**Long-term orientation, family-intensive governance arrangements, and firm performance: An institutional economics perspective**

**Abstract** In this study, we examine the effect of cultural long-term orientation on the likelihood of adopting more family-intensive governance arrangements (FGAs) and the impact on firm performance. FGAs may impose various costs on the firm, including the extraction of private benefits, conflicts with professional managers, paternalistic human resource management practices, and lower legitimacy. Drawing on institutional economics, we theorize that cultural long-term orientation reduces some of these costs, thereby increasing the relative efficiency of FGAs as a governance option. Thus, we expect FGAs to be adopted more frequently in countries with a more long-term orientation. We also expect FGAs to have a less negative impact on performance in these countries as a result of these lower costs. The results of mixed-effects regressions on a cross-sectional sample of 3221 listed family and nonfamily firms in 19 countries confirm that FGAs are more likely to be adopted in more long-term oriented countries. We also find that FGAs have a negative effect on firm performance, but not that cultural long-term orientation weakens this relationship. However, an interesting mediating effect emerges whereby cultural long-term orientation increases the likelihood of adopting FGAs but negatively affects firm performance.

**Plain English summary**Family firms are embedded in institutional frameworks that inevitably shape their governance structures and performance. In this study, we examine the impact of cultural long-term orientation on the likelihood of adopting more family-intensive governance structures and their effect on performance. Specifically, drawing on institutional theory, we hypothesize that: a) a country’s long-term orientation increases the likelihood of adopting more family-intensive governance structures; b) family-intensive governance negatively affects performance; c) a country’s long-term orientation plays a moderating role in the relationship between family-intensive governance and performance. Our statistical analysis using mixed-effects regressions on a cross-sectional dataset of 3221 publicly listed family and nonfamily firms in 19 countries validates the first two hypotheses. Although we do not find that cultural long-term orientation weakens the negative effect of family-intensive governance and performance, our results reveal an intriguing mediating effect suggesting that cultural long-term orientation negatively affects firm performance by increasing the intensity of family involvement in firm governance.

**Keywords:** Family business, Governance, Culture, Institutional economics, Long-term orientation

**JEL Codes:** G32, G34, L20, L25

**1 Introduction**

Exercising active control over the firm is critical for business families, as corporate control allows them to pursue their vision for the firm and pass it on to future generations (Chua et al., 1999; Chua et al., 2018). An important implication of this attention to corporate control is the involvement of family members in firm governance (Daspit et al., 2018), as they often own a significant portion of the firm’s equity and hold key corporate positions (Miller et al., 2013a; Miller et al., 2018). In turn, family-intensive governance arrangements (FGAs) – characterized by concentrated family ownership and family managers – are likely to affect important firm outcomes, such as value (Eklund et al., 2013) and performance (González-Cruz & Cruz-Ros, 2016). However, a plethora of conflicting theoretical arguments and mixed empirical results (Jaskiewicz et al., 2021; Miller et al., 2017) still prevent researchers from determining whether the effect of FGAs on performance is positive or negative, especially in cross-country settings (Debellis et al., 2021).

Recent scholarship suggests and demonstrates that an examination of institutions – the humanly devised constraints that shape human interaction (North, 1990) – can help reconcile this fragmentary evidence (Berrone et al., 2020; Brinkerink & Rondi, 2021; Miller et al., 2017). For example, Berrone et al. (2020) show that informal institutions in different countries affect the legitimacy of family firms and in turn determine their prevalence, performance, and strategy. On the other hand, Miller et al. (2017) argue that family-intensive forms of governance trigger market stakeholder skepticism about the trustworthiness and competence of family firms due to fundamental differences in their priorities and values. Such skepticism may be particularly intense in shareholder-based corporate governance systems (Luo et al., 2019). Moreover, Miller et al. (2018) find that family firms adopt more family-intensive forms of governance in regions where family values are stronger, but underperform. Common to these studies is the view that family firms respond to institutional pressures by conforming to established practices in order to demonstrate social and economic fitness and gain legitimacy (Greenwood et al., 2002; Soleimanof et al., 2018; Suddaby et al., 2010). However, two arguments challenge this perspective. First, that family firms can ignore some stakeholder demands and resist institutional pressures (Ge et al., 2019; Jaskiewicz et al., 2021). Second, that the institutional environment can shape the socioemotional priorities of business families – i.e., the set of noneconomic utilities that the family obtains from the business (Gómez-Mejía et al., 2007) – in ways that can be either beneficial or detrimental to firm financial outcomes (Miller & Le Breton-Miller, 2014). Instead, by portraying the family and the business systems as universally (or predominantly) opposed, past studies downplay the more nuanced and varied ways in which institutions – and culture in particular – may affect the influence of socioemotional priorities on performance and thus legitimacy concerns about family involvement in firm governance.

To overcome these limitations, we examine how FGAs and family firm performance are affected by a particular dimension of a country’s culture, namely its long-term orientation. Theoretically, we adopt the lens of institutional economics, which argues that institutions primarily aim to promote the efficient functioning of the market by reducing frictions and economic costs (Posner, 2010), and that different sets of institutions differentially affect the relative efficiency of alternative organizational forms and governance options (Gedajlovic & Carney, 2010). Based on this perspective, we argue that cultural long-term orientation mitigates some of the costs associated with FGAs (i.e., the extraction of private benefits, conflicts and goal misalignment with professional managers, paternalistic biases in human resource management, and legitimacy costs) by enhancing the salience of future-oriented socioemotional priorities. As a result, we contend that governance participants – who are institutionally embedded (Abdelnour et al., 2017) and exercise their agency and judgment based on the relative efficiency of alternative options (Gedajlovic & Carney, 2010) – are more likely to adopt more FGAs in more long-term oriented countries. In addition, we expect that FGAs negatively affect firm performance due to their costs, but that this effect is weakened by cultural long-term orientation.

We test our theory on a cross-sectional sample of 3221 listed family and nonfamily firms from 19 countries. The results of our mixed-effects ordered logistic regression confirm that a country’s long-term orientation increases the likelihood that firms adopt more FGAs. While we also find that FGAs negatively affect firm performance, we find no evidence to support our hypothesis that long-term orientation weakens this effect. Instead, we find that FGAs mediate the relationship between long-term orientation and firm performance, i.e., long-term orientation increases the likelihood that firms will adopt more FGAs, in turn negatively affecting performance. An interesting interpretation of this result is that while governance decisions are made locally (i.e., by actors embedded in and knowledgeable about local institutions), in integrated financial markets assets are priced globally (Karolyi & Stultz, 2003) by analysts and stakeholders who are not embedded in the same institutional context. However, unfamiliarity with local conditions – especially in the case of governance issues – can lead to biases in corporate valuations (Perkins et al., 2014; Pinelli et al., 2022) due to the lack of awareness and knowledge of the lower costs of FGAs in long-term oriented cultures, or discounting the value of their greater efficiency.

In particular, this study contributes to research on the determinants of family involvement in corporate governance and the performance consequences (Hoffmann et al., 2016; Jaskiewicz et al., 2021). We show that cultural long-term orientation increases the likelihood of adopting more FGAs. In so doing, we respond to the call of Berrone et al. (2020) to consider informal institutions as independent drivers of family involvement in firm governance rather than as remedies for voids in the formal institutional environment. In addition, we contribute to research focused on family businesses and institutions (Berrone et al., 2020; Luo et al., 2019; Miller et al., 2017) using a theoretical perspective that integrates and unifies legitimacy (e.g., Berrone et al., 2020; Miller et al., 2017), political rent-seeking (e.g., Morck & Yeung, 2004), and family embeddedness (e.g., Ge et al., 2019) arguments on the emergence and prevalence of family firms. More specifically, our theoretical perspective extends the predictions of institutional economics about the efficiency of alternative governance options (Gedajlovic & Carney, 2010) to explain cross-country variance in the extent to which FGAs are adopted. Finally, although we do not find support for our hypothesis that long-term orientation weakens the negative effect of FGAs on firm performance, the mediating effect of FGAs in the relationship between long-term orientation and firm performance contributes to research on the relationship between long-term orientation and performance outcomes in family firms (e.g., Brigham et al., 2014; Hoffmann et al., 2016; Lumpkin & Brigham, 2011).

**2 Theoretical background and hypothesis development**

*2.1 Family-intensive governance arrangements and performance*

Family firms are defined as “governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families” (Chua et al., 1999, p. 25). Such vision typically includes a set of noneconomic utilities that the family obtains from the business, referred to as socioemotional wealth (Gómez-Mejía et al., 2007), which the family seeks to preserve (Gomez-Mejia et al., 2011). In turn, the pursuit of the family’s vision and socioemotional priorities often leads owning families to adopt idiosyncratic forms of governance characterized by concentrated ownership and the appointment of family members as firm leaders (Miller et al., 2013a; Miller et al., 2018), as well as distinctive norms, incentives, and authority structures (Gedajlovic et al., 2004) that permeate the firm’s goals and operations (Chua et al., 2018; Sharma et al., 2020). Consequently, FGAs are reflected in idiosyncratic behaviors and corporate strategies (Williams et al., 2018), such as internationalization (Debellis et al., 2023a), acquisition propensity (Pinelli et al., 2023), innovation (Scholes et al., 2021), entrepreneurial orientation (Arzubiaga et al., 2018), and risk attitude (Fang et al., 2021).

Regarding the effects of family governance on firm performance, researchers have theorized that FGAs can have both positive and negative consequences (Hoffmann et al., 2016; Jaskiewicz et al., 2021). On the one hand, FGAs can benefit the firm’s economic prospects by reducing conflicts of interest between owners and managers, as family leaders with more authority are likely to share and implement the family’s vision better than professional managers (Chrisman et al., 2004; Kotlar & Sieger, 2019). In addition, family members’ identification with the firm promotes the adoption of pro-organizational behaviors and greater commitment to the firm’s development, such as sales growth, reputation, and profitability (Corbetta & Salvato, 2004; Miller et al., 2008). On the other hand, FGAs can be detrimental to firm performance due to conflicts with nonfamily shareholders who may fear that family leaders will use their power to divert firm resources to family-centered goals and priorities, thereby harming profitability (Schulze et al., 2001, Schulze et al., 2003). Moreover, influential family leaders may harm firm performance by making economically suboptimal strategic decisions, such as foregoing positive net present value opportunities that threaten the family’s socioemotional wealth (Gomez-Mejia et al., 2018; Miller & Le Breton-Miller, 2014). In addition, altruism and paternalism may lead powerful family leaders to reward other family members or long-time employees, regardless of their actual competence or expertise, or give them excessive responsibility, which may jeopardize the firm’s economic performance (Howorth et al., 2010; Miller et al., 2013b).

Mirroring these conflicting theoretical arguments, the empirical evidence on the effect of FGAs on performance is also mixed, with some studies reporting positive effects (Taras et al., 2018; van Essen et al., 2015; Wagner et al., 2015), others negative effects (Kosmidou, 2020), and still others mixed results (Carney et al., 2015; Duran et al., 2019). However, the growing body of family business research examining the role of institutions (Brinkerink & Rondi, 2021; Pinelli et al., 2023) suggests that the institutional context may help reconcile these fragmented findings (Jaskiewicz et al., 2021). For example, informal institutional differences can explain cross-country differences in the legitimacy of family firms and thus their prevalence and performance (Berrone et al., 2020). Moreover, while more FGAs have been found to negatively affect performance, this effect weakens in societies with higher levels of institutional trust, but amplifies in countries with higher trust in family (Jaskiewicz et al., 2021). Similarly, in regions where a strong family culture prevents business families from relegating less competent family members to marginal hierarchical positions, more FGAs tend to hurt firm performance (Miller et al., 2017).

Overall, recent research shows that an examination of the institutional environment has the potential to shed new light on the determinants of FGAs and their performance consequences. In addition, an examination of the role played by informal institutions relative to formal institutions could be particularly revealing, as past research has tended to view informal institutions as mere substitutes for weak formal institutions, even though their influence on firm behavior and structure is independent of the formal institutional context (Berrone et al., 2020). To begin to exploit some of this explanatory potential, we focus on one particular dimension of the informal institutional environment, a culture’s the long-term orientation. In the following sections, we draw on institutional economics to develop our arguments about the influence of cultural long-term orientation on the adoption of more FGAs and their performance consequences.

