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Board of director effectiveness and informal institutions: A meta-analysis

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Abstract

Research Summary: Board independence is central to corporate governance. Numerous theories espouse the value of the monitoring and advice provided by outside board members, and governance codes worldwide call for boards with more independent directors and for separating the roles of chief executive officer and chairman. However, neither original studies nor meta-analyses have found a substantial link between board independence and firm performance. We adopt an institutional logic perspective to argue that the relations between board independence and firm performance is moderated by the institutions of a country. Our analyses find that the strength of the informal institutions is a more important moderator than that of formal institutions. We employ country-level institutional moderators and apply meta-regression to a sample of 86 articles encompassing 40 nations. We offer suggestions for future governance research.

Managerial Summary: Board independence is widely considered to be a hallmark of good governance. However, prior research has been unable to connect independence with a firm's financial performance. We provide practical advice by demonstrating how national

institutions shape the consequences of an independent board. Using a multi-country sample, we show that the effectiveness of the corporate governance practices, such as board independence, depends on the strength of the local institutions and that the strength of the informal institutions is more important in explaining the effectiveness of the board than the strengths of the formal institutions. Stronger informal institutions strengthen the board independence- firm performance relationship. We discuss the implication of our findings.

KEYWORDS

board of directors, corporate governance, firm performance, institutions, meta-analysis

1 | INTRODUCTION

The roles played by independent directors are among the greatest quandaries in corporate governance research. Multiple theories posit that independent directors add value to the firm through a combination of expert advice and monitoring of top management. Governance codes worldwide echo this assessment, typically calling for boards composed primarily of independent, or non-executive, directors, and for the separation of CEO and chairman roles. Together, these mechanisms are expected to boost the effectiveness of a firm's top leadership.

Given the prominence of this topic—for both researchers and practitioners—an extensive amount of work has been done on the link between board independence and firm performance. These studies have been conducted on a wide range of developed and emerging economy nations. Individual studies have reported widely divergent findings on the board independence–firm performance relationship, ranging from positive, null, and negative relationships, and effects of varying magnitudes. Several meta-analyses have attempted to reconcile these contrasting results without success (García-Meca & Sánchez-Ballesta, 2009; van Essen et al., 2012). One early meta-analysis offered a pessimistic assessment: "It can be concluded, therefore, that there is no relationship between boards' leadership structure and firm performance" (Dalton et al., 1998, p. 280).

There are several possible explanations for this failure to substantiate a relationship between board independence and firm performance. First, board independence and firm performance might be unrelated. Second, studies could lack sufficient statistical power to detect this relationship. This explanation is more likely for individual studies versus meta-analyses, as the latter typically sample more than 25,000 firms, and often upward of 50,000 firms. Finally, the relationship is contingent on the country environment, but the majority of the studies focus on single countries (Boyd et al., 2017). As discussed later, we explore this avenue of research. Dalton et al. (1998) were doubtful about the potential for moderating effects, and subsequent meta-analyses have tested for additional moderators, with many non-significant findings (García-Meca & Sánchez-Ballesta, 2009; van Essen et al., 2012).

We advance theory on corporate governance via a systematic theory development and test of the role of country-level factors in moderating the relationship between board independence and

firm performance. Our aim is to assess how variations in informal institutions across countries affect the board independence–firm performance relationship and whether informal institutions are more relevant than formal ones. We examine this by using a meta-analysis on the moderating role of informal institutions relative to formal ones. Informal institutions include values and social norms, such as the importance of religion, while formal ones include laws and regulations. We adopt an institutional logic perspective (Thornton & Ocasio, 1999) and apply multiple operationalizations of informal and formal institutions. Logics shape the decision-making process of people and were missing from the previous meta-analyses, which looked at the formal institutions and arrived at inconclusive findings (García-Meca & Sánchez-Ballesta, 2009; van Essen et al., 2012). Our study extends the role of informal institutional logics to the board processes.

Our analyses are based on meta-regression. We searched nearly two decades of research for country-level studies of board independence and firm performance and identified 86 articles encompassing 40 nations with a sample size of nearly half a million observations. For each nation in our sample, we collected data on its legal system, shareholder protection laws, and social values. Consistent with our expectations, informal institutions are a significant moderator, and they explain more variance (i.e., a more powerful explanation) than formal institutions. Together, these findings contribute to our understanding of how informal logics influence the decision-making of the board. In particular, they highlight how different informal institutions have different effects on the board independence-firm performance relationship. These findings raise new questions while also laying the foundation for promising lines of inquiry regarding the role of institutions and national contexts in governance studies.

2 | LITERATURE, THEORY, AND HYPOTHESES

In this section, we develop a model linking board independence, informal institutions, and firm performance. We begin by describing prior work on board independence and performance. This body of research has yielded findings that are inconsistent with both academic and practitioner best practices for boards, emphasizing the need for additional theorizing in this area. Next, we examine the role of institutions as an opportunity for theory development, particularly the distinction between formal and informal institutions.

2.1 | Board Independence and firm performance

First, we provide a brief overview of factors leading to the introduction of governance reform initiatives around the world, which emphasized the role of independent directors. This historical background is critical, as it represents a confluence of academic and practitioner governance concerns on a global stage. Next, we examine the results of studies attempting to link governance and performance—essentially "proof of concept" for the many governance codes. Third, we discuss the search for moderators in the pursuit of reconciling decades of conflicting research outcomes.

2.1.1 | The quest for good governance

Early work on corporate governance viewed directors as largely uninvolved in activities such as monitoring top executives or supporting strategy (Drucker, 1981; Mace, 1971). A wave of

corporate crises in the 1990 s—including General Motors in the USA, Maxwell in the UK, and Metallgesellschaft in Germany, among others—highlighted weak or ineffectual boards of directors. Concurrently, the rise of investor activism and market globalization pushed corporate boards to the front page. Subsequently, stock exchanges worldwide began implementing codes of best practices for listed firms; these included the influential Cadbury Committee (UK), the Hilmer Report (Australia), the Dey Report (Canada), and the Vienot Report (France), among others. Today, there are over 140 governance codes around the globe (World Bank/IFC, 2019). The goal of these initiatives was to make directors independent from management, typically defined as independent or non-executive directors, and the separation of CEO and chairman positions (Norburn, Boyd, Fox, & Muth, 2000).

A major conceptual shift in management research on boards of directors was the introduction of agency theory. Briefly, agents (i.e., corporate executives) may be motivated to place their own interests over those of the firm, unless suitable internal control mechanisms are in place (Fama, 1980; Fama & Jensen, 1983). Early applications of agency theory to management topics (e.g., Eisenhardt, 1989; Walsh & Seward, 1990) served as the launching pad for numerous empirical studies, many of which focused on governance. Board independence is widely seen as a key mechanism to provide better oversight, leading to many studies attempting to link board independence with firm performance—an expectation shared with the previously mentioned governance reform initiatives.

Specifically, independence is expected to facilitate two key roles of boards of directors: monitoring and giving advice (Hillman & Dalziel, 2003). The monitoring role of boards has been studied extensively (e.g., Boyd, 1994; Johnson et al., 1996) and refers to the responsibility of directors to monitor managers on behalf of shareholders. Independent directors are better suited than inside directors for their monitoring role because they do not have any relationship with the management of the firm (the agents) and are therefore best suited to pursue shareholder value, free of conflicts of interest (Fama, 1980; Mizruchi, 1983). By monitoring CEOs and their strategies, independent directors can ensure that shareholders' interests are prioritized and that firm performance is enhanced. Economic theories rely on an under-socialized, actor-centric view that emphasizes how agents pursue their individual goals, guided by opportunism and self-interest, and are thereby subject to monitoring by independent board members. The aim of such monitoring is to efficiently change the behavior of the agents.

