically. Such studies would help clarify the preferences of different owners with regard to PP problems and inform policymakers about how to address the issues more effectively. One useful direction would be to explore whether specific owners favor certain types of conflicts and avoid others. Additionally, controlling shareholders can extract wealth from firms in many ways. For example, they can engage in cash-flow tunneling, asset tunneling "out," asset tunneling "in," and equity tunneling (Atanasov et al., 2014). An assessment of how relevant each type of tunneling is for the firm's performance can help boards and regulators to develop more effective anti-tunneling monitoring controls and investors and analysts to evaluate tunneling risk. Future research should assess how each tunneling type affects the accounting and market performance of the firm, in the short and long terms, to determine whether and to what extent anti-tunneling strategies are effective.

Second, future studies should also assess the elasticity of tunneling to external conditions. For example, do changes in the market conditions change the tunneling activity? Peng and Jiang (2010) examined how family firms changed their tunneling behavior during the Asian financial crisis, offering some preliminary findings. Future studies should extend this line of inquiry to other ownership forms and to different market conditions and institutional settings.

Third, our MASEM results revealed how institutional investors can prevent their resources from being expropriated. As this finding is somewhat counterintuitive in light of the focus in the existing literature on limiting resources being "expropriated from minority shareholders," our findings call for more research on how different ownership types interact to mitigate governance problems.

Our robustness checks uncovered several unsupported assumptions about tunneling. Our findings call for a reassessment of the assumption behind PP research. Young et al. (2008) suggested that PP conflicts do not occur in mature economies due to their more mature institutions and the rule of law, but our robustness checks suggest otherwise, as we were not able to detect differences across geographical areas or time (as institutional contexts generally advance over time, our moderator for the time period is a rough proxy for the variability of institutional factors). For the cross-country comparison, our paper drew on measures reflecting formal institutional aspects. Formal institutions comprise only half of the institutions within a country. An important role in shaping the behavior of business actors is also played by the informal institutions of a country (Williamson &

Kerekes, 2011). Depending on how strong the informal institutions in a country are, actors will behave differently in their private and public life (Platteau, 2000). Future research should assess how the informal institutions of a country are related to tunneling. For example, are family owners more or less prone to engaging in tunneling in countries that place a greater emphasis on family values? Or are the different ownership forms more or less prone to engaging in tunneling in countries that place more value on relational business transactions versus arm's-length transactions? It is therefore important that the assessment of the assumptions behind tunneling is explored, not only from a formal institution perspective but also from an informal institution's point of view.

Additionally, future studies should assess whether the interaction effect between formal and informal institutions moderates the relationship between ownership and tunneling. Helmke and Levitsky (2004), building on the ideas of North (1990, 1991), argue that informal institutions can work either positively or negatively to boost or constrain formal institutions. Future studies should assess how the informal institutions support or contain the effectiveness of the regularity environment and the formal institutions of a country. It is, thus, important that the central assumptions in PP research are re-examined.

Finally, future research on tunneling should also consider the problem with qualitative lenses, such as case studies and interviews with executives (Solarino & Aguinis, 2020), as our robustness checks have revealed that, for example, the state's capacity to implement shareholder protection rules does not moderate the relationship between ownership and tunneling. Researchers need to open the black box of tunneling and clarify why regulations are often ineffective in preventing the expropriation of minority shareholders.

A limitation of the paper is that we are bound by what kind of effect sizes researchers report in their studies. Consequently, we are unable to capture the role of noncontrolling blockholders in shaping tunneling. Future studies should assess to what extent blockholders—besides the controlling one—influence the extraction of tunneling. Some preliminary work has been done in this area, but the work is limited to single-country studies (e.g., Boateng & Huang, 2016). A second limitation of the paper is that we cannot distinguish empirically how the resources tunneled by the controlling shareholders are actually employed. Future studies should identify measures to assess how the tunneled resources have been employed. For example, how much tunneling is diverted to the controlling shareholder and how much to other stakeholders in family firms?

To conclude, given the high premium that management journals place on theory, we call for a finer-grained theorizing of PP relationships. We demonstrate that a single relationship (between concentrated ownership and tunneling) can vary substantially and robustly in terms of effect sizes and direction based on the type of company ownership.