***2.2 Institutional economics***

Rooted in economics, institutional economics seeks to explain how institutions enable markets to function effectively and efficiently. Defined as the humanly devised constraints that shape human interaction (North, 1990; Scott, 1995), or more informally the rules of the game, institutions include formalized codes such as rules, laws, and constitutions (i.e., formal institutions) as well as informal arrangements, such as social norms, cultural values, and practiced conventions (i.e., informal institutions). According to institutional economists, the primary function of institutions is to support the efficient functioning of the market by reducing market frictions and the economic costs of organizational arrangements (Posner, 2010). In doing so, market-supporting institutions are expected to reduce the costs associated with, for example, the acquisition and processing of information, information asymmetry, risk and uncertainty, as well as those associated with opportunistic behavior, monitoring and goal misalignment (e.g., agency costs) (Kostova et al., 2020; Posner, 2010). Importantly, both the extent and the way in which existing institutions promote economic activity and coordination among agents vary across countries (Berrone et al., 2020; Pinelli et al., 2023). Indeed, due to cross-country institutional differences, countries differ both in their capacity to support the value-creating activities of economic actors and in how they can most effectively organize, coordinate, act and interact to carry out such value-creating activities. As a result, different sets of institutions determine the relative efficiency of alternative forms of organization and governance (Gedajlovic & Carney, 2010). Based on these institutionally determined efficiency differentials, economic actors design and choose organizational arrangements and business practices that minimize market frictions and the economic costs of organizations (Gedajlovic & Carney, 2010; Posner, 2010). Indeed, the agency of economic actors is both constrained and enabled by institutions (Barley & Tolbert, 1997; Emirbayer & Mische, 1998), intended both as the cultural context that defines actors’ understanding of their range of action possibilities and the socio-structural context that determines the scope of interpersonal and interorganizational action (Abdelnour et al., 2017). While the scope of action of economic actors is neither unlimited nor independent of institutions, as the latter define their identities and interests (Garud et al., 2007), economic actors do have the power to make decisions, set goals, and take actions with a degree of freedom that is institutionally embedded, i.e., culturally constructed and historically contingent (Abdelnour et al., 2017). In turn, economic actors exercise such agency according to their skills, abilities, and roles, intended as a functional script for accomplishing tasks that are still institutionally derived (Kallinikos, 2003). In other words, according to an institutional economics perspective, a country’s formal and informal institutions determine how costly it is to conduct business in certain ways within a given institutional context, while economic agents within that context strategically decide how to organize internally and externally to maximize efficiency and minimize the cost of doing business. In this way, institutional economics differs from related branches of institutional theory, such as organizational institutionalism, which emphasize a legitimacy mechanism whereby the organization of economic actors is designed to gain legitimacy through compliance with institutional constraints and stakeholder expectations (Kostova et al., 2020).

***2.3 FGAs in cultures with a long-term orientation***

As shown above, FGAs can lead to a variety of costs and disadvantages for the firm (Jaskiewicz et al., 2021; Miller et al., 2017). However, we argue that some of these costs are likely to be lower in more long-term oriented cultures. The long-term orientation of a culture reflects the extent to which people are future-oriented, accept delayed gratification, and embrace virtues oriented toward future rewards, such as perseverance, thrift, and persistence (Beugelsdijk et al., 2015; Hofstede, 2001; Hofstede & Minkov, 2010). The long-term orientation of a culture also influences the cognitive models through which people frame, interpret, experience, and resolve the tradeoffs associated with intertemporal decisions (Lumpkin & Brigham, 2011), such that the perceived net present value of distant future payoffs is higher in more long-term oriented cultures. This difference in temporal discounting is in turn reflected in different business priorities between short- and long-term oriented societies, with the former placing more emphasis on short-term financial gains and performance measures (Hofstede, 2001; Hofstede & Minkov, 2010).

We argue that cultural long-term orientation can affect not only financial preferences, but also the salience of different types of socioemotional priorities. Miller and Le Breton-Miller (2014) distinguish between socioemotional priorities that are highly family-centric, leading to behaviors that favor the interests of current family members even at the expense of the firm’s long-term prospects (e.g., paternalistic management practices, entrenching family members in senior organizational positions), and extended socioemotional priorities that instead take into account the long-term well-being of the family, the firm, and its stakeholders. We propose that the latter type of socioemotional priorities are made more salient by the future-oriented values of long-term oriented cultures, so that some of the costs that might result from more FGAs are mitigated in long-term oriented countries. Conversely, the emphasis on tradition and social obligations in short-term oriented cultures (Beugelsdijk et al., 2015) may exacerbate family-centered socioemotional priorities and lead family members to satisfy the immediate needs of the family, even to the detriment of the firm. Thus, we argue that the degree of long-term orientation of a culture affects the economic costs of FGAs and thus the likelihood that more FGAs will be adopted.

First, a country’s long-term orientation reduces the costs to the firm of extracting private benefits. Indeed, FGAs allow family members to use their superior position and knowledge to make decisions that benefit the family at the expense of the firm and nonfamily shareholders (Miller et al., 2013b; Morck et al., 2005). For instance, they may hire other family members as executives even if they lack the necessary skills and qualifications for the position (Bloom & Van Reenen, 2007), pay above-market salaries and provide excessive benefits to family members (Hoffmann et al., 2016), or use firm resources for personal or family purposes (Le Breton-Miller & Miller, 2009). In these cases, where the family’s interests are prioritized over the firm’s, FGAs generate private short-term benefits for the family but impose economic costs on the firm and on nonfamily shareholders. However, in more long-term oriented cultures, these costs are likely to be lower because long-term orientation may reduce the emphasis on family-centered socioemotional priorities. Indeed, long-term orientation fosters a cross-decisional approach to decision making (Reynolds et al., 2006), which allows individuals to temporarily sacrifice the interests of a specific stakeholder group in certain decision situations (Hoffmann et al., 2016). Thus, family members who are less affected by social obligations to other family members may disregard their immediate needs if addressing them comes at the expense of the firm (Carney, 2005; Chrisman et al., 2005). As a result, in more long-term oriented cultures, more FGAs may be less costly because family members’ behaviors that could be costly to the firm are limited or less frequent.

Second, a country’s long-term orientation reduces the costs of conflicts between the family and professional managers. While business families rely on the competence and expertise of professional managers to manage the business, their goals and behaviors often conflict with the family’s priorities. In fact, professional managers tend to focus primarily on financial and economic objectives, make decisions aimed at achieving positive short-term economic outcomes, and – due to their shorter tenure – may take significant risks when the payoff is immediate and the potential downside delayed (Miller & Le Breton-Miller, 2006). Conversely, the family has a variety of noneconomic goals (Gómez-Mejía et al., 2007; Miller & Le Breton-Miller, 2014), long-term commitment to the firm (Corbetta & Salvato, 2004; Pieper et al., 2008), and a cautious approach to risk-taking (Anderson & Reeb, 2003). These differences between family members and professional managers can be costly for the firm. Indeed, when the members of an organization have different goals or priorities, challenges and tensions can undermine the firm’s functioning (Greenwood et al., 2011). In addition, professional managers tend to be both less willing and less able to make decisions that are aligned with the family’s priorities (Kotlar & Sieger, 2019), such that business families must devote substantial resources to establishing costly monitoring and sanctioning mechanisms and incentive systems to ensure that professional managers make decisions that are aligned with their goals and interests (Hoffmann et al., 2016). These costs are likely to be mitigated in more long-term oriented countries. On the one hand, cultural long-term orientation may increase the salience of managers’ socioemotional priorities (Miller & Le Breton-Miller, 2014), thereby promoting pro-organizational and stewardship behaviors toward firm-level rather than individual-level goals, as well as greater willingness to exert effort on behalf of the firm (Davis et al., 1997; Hoffmann et al., 2016). On the other hand, tensions arising from the different time horizons of family members and professional managers are likely to be mitigated in cultures that are more long-term than short-term oriented, where there is greater emphasis on short-term financial gains (Hofstede & Minkov, 2010). In turn, the lower monitoring costs and reduced tensions in more long-term oriented cultures make FGAs more efficient governance options.

Third, a country’s long-term orientation reduces family biases in human resource management. Indeed, FGAs may incur costs due to unsavvy human resource management (Carney, 1998; Gedajlovic & Carney, 2010), as family leaders may engage in unequal treatment of resources for family members relative to nonfamily members, driven by an affect heuristic rather than rational economic reasoning (Kano & Verbeke, 2018). This could lead to the adoption of ineffective practices related to hiring, promotion, and rewards (Miller & Le Breton-Miller, 2005). For instance, family leaders may avoid incentive plans – such as stock options – that dilute family control (Gedajlovic et al., 2004), manage compensation and promotions based on particularistic criteria, and feel that their authority may be undermined by policies that reward professional and technical expertise (Schulze et al., 2001). Such an approach to human resource management can fuel perceptions of procedural injustice (Lubatkin et al., 2007), create feelings of frustration and mistrust among employees who are disadvantaged by these practices, dampen their commitment and motivation, and ultimately lead to the loss of otherwise qualified and skilled workers. Thus, FGAs may impose costs on the organization in the form of less committed and motivated employees and higher turnover. Importantly, the “ownership mentality” toward human resource management stems from family managers’ perception that compensation, training, and benefits are expenses (Gedajlovic & Carney, 2010). Therefore, a long-term oriented culture that increases the salience of future-oriented socioemotional priorities (Miller & Le Breton-Miller, 2014) may mitigate the costs of paternalistic human resource management practices by fostering the view that hiring policies, promotion plans, and incentive schemes are important investments in the firm’s workforce aimed at improving morale, loyalty, and long-term commitment. Hence, in more long-term oriented cultures, FGAs may lead to lower human resource management costs.

Fourth, a country’s long-term orientation may reduce the legitimacy costs associated with FGAs. Institutional actors are subject to pressure from stakeholders to conform to the accepted norms and generalized beliefs about appropriate social and economic practices (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). While conformity to established organizational templates signals social and economic fitness, deviating from established conventions entails costs in terms of legitimacy and social endorsement (Carpenter & Feroz, 2001; Deephouse & Suchman, 2008; Greenwood et al., 2002; Zhao et al., 2017). In the case of listed family firms, FGAs often increase stakeholder skepticism about the competence and trustworthiness of family firms (Miller et al., 2017; Zhao et al., 2017) because family members may prioritize noneconomic priorities over financial goals. As a result of this skepticism, firms that adopt FGAs may have difficulty obtaining support from providers of financial and nonfinancial resources, and may lack political support from key stakeholders. In other words, the involvement of family members in firm governance has an economic cost in terms of legitimacy. However, in more long-term oriented countries, this cost may be lower because the cultural long-term orientation reinforces the future-oriented and stakeholder-oriented socioemotional priorities of family members and stakeholders (Miller & Le Breton-Miller, 2014). Family members may thus foster enhanced transgenerational control intentions (Hoffmann et al., 2019; Zellweger et al., 2012), which translate into values such as futurity, continuity, and perseverance (Lumpkin & Brigham, 2011), leading to strategic choices and business practices aimed at promoting the long-term well-being of the firm and its stakeholders (Chua et al., 2018). At the same time, stakeholders in more long-term oriented cultures are also likely to share future-oriented socioemotional priorities, and may thus develop more favorable attitudes toward the involvement of family members in firm governance. In turn, less skepticism about the trustworthiness and competence of family members reduces the legitimacy costs of FGAs in more long-term oriented countries.