Alternative perspectives have been applied to boards as well, including resource dependence theory and stakeholder theory (Boyd, 1990; Heath & Norman, 2004; Hillman et al., 2009). These theories have linked the role of independent directors to the advisory role of the board. Both resource dependence theory and stakeholder theory suggest that independent board members, because they are free from conflicts of interest and can identify which stakeholders matter more for the firm, are better positioned to build links with external stakeholders (Freeman et al., 2007; Hillman et al., 2009). In summary, both management theory and normative practice guidelines argue that board independence is desirable to improve firm performance.

2.1.2 | Empirical findings

The volume of empirical work on board independence and performance is vast and spans multiple nations. The results of individual studies are highly discordant, with various papers reporting positive, negative, or null findings, with significant effects also varying substantially in magnitude. These inconclusive findings have spurred an entire stream of meta-analytic

syntheses in an effort to reconcile the apparent disconnect between theory, governance guidelines, and empirical results. Table 1 reports key details of these meta-analyses, which encompass hundreds of original studies and hundreds of thousands of observations. However, as with the studies based on original data, the results for meta-analyses are also mixed and inconclusive. The earliest meta-analysis was the influential 1998 study by Dalton and colleagues, which examined the effects of the ratio of independent and outsider directors and CEO duality on a mix of accounting and market-based performance measures.

Despite an ample sample size, they concluded that the relationship between board independence and firm performance was essentially near zero. Subsequent papers have reported comparable results, as shown in Table 1. The Table includes "effect size" estimates for each study, which reflects the magnitude (strength) of a relationship between two variables. Effect sizes are a key metric in a meta-analysis, and in this case represent the bivariate correlation between board independence and performance, weighted by the sample size of the individual studies included in the meta-analysis. Consequently, an effect size is interpreted in a similar way as a correlation coefficient, where a value of 0 indicates the absence of a relationship between two variables, and a value of 1 indicates that both variables are perfectly correlated. The effect size estimates reported in Table 1 are consistently quite small, in line with the initial assessment by Dalton and colleagues that there is virtually no empirical evidence linking a key "best practice" of corporate governance with firm outcomes.

Subsequently, researchers have begun to look at possible institutional moderators of the relationship: García-Meca and Sánchez-Ballesta (2009) examined the role of formal institutions, specifically focusing on country-level corporate governance systems associated with Anglo-Saxon, communitarian, and emerging economies. They examined the effects for both board independence and CEO duality, but did not find statistical support for moderation. Similarly, van Essen et al. (2012) conducted a meta-analysis of the board-performance relationship for Asian firms. While they reported that the effect size for both board independence and CEO duality varied by country, the differences were not statistically significant. Several factors may explain why this promising line of inquiry has also yielded minimal results. First, both studies examined institutional factors at a very coarse level, which may not provide enough detail to capture the variability in both formal and informal institutions across nations. Additionally, these studies might not have enough variability in the countries studied, or sufficient sample size, to adequately detect the possible moderating effect of institutions on the board independence–performance relationship. In the next sections, we address the importance of decomposing institutions into formal and informal elements, followed by a presentation of a methodology that would be sufficiently powerful to capture the differential effects of each element as moderations of board independence and firm performance.

2.2 | Theory and hypotheses

Given that studies rooted in institutional economics, agency theory, and other theoretical lenses have failed to detect a relationship between board independence and firm performance, we adopted an institutional logic lens to explain the effectiveness of boards. Thornton and Ocasio (1999, p. 804) defined institutional logics as "the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality." Logics are reflected by the values people hold relating to an institution and are

TABLE 1 Meta-analyses of board independence-performance

Authors	Year	Independence measures	N of studies	Sample size	Region	Findings	Effect size	Institutional moderators
Bergh et al.	2016	Insider ratio	93	40,021	Unspecified	Weak but significant relationship	.023	None
Bergh et al.	2016	CEO-chair[a]	74	54,839	Unspecified	Not significant	.01	None
Boyd	1995	CEO-chair[a]	7	3,275	Unspecified	Weak negative relationship	−.02	None
Dalton et al.	1998	Outside directors	159	40,160	Unspecified	Practically zero	.023	None
Dalton et al.	1998	CEO-chair[a]	69	12,915	Unspecified	Practically zero	−.036	None
García-Meca and Sánchez-Ballesta	2009	Board independence	16	15,155	Multiple nations	Marginally significant	−.031	Results varied among liberal market economies, coordinated market economies, and emerging economies, but moderation was detected.
García-Meca and Sánchez-Ballesta	2009	CEO-chair[a]	7	12,364	Multiple nations	Not significant	−.001	Results varied for Anglo versus emerging economies, but no moderation was detected.
Mutlu et al.	2018	Outside directors	73	49,441	China	Not significant	−.01	None
Mutlu et al.	2018	CEO-chair[a]	49	30,250	China	Not significant	.01	None
Rhoades et al.	2001	Independent chair	21	5,751	Unspecified	Small positive link	.06	None
van Essen et al.	2015	CEO-chair[a]	55	70,936	Asia	Not significant	.01	Results varied by country, but no moderator was identified, and no moderation was detected.

TABLE 1 (Continued)

Authors	Year	Independence measures	N of studies	Sample size	Region	Findings	Effect size	Institutional moderators
van Essen et al.	2015	Outside directors	130	162,073	Asia	Small but significant	.03	Results varied by country, but no moderator was identified, and no moderation was detected.
van Essen et al.	2012	Outside directors	17	20,316	US	Not tested	−.02	None
van Essen et al.	2012	CEO-chair[a]	17	22,847	US	Not tested	−.02	None
Wagner et al.	1998	Insiders[a]	30	4,890	Unspecified	Small positive link	.04	None
Wagner et al.	1998	Outside directors	33	8,729	Unspecified	Small positive link	.08	None

Note: All studies used a mix of accounting and market-based measures, except for that of García-Meca and Sánchez-Ballesta (2009), which used earnings management.

[a]Negatively associated with independence.

sets of rule-like structures that constrain individual actions (Thornton et al., 2012). This institutional perspective is well suited for assessing the role of informal institutions because it stresses values and morals as part of the socio-cognitive process of individual actors, allowing us to capture not how the formal rules of the game emphasized by institutional economics work, but instead how the logics, norms, and values of board members guide them. This view is in line with a recent theoretical development aimed at scrutinizing the implicit drivers of board members' behaviors (Boivie et al., 2021), which we extend by assessing how the relevance of institutional logics by country moderates the board independence–firm performance relationship.

Institutions are generally defined as the "rules of the game" or "humanly devised constraints that shape human interaction" (North, 1990). They are resilient social structures (Scott, 2001), some of which are informal. This means that they are rules based on implicit understandings and are not necessarily accessible through written documents. Formal institutions are rules encapsulated in formal structures—such as constitutions, political institutions, and formal legal and property rights systems—Formal institutions are enforced by official entities (courts, judges, police officers, bureaucrats, etc.).

By contrast, informal institutions are socially enforced norms of behavior (attitudes, customs, taboos, conventions, and traditions) and extensions, elaborations, and modifications of formal rules outside of the official framework. They are generally self-enforced through mechanisms of obligation, expectations of reciprocity and internalized norm adherence, or enforcement by a community through gossip, shunning, ostracism, boycotting, shaming, threats, and the use of violence (Brinks, 2003; Helmke & Levitsky, 2004). As Helmke and Levitsky (2004, p. 727) defined them, informal institutions are "socially shared rules, usually unwritten, that are created, communicated, and enforced outside of officially sanctioned channels."

Attention to informal institutions is by no means new to strategy research: Studies on clientelism (e.g., Khatri et al., 2006; Sun et al., 2014), corruption (e.g., Cuervo-Cazurra, 2016; Sanyal, 2005), government–business relations (e.g., Baysinger & Woodman, 1982; Calingaert, 1993), *blat* in the Soviet Union, and *guanxi* in China (e.g., Michailova & Worm, 2003; Park & Luo, 2001; Tsang, 1998; Xin & Pearce, 1996) highlighted the importance of unwritten rules in management research. Nevertheless, informal institutions have not been extensively studied in comparative corporate governance. Indeed, despite several authors recognizing that informal institutions play a crucial role in defining actors' behavior (e.g., Denzau & North, 1994; Hart, 2001; Williamson, 1991), much current literature focuses on a single country or assumes that actors' incentives and expectations are shaped primarily, if not exclusively, by formal rules (e.g., Boyd et al., 2017; Chen et al., 2011; Guillén & Capron, 2016).