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NOTES

[1] Following the advice of a reviewer, we compared the effect sizes across different BG forms (Yiu et al., 2007) to investigate whether there are statistically meaningful differences among them. We were not able to detect a statistically meaningful difference. Therefore, we do not further distinguish between different forms of BGs.

[2] The list of the studies included in the MASEM analysis is available in the Supporting Information.

[3] The index captures 10 key legal provisions that are relevant to the protection of minority shareholder rights: powers of the general meeting for de 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. If present, each of these legal provisions provides minority shareholders with a comprehensive set of protections against the actions of large shareholders and/or management and in the event of a change in corporate control.

REFERENCES

Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. *Journal of Finance*, *58*, 1301–1327. https://doi.org/10.1111/1540-6261.00567

Ang, J. S., Cole, R. A., & Lin, J. W. (2000). Agency costs and ownership structure. *Journal of Finance*, *55*, 81–106. https://doi.org/10.1111/0022-1082.00201

Appel, I. R., Gormley, T. A., & Keim, D. B. (2016). Passive investors, not passive owners. *Journal of Financial Economics*, *121*, 111–141. https://doi.org/10.1016/j.jfineco.2016.03.003

Arosa, B., Iturralde, T., & Maseda, A. (2010). Outsiders on the board of directors and firm performance: Evidence from Spanish non-listed family firms. *Journal of Family Business Strategy*, *1*, 236–245. https://doi.org/10.1016/j.jfbs.2010.10.004

Astrachan, J. H., & Shanker, M. C. (2003). Family businesses contribution to the US economy: A closer look. *Family Business Review*, *16*, 211–219. https://doi.org/10.1177/08944865030160030601

Atanasov, V., Black, B., & Ciccotello, C. S. (2014). Unbundling and measuring tunneling. *University of Illinois Law Review*, *2014*, 1697–1738.

Bae, K. H., Kang, J. K., & Kim, J. M. (2002). Tunneling or value added? Evidence from mergers by Korean business groups. *Journal of Finance*, *57*, 2695–2740. https://doi.org/10.1111/1540-6261.00510

BBC. (2019, September 25). Wrightbus: Firm faces questions over Green Pastures donations. Retrieved from https://www.bbc.co.uk/news/uk-northern-ireland-49824525

Bergh, D. D., Aguinis, H., Heavey, C., Ketchen, D. J., Boyd, B. K., Su, P., & Joo, H. (2016). Using meta-analytic structural equation modeling to advance strategic management research: Guidelines and an empirical illustration via the strategic leadership–performance relationship. *Strategic Management Journal*, *37*, 477–497. https://doi.org/10.1002/smj.2338

Bergh, D. D., Ketchen, D. J., Orlandi, I., Heugens, P. P. M. A. R., & Boyd, B. K. (2019). Information asymmetry in management research: Past accomplishments and future opportunities. *Journal of Management*, *45*, 122–158. https://doi.org/10.1177/0149206318798026

Berrone, P., Cruz, C., Gómez-Mejía, L., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, *55*, 82–113. https://doi.org/10.2189/asqu.2010.55.1.82

Bharath, S. T., Jayaraman, S., & Nagar, V. (2013). Exit as governance: An empirical analysis. *Journal of Finance*, 68, 2515–2547. https://doi.org/10.1111/jofi.12073

Bingham, J. B., Dyer, W. G., Smith, I., & Adams, G. L. (2011). A stakeholder identity orientation approach to corporate social performance in family firms. *Journal of Business Ethics*, 99, 565–585. https://doi.org/10.1007/s10551-010-0669-9

Boateng, A., & Huang, W. (2016). Multiple large shareholders, excess leverage and tunneling: Evidence from an emerging market. *Corporate Governance: An International Review*, 25, 58–74. https://doi.org/10.1111/corg.12184

Bonini, S., Deng, J., Ferrari, M., & John, K. (2017, June 5). On long-tenured independent directors. Harvard Law School Forum on Corporate Governance. Retrieved from https://corpgov.law.harvard.edu/2017/06/05/on-long-tenured-independent-directors/

Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2005). *Comprehensive meta-analysis: Version 2*. Englewood, NJ: Biostat.