Finally, a country’s long-term orientation can reduce the costs of political rent-seeking for the firm and society. Indeed, powerful business families can achieve above-market returns and increase their personal wealth by leveraging political connections, albeit at the cost of substantial investments and the diversion of resources from value-adding firm functions, such as innovation (Morck & Yeung, 2004). In the long run, lack of investment in value-adding activities harms the firm’s prospects and chances of survival. At the country level, political rent-seeking by business families has also been negatively associated with several dimensions of socioeconomic development (i.e., economic prosperity, social equality, the quality of infrastructure, health care, education, and macroeconomic policies; Morck & Yeung, 2004). However, these firm and social costs are likely to be lower in long-term oriented cultures. As noted earlier, cultural long-term orientation leads to an increased emphasis on transgenerational control intentions (Hoffmann et al., 2019; Zellweger et al., 2012), which creates an incentive for business families to leverage family ties rather than political connections (Ge et al., 2019). Leveraging this type of relationship offers several advantages at both the firm and country level. Indeed, family networks are characterized by virtuous qualities, such as solidarity, mutual accountability and trustworthiness, which facilitate the accumulation (Steier & Greenwood, 2000) and mobilization of resources (Arregle et al., 2015), as well as the identification of business opportunities (Tsang, 2002). At the country level, business families that conduct business through family networks rather than political connections contribute to entrepreneurship, growth, and economic development (Ge et a., 2019). As a result, the potential firm- and country-level costs of political rent-seeking by business families are likely to be lower in countries with a more long-term orientation, as a focus on the future and transgenerational intentions incentivize the use of family rather than political ties, in turn increasing the efficiency of FGAs as a governance option.

Taken together, these arguments suggest that cultural long-term orientation, by differentially affecting the salience of different types of socioemotional priorities, can mitigate the various costs and frictions that arise from adopting more FGAs. Thus, long-term orientation acts as an institutional force that increases the relative efficiency of FGAs (Gedajlovic & Carney, 2010), and governance participants may be more likely to adopt more FGAs in more long-term oriented countries. Therefore:

**H1**: A country’s long-term orientation increases the likelihood of adopting more FGAs.

***2.4 FGAs and firm performance in cultures with a long-term orientation***

In the previous sections, we have shown that FGAs can be costly for firms. The costs of FGAs can arise from the appropriation of private benefits at the expense of the firm, from conflict and goal misalignment with professional managers, from paternalistic biases in human resources management, and from lower legitimacy and political rent-seeking. However, we presented arguments suggesting that these costs may be lower in long-term oriented countries. Extending this line of reasoning, we contend that FGAs have a negative effect on performance, but building on the view that the environment can shape socioemotional priorities in ways that lead to more or less positive financial outcomes (Miller & Le Breton-Miller, 2014), we also propose that cultural long-term orientation positively moderates this effect by reducing the costs of FGAs. First, when the extraction of private benefits by family members is lower, fewer resources are diverted from the firm, and its value and profitability increase. Second, when tensions between the family and professional managers are lower, not only is organizational functioning preserved, but the reduced need for monitoring systems and incentive schemes frees resources that can be directed to more value-adding projects, contributing positively to firm value and performance. In addition, since managers’ pro-organizational behavior and long-term commitment improve shareholder value (Flammer & Bansal, 2017), the shift from individual-level to firm-level goals driven by long-term orientation (Davis et al., 1997; Hoffmann et al., 2016) may also benefit firm performance. Third, when family leaders adopt human resource management practices that improve employee morale, loyalty, and commitment, the firm’s prospects are also likely to improve, as is shareholder value (Flammer & Bansal, 2017). Fourth, the lower legitimacy costs of FGAs in long-term oriented cultures may enhance performance thanks to the support of stakeholders and resource providers on whom the firm depends. Finally, business families that rely on relational strategies within the family’s social network instead of political rent-seeking invest less in building and maintaining political connections, freeing up resources that can be devoted to innovation and other value-adding business activities (Ge et al., 2019; Morck & Yeung, 2004).

In summary, while the adoption of more FGAs may lead to various costs that could negatively affect firm performance, we posit that such costs are likely to be mitigated in long-term oriented cultures, hence weakening the negative effect of FGAs on performance. Therefore:

**H2a**: FGAs are negatively associated with firm performance.

**H2b**: A country’s long-tern orientation weakens the negative relationship between FGAs and firm performance.

**3 Methodology**

To conduct our empirical analysis, we assembled a cross-sectional sample of 3221 listed family and nonfamily firms from 19 countries. We started our sampling process with the NRG Metrics ([https://‌nrgmetrics.com/](https://nrgmetrics.com/)) database (2017 version), which includes 4956 nonfinancial firms from 33 countries. NRG Metrics provides information on family involvement in corporate governance retrieved from publicly available documents such as annual reports, company presentations, regulatory filings, and press releases. According to NRG Metrics, the firms and countries included in the database are selected from the developed and advanced emerging country categories of the FTSE Country Classification (classifying countries as developed, advanced emerging, secondary emerging, and frontier), with a particular focus on firms from European countries. In addition, the data is collected by experienced analysts and supervised by a separate team to ensure accuracy and consistency. Random checks and customized software further ensure data consistency and reliability.

To obtain additional firm-level data, we used the Thomson Reuters (now Refinitiv) Eikon database (<https://eikon.refinitiv.com/>), which we triangulated with the NRG Metrics database. From the initial sample of 4956 nonfinancial firms included in the latter database, we selected only listed firms. This step reduced the original raw sample to 3840 firms. Since this screening procedure is a potential source of endogeneity due to differences in coverage of firms based on their listed status, we applied the Heckman procedure to control for sample selection bias. Following previous studies on governance and institutions in cross-country settings (e.g., Pinelli et al., 2022), we used industry dummies as exclusion restriction variables in a probit regression on listed firms. We then computed the residuals and used them to calculate the inverse Mills ratio included as an additional control variable in our empirical tests.

Next, we examined the prevalence of family firms in our sample to ensure that the country-level percentages were comparable to other studies. As a benchmark, we used the percentages reported in the recent meta-analysis of Berrone et al. (2020), which we compared to those in our sample (see Table 1). To identify family firms, we followed the conventions of family business research (e.g., Chrisman & Patel, 2012; Gomez-Mejia et al., 2018; Patel & Chrisman, 2014; Pinelli et al., 2023) and considered firms to be family firms if the family owns at least 5% of shares and at least one family member serves as a top-level executive or on the board of directors (this information was retrieved directly from NRG Metrics). Firms that did not meet these criteria were categorized as nonfamily firms. To ensure that the proportion of family firms by country in our sample is comparable to other studies, we excluded those countries where the prevalence of family firms differed by more than 25% from studies included in our benchmark meta-analysis. This led to excluding 9 countries (i.e., Austria, Belgium, Brazil, India, Israel, Japan, South Korea, Taiwan, and Turkey) and 476 firms. We also excluded three countries that were not included in any of the studies analyzed by Berrone et al. (2020) to ensure consistent comparability (i.e., Croatia, Czech Republic, and Russia). As shown in Table 1, this data cleaning procedure reduced our sample to 3319 firms from 20 countries, of which 25.25% classified as family firms. Finally, we excluded 26 Irish firms because we could not compute three country-level control variables, as Ireland is not covered in the World Values Survey, as well as an additional 72 firms (2.16% of the sample) due to missing information on some firm-level control variables (e.g., revenues, assets, ROA, debt). Thus, our final sample includes a total 3221 firms (of which 838 classified as family firms) from 19 countries.

(Insert Table 1 about here)

***3.1 Dependent variables***

We use two dependent variables in our analysis. Consistent with prior studies (e.g., Miller et al., 2017), the first dependent variable to assess H1 measures the level of FGAs using a categorical variable that includes two dimensions of family involvement in the firm: family ownership and family leadership. This variable takes value 0 if the firm does not meet our definitional criteria of family firm, value 1 if the family is not the largest shareholder, value 2 if the family is the largest shareholder but the CEO is not a family member, and value 3 if the family is the largest shareholder and the CEO is a family member. We report the relative frequencies and geographic distribution of this variable in Table 2.

To test H2a and H2b, we use Tobin’s Q as our measure of firm performance. Given the criticism of using accounting-based measures of firm performance (Singh et al., 2018), we use Tobin’s Q – a stock market-based measure of performance (Girod & Whittington, 2017) – that reflects the present value of future profits. Calculated as the ratio of a firm’s market to book value, this is a forward-looking measure of performance for publicly traded firms across industries, and is widely used in the strategy, marketing, finance, and governance literature (Anderson & Reeb, 2004). Moreover, Tobin’s Q is particularly appropriate for examining family firm performance because other accounting measures of performance, such as ROA, are often not the primary concern of family firms (Miller et al., 2018).

(Insert Table 2 about here)

***3.2 Independent variable***

We measure the long-term orientation of a culture using Hofstede’s national long-term orientation (LTO) score (Hofstede, 2001; Hofstede & Minkov, 2010) (https://geerthofstede.com/‌research-and-vsm/dimension-data-matrix/). Higher values of this score reflect greater future orientation, acceptance of delayed gratification, and increased importance of values associated with future rewards, while lower values reflect greater emphasis on tradition and fulfillment of social obligations (Beugelsdijk et al., 2015; Hofstede, 2001; Hofstede & Minkov, 2010).

**3.3 Controls**

Since both firm performance and level of FGAs can be affected by economic wealth, we control for a country’s economic and financial development through the natural logarithm of national GDP per capita. As both firm performance and family involvement in governance can be affected by the extent to which national laws protect the interests of minority shareholders (Johnson et al., 2000), we control for the level of legal protection of minority shareholders through the investor protection index of Guillén and Capron (2016). We also control for the overall quality of formal institutions, which, especially for family firms, determines the attractiveness of a country as a business location (Pinelli et al., 2023) and can affect firm performance (Pinelli et al., 2022). We compute this measure through a principal component analysis of the six dimensions of the World Banks’ world governance indicators. In addition, following Arregle et al. (2017), we control for generalized social trust, as this is an important control variable for the study of institutions and family firms. Our final two country-level control variables are family logic and business logic, which we compute following Miller et al. (2017). According to their procedure, the family logic variable is obtained through a principal component analysis of five questions from the World Values Survey that aim to capture dimensions such as family-based control mechanisms, family-rooted norms, family identity, family-based legitimacy and authority. Higher values of this measure indicate a stronger family logic at the country level. The business logic variable is instead obtained through principal component analysis of three questions from the World Values Survey that reflect market-based controls through competition, norms of meritocracy, identity and legitimacy based on productivity. Higher values of this measure indicate a stronger business logic at the country-level.

At the firm level, we control for firm age (number of years since the firm was first listed), as older firms may have better performance due to long-lasting reputation and legitimacy, and may favor higher levels of family involvement in firm governance due to more professional and knowledgeable family members (Debellis et al., 2023a). We also control for firm size (natural logarithm of total sales) and leverage (natural logarithm of long-term debt) because larger firms and firms with less debt may exhibit higher levels of performance due to factors such as economies of scale, lower financial costs, and greater potential to obtain additional financial resources to invest in promising opportunities. We then control for two critical firm-level governance variables – the size of the board of directors and the number of independent directors – because larger boards and boards with more independent directors may contribute positively to firm performance due to their greater ability to advise on fundamental business decisions and to monitor that managers’ decisions do not conflict with the interests of minority shareholders and investors. These variables are also highly related to the intensity of family involvement in firm governance because larger boards and independent directors may hinder the family’s ability to pursue family-centered noneconomic goals. Finally, we include industry dummies to control for industry-level effects on firm performance and the intensity of family involvement in firm governance, as well as the inverse Mills ratio obtained from the Heckman procedure. The descriptive statistics and correlation matrix for all variables are reported in Table 3.

(Insert Table 3 about here)

**4 RESULTS**

To test our hypotheses, we conducted multilevel mixed-effects regressions (Brieger & Gielnik, 2021; Guerrero et al., 2021), the results of which we report in Table 4. In the presence of nested data, as in the case of our dataset, which contains firm- and country-level information, multilevel modeling outperforms traditional regression techniques because the latter provide inefficient estimates and biased standard errors (De Clercq et al., 2013). To avoid these, multilevel modeling accounts for the nested data structure and simultaneously estimates the variability of the dependent variable within and across countries (Bosker & Snijders, 2011). Furthermore, multilevel mixed-effects models consider fixed and random effects to adequately model the effects between variables at different levels (Bosker & Snijders, 2011).