Previous studies have alternately used both narrow and specific definitions of informal institutions, with a wide array of operationalizations. Together, this variability makes it harder to assess how informal institutions shape business decision making. As Aguilera and Grogaard (2019, p. 31) commented:

> IB scholars must critically assess when and why the use of a specific institutional variable is most appropriate to address a research question. The misalignment of theoretical front-end discussions of institutions and the subsequent empirical designs that we pointed out earlier in this commentary suggests that this warrants more attention among IB scholars.

2.3 | Hypothesis development

2.3.1 | Informal institutions as a moderator of board Independence and performance

The social groups to which people belong play a major role in shaping individual logics, such as attitude formation, attitude–behavior consistency, and subsequent behavior (Thornton & Ocasio, 1999). Friedland (2021) proposed that logics are anchored in individuals by practices that animate the logic itself by infusing the practices with purpose. Social actors give rise to emotionally meaningful experiences that shape everyday behaviors (Toubiana et al., 2017). These societal-level logics influence the behaviors of individuals in the board setting as well. Board logics and norms are created through two distinct mechanisms: informational social influence and normative social influence (Deutsch & Gerard, 1955).

Informational social influence occurs through peer observation: In situations in which the correct attitude or behavior is difficult to determine, people examine the attitudes or behaviors of their surrounding peers in order to determine what their peers think and thereby select the appropriate response in such circumstances. Experiments have shown that, in the presence of uncertainty, people look to others for clues and to fill gaps in their knowledge (Jost & Hunyady, 2005; Levine et al., 2000; Levine & Higgins, 2001; Sherif, 1936). Participants in these experiments internalized group behavior and remained closely tied to it.

Normative social influence reflects the role of groups in the formations of judgments: People are more likely to conform to the judgments of other group members when their responses are public rather than private. Social sanctioning by group members makes normative social influence the basis for the attitudes they adopt (Asch, 1956; Insko et al., 1983; Spears, 2010).

Therefore, groups provide information and exert normative pressure on individuals. This pressure is stronger when people categorize themselves as members of a group. In such a case, the group norms will be more likely to influence individuals to form an opinion, an attitude, and/or an act (Terry & Hogg, 1996; Turner, 1991).

The group effect persists even in the presence of deliberate and effortful decision-making (Ajzen, 1991), such as a board decision. The theory of planned behavior (Ajzen, 1991) suggests that normative and informational social influences shape people's behaviors through three components: personal beliefs about the consequences of a behavior (the person's "attitude"), personal beliefs about control ("perceived behavioral control"), and social or normative beliefs ("subjective norms").

According to the model: (a) an individual's personal attitude is a function of the beliefs the individual holds about the consequences of a given behavior and the individual's evaluation of these consequences; (b) control beliefs are those that the individual holds about his or her ability to perform the behavior; and (c) the individual's social beliefs, on the other hand, are a function of the degree to which he or she perceives social pressure to perform the behavior. This perceived social pressure, or subjective norm, is determined by the individual's perceptions of how referent individuals or groups think that he or she should behave in a situation, and the degree to which the individual is motivated to comply with these referent individuals or groups. The theory of planned behavior argues that the combined additive influence of attitudes, control beliefs, and social beliefs (subjective norms) leads to behavioral intentions, which in turn directly influence behavior.

Societal logics shape board logics and the outcome of peer pressure. Perceived social pressure can overshadow personal considerations (e.g., Dovidio et al., 2009; Haslam et al., 2004;

Terry & Hogg, 1996; White et al., 1994), and Terry and Hogg (1996) demonstrated that social norms can make significant independent contributions to behavioral intentions. Societal logics can force a group to find an acceptable outcome, one that complies with the prevailing societal logics and norms.

Applying these to the context of the board of directors, first, directors learn group norms by observing their board colleagues and generating peer pressure (Sonnenfeld, 2002; Westphal & Bednar, 2005). This situation leads to directors facing normative influence, which pushes them to conform to group judgments. Stronger informal institutions logics will, therefore, shape the directors' behaviors in a way that is favorable to group cohesion (and to their identity). Overall, among directors, a set of unwritten rules (logics) is established that makes the board function smoothly, while violating these norms can threaten the proper functioning of the group. Relationships established by directors spur cooperation in the boardroom through norms of reciprocity and reciprocal obligations (Dore, 1983).

The surrounding logics will shape the group's attitudes and beliefs in alignment with the company's goals. Indeed, groups that face potential poor performance have been found to make significantly higher-quality decisions than other groups, as debates and decision making comprise a collective effort directed at warding off potentially negative views of the group itself (Turner et al., 1992). Consequently, we offer the general proposition that the relationship between board independence and firm performance will be positively moderated by the strength of informal institutions.

> **HYPOTHESIS 1.** The relationship between board independence and firm performance is positively moderated by the strength of informal institutions.

Given the caveat by Aguilera and Grogaard (2019), we plan to further test this proposition via sub-hypotheses that draw on separate definitions of informal institutions. Each of these definitions addresses how informal institutions serve to constrain human behavior, which has the strongest theoretical relevance for our research topic.

2.4 | Alternate conceptions of informal institutions

We use two different definitions of informal institutions. In our main analysis, we examined the *social arrangements* that drive interpersonal and group interactions (England, 1967), which are measured by variables relating to family, religion, and communities. In the appendix, we replicated the analysis using Tabellini's (2010) and Williamson and Kerekes's (2011) approaches to informal institutions, which addressed values relevant for economic interaction and exchange; in other words, the *economic culture* of a country.

The benefit of using these two approaches is that they capture the informal institutions at two different but interrelated levels (Friedland & Alford, 1991). The first approach captures a higher-order set of values that are interlinked with the social arrangements of a country and which constrain or allow for the mobilization of resources and participation in social and economic exchanges (Portes, 1998; Tsai & Ghoshal, 1998); while the approach used in the appendix captures the values and guiding principles that define a society and shape individual behavior (Harrison & Huntington, 2000; Rokeach, 1973).

2.4.1 | Social arrangements

The importance of family, community, and religion has been discussed as the key drivers that shape and enforce norms of behaviors (England, 1967), including business behaviors (e.g., Encarnation, 1989; Khanna & Rivkin, 2001, 2006). Most previous studies have reported that religion constrains manipulative and illegal managerial behaviors, both directly (Grullon et al., 2010; Hilary & Hui, 2009) and indirectly through the threat of retaliation from other social actors. Researchers have reported similar evidence regarding behaviors for both family and community variables (Chua et al., 2009; Ingram & Zou, 2008; Lorenzoni & Ornati, 1988; Uzzi, 1997).

The family constitutes a fundamental pillar of social organization: It represents the primary identification unit to which people belong in terms of biological origins, geography, and so on, and is the first social arrangement in which children are socialized and internalize values. For example, in patriarchal societies, girls become less competitive as they mature (Andersen et al., 2013), thereby excluding them from business life. Boys, on the other hand, are raised to ensure the long-term welfare of the whole family. The importance of the family gives rise to the preservation of socioemotional wealth logic (Gómez-Mejía et al., 2007). The preservation of socioemotional wealth includes a sense of dynasty that implies a long-term orientation and a concern for the firm's reputation, which is reflected in the family (Berrone et al., 2012). As a result, family firms are more risk/loss-averse than non-family firms, thereby foregoing profitable risky opportunities or accepting certain but below target returns because preserving socioemotional wealth is crucial to family members (Gómez-Mejía et al., 2007). Therefore, people in family-oriented societies absorb a logic that aims to ensure stable returns and which includes an attachment to the family's core values and strong social ties and harmony within the (family) group (Berrone et al., 2012).