Boyd, B. K., & Solarino, A. (2016). Ownership of corporations: A review, synthesis, and research agenda. *Journal of Management*, 42, 1282–1314. https://doi.org/10.1177/0149206316633746

Brav, A., Jiang, W., Partnoy, F., & Thomas, R. (2008). Hedge fund activism, corporate governance, and firm performance. *Journal of Finance*, 63, 1729–1775. https://doi.org/10.1111/j.1540-6261.2008.01373.x

Brickley, J. A., Lease, R. C., & Smith, C. W. (1988). Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics*, 20, 267–291. https://doi.org/10.1016/0304-405X(88)90047-5

Byun, H. Y., Choi, S., Hwang, L. S., & Kim, R. G. (2013). Business group affiliation, ownership structure, and the cost of debt. *Journal of Corporate Finance*, 23, 311–331. https://doi.org/10.1016/j.jcorpfin.2013.09.003

Carney, M., Gedajlovic, E. R., Heugens, P. P., Van Essen, M., & Van Oosterhout, J. (2011). Business group affiliation, performance, context, and strategy. A meta-analysis. *Academy of Management Journal*, 54, 437–460.

Cennamo, C., Berrone, P., Cruz, C., & Gómez-Mejía, L. R. (2012). Socioemotional wealth and proactive stakeholder engagement: Why family-controlled firms care more about their stakeholders. *Entrepreneurship Theory and Practice*, 36, 1153–1173. https://doi.org/10.1111/j.1540-6520.2012.00543.x

Chang, S. J. (2003). Ownership structure, expropriation, and performance of group-affiliated companies in Korea. *Academy of Management Journal*, 46, 238–253. https://doi.org/10.5465/30040617

Chang, S. J., & Hong, J. (2002). How much does the business group matter in Korea? *Strategic Management Journal*, 23, 265–274. https://doi.org/10.1002/smj.224

Cheung, Y. L., Jing, L., Lu, T., Rau, P. R., & Stouraitis, A. (2009). Tunneling and propping up: An analysis of related party transactions by Chinese listed companies. *Pacific-Basin Finance Journal*, 17, 372–393. https://doi.org/10.1016/j.pacfin.2008.10.001

Cheung, Y. L., Rau, P. R., & Stouraitis, A. (2010). Helping hand or grabbing hand? Central vs. local government shareholders in Chinese listed firms. *Review of Finance*, 14, 669–694. https://doi.org/10.1093/rof/rfp024

Claessens, S., Djankov, S., & Lang, L. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58, 81–112. https://doi.org/10.1016/S0304-405X(00)00067-2

Colquitt, J. A., & Zapata-Phelan, C. P. (2007). Trends in theory building and theory testing: A five-decade study of the Academy of Management Journal. *Academy of Management Journal*, 50, 1281–1303. https://doi.org/10.5465/amj.2007.28165855

Combs, J. G., Crook, T. R., & Rauch, A. (2019). Meta-analytic research in management: Contemporary approaches, unresolved controversies, and rising standards. *Journal of Management Studies*, 56, 1–18. https://doi.org/10.1111/joms.12427

Craig, J., & Dibrell, C. (2006). The natural environment, innovation, and firm performance: A comparative study. *Family Business Review*, 19, 275–288. https://doi.org/10.1111/j.1741-6248.2006.00075.x

Dahya, J., Dimitrov, O., & McConnell, J. J. (2008). Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics*, 87, 73–100. https://doi.org/10.1016/j.jfineco.2006.10.005

Dalton, D. R., Aguinis, H., Dalton, C. A., Bosco, F. A., & Pierce, C. A. (2012). Revisiting the file drawer problem in meta-analysis: An empirical assessment of published and non-published correlation matrices. *Personnel Psychology*, 65, 221–249. https://doi.org/10.1111/j.1744-6570.2012.01243.x

David, P., Hitt, M. A., & Gimeno, J. (2001). The influence of activism by institutional investors on R&D. *Academy of Management Journal*, 44, 144–157. https://doi.org/10.5465/3069342

Del Guercio, D., Seery, L., & Woidtke, T. (2008). Do boards pay attention when institutional investor activists "just vote no"? *Journal of Financial Economics*, 90, 84–103. https://doi.org/10.1016/j.jfineco.2008.01.002