Given the nature of our dependent variable, *family intensity*, which we use to test the hypothesis that long-term orientation translates into a greater likelihood that listed firms adopt more FGAs, we conducted a multilevel mixed-effects ordered logistic regression (Model 2 of Table 4). Conversely, we conducted a multilevel mixed-effects linear regression to test our hypotheses that FGAs negatively affect firm performance (H2a; Model 5 of Table 4), and that cultural long-term orientation weakens this effect (H2b; Model 6 of Table 4). We also computed the intraclass correlation coefficient (ICC) by dividing between-country variance by total variance. The ICC estimates the percentage of total variance in the dependent variable that exists between countries and thus reflects the proportion of the total residual variation that is due to differences between countries. The ICC for the family intensity variable is approximately 0.12, indicating that 12% of variance is between countries. Since ICCs of 0.05, 0.10, and 0.15 are considered small, medium, and large, respectively (Hox et al., 2017), we confirmed that the multilevel specification is justified for family intensity. Instead, the ICC of Tobin’s Q is quite small (0.016 or 1.6% of the between-country variance), indicating that multilevel modeling is not necessary for this variable. While in Table 4 we only report the results of the multilevel mixed-effects linear regressions on Tobin’s Q, we checked that our results also hold for standard linear regressions with and without robust standard errors.

We first tested whether family firms are more likely to adopt more FGAs in more long-term oriented countries (H1). Model 2 of Table 4 reports the results of the mixed-effects ordered logistic regression on family intensity. As the table shows, the coefficient of LTO is positive and highly statistically significant (*p* = 0.003), which is consistent with our arguments. In addition, the ordered logistic regression requires an analysis of the marginal effects for each of the outcomes of our dependent variable (family intensity). This analysis reveals that a one-unit increase in the LTO score: a) decreases the probability that a firm is not family owned by 0.2%; b) increases the probability that a family owns a non-majority equity stake by 0.04%; c) increases the probability that a family owns the majority equity stake by 0.13%; and d) increases the probability that a family owns the majority equity stake *and* that the CEO is a family member by 0.04%. To put these numbers in perspective, a one standard deviation increase in LTO (18.52) reduces the probability of a firm being nonfamily owned by 4.1% and increases the probability of the other scenarios described above by 0.8%, 2.5%, and 0.8%, respectively. These results confirm H1.

We then tested our hypothesis that more FGAs negatively affect firm performance (H2a) through a mixed-effects linear regression on Tobin’s Q (Model 5). The coefficient of family intensity is negative and again highly statistically significant (*p* = 0.001), providing support for our prediction. Consistent with our hypothesis that cultural long-term orientation weakens the negative effect of FGAs on firm performance (H2b), the coefficient of the interaction term *LTO\*Family Intensity* in Model 6 is not statistically significant. This result prevents us from confirming H2b. However, a joint reading of our results reveals another interesting effect. In fact, Model 4 shows that the LTO coefficient is negative and statistically significant (*p* = 0.074), but this significance is lost when the family intensity variable is included in the regression (Model 5). Together with Model 2, which shows a positive association between LTO and family intensity, these results indicate a full mediation effect of family intensity in the relationship between LTOandTobin’s Q, with LTO positively affecting family intensity and thereby negatively affecting Tobin’s Q. However, the negative effect on Tobin’s Q is due to family intensity and not LTO. One interpretation of these results, which we will discuss in more detail in the next section, is that a country’s long-term orientation increases the likelihood that firms will adopt more FGAs by providing them more efficient governance options locally (i.e., within the embedding institutional context), but this comes at a cost in terms of stock market valuation because in global financial markets, assets are not priced locally but globally, so market analysts and stakeholders may be unaware of or insensitive to the mitigated costs of FGAs in long-term oriented cultures. The small ICC of Tobin’s Q (0.016 or 1.6% of between-country variance) is consistent with this interpretation, suggesting that a firm’s market value (relative to its book value) is not sensitive to a nested data structure.

(Insert Table 4 about here)

**5 Discussion and conclusions**

This paper contributes to research on the determinants of family involvement in firm governance and the performance consequences (e.g., Hoffmann et al., 2016; Jaskiewicz et al., 2021). Through the lens of institutional economics, we developed arguments for the greater relative efficiency of FGAs in long-term oriented cultures. Consistent with our reasoning, the empirical results show that the long-term orientation of a culture increases the likelihood of adopting more FGAs. We attribute this effect to the lower costs of extracting private benefits from the firm, conflicts and tensions between family owners and professional managers, and paternalistic human resource management practices, as well as lower legitimacy costs. While we expected that such greater efficiency would also be reflected in improved performance from the adoption of FGAs in more long-term oriented countries, we found no evidence to support this prediction. Instead, we find that cultural long-term orientation has a negative effect on firm performance. However, when our measure of FGAs is included in the regression, this negative effect disappears. Since our results also show that FGAs have a negative effect on performance, our empirical analysis indicates that the relationship between cultural long-term orientation and performance is mediated by FGAs. In other words, long-term orientation increases the adoption of FGAs, which decreases performance. The study of the drivers and consequences of family involvement in firm governance is central to family business and management research. In this study, we draw on institutional economics to theorize the effect of cultural long-term orientation on the adoption of FGAs and firm performance. In so doing, we contribute to the literature in several ways.

First, our study contributes to research on the impact of institutions on family firm governance. Departing from the commonly adopted perspective that informal institutions influence stakeholders’ perceptions of the legitimacy of family involvement in firm governance (Berrone et al., 2020; Miller et al., 2018), we build on institutional economics to argue that cultural long-term orientation enhances the salience of socioemotional priorities that reduce the economic costs of FGAs. From an institutional economics perspective, institutions are responsible for making alternative forms of organization and governance more or less costly (Gedajlovic & Carney, 2010). Our arguments highlight that cultural long-term orientation can mitigate some of the costs associated with FGAs, making them more efficient and more frequently adopted as governance options. Our theoretical perspective thus allows us to address a fundamental issue in family firm research, namely explaining how informal institutional aspects (in our case, the long-term orientation of a country’s culture) affect firm performance and how family firms differ in their behavior from nonfamily firms (Gedajlovic et al., 2012; Peng et al., 2018). This also calls for a conceptual reconsideration of the importance of the institutional context in explaining the relationship between governance and performance in family firms. The literature often uses samples of family firms in the US, where there is less long-term orientation, as a reference point and attempts to theorize such contexts as generic to all. Our findings call for future research to consider the institutional context as a fundamental variable that can help clarify how certain governance mechanisms can explain firm performance. Since the owning family is embedded in the social environment, the culture of a society will strongly influence the governance structure and objectives of the owning family (Dou et al., 2022). With the aim of shedding light on the heterogeneity of family firms (Daspit et al., 2021), taking into account the cultural variables of a country can also help explain how family firms set their economic and non-economic goals differently. We hope that our theorization serves as an incentive for future research to consider institutional aspects as determinants of goal setting in family firms (Kotlar & De Massis, 2013), considering both firm-level aspects, such as family involvement in governance, and institutional aspects, such as country cultural dimensions, to explain differences in the scale and scope of family firms.

Importantly, our institutional economics perspective lends itself to integrating, reconciling, and unifying three views on the institutional determinants of the emergence and spread of family governance, namely legitimacy (e.g., Berrone et al., 2020; Miller et al., 2018), political rent-seeking (e.g., Morck & Yeung, 2004), and family embeddedness (e.g., Ge et al., 2019). As previously noted, legitimacy arguments suggest that the prevalence of family firms depends fundamentally on perceptions of the legitimacy of family governance. Our institutional economics perspective embraces this line of reasoning because the legitimacy costs of FGAs can be viewed as just one particular manifestation of the broader set of costs that result from family involvement in firm governance. The political rent-seeking (e.g., Morck & Yeung, 2004) and family embeddedness (e.g., Ge et al., 2019) perspectives argue that family firms are more common in countries with less developed institutions. However, they differ fundamentally on the antecedents and consequences of the emergence of family governance. The rent-seeking perspective suggests that in countries with high levels of corruption and low levels of societal trust, a relatively small number of business families have an incentive to invest in political connections to accumulate personal wealth rather than in innovation and other value-adding business functions. As a result, political rent-seeking by business families ultimately harms long-term firm performance and the socioeconomic development of a country (Morck & Yeung 2004). In contrast, the relational perspective argues that family firms – as a form of governance – emerge in underdeveloped countries due to their ability to offset the inefficiencies of low-quality institutions by leveraging the family’s social network (Ge et al., 2019). When weak legal provisions, enforcement, and infrastructure do not effectively support market mechanisms, the use of family networks and the social capital of business families reduces uncertainty and transaction costs (Faccio et al., 2006; Peng & Luo, 2000). At the firm level, this provides family firms with a competitive advantage, which also translates into greater entrepreneurship, growth, and socioeconomic development at the country level (Ge et al., 2019). Our institutional economics perspective reconciles these views because the cost of political rent-seeking to the firm is also a special kind of cost that arises from family involvement in firm governance. Such costs are likely to be mitigated in long-term oriented cultures because a stronger orientation to the future and a focus on the welfare of the next generations provide incentives for business families to rely on family rather than political ties. In this way, cultural long-term orientation reduces the political rent-seeking costs of FGAs through a substitution effect from political to family networking strategies. Thus, our theoretical perspective explains why in similar environments (i.e., poorly developed institutional contexts), some authors argue that family governance is costly and others that it is efficient. Since our institutional economics perspective also incorporates legitimacy arguments for the prevalence of family firms, it can be viewed as a more comprehensive, integrated, and unified theory of family governance that contributes to our understanding of why firms are owned and managed by families instead of professional managers and investors, speaking to the greater economic efficiency of FGAs in long-term oriented cultures.

Another contribution of our study is to research on the effects of informal institutions (Jaskiewicz et al., 2021; Miller et al., 2017) and long-term orientation (Brigham et al., 2014; Lumpkin & Brigham, 2011) on family business performance. In family business research, past studies have mostly examined long-term orientation at the organizational level to argue that business families’ emphasis on futurity, continuity, and perseverance derived from their long-term perspective, vision, and commitment provide family firms with performance advantages (Le Breton-Miller & Miller, 2006; Lumpkin & Brigham, 2011; Miller & Le Breton-Miller, 2005). Instead, we examined long-term orientation at the cultural level, arguing that it may enhance the salience of future-oriented socioemotional priorities, thus mitigating some of the economic costs of FGAs that can reduce firm profitability and value. Therefore, we hypothesized a positive moderating effect of cultural long-term orientation on the relationship between FGAs and performance. Consistent with past studies that found that greater family involvement in firm governance has negative performance consequences (Jaskiewicz et al., 2021), we find that more FGAs negatively affect firm performance. Contrary to our prediction, we find no evidence that this effect is weakened by long-term orientation, which also has a negative effect on performance. However, we also find that the latter disappears when we control for FGAs, suggesting that long-term orientation mediates the FGAs-performance relationship. This result is open to interesting interpretations. One possible explanation is that FGAs negatively affect the market value of firms because assets listed in financial markets are priced globally, not locally. Indeed, the increasing degree of political and economic openness in recent decades is reflected in the degree of financial market integration (Raddant & Kenett, 2021). The purpose of such integration is to make financial markets more stable and robust, as connectivity is supposed to promote the stability of the entire financial system. However, another consequence of financial integration is that no finance is local, and assets are priced independently of their local market (Karolyi & Stultz, 2003). This can lead to biases in corporate valuations due to lack of knowledge or familiarity with local conditions, particularly in the case of governance issues (Perkins et al., 2014; Pinelli et al., 2022). Thus, while firm owners and governance participants embedded in their local institutions are likely to be aware of the higher cost-effectiveness of FGAs in long-term oriented countries, market participants and analysts not embedded in the same institutional environment may lack such knowledge or undervalue the lower costs and long-term benefits of FGAs in long-term oriented cultures. Such valuations may be due to the bounded rationality of market analysts (Luo et al., 2019), which may lead them to be skeptical or overly cautious about FGAs (Miller et al., 2018) and hyperbolically discount the performance benefits of the lower cost of FGAs (Flammer & Bansal, 2017). Moreover, the emphasis on the short term in capital markets (Reilly et al., 2016) may exacerbate these estimation biases. Importantly, the finding that more FGAs are associated with lower market valuations has implications for the scale and scope of family firms, as firms that perform worse in financial markets are likely to have more difficulty obtaining the resources needed to expand and diversify their operations. As a result, empirical observations such as the lower propensity of family firms to engage in acquisitions (Gomez-Mejia et al., 2018) and internationalization (Debellis et al., 2023b) may be due not only to risk aversion (Anderson & Reeb, 2003) or unwillingness to rely on external capital (Molly et al., 2019), but also to a lower ability to obtain resources from the financial market.