Independent directors in countries with stronger family logics will focus on the longer-term success of the firm, and avoid riskier investments that could jeopardize the future and the reputation of the firm itself. Indeed, in some countries with strong family values, expressions that translate as "good family man" refer especially to the directors' duties of caring for the firm's long-term success.

Second, religiosity gives rise to a logic influencing people's risk preferences. In countries with a higher level of religiosity, people are more risk-averse and less prone to accepting an uncertain payoff (Miller & Hoffman, 1995; Noussair et al., 2013). These preferences are translated into business decisions as well: Hilary and Hui (2009) found that firms located in areas where religious sentiment is strong have different investment profiles than firms in locations with less religiosity. In particular, because firms located in areas with higher religiosity are more risk-averse, they have a higher subjective discount rate for projects and invest only in those projects that have a higher return rate for a certain payoff. This strategy pays off in terms of higher and more stable profitability and in terms of market reactions to investment announcements. Independent board members will therefore seek higher and more stable profitability for the firm they represent.

Finally, communities represent the basis for economic exchanges and are necessary for building trust among the exchange participants, for lower transaction costs, and for enforcing property rights, especially when formal institutions are underperforming (Coleman, 1988; Granovetter, 1985; Portes, 1998; Richman, 2006). The logic of communities punishes transgressors by excluding them from future transactions. Individual reputation and acknowledgement from the community are necessary for continuing business. Because of the importance of

building trust in the community, independent board members disclose higher quality information about the firm in their communities (Yekini & Adelopo, 2015) and limit corporate misconduct (Neville et al., 2019). Higher levels of transparency and mutual trust between the firm and its community favor the economic exchange and the long-term prospects of the firm.

Overall, the importance of religion, community, and family logics pushes the decisions of the board toward a common goal, each guided by its own aim: religion, by reducing risk taking; family, by making the group more cohesive; and community, by the logic of trust and respect. Overall, as these logics and their value increase in importance in the board, the board members will act in the best interest of the firm. Therefore,

> **HYPOTHESIS 2.** The relationship between board independence and firm performance is positively moderated by the strength of informal institutions, defined as the importance of family, community, and religion.

2.5 | Comparing the effect of informal vs. formal institutions

As noted previously, prior work has not found significant support for formal institutions as a moderator of the board independence–performance relationship. It is worth noting that formal institutions have also been minimally effective as moderators of other governance phenomena. For example, meta-analyses on the role of ownership concentration across countries were unable, using a variety of indicators, to detect a moderating role of formal institutions. These indicators include anti-self-dealing regulations (Carney et al., 2011; van Essen et al., 2013), legal system origins (Neville et al., 2019), and the rule of law index (van Essen et al., 2013). Similarly, given the limited effectiveness of formal institutions in prior work, a meta-analysis on family firm strategy explored informal institutions as a moderator (Berrone et al., 2020). One exception is the work of Post and Byron (2015), which examined the role of gender in boards. These authors found that shareholder protection—an indicator of formal institution strength—had a positive correlation with performance and board monitoring; however, the size of the effect was very small.

Separate from these empirical findings, there are also strong theoretical arguments as to why informal institutions should be a more relevant moderator. Based on our prior discussion, we expect informal institutions to be the primary driver of directors' behaviors. Consequently, this respect for informal institutions can overshadow the respect for formal institutions, meaning that the former should have greater explanatory power. This highlights the distinction between *de jure* and de facto institutions.

If, due to judicial inefficiency or corruption, formal rights (*de jure*) are not matched by enforcement, then these formal institutions are said to be ineffective. Informal institutions can operate in a context of effective formal institutions where good rules exist and are enforced, or they can work in a context in which clear rules are non-existent or unenforced. Only when legal rights on paper are matched by de facto (in reality) enforcement, which can come about through formal or informal institutional means, can we argue that these formal institutions are effective. In the presence of contrasting goals between formal and informal institutional logics, informal institutions will prevail. Researchers have noted that, in spite of Chinese industrialization and reforms, which should have pushed the country toward a more arm's length way of doing business, because of preexisting social norms China has not substantially changed its functioning, and continues to rely on kinship (e.g., Greif & Tabellini, 2010, 2017). Other researchers have noted that even within a single multinational enterprise (MNE), which

is therefore subject to a common set of guidelines, country differences in local informal institutional logics affect how the different branches of the MNE perform (Ichino & Maggi, 2000).

Indeed, while formal institutions in corporate governance dictate how the agency problem should be mitigated, in terms of board composition and the protection of shareholder protection rights (Doidge, Karolyi, & Stulz, 2007; Klapper & Love, 2004), the processes through which the board makes decisions, and the extent of board engagement with minority shareholders, are left to the board members themselves. If the law dictates that the board should have independent members, but the board ostracizes them, their effectiveness is diminished.

The logics derived from the social arrangements are deeply significant and sticky to the individuals (Cardinale, 2018; Toubiana, 2020), shaping their behaviors. The social arrangement logics call for greater risk aversion and lawful behavior (religion logic), longer time orientation and uphold of personal reputation (family logic), common agreement and highlight the role of interpersonal trust (community logic). In the board setting, these logics translate into greater trust between the CEO and the independent directors because the former is less likely to misbehave or engage in risky decisions, freeing independent directors from the excessive monitoring duties. These logics will shape the directors' behaviors more than the logics from formal institutions, which assume a lower degree of trust and higher levels of risk-taking from the CEO—hence the importance of monitoring. Some studies have indeed found that informal governance mechanisms in boards and integrity-based trust tend to have larger effects on firm performance than formal governance arrangements (Calabrò & Mussolino, 2013). Overall, informal institutions alter the effectiveness of formal rules and regulations and, as a consequence, the effect of these informal institutions is expected to be able to explain more variance than that of formal institutions:

> **HYPOTHESIS 3.** The strength of informal institutions, defined as the importance of family, community, and religion, has greater explanatory power than formal institutions as a moderator of the board independence-firm performance relationship.

3 | METHODOLOGY

Our hypotheses are tested using a combination of meta-analysis and meta-regression. We briefly describe the methodology of both tools, after which we outline our article search process and the key variables used in our analysis.

Meta-analyses are statistical techniques that allow for the estimation of the true relationship between two variables in a population through the aggregation of results across independent studies. The inputs are effect sizes which capture the strength and direction of the focal relationship in a given sample. We used the Pearson product–moment correlation (r), which is the most widely used effect size measure, and is considered to be more suitable than alternatives such as r-squared or a partial or semipartial correlation (Bergh et al., 2016; Kepes et al., 2013; Schmidt & Hunter, 2015). Using r permits the capturing of the effect without including other variables that are often used as controls in multivariate investigations of focal relationships. We used Fisher's (1928) z-transformation to correct for skewness in the effect size distribution. Following best practices, all variables were corrected for reliability with a value of 0.8 (Dalton et al., 1998; Schmidt & Hunter, 2015). Researchers have the choice of focusing their meta-analysis on articles or effect sizes as the unit of analysis. Following recent guidelines, we conducted our meta-analysis based on effect size (e.g., Aguinis et al., 2005; Aguinis et al., 2011; Bergh et al., 2016), as it captures both the heterogeneity of effect-size estimates and the unique

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information for each relationship that would otherwise be missing (van Mierlo et al., 2009). We employed the meta-analysis to generate our baseline effect for the purpose of replication of prior studies on the topic.