Ding, Y., Zhang, H., & Zhang, J. (2007). Private vs state ownership in earnings management: Evidence from Chinese listed companies. *Corporate Governance: An International Review*, 15, 223–238. https://doi.org/10.1111/j.1467-8683.2007.00556.x

Dyck, A., & Zingales, L. (2004). Private benefits of control: An international comparison. *Journal of Finance*, 59, 537–600. https://doi.org/10.1111/j.1540-6261.2004.00642.x

Edmans, A. (2014). Blockholders and corporate governance. *Annual Review of Finance and Economics*, 6, 23–50. https://doi.org/10.1146/annurev-financial-110613-034455

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14, 57–74. https://doi.org/10.5465/amr.1989.4279003

Ertimur, Y., Ferri, F., & Muslu, V. (2010). Shareholder activism and CEO pay. *Review of Financial Studies*, 24, 535–592. https://doi.org/10.1093/rfs/hhq113

Fan, J. P., Wong, T. J., & Zhang, T. (2007). Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics*, 84, 330–357. https://doi.org/10.1016/j.jfineco.2006.03.008

Gómez-Mejía, L. R., Makri, M., & Larraza-Kintana, M. (2010). Diversification decisions in family-controlled firms. *Journal of Management Studies*, 47, 223–252. https://doi.org/10.1111/j.1467-6486.2009.00889.x

Gómez-Mejía, L. R., Takacs Haynes, K., Núñez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive mills. *Administrative Science Quarterly*, 52, 106–137. https://doi.org/10.2189/asqu.52.1.106

Guillén, M. F., & Capron, L. (2016). State capacity, minority shareholder protections, and stock market development. *Administrative Science Quarterly*, 61, 125–160. https://doi.org/10.1177/0001839215601459

Haß, L. H., Johan, S., & Müller, M. A. (2016). The effectiveness of public enforcement: Evidence from the resolution of tunneling in China. *Journal of Business Ethics*, 134, 649–668. https://doi.org/10.1007/s10551-014-2389-z

Hearn, B., Strange, R., & Piesse, J. (2017). Social elites on the board and executive pay in developing countries: Evidence from Africa. *Journal of World Business*, 52, 230–243. https://doi.org/10.1016/j.jwb.2016.12.004

Helmke, G., & Levitsky, S. (2004). Informal institutions and comparative politics: A research agenda. *Perspectives on Politics*, 2, 725–740. https://doi.org/10.1017/S1537592704040472

Huyghebaert, N., & Wang, L. (2012). Expropriation of minority investors in Chinese listed firms: The role of internal and external corporate governance mechanisms. *Corporate Governance: An International Review*, 20, 308–332. https://doi.org/10.1111/j.1467-8683.2012.00909.x

Inoue, C. F. K. V., Lazzarini, S. G., & Musacchio, A. (2013). Leviathan as a minority shareholder: Firm-level implications of state equity purchases. *Academy of Management Journal*, 56, 1775–1801. https://doi.org/10.5465/amj.2012.0406

Institutional Shareholders Service. (2017). Institutional investors and trends in board refreshment. Boston, MA.

Jiang, G., Lee, C., & Yue, H. (2010). Tunneling through intercorporate loans: The China experience. *Journal of Financial Economics*, 98, 1–20. https://doi.org/10.1016/j.jfineco.2010.05.002

Jiang, G., Rao, P., & Yue, H. (2015). Tunneling through non-operational fund occupancy: An investigation based on officially identified activities. *Journal of Corporate Finance*, 32, 295–311. https://doi.org/10.1016/j.jcorpfin.2014.10.011

Jiang, Y., & Peng, M. W. (2011). Principal–principal conflicts during crisis. *Asia Pacific Journal of Management*, 28, 683–695. https://doi.org/10.1007/s10490-009-9186-8

Johnson, S., La Porta, R., Lopes-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *American Economic Review*, 90, 22–27. https://doi.org/10.1257/aer.90.2.22

Jones, C. D., Makri, M., & Gomez–Mejia, L. R. (2008). Affiliate directors and perceived risk bearing in publicly traded, family-controlled firms: The case of diversification. *Entrepreneurship Theory and Practice*, 32, 1007–1026. https://doi.org/10.1111/j.1540-6520.2008.00269.x

Khanna, T., & Rivkin, J. W. (2001). Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22, 45–74. https://doi.org/10.1002/1097-0266(200101)22:1<45::AID-SMJ147>3.0.CO;2-F