Finally, by examining the effect of cultural long-term orientation, which is a particular dimension of the broader informal institutional environment, we respond to Berrone et al.’s (2020) call to study informal institutions with greater centrality. Seminal works (La Porta et al., 1999; La Porta et al., 2000) have identified institutions as primary drivers of firm governance and performance. However, while the existence of informal institutions is widely acknowledged, scholars have predominantly focused on formal institutions (e.g., laws, codes, etc.), leaving the role of the informal institutional context largely unexamined (Berrone et al., 2020). In addition, most studies that examine informal institutions (e.g., social norms, values culture, etc.) view their importance as inversely proportional to the level of development of the formal institutional environment (Peng et al., 2018). Thus, constructs such as culture and social norms have been viewed as remedies for voids in the formal institutional environment (e.g., weak shareholder protection, ineffective legal enforcement, lack of pro-business policies). As such, the relevance of informal institutions for firm performance and behavior has traditionally been subordinated to the presence of developed formal institutions. Instead, the informal institutional context can be viewed as a factor that influences the prevalence, behavior, and performance of family firms *per se*, separately and independently of formal institutions (Berrone et al., 2020). This study adheres to this perspective because, while we empirically control for the influence of formal institutions, our theoretical reasoning considers cultural long-term orientation as an independent institutional force, and our arguments about its effects are not directly dependent on the presence or degree of development of other formal institutions.

**5.1 Limitations and directions for future research**

Our study offers insights and limitations, both of which provide opportunities for further research. First, we focus only on long-term orientation, which is just one dimension of the broader cultural environment. Thus, future research could examine whether other cultural dimensions (e.g., collectivism, power distance) influence family governance and performance. Researchers could also explore *how* cultural dimensions – and informal institutions more generally – exert their influence. Such a research line could develop in several directions. On the one hand, researchers could examine the relationships among different informal institutions or between formal and informal institutions to uncover institutional interdependencies. Indeed, individual institutions do not exist in a vacuum, and their effects usually depend on the characteristics of the broader institutional context. On the other hand, researchers could also adopt novel theoretical perspectives to explore new mechanisms underlying institutional effects. Second, this study focuses on two dimensions of family involvement – leadership and ownership – but such involvement may unfold across multiple dimensions, such as the distribution of equity among family members, the degree of centrality of family members’ collocation in the firm’s hierarchy, or the number of generations involved in the firm’s governance (Debellis et al., 2023b; Fang et al., 2018; Nordqvist et al., 2014). Therefore, future research could also examine the nature – rather than the extent – of family involvement. Third, while we examined the effect of FGAs on performance, several other organizational outcomes may be affected by family governance. Thus, future research could examine whether cultural differences in family governance are reflected in systematic differences in, for example, internationalization patterns, investment decisions, innovation strategies, or preferences for internal vs external growth. Fourth, our arguments suggest that cultural influences may affect the incentives, priorities, and practices of family and nonfamily individuals involved in firm governance. However, we only theorize the effect of cultural long-term orientation. Future research could extend our reasoning to consider how other cultural dimensions affect family members’ priorities and, in turn, family business behaviors, strategies, and outcomes. Such a research trajectory might reveal cross-cultural variance in business family values and enrich our knowledge through a more nuanced understanding of the family logic, which is usually described as universal, monolithic, and characterized by a defined and limited set of traits (e.g., altruism, paternalism, stewardship). Instead, these values may vary across cultures. Fifth, and relatedly, our study suffers from the assumption – common to many if not most family business studies – that socioemotional priorities are responsible for functional or dysfunctional financial outcomes. Due to the difficulty of capturing socioemotional priorities, most studies that rely on secondary data do not measure them directly, but assume they are automatically present when a firm is family owned (Miller & Le Breton-Miller, 2014). Because socioemotional priorities can be heterogeneous, and so can their effects on performance, future research could make a significant academic contribution by further investigating the effect of culture – and informal institutions more generally – on family firm governance and performance through direct measures of socioemotional goals to provide a more nuanced account of their diversity and effects. Moreover, such an approach, especially when combined with the use of panel data, would also enrich our results by revealing within-country differences and temporal variations in family firm governance and performance that our study could not capture due to our focus on cross-country differences and reliance on cross-sectional data.

**References**

Abdelnour, S., Hasselbladh, H., & Kallinikos, J. (2017). Agency and institutions in organization studies. *Organization Studies*, *38*(12), 1775-1792. <https://doi.org/10.1177/0170840617708007>

Anderson, R. C., & Reeb, D. M. (2003). Founding‐family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance*, *58*(3), 1301-1328. <https://doi.org/10.1111/1540-6261.00567>

Anderson, R. C., & Reeb, D. M. (2004). Board composition: Balancing family influence in S&P 500 firms. *Administrative Science Quarterly*, *49*(2), 209-237. <https://doi.org/10.2307/4131472>

Arregle, J.-L., Batjargal, B., Hitt, M. A., Webb, J. W., Miller, T., & Tsui, A. S. (2015). Family ties in entrepreneurs’ social networks and new venture growth. *Entrepreneurship Theory and Practice*, *39*(2), 313–344. <https://doi.org/10.1111/etap.12044>

Arregle, J. L., Duran, P., Hitt, M. A., & Van Essen, M. (2017). Why is family firms’ internationalization unique? A meta-analysis. *Entrepreneurship Theory and Practice*, *41*(5), 801-831. <https://doi.org/10.1111/etap.12246>

Arzubiaga, U., Kotlar, J., De Massis, A., Maseda, A., & Iturralde, T. (2018). Entrepreneurial orientation and innovation in family SMEs: Unveiling the (actual) impact of the Board of Directors. *Journal of Business Venturing*, *33*(4), 455-469. <https://doi.org/10.1016/j.jbusvent.2018.03.002>

Barley, S. R., & Tolbert, P. S. (1997). Institutionalization and structuration: Studying the links between action and institution. *Organization Studies*, *18*(1), 93-117. <https://doi.org/10.1177/017084069701800106>

Berrone, P., Duran, P., Gómez-Mejía, L., Heugens, P. P., Kostova, T., & van Essen, M. (2020). Impact of informal institutions on the prevalence, strategy, and performance of family firms: A meta-analysis. *Journal of International Business Studies*, *53*, 1153-1177. <https://doi.org/10.1057/s41267-020-00362-6>

Beugelsdijk, S., Maseland, R., & Van Hoorn, A. (2015). Are scores on Hofstede's dimensions of national culture stable over time? A cohort analysis. *Global Strategy Journal*, *5*(3), 223-240. <https://doi.org/10.1002/gsj.1098>

Bloom, N., & Van Reenen, J. (2007). Measuring and explaining management practices across firms and countries. *The Quarterly Journal of Economics*, *122*(4), 1351-1408. <https://doi.org/10.1162/qjec.2007.122.4.1351>

Bosker, R., & Snijders, T. A. (2011). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Sage Publications Ltd.

Brieger, S. A., & Gielnik, M. M. (2021). Understanding the gender gap in immigrant entrepreneurship: A multi-country study of immigrants’ embeddedness in economic, social, and institutional contexts. *Small Business Economics*, *56*, 1007-1031. <https://doi.org/10.1007/s11187-019-00314-x>

Brigham, K. H., Lumpkin, G. T., Payne, G. T., & Zachary, M. A. (2014). Researching long-term orientation: A validation study and recommendations for future research. *Family Business Review*, *27*(1), 72-88. <https://doi.org/10.1177/0894486513508980>

Brinkerink, J., & Rondi, E. (2021). When can families fill voids? Firms’ reliance on formal and informal institutions in R&D decisions. *Entrepreneurship Theory and Practice*, 45(2), 291-318. <https://doi.org/10.1177/1042258719899423>

Carney, M. (1998). A management capacity constraint? Obstacles to the development of the overseas Chinese family business. *Asia Pacific Journal of Management*, *15*, 137-162. [https://doi.org/10.1023/A:1015433429765](https://doi.org/10.1023/A%3A1015433429765)

Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, *29*(3), 249-265. <https://doi.org/10.1111/j.1540-6520.2005.00081.x>

Carney, M., Van Essen, M., Gedajlovic, E. R., & Heugens, P. P. (2015). What do we know about private family firms? A meta–analytical review. *Entrepreneurship Theory and Practice*, *39*(3), 513-544. <https://doi.org/10.1111/etap.12054>

Carpenter, V. L., & Feroz, E. H. (2001). Institutional theory and accounting rule choice: An analysis of four US state governments’ decisions to adopt generally accepted accounting principles. *Accounting, Organizations and Society*, *26*(7-8), 565-596. [https://doi.org/10.1016/S0361-3682(00)00038-6](https://doi.org/10.1016/S0361-3682%2800%2900038-6)

Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and Practice*, *28*(4), 335-354. <https://doi.org/10.1111/j.1540-6520.2004.00049.x>

Chrisman, J. J., Chua, J. H., & Sharma, P. (2005). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, *29*(5), 555-575. [https://doi.org/10.1111/j.1540-6520.2005.00098.](https://doi.org/10.1111/j.1540-6520.2005.00098.x)

Chrisman, J. J., & Patel, P. C. (2012). Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives. *Academy of Management Journal*, *55*(4), 976-997. <https://doi.org/10.5465/amj.2011.0211>

Chua, J. H., Chrisman, J. J., De Massis, A., & Wang, H. (2018). Reflections on family firm goals and the assessment of performance. *Journal of Family Business Strategy*, *9*(2), 107-113. <https://doi.org/10.1016/j.jfbs.2018.02.001>

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, *23*(4), 19-39. <https://doi.org/10.1177/104225879902300402>

Corbetta, G., & Salvato, C. A. (2004). The board of directors in family firms: One size fits all? *Family Business Review*, *17*(2), 119-134. <https://doi.org/10.1111/j.1741-6248.2004.00008.x>

Daspit, J. J., Chrisman, J. J., Ashton, T., & Evangelopoulos, N. (2021). Family firm heterogeneity: A definition, common themes, scholarly progress, and directions forward. *Family Business Review*, *34*(3), 296-322. <https://doi.org/10.1177/08944865211008350>

Daspit, J. J., Chrisman, J. J., Sharma, P., Pearson, A. W., & Mahto, R. V. (2018). Governance as a source of family firm heterogeneity. *Journal of Business Research*, *84*, 293-300. <https://doi.org/10.1016/j.jbusres.2017.12.041>

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, *22*(1), 20-47. <https://doi.org/10.2307/259223>

De Clercq, D., Lim, D. S., & Oh, C. H. (2013). Individual-level resources and new business activity: The contingent role of institutional context. *Entrepreneurship Theory and Practice*, *37*(2), 303-330. <https://doi.org/10.1111/j.1540-6520.2011.00470.x>

Debellis, F., Pinelli, M., Hülsbeck, M., & Heider, A. (2023a). Ownership, governance, and internationalization in family firms: A replication and extension. *Small Business Economics*, <https://doi.org/10.1007/s11187-023-00736-8>

Debellis, F., Rondi, E., Plakoyiannaki, E., & De Massis, A. (2021). Riding the waves of family firm internationalization: A systematic literature review, integrative framework, and research agenda. *Journal of World Business*, *56* (1), 101144. <https://doi.org/10.1016/j.jwb.2020.101144>

Debellis, F., Torchia, M., Quarato, F., & Calabrò, A. (2023b). Board openness and family firm internationalization: A social capital perspective. *Small Business Economics*, *60*(4), 1431-1448. <https://doi.org/10.1007/s11187-022-00670-1>

Deephouse, D. L., & Suchman, M. (2008). *Legitimacy in organizational institutionalism*. In R. Greenwood, C. Oliver, R. Suddaby, & K. Sahlin-Andersson (Eds.), The Sage handbook of organizational institutionalism (pp. 49-77). Sage Publications.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147-160. <https://doi.org/10.2307/2095101>