For testing our hypotheses, we relied on a meta-regression. In contrast to simple meta-analysis, a meta-regression aims to relate the size of an effect to one or more continuous moderators of a relationship. A meta-analytic regression is a type of weighted least squares regression analysis designed to assess the relationship between effect size and moderator variables by modeling heterogeneity in the effect size distribution (Borenstein, Hedges, Higgins, & Rothstein, 2011). Meta-regression uses study-level effect sizes rather than primary-level data and assigns a weight to each study to account for its precision, with larger studies given greater weight (Gonzalez-Mulé & Aguinis, 2018). Because studies come from different sources and data collection was performed by various authors following different procedures, it is recommended that a random-effects model be used in a meta-regression (Borenstein et al., 2011). A random effects meta-analysis model assumes that the observed effect sizes can vary across studies because of real differences in the effect in each study, as well as sample differences. In essence, a random effects method (DerSimonian & Laird, 1986) incorporates the assumption that the different studies are estimating different, yet related, effects.

3.1 | Sample and coding

We conducted a systematic literature review, sampling a 17-year window of published papers (2000–2017),[1] using a set of prominent journals in management, international business, and finance. The ABS list ranks academic journals in five categories (1–4, and 4*), where 1 is the lowest category, 4 is the highest category, and 4* is for elite journals. We selected only articles ranked 3 or above in the ABS ranking. We searched for the keywords "board of director*," "CEO*," "board independence," and "corporate governance." We then focused on empirical articles that reported the relevant statistics (correlations or *t*-tests) for computing meta-analytic effect sizes. The final sample consisted of 86 articles,[2] for a total of 209 effect sizes distributed across 40 countries ($n = 474{,}349$). The relatively large sample-to-study ratio is a function of governance research, which commonly relies on multiple operationalizations of board composition, as well as multiple indicators of financial performance. Our sample is comparable to a recent meta-analysis on founder CEOs and institutions, which reported 117 studies, 22 nations, and 345,217 observations (Zaandam et al., 2021). We excluded unpublished papers, as researchers have found that the "file drawer problem" has minimal influence on the outcome of meta-analyses (Dalton et al., 2012), and therefore on meta-regression as well. Although meta-analytic studies can be affected by sample dependence across individual studies, this potential concern was mitigated by three aspects of the present study sample: a 17-year time horizon, sampling across three disciplines, and the broad range of nations sampled. A single expert rater coded all articles, and a second rater coded a subset of articles to assess reliability. Interrater agreement was 100%.

3.2 | Variables

3.2.1 | Board independence

Following previous meta-analyses on this topic (e.g., Dalton et al., 1998), we collected five different measures of board independence, which covered board composition and the leadership

structure of the board itself. The board composition measures included the number or percentage of outside directors (23%, who are not in the direct employment of the corporation), independent directors (33%, without existing or potential ties to the firm other than their directorship), affiliated directors (6%, non-management directors who maintain personal and/or professional relationships with the firm, the management, or the shareholders), and inside directors (4%, members of the management ranks who report directly to the CEO). The last construct collected was CEO duality (33%, whether the CEO is also the chairman of the corporation). The last three operationalizations of board independence were inversely coded.

3.2.2 | Performance

We coded data for both accounting performance (e.g., ROA, ROS, ROE) and market performance (e.g., MTB, Tobin's Q, CAR) as the dependent variables.

3.2.3 | Institutions

We measured informal institutions using items from the World Value Survey (WVS) and the European Value Survey (EVS). A number of studies have used these surveys to assess informal institution strength (Au, 2000; Surroca et al., 2013; Tang & Koveos, 2008). Launched in 1981, the regularly updated WVS and EVS consist of nationally representative surveys conducted using a common instrument in almost 100 countries that together contain nearly 90% of the world's population. These surveys capture individual beliefs and values that reflect local norms and customs.

For the *social arrangements* dimensions we selected three items from the combined WVS and EVS: the importance of family, communities, and religion. The items were measured on a scale of 1 to 4, where 1 stood for "very important" and 4 stood for "not important at all." To ease interpretation of the results, the scale was re-coded, with 4 standing for "very important" and 1 standing for "not important at all." We used a 20-year average because the country scores on these dimensions were considerably stable over time and because the included studies often collected data over a span of years (Neville et al., 2019). For testing hypothesis 1 we summed the score of the informal institution to create an "informal institution strength index", while for hypotheses 2 and 3, we run separate analysis for each measure of informal institutions.

For formal institutions, we used the Minority Shareholder Protection Index, which encompasses an array of legal protections available to investors. The Minority Shareholder Protection Index is a suitable measure for formal institutions in our study because it limits the autonomy of managers and the interests of large shareholders, such as banks (Aguilera & Jackson, 2003; O'Sullivan, 2003; Schneper & Guillén, 2004), making it a suitable indicator to assess the formal aspect of a country in the governance of a firm. The rationale is that if the legal environment for minority shareholders is weak, then they are unlikely to affect board composition. Minority shareholders fear that controlling shareholders will expropriate their rights, and they therefore seek board representation via independent directors as objective monitors and advisors of the firm as they are less susceptible to self-serving managerial (or large owner) influence (Dahya et al., 2002; Fama, 1980). Countries with stronger shareholder protection rights have empowered minority shareholders who affect board composition (Doidge et al., 2007; Kim, Kitsabunnarat-Chatjuthamard & Nofsinger, 2007) and its

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ability to appoint independent board members. As multiple measures are available for assessing shareholder protection, we tested Hypothesis 2 with two different composite indices.

Other measures of formal institutions, such as state capacity or the functioning of the courts, capture a mix of formal and informal institutions. Indeed, state capacity measures the ability to increase and spend revenues, yet this ability is a mix of the formal rules on which revenues can be raised and spent and informal rules on how the process actually happens. Consider the case of a country that has very solid formal rules on tax evasion but which enforces those rules laxly due to local informal institutions. Therefore, we included in the robustness checks how these hybrid measures of state functioning perform.

Formal institutions were used as a control variable for testing Hypothesis 2 and as a predictor variable for testing Hypothesis 3. Our first measure was the Minority Shareholder Protection Index from Guillén and Capron (2016). The authors collected information on the 10 key legal provisions identified by legal researchers as the most 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. The variable ranges from 0 to 10, with a higher number indicating better protection.

Our second measure to test Hypothesis 3 was the Strength of Minority Shareholder Protection Index from the World Bank, based on the study by Djankov et al. (2008). The index is a composite measure of eight other indices: extent of disclosure index, extent of director liability index, ease of shareholder suits index, extent of conflicts of interest regulation index, extent of shareholder rights index, extent of ownership and control index, extent of corporate transparency index, and extent of shareholder governance index (World Bank/IFC, 2019). The variable ranges from 1 to 10, with a higher number indicating better protection.

3.2.4 | Control variables

The use of control variables is inherently limited with either meta-analysis or meta-regression. Our primary control variable was the quality of the publication outlet. The ABS journal list (Chartered ABS, 2018) ranks journals from 1 (lowest quality) to 4 (high quality, with an additional rank of 4* for elite journals). We used the ABS coding scheme, substituting 5 for 4*. We included additional control variables in our robustness checks.

4 | RESULTS

Table 2: Panel A reports the results of the meta-analysis. The results are in line with previous meta-analyses (e.g., Dalton et al., 1998; Rhoades et al., 2001), as we did not detect a significant relationship between board independence and firm performance: Drawing on nearly 500,000 observations, the effect size estimate was −.01 and was non-significant despite the very large

sample size. For comparison purposes, Panel B of the table disaggregates the results based on specific measures of board independence. Four of the five indicators were not significant. In the case of non-affiliated directors, the relationship with performance was -0.12 ($p < .001$), meaning that having affiliated directors on the board enhances the firm's performance. This finding is against the common logic of the importance of independence.

Table 3 reports the results of the meta-regressions testing Hypotheses 1 and 2. Hypothesis 1 postulates that stronger informal institutions would positively moderate the board independence–performance relationship. The results on the moderating effect of informal institutions on the board independence–performance relationship indicate how stronger social institutions that capture the social arrangements of a group positively moderate the relationship. Model 1, where we combined the strength of the informal institutions in a composite index offers support for Hypotheses 1 ($p = 0.02$).