Khanna, T., & Yafeh, Y. (2007). Business groups in emerging markets: Paragons or parasites? *Journal of Economic Literature*, 45, 331–372. https://doi.org/10.1257/jel.45.2.331

Klein, A., & Zur, E. (2009). Entrepreneurial shareholder activism: Hedge funds and other private investors. *Journal of Finance*, 64, 187–229. https://doi.org/10.1111/j.1540-6261.2008.01432.x

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, 54, 471–517. https://doi.org/10.1111/0022-1082.00115

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *Journal of Finance*, 57, 1147–1170. https://doi.org/10.1111/1540-6261.00457

Lee, C.-W. J., & Xiao, X. (2004). Tunneling dividends (SSRN working paper). Retrieved from https://ssrn.com/abstract=693361 or https://doi.org/10.2139/ssrn.693361

Lee, W., & Wang, L. (2017). Do political connections affect stock price crash risk? Firm-level evidence from China. *Review of Quantitative Finance and Accounting*, 48, 643–676. https://doi.org/10.1007/s11156-016-0563-3

Lemmon, M. L., & Lins, K. V. (2003). Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. *Journal of Finance*, 58, 1445–1168. https://doi.org/10.1111/1540-6261.00573

Lins, K. V. (2003). Equity ownership and firm value in emerging markets. *Journal of Financial and Quantitative Analysis*, 38, 159–184. https://doi.org/10.2307/4126768

Liu, M., & Magnan, M. (2011). Self-dealing regulations, ownership wedge, and corporate valuation: International evidence. *Corporate Governance: An International Review*, 19, 99–115. https://doi.org/10.1111/j.1467-8683.2010.00839.x

Lo, A. W., Wong, R. M., & Firth, M. (2010). Can corporate governance deter management from manipulating earnings? Evidence from related-party sales transactions in China. *Journal of Corporate Finance*, 16, 225–235. https://doi.org/10.1016/j.jcorpfin.2009.11.002

Luo, J. H., Wan, D. F., & Cai, D. (2012). The private benefits of control in Chinese listed firms: Do cash flow rights always reduce controlling shareholders' tunneling? *Asia Pacific Journal of Management*, 29, 499–518. https://doi.org/10.1007/s10490-010-9211-y

Martins, H. C., Schiehll, E., & Terra, P. R. S. (2017). Country-level governance quality, ownership concentration, and debt maturity: A comparative study of Brazil and Chile. *Corporate Governance: An International Review*, 25, 236–254. https://doi.org/10.1111/corg.12192

Milhaupt, C. J., & Lin, L. W. (2013). We are the (national) champions: Understanding the mechanisms of state capitalism in China. *Stanford Law Review*, 65, 697–760.

Miller, D., Breton-Miller, I. L., & Lester, R. H. (2013). Family firm governance, strategic conformity, and performance: Institutional vs. strategic perspectives. *Organization Science*, 24, 189–209. https://doi.org/10.1287/orsc.1110.0728

Miner, J. B. (2003). The rated importance, scientific validity, and practical usefulness of organizational behavior theories: A quantitative review. *The Academy of Management Learning and Education*, 2, 250–268. https://doi.org/10.5465/amle.2003.10932132

Mitton, T. (2002). A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis. *Journal of Financial Economics*, 64, 215–241. https://doi.org/10.1016/S0304-405X(02)00076-4

Mobbs, S. (2013). CEOs under fire: The effects of competition from inside directors on forced CEO turnover and CEO compensation. *Journal of Financial and Quantitative Analysis*, 48, 669–698. https://doi.org/10.1017/S0022109013000318

Muthén, L. K., & Muthén, B. (2017). *Mplus users guide: Statistical analysis with latent variables*. Los Angeles, CA: Muthén & Muthén.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.

North, D. C. (1991). Institutions. *Journal of Economic Perspectives*, 5, 97–112. https://doi.org/10.1257/jep.5.1.97

Okhmatovskiy, I. (2010). Performance implications of ties to the government and SOEs: A political embeddedness perspective. *Journal of Management Studies*, 47, 1020–1047. https://doi.org/10.1111/j.1467-6486.2009.00881.x

Peng, M. W., & Jiang, Y. (2010). Institutions behind family ownership and control in large firms. *Journal of Management Studies*, 47, 253–273. https://doi.org/10.1111/j.1467-6486.2009.00890.x

Peng, M. W., & Sauerwald, S. (2013). Corporate governance and principal–principal conflicts. In M. Wright, D. S. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance* (pp. 658–672). Oxford: Oxford University Press.