Dou, J., Wu, S., & Fang, H. (2022). Family involvement, family essence, and family-centered non-economic and economic goals in Chinese family firms: A replication study. *Journal of Family Business Strategy,* *13*(4), 100499. <https://doi.org/10.1016/j.jfbs.2022.100499>

Duran, P., Van Essen, M., Heugens, P. P., Kostova, T., & Peng, M. W. (2019). The impact of institutions on the competitive advantage of publicly listed family firms in emerging markets. *Global Strategy Journal*, 9(2), 243-274. <https://doi.org/10.1002/gsj.1312>

Eklund, J., Palmberg, J., & Wiberg, D. (2013). Inherited corporate control and returns on investment. *Small Business Economics*, *41*, 419-431. <https://doi.org/10.1007/s11187-012-9432-1>

Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology*, *103*(4), 962-1023. <https://doi.org/10.1086/231294>

Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailouts. *The Journal of Finance*, *61*(6), 2597–2635. <https://doi.org/10.1111/j.1540-6261.2006.01000.x>

Fang, H. C., Kotlar, J., Memili, E., Chrisman, J. J., & De Massis, A. (2018). The pursuit of international opportunities in family firms: Generational differences and the role of knowledge-based resources. *Global Strategy Journal*, *8*(1), 136-157. <https://doi.org/10.1002/gsj.1197>

Fang, H. C., Memili, E., Chrisman, J. J., & Tang, L. (2021). Narrow‐framing and risk preferences in family and non‐family firms. *Journal of Management Studies*, *58*(1), 201-235. <https://doi.org/10.1111/joms.12671>

Flammer, C., & Bansal, P. (2017). Does a long-term orientation create value? Evidence from a regression discontinuity. *Strategic Management Journal*, *38*(9), 1827-1847. <https://doi.org/10.1002/smj.2629>

Garud, R., Hardy, C., & Maguire, S. (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies*, *28*(7), 957-969. <https://doi.org/10.1177/0170840607078958>

Ge, J., Carney, M., & Kellermanns, F. (2019). Who fills institutional voids? Entrepreneurs’ utilization of political and family ties in emerging markets. *Entrepreneurship Theory and Practice*, *43*(6), 1124-1147. <https://doi.org/10.1177/1042258718773175>

Gedajlovic, E., & Carney, M. (2010). Markets, hierarchies, and families: Toward a transaction cost theory of the family firm. *Entrepreneurship Theory and Practice*, *34*(6), 1145-1172. <https://doi.org/10.1111/j.1540-6520.2010.00418.x>

Gedajlovic, E., Carney, M., Chrisman, J. J., & Kellermanns, F. W. (2012). The adolescence of family firm research: Taking stock and planning for the future. *Journal of Management*, *38*(4), 1010-1037. <https://doi.org/10.1177/0149206311429990>

Gedajlovic, E., Lubatkin, M. H., & Schulze, W. S. (2004). Crossing the threshold from founder management to professional management: A governance perspective. *Journal of Management Studies*, *41*(5), 899-912. <https://doi.org/10.1111/j.1467-6486.2004.00459.x>

Girod, S. J., & Whittington, R. (2017). Reconfiguration, restructuring and firm performance: Dynamic capabilities and environmental dynamism. *Strategic Management Journal*, *38*(5), 1121-1133. <https://doi.org/10.1002/smj.2543>

Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, *5*(1), 653-707. <https://doi.org/10.5465/19416520.2011.593320>

Gomez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, *52*(1), 106-137. <https://doi.org/10.2189/asqu.52.1.106>

Gomez-Mejia, L. R., Patel, P. C., & Zellweger, T. M. (2018). In the horns of the dilemma: Socioemotional wealth, financial wealth, and acquisitions in family firms. *Journal of Management*, *44*(4), 1369-1397. <https://doi.org/10.1177/0149206315614375>

González-Cruz, T. F., & Cruz-Ros, S. (2016). When does family involvement produce superior performance in SME family business? *Journal of Business Research*, *69*(4), 1452-1457. <https://doi.org/10.1016/j.jbusres.2015.10.124>

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *Academy of Management Annals*, *5*(1), 317-371. <https://doi.org/10.5465/19416520.2011.590299>

Greenwood, R., Suddaby, R., & Hinings, C. R. (2002). Theorizing change: The role of professional associations in the transformation of institutionalized fields. *Academy of Management Journal*, *45*(1), 58-80. <https://doi.org/10.2307/3069285>

Guerrero, M., Amorós, J. E., & Urbano, D. (2021). Do employees’ generational cohorts influence corporate venturing? A multilevel analysis. *Small Business Economics*, *57*(1), 47-74. <https://doi.org/10.1007/s11187-019-00304-z>

Guillén, M. F., & Capron, L. (2016). State capacity, minority shareholder protections, and stock market development. *Administrative Science Quarterly*, *61*(1), 125-160. <https://doi.org/10.1177/0001839215601459>

Hoffmann, C., Jaskiewicz, P., Wulf, T., & Combs, J. G. (2019). The effect of transgenerational control intention on family-firm performance: It depends who pursues it. *Entrepreneurship Theory and Practice*, *43*(3), 629-646. <https://doi.org/10.1177/1042258717730025>

Hoffmann, C., Wulf, T., & Stubner, S. (2016). Understanding the performance consequences of family involvement in the top management team: The role of long-term orientation. *International Small Business Journal*, *34*(3), 345-368. <https://doi.org/10.1177/0266242614550500>

Hofstede, G. (2001). *Culture’s consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage Publications.

Hofstede, G., & Minkov, M. (2010). Long-versus short-term orientation: New perspectives. *Asia Pacific Business Review*, *16*(4), 493-504. <https://doi.org/10.1080/13602381003637609>

Howorth, C., Rose, M., Hamilton, E., & Westhead, P. (2010). Family firm diversity and development: An introduction. *International Small Business Journal*, *28*(5), 437-451. <https://doi.org/10.1177/0266242610373685>

Hox, J., Moerbeek, M., & Van de Schoot, R. (2017). *Multilevel analysis: Techniques and applications*: Routledge.

Jaskiewicz, P., Block, J., Wagner, D., Carney, M., & Hansen, C. (2021). How do cross-country differences in institutional trust and trust in family explain the mixed performance effects of family management? A meta-analysis. *Journal of World Business*, *56*(5), 101196. <https://doi.org/10.1016/j.jwb.2021.101196>

Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *American Economic Review*, *90*(2), 22-27. <https://doi.org/10.1257/aer.90.2.22>

Kallinikos, J. (2003). Work, human agency and organizational forms: An anatomy of fragmentation. *Organization studies*, *24*(4), 595-618. <https://doi.org/10.1177/0170840603024004005>

Kano, L., & Verbeke, A. (2018). Family firm internationalization: Heritage assets and the impact of bifurcation bias. *Global Strategy Journal*, *8*(1), 158-183. <https://doi.org/10.1002/gsj.1186>

Karolyi, G., & Stultz, R. (2003). Are financial assets priced locally or globally? In G.M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the economics of finance* (pp. 975-1020). Elsevier.

Kosmidou, V. (2020). A meta-analytic examination of the relationship between family firm generational involvement and performance. *Management Research Review*, *43*(8), 971-987. <https://doi.org/10.1108/MRR-07-2019-0306>

Kostova, T., Beugelsdijk, S., Scott, W. R., Kunst, V. E., Chua, C. H., & van Essen, M. (2020). The construct of institutional distance through the lens of different institutional perspectives: Review, analysis, and recommendations. *Journal of International Business Studies*, *51*,467-497. <https://doi.org/10.1057/s41267-019-00294-w>

Kotlar, J., & De Massis, A. (2013). Goal setting in family firms: Goal diversity, social interactions, and collective commitment to family–centered goals. *Entrepreneurship Theory and Practice,* *37*(6), 1263-1288. <https://doi.org/10.1111/etap.12065>

Kotlar, J., & Sieger, P. (2019). Bounded rationality and bounded reliability: A study of nonfamily managers’ entrepreneurial behavior in family firms. *Entrepreneurship Theory and Practice*, *43*(2), 251-273. <https://doi.org/10.1177/1042258718796085>

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, *54*(2), 471-517. <https://doi.org/10.1111/0022-1082.00115>

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, *58*(1-2), 3-27. [https://doi.org/10.1016/S0304-405X(00)00065-9](https://doi.org/10.1016/S0304-405X%2800%2900065-9)

Le Breton-Miller, I., & Miller, D. (2006). Why do some family businesses out-compete? Governance, long-term orientations, and sustainable capability. *Entrepreneurship Theory and Practice*, *30*(6), 731-746. <https://doi.org/10.1111/j.1540-6520.2006.00147.x>

Le Breton-Miller, I., & Miller, D. (2009). Agency vs. stewardship in public family firms: A social embeddedness reconciliation. *Entrepreneurship Theory and Practice*, *33*(6), 1169-1191. <https://doi.org/10.1111/j.1540-6520.2009.00339.x>

Lubatkin, M. H., Ling, Y., & Schulze, W. S. (2007). An organizational justice‐based view of self‐control and agency costs in family firms. *Journal of Management Studies*, *44*(6), 955-971. <https://doi.org/10.1111/j.1467-6486.2006.00673.x>

Lumpkin, G. T., & Brigham, K. H. (2011). Long-term orientation and intertemporal choice in family firms. *Entrepreneurship Theory and Practice*, *35*(6), 1149-1169. <https://doi.org/10.1111/j.1540-6520.2011.00495.x>

Luo, X. R., Jeong, Y.-C., & Chung, C.-N. (2019). In the eye of the beholder: Global analysts’ coverage of family firms in an emerging market. *Journal of Management*, *45*(5), 1830-1857. <https://doi.org/10.1177/0149206317734899>

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, *83*(2), 340-363. <https://doi.org/10.1086/226550>

Miller, D., Amore, M. D., Le Breton-Miller, I., Minichilli, A., & Quarato, F. (2018). Strategic distinctiveness in family firms: Firm institutional heterogeneity and configurational multidimensionality. *Journal of Family Business Strategy*, *9*(1), 16-26. <https://doi.org/10.1016/j.jfbs.2018.01.004>

Miller, D., & Le Breton-Miller, I. (2005). *Managing for the long run: Lessons in competitive advantage from great family businesses*. Harvard Business Press.

Miller, D., & Le Breton-Miller, I. (2006). Family governance and firm performance: Agency, stewardship, and capabilities. *Family Business Review*, *19*(1), 73-87. <https://doi.org/10.1111/j.1741-6248.2006.00063.x>

Miller, D., & Le Breton-Miller, I. (2014). Deconstructing socioemotional wealth. *Entrepreneurship Theory and Practice*, *38*(4), 713-720. <https://doi.org/10.1111/etap.12111>

Miller, D., Le Breton-Miller, I., Amore, M. D., Minichilli, A., & Corbetta, G. (2017). Institutional logics, family firm governance and performance. *Journal of Business Venturing*, *32*(6), 674-693. <https://doi.org/10.1016/j.jbusvent.2017.08.001>

Miller, D., Le Breton-Miller, I., & Lester, R. H. (2013a). Family firm governance, strategic conformity, and performance: Institutional vs. strategic perspectives. *Organization Science*, *24*(1), 189-209. <https://doi.org/10.1287/orsc.1110.0728>

Miller, D., Le Breton-Miller, I., & Scholnick, B. (2008). Stewardship vs. stagnation: An empirical comparison of small family and non‐family businesses. *Journal of Management Studies*, *45*(1), 51-78. <https://doi.org/10.1111/j.1467-6486.2007.00718.x>

Miller, D., Minichilli, A., & Corbetta, G. (2013b). Is family leadership always beneficial? *Strategic Management Journal*, *34*(5), 553-571. <https://doi.org/10.1002/smj.2024>

Molly, V., Uhlaner, L. M., De Massis, A., & Laveren, E. (2019). Family-centered goals, family board representation, and debt financing. *Small Business Economics*, *53*, 269-286. <https://doi.org/10.1007/s11187-018-0058-9>

Morck, R., Wolfenzon, D., & Yeung, B. (2005). Corporate governance, economic entrenchment, and growth. *Journal of Economic Literature*, *43*(3), 655-720. <https://doi.org/10.1257/002205105774431252>