Models 2 to 4 report the results for the analysis for the individual components: the effect is significant for the informal institutions capturing each social arrangement ($p = 0.02$ for religion, $p = 0.03$ for family, and $p = 0.04$ for communities). Therefore, also Hypothesis 2 is supported. The coefficient for the informal institutions strength index is smaller compared with those that report the analysis for each informal institution, further supporting Aguilera and Grogaard's (2019) suggestion to well specify the informal institutions under investigation.

Hypothesis 3 states that informal institutions will explain more heterogeneity than formal institutions—that is, that informal institutions will have greater explanatory power than formal institutions. We tested this hypothesis testing for the difference in R-squared of the linear

TABLE 2 Random effect analysis of board independence–performance

Panel A: Aggregated estimate							
K	**N**	**Estimate**	**SE**	**z value**	**p value**	**ci.lb**	**ci.ub**
209	474,349	-0.01	0.01	-1.30	.19	-0.03	0.01

T-squared $= 0.01$
$T = 0.11$
I-squared $= 96.73\%$
H-squared $= 30.62$
QE stat $= 6,463.94$ (df $= 208$)

Panel B: Estimate by independence type							
	K	**N**	**Estimate**	**SE**	**z value**	**p value**	**ci.lb**	**ci.ub**
Non-CEO duality	70	264,842	-0.01	0.02	-0.52	.60	-0.04	0.02
Outside director	49	102,006	-0.02	0.01	-1.24	.21	-0.04	0.01
Independent director	69	125,553	0.02	0.01	1.08	.28	-0.01	0.04
Non-affiliated director	12	5,476	-0.12	0.02	-5.10	**<.001**	-0.16	-0.07
Not inside director	9	15,358	-0.05	0.03	-1.53	.13	-0.11	0.01

Note: K, number of effect sizes; N, cumulative number of observations; *T-squared*, estimate of the between-study variance in a random-effects meta-analysis; *T*, estimated standard deviation of underlying effects across studies; *I-squared*, describes the proportion of total variance between studies that is attributed to heterogeneity rather than sampling error; *H-squared*, the ratio of the standard deviation of the estimated overall effect size from a random-effects meta-analysis compared with the standard deviation from a fixed-effect meta-analysis; *QE stat*, statistic for testing between-study heterogeneity; *SE*, standard error; *ci.lb*, confidence interval—lower bound; *ci.ub*, confidence interval—upper bound. p value smaller than 0.05 are in bold.

TABLE 3 Moderating effect of formal and informal institutions on firm performance

	Model 1	Model 2	Model 3	Model 4
Informal institution strength				
B	0.03			
SE	0.01			
p-value	**.02**			
Religion				
B		0.04		
SE		0.02		
p-value		**.02**		
Family				
B			0.06	
SE			0.03	
p-value			**.03**	
Community				
B				0.06
SE				0.03
p-value				**.04**
ABS ranking				
B	0.01	0.00	0.01	0.01
SE	0.01	0.01	0.01	0.01
p-value	.37	.72	.31	.3
MSPI				
B	−0.00	0.00	0.00	0.00
SE	0.01	0.01	0.01	0.01
p-value	.64	.67	.5	.68
Intercept				
B	0.08	0.07	0.06	0.03
SE	0.03	0.07	0.06	0.06
p-value	.01	.27	.37	.61
T-squared	0.02	0.01	0.01	0.01
T	0.13	0.1	0.1	0.1
I-squared	0.98	0.96	0.96	0.96
H-squared	46.11	25.12	25.47	25.89
R-squared	0.23	0.18	0.17	0.15
QE stat	9878.48	5362.94	5431.41	5520.76

Note: K = 209; Q stat df = 207. p value smaller than 0.05 are in bold.

regressions, each assessing a measure of a formal or informal institution. This approach was chosen due to several considerations: First, meta-regressions do not have an adjusted R-squared, making it impossible to allocate the amount of heterogeneity explained to a single additional variable as each variable added to the model would increase the overall R-squared. Second, we did not adjust for the scale difference to generate conservative results, as the more discrete the scale, the larger its statistical power. Therefore, the informal institution measures, being out of 4 rather than out of 10, offer more conservative estimates. The results of the meta-regressions (Table 4: Panels A1 and A2) show that the percentage of heterogeneity explained is between 4.58% and 13.03%, substantially higher than the meta-regressions with the formal institutions, which explain between 0.29% and 0.41% of the heterogeneity (Table 4: Panel A3). In order to test for the significance of the R-squared difference, we conducted a t-test based on the following equation adapted from Gunawan and Rose (2014):

$$t = \frac{\left(R_1^2 - R_2^2\right)}{\sqrt{\widehat{Var}\left(R_1^2 - R_2^2\right)}}$$

We used the largest standard error instead of the pooled error in order to produce more conservative results. Table 4: Panel B reports the t-value for the R-squared differences. The t-value for the significance ranges from 4.08 (community) to 7.14 (religion), well above the commonly used threshold of 1.96. Therefore, the regressions that included informal institutions have greater explanatory power than those without them but including formal institutions. Hypothesis 3 is supported.

We replicated the analysis of our main study using the economic culture variables from Tabellini (2010) and Williamson and Kerekes (2011). The logic behind the choice of the variables and the results of the analysis are shown in the supporting information. In brief, the economic culture variables partially moderate the relationship between board independence and firm performance, and the analyses still carry greater explanatory power compared with the analysis with the formal institutions.

4.1 | Further analysis: The interaction effect between informal and formal institutions

As a further analysis, we tested whether the interaction effect between formal and informal institutions would substantially contribute explanatory power to the board independence-firm performance relationship. Formal and informal institutions are often analyzed and evaluated in separate studies due to methodological challenges (Hart, 2001). For instance, Williamson (1991, p. 359) considered the presence of informal institutions as a "shift parameter"—that is, exogenous forces that simply change the benefits to using alternative formal structures. Studies focusing on informal institutions, on the other hand, have "largely abstracted from the importance of formal institutions, often viewing them as mere functional substitutes" (Zenger et al., 2002, p. 279). Not only is there limited data regarding the correlation of these constructs, but the available information is conflicting. Krasniqi and Desai (2016), for example, reported these two elements to be statistically unrelated, while Holmes et al. (2011) reported more substantive relationships. Zaandam et al. (2021) created multiple measures for both formal and informal institutions and reported both positive and negative correlations across these dimensions.

TABLE 4 Panel A: Simple linear meta-regression on the moderating effect of formal and informal institutions on firm performance

Panel A1 Englands' informal institutions[a]

	Religion			Family			Community		
	B	*SE*	*p*-value	*B*	*SE*	*p*-value	*B*	*SE*	*p*-value
Intercept	0.07	0.03	.05	0.05	0.04	.14	0.04	0.03	.16
Slope	0.04	0.02	.02	0.05	0.03	.07	0.05	0.03	.07
T-squared	0.01			0.01			0.01		
T	0.1			0.11			0.11		
I-squared	96.23%			96.47%			96.58%		
H-squared	26.54			28.36			29.2		
R-squared	13.03%			7.30%			4.58%		
QE stat (p-value)	5648.99		(<.001)	6007.29		(<.001)	6177.18		(<.001)

Panel A2 formal institution measures

	Guillén-Capron MSPI			World Bank MSPI[b]		
	B	*SE*	*p*-value	B	*SE*	*p*-value
Intercept	−0.01	0.05	.9	0.06	0.13	.04
Slope	0	0.01	.92	−0.01	0.09	.01
T-squared	0.01			0		
T	0.11			0.07		
I-squared	96.72%			91.58%		
H-squared	30.52			11.87		
R-squared	0.41%			0.29%		
QE stat (*p-value*)	6438.40		(<.001)	2497.16		(<.001)

Panel B: *R*-squared differences (*t*-values)

Informal institutions	Religion	Family	Community
Formal institutions	*T*-test difference in *R*-squared		
Guillén-Capron MSPI	7.10	5.25	4.08
World Bank MSPI	7.14	5.30	4.14

[a]K = 209; Q stat *df* = 207.
[b]K = 207; Q stat *df* = 205.