Peng, W. Q., Wei, K. J., & Yang, Z. (2011). Tunneling or propping: Evidence from connected transactions in China. *Journal of Corporate Finance*, 17, 306–325. https://doi.org/10.1016/j.jcorpfin.2010.08.002

Platteau, J.-P. (2000). *Institutions, social norms, and economic development*. Amsterdam: Routledge & CRC Press.

Pombo, C., & Gutiérrez, L. H. (2011). Outside directors, board interlocks and firm performance: Empirical evidence from Colombian business groups. *Journal of Economics and Business*, 63, 251–277. https://doi.org/10.1016/j.jcorpfin.2010.08.002

Schmidt, F. L., & Hunter, J. E. (2014). *Methods of meta-analysis: Correcting error and bias in research findings* (3rd ed.). Los Angeles: Sage.

Shen, W., & Lin, C. (2009). Firm profitability, state ownership, and top management turnover at the listed firms in China: A behavioral perspective. *Corporate Governance: An International Review*, 17, 443–456. https://doi.org/10.1111/j.1467-8683.2009.00725.x

Shleifer, A. (1998). State versus private ownership. *Journal of Economic Perspectives*, 12, 133–150. https://doi.org/10.1257/jep.12.4.133

Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737–783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x

Shleifer, A., & Vishny, R. W. (1994). Politicians and firms. *Quarterly Journal of Economics*, 109, 995–1025. https://doi.org/10.2307/2118354

Simpson, M. (2019, September 29). Wrightbus: Protest at Green Pastures Church over donations. BBC NI. Retrieved from: https://www.bbc.co.uk/news/uk-northern-ireland-49869944

Solarino, A. M., & Aguinis, H. (2020). Challenges and best-practice recommendations for designing and conducting interviews with elite informants. *Journal of Management Studies*, https://doi.org/10.1111/joms.12620

Van Essen, M., Otten, J., & Carberry, E. J. (2012). Determinants of CEO compensation and managerial power theory: A meta-analytic approach. *Journal of Management*, 41, 164–202. https://doi.org/10.1177/0149206311429378

Wang, C., Hong, J., Kafouros, M., & Wright, M. (2012). Exploring the role of government involvement in outward FDI from emerging economies. *Journal of International Business Studies*, 43, 655–676. https://doi.org/10.1057/jibs.2012.18

Williamson, C. R., & Kerekes, C. B. (2011). Securing private property: Formal versus informal institutions. *Journal of Law and Economics*, 54, 537–572. https://doi.org/10.1086/658493

Yang, D. R. (2017). Buying gold at the price of silver? Controlling shareholders and real estate transactions in Korean listed firms. *Corporate Governance: An International Review*, 25, 200–218. https://doi.org/10.1111/corg.12193

Yang, K. P., & Schwarz, G. M. (2016). A multilevel analysis of the performance implications of excess control in business groups. *Organization Science*, 27, 1219–1236. https://doi.org/10.1287/orsc.2016.1086

Yeh, Y. H., & Woidtke, T. (2005). Commitment or entrenchment? Controlling shareholders and board composition. *Journal of Banking & Finance*, 29, 1857–1885. https://doi.org/10.1016/j.jbankfin.2004.07.004

Yiu, D. W., Lu, Y., Bruton, G. D., & Hoskisson, R. E. (2007). Business groups: An integrated model to focus future research. *Journal of Management Studies*, 44, 1551–1579. https://doi.org/10.1111/j.1467-6486.2007.00735.x

Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal–principal perspective. *Journal of Management Studies*, 45, 196–220. https://doi.org/10.1111/j.1467-6486.2007.00752

Zellweger, T. M., Kellermanns, F. W., Chrisman, J. J., & Chua, J. H. (2012). Family control and family firm valuation by family CEOs: The importance of intentions for transgenerational control. *Organization Science*, 23, 851–868. https://doi.org/10.1287/orsc.1110.0665

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