Morck, R., & Yeung, B. (2004). Family control and rent-seeking society. *Entrepreneurship Theory and Practice*, *28*(4), 391-410. <https://doi.org/10.1111/j.1540-6520.2004.00053.x>

Nordqvist, M., Sharma, P., & Chirico, F. (2014). Family firm heterogeneity and governance: A configuration approach. *Journal of Small Business Management*, *52*(2), 192-209. <https://doi.org/10.1111/jsbm.12096>

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

Patel, P. C., & Chrisman, J. J. (2014). Risk abatement as a strategy for R&D investments in family firms. *Strategic Management Journal*, *35*(4), 617-627. <https://doi.org/10.1002/smj.2119>

Peng, M. W., & Luo, Y. (2000). Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of Management Journal*, *43*(3), 486-501. <https://doi.org/10.5465/1556406>

Peng, M. W., Sun, W., Vlas, C., Minichilli, A., & Corbetta, G. (2018). An institution-based view of large family firms: A recap and overview. *Entrepreneurship Theory and Practice*, *42*(2), 187-205. <https://doi.org/10.1177/1042258717749234>

Perkins, S., Morck, R., & Yeung, B. (2014). Innocents abroad: The hazards of international joint ventures with pyramidal group firms. *Global Strategy Journal*, *4*(4), 310-330. <https://doi.org/10.1002/gsj.1087>

Pieper, T. M., Klein, S. B., & Jaskiewicz, P. (2008). The impact of goal alignment on board existence and top management team composition: Evidence from family‐influenced businesses. *Journal of Small Business Management*, *46*(3), 372-394. <https://doi.org/10.1111/j.1540-627X.2008.00249.x>

Pinelli, M., Cappa, F., Peruffo, E., & Oriani, R. (2022). Acquisitions of non-controlling equity stakes: Agency conflicts and profitability. *Strategic Organization*, *20*(2), 341-367. <https://doi.org/10.1177/1476127020926672>

Pinelli, M., Chirico, F., De Massis, A., & Zattoni, A. (2023). Acquisition relatedness in family firms: Do the environment and the institutional context matter? *Journal of Management Studies*, <https://doi.org/10.1111/joms.12932>

Posner, R. A. (2010). From the new institutional economics to organization economics: With applications to corporate governance, government agencies, and legal institutions. *Journal of Institutional Economics*, *6*(1), 1-37. <https://doi.org/10.1017/S1744137409990270>

Raddant, M., & Kenett, D. Y. (2021). Interconnectedness in the global financial market. *Journal of International Money and Finance*, *110*, 102280. <https://doi.org/10.1016/j.jimonfin.2020.102280>

Reilly, G., Souder, D., & Ranucci, R. (2016). Time horizon of investments in the resource allocation process: Review and framework for next steps. *Journal of Management*, *42*(5), 1169-1194. <https://doi.org/10.1177/0149206316630381>

Reynolds, S. J., Schultz, F. C., & Hekman, D. R. (2006). Stakeholder theory and managerial decision-making: Constraints and implications of balancing stakeholder interests. *Journal of Business Ethics*, *64*, 285-301. <https://doi.org/10.1007/s10551-005-5493-2>

Scholes, L., Hughes, M., Wright, M., De Massis, A., & Kotlar, J. (2021). Family management and family guardianship: Governance effects on family firm innovation strategy. *Journal of Family Business Strategy*, *12*(4), 100389. <https://doi.org/10.1016/j.jfbs.2020.100389>

Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2003). Toward a theory of agency and altruism in family firms. *Journal of Business Venturing*, *18*(4), 473-490. [https://doi.org/10.1016/S0883-9026(03)00054-5](https://doi.org/10.1016/S0883-9026%2803%2900054-5)

Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, *12*(2), 99-116. <https://doi.org/10.1287/orsc.12.2.99.10114>

Scott, W. R. (1995). *Institutions and organizations.* Sage Publications.

Sharma, P., Chrisman, J. J., Chua, J. H., & Steier, L. P. (2020). Family firm behavior from a psychological perspective. *Entrepreneurship Theory and Practice*, *44*(1), 3-19. <https://doi.org/10.1177/1042258719879675>

Singh, S., Tabassum, N., Darwish, T. K., & Batsakis, G. (2018). Corporate governance and Tobin’s Q as a measure of organizational performance. *British Journal of Management*, *29*(1), 171-190. <https://doi.org/10.1111/1467-8551.12237>

Soleimanof, S., Rutherford, M. W., & Webb, J. W. (2018). The intersection of family firms and institutional contexts: A review and agenda for future research. *Family Business Review*, *31*(1), 32-53. <https://doi.org/10.1177/0894486517736446>

Steier, L., & Greenwood, R. (2000). Entrepreneurship and the evolution of angel financial networks. *Organization Studies*, *21*(1), 163-192. <https://doi.org/10.1177/0170840600211002>

Suddaby, R., Elsbach, K. D., Greenwood, R., Meyer, J. W., & Zilber, T. B. (2010). Organizations and their institutional environments—Bringing meaning, values, and culture back in: Introduction to the special research forum. *Academy of Management Journal*, *53*(6), 1234-1240. <https://doi.org/10.5465/amj.2010.57317486>

Taras, V., Memili, E., Wang, Z., & Harms, H. (2018). Family involvement in publicly traded firms and firm performance: A meta-analysis. *Management Research Review*, *41*(2), 225-251. <https://doi.org/10.1108/MRR-05-2017-0150>

Tsang, E. W. K. (2002). Learning from overseas venturing experience. *Journal of Business Venturing*, *17*(1), 21–40. [https://doi.org/10.1016/S0883-9026(00)00052-5](https://doi.org/10.1016/S0883-9026%2800%2900052-5)

van Essen, M., Carney, M., Gedajlovic, E. R., & Heugens, P. P. (2015). How does family control influence firm strategy and performance? A meta‐analysis of US publicly listed firms. *Corporate Governance: An International Review*, *23*(1), 3-24. <https://doi.org/10.1111/corg.12080>

Wagner, D., Block, J. H., Miller, D., Schwens, C., & Xi, G. (2015). A meta-analysis of the financial performance of family firms: Another attempt. *Journal of Family Business Strategy*, *6*(1), 3-13. <https://doi.org/10.1016/j.jfbs.2015.01.001>

Williams, R. I. Jr, Pieper, T. M., Kellermanns, F. W., & Astrachan, J. H. (2018). Family firm goals and their effects on strategy, family and organization behavior: A review and research agenda. *International Journal of Management Reviews*, *20*, S63-S82. <https://doi.org/10.1111/ijmr.12167>

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*(3), 851-868. <https://doi.org/10.1287/orsc.1110.0665>

Zhao, E. Y., Fisher, G., Lounsbury, M., & Miller, D. (2017). Optimal distinctiveness: Broadening the interface between institutional theory and strategic management. *Strategic Management Journal*, *38*(1), 93-113. <https://doi.org/10.1002/smj.2589>

**Table 1**

Geographic distribution of the sample

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Firms** | **Family Firms** | **Total Firms** | **Percentage of Family Firms** | **Percentage of Family Firms (Berrone et al., 2020)** | **Prevalence difference** | **Excluded Countries** | **Excluded Firms** | **Retained Family firms** | **Total Retained Firms** |
| **Australia** | 149 | 29 | 178 | 16.3% | 20% | 4% |  | 0 | 29 | 178 |
| **Austria** | 19 | 13 | 32 | 40.6% | 15% | -26% | 1 | 32 | 0 | 0 |
| **Belgium** | 48 | 13 | 61 | 21.3% | 48% | 27% | 1 | 61 | 0 | 0 |
| **Brazil** | 38 | 0 | 38 | 0.0% | 36% | 36% | 1 | 38 | 0 | 0 |
| **Canada** | 175 | 31 | 206 | 15.0% | 27% | 12% |  | 0 | 31 | 206 |
| **Croatia** | 6 | 0 | 6 | 0% | N/A |  | 1 | 6 | 0 | 0 |
| **Czechia** | 5 | 0 | 5 | 0% | N/A |  | 1 | 5 | 0 | 0 |
| **Denmark** | 55 | 5 | 60 | 8.3% | 11% | 3% |  | 0 | 5 | 60 |
| **Finland** | 79 | 15 | 94 | 16.0% | 28% | 12% |  | 0 | 15 | 94 |
| **France** | 94 | 64 | 158 | 40.5% | 44% | 3% |  | 0 | 64 | 158 |
| **Germany** | 155 | 62 | 217 | 28.6% | 53% | 24% |  | 0 | 62 | 217 |
| **Greece** | 58 | 115 | 173 | 66.5% | 73% | 7% |  | 0 | 115 | 173 |
| **Hong Kong** | 30 | 27 | 57 | 47.4% | 64% | 17% |  | 0 | 27 | 57 |
| **India** | 69 | 0 | 69 | 0.0% | 57% | 57% | 1 | 69 | 0 | 0 |
| **Ireland** | 22 | 4 | 26 | 15.4% | 8% | -7% |  | 0 | 4 | 26 |
| **Israel** | 15 | 0 | 15 | 0% | 65% | 65% | 1 | 15 | 0 | 0 |
| **Italy** | 61 | 61 | 122 | 50.0% | 64% | 14% |  | 0 | 61 | 122 |
| **Japan** | 179 | 3 | 182 | 1.6% | 49% | 47% | 1 | 182 | 0 | 0 |
| **Netherlands** | 53 | 10 | 63 | 15.9% | 14% | -2% |  | 0 | 10 | 63 |
| **Norway** | 74 | 23 | 97 | 23.7% | 37% | 13% |  | 0 | 23 | 97 |
| **Poland** | 17 | 3 | 20 | 15.0% | 33% | 18% |  | 0 | 3 | 20 |
| **Portugal** | 19 | 7 | 26 | 26.9% | 39% | 12% |  | 0 | 7 | 26 |
| **Russia** | 28 | 6 | 34 | 17.6% | N/A |  | 1 | 34 | 0 | 0 |
| **Singapore** | 51 | 13 | 64 | 20.3% | 26% | 6% |  | 0 | 13 | 64 |
| **South Korea** | 16 | 3 | 19 | 15.8% | 72% | 56% | 1 | 19 | 0 | 0 |
| **Spain** | 46 | 17 | 63 | 27.0% | 39% | 12% |  | 0 | 17 | 63 |
| **Sweden** | 102 | 27 | 129 | 20.9% | 43% | 22% |  | 0 | 27 | 129 |
| **Switzerland** | 77 | 27 | 104 | 26.0% | 46% | 20% |  | 0 | 27 | 104 |
| **Taiwan** | 14 | 5 | 19 | 26.3% | 60% | 34% | 1 | 19 | 0 | 0 |
| **Turkey** | 41 | 0 | 41 | 0% | 56% | 56% | 1 | 41 | 0 | 0 |
| **USA** | 896 | 234 | 1130 | 20.7% | 33% | 12% |  | 0 | 234 | 1130 |
| **UK** | 268 | 64 | 332 | 19.3% | 41% | 22% |  | 0 | 64 | 332 |
| **Total** | 2959 | 881 | 3840 | 22.9% |  |  |  | 521 | 838 (25.25%) | 3319 |

**Table 2**

FGAs: relative frequencies and distribution

|  |
| --- |
| **Family Intensity** |
| **Country** | **0** | **1** | **2** | **3** | **Total** |
| **Australia** | 146 | 13 | 14 | 2 | 175 |
| **Canada** | 175 | 5 | 19 | 7 | 206 |
| **Denmark** | 53 | 0 | 4 | 1 | 58 |
| **Finland** | 76 | 3 | 7 | 5 | 91 |
| **France** | 91 | 9 | 49 | 6 | 155 |
| **Germany** | 146 | 6 | 35 | 21 | 208 |
| **Greece** | 50 | 13 | 62 | 26 | 151 |
| **Hong Kong** | 30 | 3 | 21 | 3 | 57 |
| **Italy** | 59 | 7 | 35 | 19 | 120 |
| **Netherlands** | 53 | 1 | 8 | 1 | 63 |
| **Norway** | 69 | 3 | 15 | 5 | 92 |
| **Poland** | 16 | 0 | 0 | 3 | 19 |
| **Portugal** | 19 | 2 | 4 | 1 | 26 |
| **Singapore** | 50 | 3 | 5 | 5 | 63 |
| **Spain** | 46 | 0 | 14 | 3 | 63 |
| **Sweden** | 100 | 12 | 8 | 7 | 127 |
| **Switzerland** | 75 | 4 | 21 | 2 | 102 |
| **USA** | 885 | 65 | 138 | 31 | 1,119 |
| **UK** | 263 | 21 | 29 | 13 | 326 |
| **Total** | **2,402** | **170** | **488** | **161** | **3,221** |
| **Total (%)** | **74.6%** | **5.3%** | **15.1%** | **5.0%** | **100%** |