Consequently, we know very little about the possible interaction between formal and informal institutions.

We used measures derived from England (1967) to assess the interaction effect between formal and informal institutions. The results are presented in Table 5. The interaction effects between formal and informal institutions were non-significant. Still, the models exhibited a modest improvement in the explanatory power for the interaction effect between informal institutions and Guillén and Capron's (2016) index (with Religion +1.43%, Family +0.83%, and Communities +0.21%).

4.2 | Robustness checks

Our first robustness check involved assessing the presence of possible publication bias. We ran the Egger et al. (1997) test for funnel plot asymmetry. The test is non-significant ($p = 0.1658$), suggesting that publication bias was not a concern in this study. Second, because our main models are parsimonious, we ran supplementary models with additional control variables. These models are shown in the supporting information. We included as control variables the *mean level of board independence* reported in the study and whether the sample is from a *common* or *civil law* country. The results are consistent with those of our main analysis. Third, we also reran the analysis of the data with a different meta-regression methodology to determine whether the results were conditional on the methodology adopted. The method of Knapp and Hartung (2003) provided stronger statistical power and control for Type 1 errors. Meanwhile, and as expected, changing the estimation methodology in the meta-regression substantially reduced the *R*-squared of the models. Despite this restriction, the models including the informal institutions still explained substantially more heterogeneity than the model including formal institutions, further supporting our hypotheses.

Fourth, because a substantial portion of our studies used a US or a Chinese sample, we reran the models excluding these countries. The results are consistent with those of the main analysis but are non-statistically significant due to the lack of sufficient statistical power caused by the reduced sample size. Fifth, we performed a subgroup analysis to determine whether our results would be different between long-term versus shorter-term measures of performance, as directors have the duty to assure the long-term success of the firm. We used market measures as a proxy for long-term performance and an accounting measure as a proxy for short-term performance. We found that the importance of religion positively moderates the relationship between board independence and long-term measures of performance, but not for shorter-term measures of performance. We should note that as the sample sizes for these subgroups analysis are smaller than recommended ones, therefore our findings should be interpreted with caution. However, the pattern in the findings is consistent with our main analysis.

Sixth, we checked whether changing the measure of formal institutions would change the results of our analysis. From the Global Competitiveness Report, we selected the measure of burden of government regulation (red tape). The questions asked respondents to share information concerning "Complying with administrative requirements for businesses (permits, regulations, reporting) issued by the government in your country is: (1 = Burdensome; 7 = Not burdensome)." We used this variable as an additional proxy for how many formal institutions existed within a country. The comparison among the meta-regressions using the three different indicators of formal institutions suggested that the results were comparable, further increasing our confidence in the findings.

Furthermore, we conducted a number of auxiliary tests. We tested the extent to which low levels of confidence in formal institutions, such as the judiciary system, the parliament, and the government, favor greater reliance upon informal institutions. Our results suggest that this is the case. To test whether there were differences in the strength of values between the top earners and the rest of the population. As board members are likely to come from privileged backgrounds, they could present characteristics that are different from those of the rest of the population. The WVS/EVS asked respondents to self-report in 10 different categories of earning. The top earners represented 2.99% of the sample. The difference in mean values between the top earners and the rest of the sample was not statistically meaningful, thereby increasing our confidence in the findings.[3] All results are available in the Supporting Information.

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TABLE 5 Interaction effect between informal and formal institutions

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Guillén & Capron's (2016) measure of minority shareholder protection			World Bank/Djankov et al. (2008) measure of minority shareholder protection		
Religion						
B	−0.01			0.03		
SE	0.07			0.02		
p-value	.83			.21		
Family						
B		−0.36			0.12	
SE		0.31			0.09	
p-value		.25			.18	
Community						
B			−0.07			0.14
SE			0.33			0.09
p-value			.82			.13
MSPI						
B	−0.02	−0.15	−0.06	0	0.15	0.21
SE	0.02	0.11	0.14	0.05	0.13	0.17
p-value	.50	.18	.69	.93	.26	.22
MSPI* religion						
B	0.01			0.01		
SE	0.01			0.02		
p-value	.41			.82		
MSPI* family						
B		0.06			−0.06	
SE		0.05			0.06	
p-value		.19			.30	
MSPI* community						
B			0.02			−0.07
SE			0.05			0.06
p-value			.70			.25
Intercept						
B	−0.04	0.89	0.021	−0.08	−0.31	−0.44
SE	0.14	0.77	0.97	0.04	0.21	0.26
p-value	.88	.25	.82	.04	.14	.10
T-squared	0.01	0.01	0.01	0.01	0.01	0.01
T	0.10	0.10	0.11	0.10	0. 10	0. 10
I-squared	96.19%	96.46%	96.58%	96.20%	96.17%	96.17%
H-squared	26.28	28.21	29.21	26.28	26.13	26.08

(Continues)

TABLE 5 (Continued)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Guillén & Capron's (2016) measure of minority shareholder protection			World Bank/Djankov et al. (2008) measure of minority shareholder protection		
R-squared	14.46%	8.13%	4.79%	14.04%	14.05%	14.23%
QE stat	5559.43	5955.61	6164.21	5585.61	2473.87	2472.27

Note: $K = 209$; Q stat $df = 207$ for models 1–3; $K = 207$; Q stat $df = 205$ for models 4–6.

5 | DISCUSSION

5.1 | Contribution to international corporate governance research

The role of board independence has been a matter of great debate in corporate governance. Agency theory and other commonly adopted theories in corporate governance assumed that directors should function in the same way worldwide, and differences in findings were driven by the strength of the formal institutions. However, neither original studies nor meta-analyses have been able to detect a meaningful correlation between board independence and firm performance (e.g., Dalton et al., 1998; Rhoades et al., 2001; van Essen et al., 2012). Additionally, studies exploring the moderating role of formal institutions (García-Meca & Sánchez-Ballesta, 2009; van Essen et al., 2012) have yielded mixed and inconsistent results. By adopting an institutional logic, we advance theory by arguing that informal institutions shape board effectiveness and how they moderate the relationship between board independence and firm performance. We also argue that informal have greater explanatory power than formal institutions.

Our results suggest that "boards matter," and that boards influence a distal outcome such as firm performance. We found that the strength of the informal institutions positively moderates the board independence-performance relationship, while we were not able to detect a moderating effect of the formal institutions in any of our analysis. Furthermore, we show that not all informal institutions have the same effect on the independence-performance relationship, but some, such as religion, have a greater effect compared with the other informal institutions we investigated. Finally, our paper shows that informal institutions can explain more heterogeneity than formal institutions.

The present study contributes to international corporate governance research in several ways. First, it offers support for the presence of the board independence–firm performance relationship, conditional on the informal institution under investigation. These findings also help to explain why previous studies on the adoption of corporate governance best practices across countries (e.g., Chen et al., 2011; Mutlu et al., 2018) found that the adoption of "OECD guidelines" will not necessarily lead to better corporate governance. These results can be explained by the fact that informal institutions and their logics are the primary drivers of directors' behaviors and, being socially constructed, these behaviors cannot be properly captured by the formal institutions in a country. Informal institution logics modify the agency relationship differently across countries in ways that require specific contextualization. Therefore, informal institutions matter in corporate governance because they create a different set of constraints, incentives, and behavioral norms that directly shape directors' behaviors. In particular, we found support for our moderating hypothesis on the relationship between board independence and firm performance for the informal institutions that determine the social arrangements within a group,

and less so for those that capture the economic culture and values of an individual. The possible rationale for these findings is that the social pressure that shapes directors' decision-making manifests primarily through the dimensions of social arrangements rather than via economic culture, thereby overshadowing the individual values in favor of the group norms (Terry & Hogg, 1996).

These findings also extend previous comparative governance research on institutions (Filatotchev et al., 2013; Globerman, Peng, & Shapiro, 2011) in two ways. On the one hand, the findings highlight the importance of informal versus formal institutions and their respective logics. In the context of institutional framing, prior work has emphasized the study of formal institutions (e.g., Denis & McConnell, 2003; Guillén & Capron, 2016) or an in-depth study of informal institutions within a single country (e.g., Park & Luo, 2001). While many single-country studies have been conducted (Boyd et al., 2017), generating important insights into locally diverse institutions, there has been a limited number of ways to systematically explain the various findings.

Second, this paper shows that the study of informal institutions can explain more heterogeneity than the study of formal institutions, thereby calling for a reassessment of the outcomes of several corporate governance–firm outcome relationships. Our findings allow interpreting why substantial heterogeneity can be observed for the same board-firm performance relationship across countries. Our results suggest that directors are keen on following the informal institution logic. This binding effect forces them to find acceptable solutions to board problems that are in line with the expectations of the board role and with the respective informal institution logics, consequently benefiting firm performance.

Third, this study identified that different informal institutions have different effects on the independence-performance relationship. This variability highlights how important it is to think carefully about what aspects of informal institutions are most theoretically relevant to a given research question, going beyond the intuition that "institutions matter." The varying degree of relevance of informal institutions across countries and their level (group or individual) has consequential effects on the effectiveness of the governance structure. The stronger the informal institutions logic that binds directors to their local communities and to the other directors, the better the firm performance; as the director's role becomes less bound by social constraints, its effectiveness diminishes. Overall, these findings highlight the need for governance researchers to consider the informal environment in which governance decisions are made in their study design.

This study calls for corporate governance studies researchers to pay greater attention to their choice of moderators. While the use of formal institutions as moderators is appealing because this type of data is easy to collect, formal institutions are more distal from where the actual decision process happens, and they therefore influence the decision-making process of the actors in a limited way (e.g., Post & Byron, 2015). Informal institutions, by shaping the way actors make decisions, are a closer proxy for capturing country-level differences.

Our study also suggests that policymakers should not take for granted corporate governance best practices. Indeed, they should design governance regulations that consider national and local informal institutions. For countries with weaker informal institutions, policymakers should identify which informal institutions are stronger and encourage their translation into governance. For example, countries that have undergone extensive secularization might benefit from having representatives of local communities on the boards of companies to strengthen the representation of the informal institutions on the board itself.

5.2 | Contribution to institutional logic

The research on institutional logic has centred around two main areas: On the one hand, researchers have assessed the consequences of competing logics, which have resulted in symbolic interaction (Jourdan et al., 2017), identifying the valuable logic (Cobb et al., 2016), coupling and legitimacy of logics (Pache & Santos, 2013), and so forth. On the other hand, researchers have explored the role of change in institutional logic concerning decision-making (Almandoz, 2014; Thornton, 2004). More recently, there has been a call to assess how variation in commitment to values and logics affects outcomes (Lounsbury et al., 2021). We extended the research on institutional logic by assessing how variation in commitment to the same logic across countries affects firm outcomes. Indeed, we found that logics vary in importance across countries and that such variance has substantial consequences for organizations. As the logic becomes more important, its effects are greater and more binding for the actors subject to it. Our informal institution logic suggests that, as informal institutions related to social arrangements in a country grow stronger, directors are more bound by them, with positive outcomes for the firm. These findings suggest that future studies should look at the heterogeneity and variation of logics across countries and assess how such variation can affect organizations working across multiple logics.

These findings have implications for widely adopted theories in corporate governance research. Traditionally, these theories have assumed that the main solution to the agency problem lies in more regulation and more formal institutions (e.g., Guillén & Capron, 2016), fewer social arrangements, and that formal institutional logic is sufficient. Our findings suggest the contrary. In order to achieve a solution to this problem, researchers should investigate how the informal institutions that bind people would react, for example, to managers embezzling resources or achieving personal gains from their own positions. Therefore, corporate governance theories should develop a more emic approach (Whetten, 2009) to solving the agency problem, one better grounded in informal institutional logics.

5.3 | Limitations and further research

The findings of this study open interesting avenues for further research. First, we found that while all analyses including informal institutions carried greater explanatory power, some, namely the analyses including religion (and respect and trust in others in the supporting information), explained substantially more than other informal institutions. Therefore, researchers should seek to explain why some informal institutions are more relevant than others in influencing managerial decision-making. A possible explanation could arise from the exploration of the relationships among social institutions. For instance, are some social institutions, like religion, of a higher order and, therefore, more relevant than others? Or is the community, for example, nested within religion, and is that the reason why it explains less heterogeneity? What are the business implications of the relative strength of informal institutions within a country?

We found that non-affiliated directors, on average, have a positive effect on firm performance. These findings are at odds with the prevailing assumption that the board needs more independence and not less. Future studies should explore under what institutional conditions our findings hold and the contribution of non-independent directors to the firm performance is strengthened or weakened.

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We offered a preliminary assessment of the interaction effect between formal and informal institutional logics and found that the interaction between formal and informal institutions further increased the explanatory power of the analysis. As the R-squares increase for the moderation analysis is larger than the sum of the R-squared of the analysis with separate formal or informal institution, it suggests that there is a possible research area on exploring how formal and informal institutional logics interact. Helmke and Levitsky (2004), building on the ideas of North (1990, 1991), argued that informal institutions can work either positively or negatively to boost or constrain formal institutions. They identified four distinct types of informal institutions in terms of the ways in which they interact with formal institutions: complementary, accommodating, competing, and substitutive. Key to Helmke and Levitsky is the degree of compatibility between the goals of the actors relevant to formal and informal institutions. Goals are compatible at a particular level of analysis if the aims of the formal laws and the agents working within informal institutions—be they business groups, familial networks, the state through the local party or bureaucratic elites—are working toward the same ends; for example, the financing of companies or the reinforcement of corporate ownership rights. Incompatible goals mean that the aims of formal and informal agents at that level of analysis are hostile or, more weakly, are not mutually reinforcing, thereby creating possible adverse effects. To give an example, where shareholder rights are contested by the state, or where minority investor rights are threatened by expropriation, the goals of investors or shareholders are pitted against those of agents in informal institutions, such as the state or the local party, or oligarchic shareholders threatening expropriation. Researchers could assess how and when informal institutional logics change and become aligned with formal ones, or vice versa.

Studies have shown that the ownership of the firm plays an important role in corporate governance (Boyd & Solarino, 2016; Solarino & Boyd, 2020). Future studies should assess the extent to which our findings are generalizable across ownership types. Different owners can create different dynamics in the board because different owners are rooted in different logics (Solarino & Boyd, 2020), posing an interesting challenge: To what extent does the logic of ownership shape board dynamics? For example, do independent directors function differently in a family firm versus a business group? Stated differently, to what extent do controlling shareholders exert a direct or indirect influence on board members in shaping how discussions are carried out?

Finally, a limitation of our study lies in the subnational variations of the informal institutions. Tabellini (2010), for instance, reported how, in Italy, the judicial system, even in the presence of national laws, a unified incentive system, and same-resource provisions by the central government, demonstrates substantial variations in the length of trials. In the southern regions, where certain local informal institution logics are stronger than their counterparts in northern regions of the country, and the rule of law is weaker, trials take comparatively longer. Furthermore, the importance of religion could play both a unifying and a divisive role in the board, giving rise to possible social fault lines within it. A few studies have begun to look at the role of the religion of board members (e.g., Ramli & Ramli, 2016), but more studies are needed to unpack its role in corporate governance decisions. Future studies should investigate how board independence and corporate governance effectiveness vary within the same country, based on the informal institutions that prevail where the firm is located.

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ENDNOTES

[1] The data collection ended for the year 2017 as it is the last year available in Guillén and Capron's (2016) minority shareholder projection index.

[2] The list of articles included in the meta-analysis is available in Supporting Information—Table 1.

[3] The authors bootstrapped *t*-tests for each mean difference. The mean differences between results were all nonsignificant.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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