**Table 3**

Descriptive statistics and correlation matrix

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Variable** | **Obs** | **Mean** | **Std. dev.** | **Min** | **Max** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| **1** | **Family Intensity** | 3,221 | 0.51 | 0.93 | 0.00 | 3.00 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2** | **Tobin's Q** | 3,221 | 1.57 | 1.48 | 0.09 | 46.75 | -0.08 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **3** | **LTO** | 3,221 | 42.17 | 18.52 | 21.16 | 82.87 | 0.14 | -0.09 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |
| **4** | **Institutional Quality** | 3,221 | 3.36 | 0.95 | 0.59 | 4.48 | -0.23 | 0.07 | 0.06 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |
| **5** | **Shareholder protection** | 3,221 | 6.61 | 0.87 | 3.00 | 7.57 | -0.09 | 0.06 | -0.32 | 0.03 | 1.00 |  |  |  |  |  |  |  |  |  |  |
| **6** | **Family Logic** | 3,221 | 3.03 | 0.70 | 1.36 | 4.39 | 0.10 | -0.03 | -0.05 | -0.51 | 0.06 | 1.00 |  |  |  |  |  |  |  |  |  |
| **7** | **Business Logic** | 3,221 | 1.55 | 0.49 | 0.46 | 2.83 | -0.04 | 0.05 | -0.18 | 0.01 | 0.16 | 0.27 | 1.00 |  |  |  |  |  |  |  |  |
| **8** | **General Social Trust** | 3,221 | 68.95 | 6.18 | 48.03 | 79.75 | -0.25 | 0.09 | -0.18 | 0.77 | 0.10 | -0.43 | -0.13 | 1.00 |  |  |  |  |  |  |  |
| **9** | **Per Capita GDP** | 3,221 | 10.75 | 0.33 | 9.44 | 11.32 | -0.22 | 0.12 | -0.29 | 0.69 | 0.24 | -0.20 | 0.28 | 0.65 | 1.00 |  |  |  |  |  |  |
| **10** | **Board Size** | 3,221 | 9.12 | 3.21 | 2.00 | 28.00 | -0.04 | -0.07 | 0.18 | -0.08 | 0.11 | -0.04 | 0.10 | -0.08 | -0.11 | 1.00 |  |  |  |  |  |
| **11** | **Independent Directors** | 3,221 | 5.93 | 2.72 | 0.00 | 18.00 | -0.22 | 0.02 | -0.26 | 0.14 | 0.34 | -0.12 | 0.20 | 0.22 | 0.36 | 0.59 | 1.00 |  |  |  |  |
| **12** | **Firm Age** | 3,221 | 57.67 | 48.25 | 0.00 | 499.00 | -0.09 | -0.09 | 0.09 | 0.03 | -0.05 | -0.02 | -0.05 | 0.05 | 0.03 | 0.25 | 0.20 | 1.00 |  |  |  |
| **13** | **Total Revenues** | 3,221 | 20.58 | 2.08 | 0.00 | 26.90 | -0.03 | -0.13 | -0.03 | 0.00 | 0.22 | -0.04 | 0.07 | 0.06 | 0.11 | 0.53 | 0.51 | 0.32 | 1.00 |  |  |
| **14** | **Long Term Debt** | 3,221 | 18.53 | 3.37 | 0.00 | 26.09 | 0.00 | -0.11 | -0.07 | 0.00 | 0.15 | -0.08 | 0.01 | 0.05 | 0.06 | 0.38 | 0.38 | 0.21 | 0.61 | 1.00 |  |
| **15** | **IMR** | 3,221 | 0.39 | 0.04 | 0.35 | 0.53 | -0.09 | 0.00 | -0.07 | 0.06 | 0.04 | -0.11 | -0.02 | 0.05 | 0.03 | 0.03 | 0.07 | -0.13 | -0.01 | 0.14 | 1.00 |

*Industry-level dummy variables omitted*

**Table 4**

Mixed-effects regressions on FGAs and performance

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number of obs  | 3221 |  | 3221 |  | 3221 |  | 3221 |  | 3221 |  | 3221 |  |
|  Number of groups  | 19 |  | 19 |  | 19 |  | 19 |  | 19 |  | 19 |  |
| Obs per group: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *min* | *19* |  | *19* |  | *19* |  | *19* |  | *19* |  | *19* |  |
| *avg* | *169.5* |  | *169.5* |  | *169.5* |  | *169.5* |  | *169.5* |  | *169.5* |  |
| *MAX* | *1119* |  | *1119* |  | *1119* |  | *1119* |  | *1119* |  | *1119* |  |
| Wald chi2 | 253.09 |  | 288.9 |  | 237.78 |  | 241.21 |  | 252.47 |  | 252.99 |  |
| Log likelihood  | -2367.66 |  | -2364.45 |  | -5699.49 |  | -5697.89 |  | -5692.67 |  | -5692.42 |  |
| Prob > chi2 | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| *Model* | *1* |  | *2* |  | *3* |  | *4* |  | *5* |  | *6* |  |
| DV | **Family Intensity** |  | **Family Intensity** |  | **Tobin's Q** |  | **Tobin's Q** |  | **Tobin's Q** |  | **Tobin's Q** |  |
|   | **Coeff.** | **Std. Err.** | **P>z** |  | **Coeff.** | **Std. Err.** | **P>z** |  | **Coeff.** | **Std. Err.** | **P>z** |  | **Coeff.** | **Std. Err.** | **P>z** |  | **Coeff.** | **Std. Err.** | **P>z** |  | **Coeff.** | **Std. Err.** | **P>z** |  |
| Family Intensity |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  | -0.094 | 0.029 | 0.001 | \*\*\* | -0.142 | 0.074 | 0.056 | \* |
| LTO |  |  |  |  | 0.013 | 0.004 | 0.003 | \*\*\* |  |  |  |  | -0.003 | 0.002 | 0.074 | \* | -0.003 | 0.002 | 0.129 |  | -0.003 | 0.002 | 0.095 | \* |
| Family Intensity \* LTO |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |  |  |  | 0.001 | 0.001 | 0.487 |  |
| Institutional Quality | -0.496 | 0.181 | 0.006 | \*\*\* | -0.556 | 0.139 | 0.000 | \*\*\* | -0.109 | 0.053 | 0.041 | \*\* | -0.066 | 0.058 | 0.260 |  | -0.086 | 0.059 | 0.142 |  | -0.084 | 0.059 | 0.152 |  |
| Shareholder protection | 0.057 | 0.097 | 0.553 |  | 0.049 | 0.078 | 0.534 |   | 0.087 | 0.032 | 0.007 | \*\*\* | 0.076 | 0.032 | 0.019 | \*\* | 0.076 | 0.032 | 0.019 | \*\* | 0.075 | 0.032 | 0.021 | \*\* |
| Family Logic | -0.170 | 0.145 | 0.240 |  | -0.161 | 0.112 | 0.149 |   | -0.064 | 0.045 | 0.151 |  | -0.058 | 0.045 | 0.194 |  | -0.065 | 0.045 | 0.147 |  | -0.063 | 0.045 | 0.158 |  |
| Business Logics | -0.082 | 0.179 | 0.648 |  | 0.003 | 0.143 | 0.982 |   | 0.060 | 0.060 | 0.322 |  | 0.037 | 0.062 | 0.549 |  | 0.038 | 0.062 | 0.537 |  | 0.034 | 0.062 | 0.579 |  |
| General Social Trust | -0.037 | 0.020 | 0.068 | \* | -0.023 | 0.017 | 0.180 |   | 0.013 | 0.007 | 0.079 | \* | 0.009 | 0.008 | 0.260 |  | 0.007 | 0.008 | 0.339 |  | 0.007 | 0.008 | 0.347 |  |
| Per Capita GDP | 1.085 | 0.417 | 0.009 | \*\*\* | 0.978 | 0.338 | 0.004 | \*\*\* | 0.474 | 0.140 | 0.001 | \*\*\* | 0.433 | 0.142 | 0.002 | \*\*\* | 0.458 | 0.142 | 0.001 | \*\*\* | 0.459 | 0.142 | 0.001 | \*\*\* |
| Board Size | 0.050 | 0.021 | 0.017 | \*\* | 0.040 | 0.021 | 0.061 | \* | 0.001 | 0.012 | 0.913 |  | 0.008 | 0.012 | 0.508 |  | 0.009 | 0.012 | 0.465 |  | 0.010 | 0.012 | 0.440 |  |
| Independent Directors | -0.278 | 0.028 | 0.000 | \*\*\* | -0.264 | 0.029 | 0.000 | \*\*\* | 0.023 | 0.015 | 0.125 |  | 0.016 | 0.015 | 0.295 |  | 0.009 | 0.015 | 0.576 |  | 0.008 | 0.015 | 0.596 |  |
| Firm Age | -0.008 | 0.001 | 0.000 | \*\*\* | -0.008 | 0.001 | 0.000 | \*\*\* | -0.001 | 0.001 | 0.093 | \* | -0.001 | 0.001 | 0.113 |  | -0.001 | 0.001 | 0.055 | \* | -0.001 | 0.001 | 0.053 | \* |
| Total Revenues | 0.067 | 0.034 | 0.051 | \* | 0.061 | 0.034 | 0.072 | \* | -0.078 | 0.018 | 0.000 | \*\*\* | -0.076 | 0.018 | 0.000 | \*\*\* | -0.074 | 0.018 | 0.000 | \*\*\* | -0.074 | 0.018 | 0.000 | \*\*\* |
| Long Term Debt | 0.092 | 0.021 | 0.000 | \*\*\* | 0.094 | 0.021 | 0.000 | \*\*\* | -0.022 | 0.010 | 0.021 | \*\* | -0.023 | 0.010 | 0.016 | \*\* | -0.021 | 0.010 | 0.031 | \*\* | -0.021 | 0.010 | 0.032 | \*\* |
| IMR | -18.267 | 3.673 | 0.000 | \*\*\* | -18.279 | 3.671 | 0.000 | \*\*\* | -2.337 | 1.316 | 0.076 | \* | -2.383 | 1.315 | 0.070 | \* | -2.754 | 1.318 | 0.037 | \*\* | -2.767 | 1.318 | 0.036 | \*\* |
| Constant |   |   |   | \*\*\* |   |   |   | \*\*\* | -1.934 | 1.407 | 0.169 |   | -1.145 | 1.474 | 0.438 |   | -1.103 | 1.472 | 0.454 |   | -1.078 | 1.472 | 0.464 |   |
| /cut1  | 3.345 | 4.271 |  |  | 3.615 | 3.559 |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| /cut2  | 3.700 | 4.271 |  |  | 3.970 | 3.559 |  |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| /cut3  | 5.438 | 4.272 |   |   | 5.706 | 3.561 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Country Var (cons) | 0.107 | 0.056 |  |  | 0.044 | 0.039 |  |   | 0.000 |  |  |  | 0.000 |  |  |  | 0.000 |  |  |  | 0.000 |  |  |  |
| Country Var (residual) |  |  |  |  |  |  |  |   | 2.016 | 0.050 |  |  | 2.014 | 0.050 |  |  | 2.007 | 0.050 |  |  | 2.007 | 0.050 |  |  |

*Industry-level dummy variables omitted*

*Intra-class correlation (ICC) for:*

 *Family Intensity = 0.119 (11.9%)*

 *Tobin's Q = 0.016 (1.6%)*