Family governance and firm performance: exploring the intermediate effects of family functioning and competitive advantage

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FAMILY GOVERNANCE AND FIRM PERFORMANCE: EXPLORING THE INTERMEDIATE EFFECTS OF FAMILY FUNCTIONING AND COMPETITIVE ADVANTAGE

Abstract

Purpose
Scholars and practitioners agree that governance practices are at the core of what differentiates family firms from other forms of business. Yet, there is a lack of consensus in the extant literature about how and the extent to which *family* governance affects firm performance. We address the matter by taking a more comprehensive unified systems perspective to explore the pathways through which variations in family governance mechanisms simultaneously affect both the business and the family system.

Design/methodology/approach
We utilise a global dataset sourced from a survey and structural equation modelling to empirically measure several intermediate and final outcomes of family governance.

Findings
We find that the use of family protocols, as well as formal and informal meetings, have positive effects on the functioning of the family, whereas family involvement in the top management team diminishes the firm's competitive advantage. In turn, we demonstrate that both family functioning and competitive advantage are positively related to firm performance.

Originality
By taking into consideration the complexity of the family and business systems, and measuring their interlinkages, we advance knowledge by providing a more complete picture of the family governance/firm performance relationship.

Key Words
Family Governance; Family Functioning; Competitive Advantage; Family Firm Performance

1. INTRODUCTION

The family governance and firm performance relationship is a puzzle. This is evidenced by the extant literature, including numerous empirical, theoretical, and review articles, which cover the topic extensively, yet show a lack of consensus on important questions relating to if and how *family governance* – the means by which a family exerts its oversight over the family and the firm – ultimately affects firm performance (Arteaga & Escribá-Esteve, 2021; Daspit, Chrisman, Sharma, Pearson, & Mahto, 2018; Suess, 2014). While various pieces of the puzzle have been empirically investigated, a complete picture remains ambiguous. The wide array of idiosyncratic findings, in which family governance is sometimes found to positively or negatively affect firm performance, and sometimes found to have no significant effects at all, demonstrates the challenge of assembling the various pieces (Lohwasser, Hoch, & Kellermanns, 2022).

Since family businesses are not a homogeneous group, part of the challenge lies in measuring various nuances in the scope and structure of family governance mechanisms exhibited across any given population of family firms (Chrisman, Chua, Le Breton-Miller, Miller, & Steier, 2018; Muntahanah, Kusuma, Harjito, & Arifin, 2021; Parada, Gimeno, Samara, & Saris, 2020). For example, key variables like the degree and mode of family ownership, family leadership, the broader involvement of family members, and the planned or actual participation of later generations are all known to be important factors that can influence the governance-performance relationship (Le Breton-Miller & Miller, 2018; Lohwasser et al., 2022).

Another key part of the challenge lies in the (perhaps data-driven) tendency of family business scholars to emphasise either a business- or a less common family-centric view of the relationship (Suess, 2014). Based on systems theory, and the well-known three-circle model of family business (Tagiuri & Davis, 1996), we propose that solving the family governance and

firm performance puzzle starts with a holistic view of both the business *and* family systems. As both these complex systems can be influenced by family governance, and considering that both possess distinct as well as integrated resources and capabilities which can affect firm performance, our study takes a broader "unified systems" perspective (Habbershon, Williams, & MacMillan, 2003; Suess, 2014; Vollero, Siano, & Della Volpe, 2019) to explore:

1) How does family governance simultaneously affect both the business and the family, and ultimately firm performance?
2) Which particular family governance mechanisms matter most, and in what way?

We focus our exploration exclusively on family firms and consider a multilayered theoretical approach, using both the resource-based and stakeholder perspectives, to develop testable hypotheses on how heterogeneity in family governance can explain both intermediate and final outcomes for the family and as well as the firm. Employing a global family business dataset that is rich enough to measure the many important attributes of our hypothesised relationships, we further estimate the simultaneous direct and indirect relationships between various family governance mechanisms, the family's functioning, the business' competitive advantage, and finally, its performance.

By taking into consideration the complexity of the family and business systems, and measuring their interlinkages, we advance a more complete picture of the family governance/firm performance relationship. Although we cannot claim to be the first study to suggest a unified conceptual approach to family governance (see for example, Suess (2014)), this is one of the first studies to hypothesise and empirically measure the various simultaneous relationships, showing what an effective holistic system of family governance looks like.

The following sections lead us through a more formal discussion of family governance, a broad review of the governance literature focusing our attention on the current knowledge gaps, and the formulation of our hypotheses based on these gaps. Subsequently, we describe

our dataset and the variables used in our analysis, as well as the structural equation model employed to test our hypotheses. We conclude by discussing our findings and their implications for family business scholars, practitioners, and owners.

2. BACKGROUND

2.1 What is Family Governance?

There is no single agreed-upon definition of governance. Based on the various task- and goal-oriented, as well as broad and narrow, definitions offered in the extant literature, we accept that governance on a firm level is a *system of oversight*, as well as a *process of accountability* with the broad purpose of *serving the firm's various stakeholders*. From this, and for the sake of conceptual clarity, we specify family governance as *the structure and means by which a family 1) owns, controls, and monitors the firm, and 2) coordinates, manages, and aligns its members in order to protect and enhance stakeholder wealth*.

Broadly categorised in the literature as contractual and relational controls (Kussudyarsana, Soepatini, Maimun, & Vemuri, 2020), a family can exercise its governance through numerous mechanisms, including the ownership of shares, the direct management of the firm, the setting of strategic initiatives and monitoring through a board of directors, as well as through social relations that establish mutual trust, a shared vision, and a commitment to the success of the firm (Chrisman et al., 2018). From a systems perspective, these various governance mechanisms relate to different parts of the larger family business system (for an extensive discussion on the tasks and purposes of governance using the three-circle model, see Gersick and Feliu (2014)). With the family business three-circle model in mind, we distinguish between mechanisms that relate to 1) *family governance of the business* (FG_{bus}), like direct involvement in the firm through ownership, management, and a board of directors, and 2) *family governance of the family* (FG_{fam}), such as family meetings, a family constitution and protocols, or a family foundation.

Most importantly, this systems perspective allows for the understanding that family governance will manifest itself in various configurations. Within any population of family firms, we anticipate a wide array of different family governance structures, which occur simultaneously, and consist of varying degrees of family involvement in both FG_{bus} and FG_{fam} mechanisms (Gnan, Montemerlo, & Huse, 2015). In turn, varying configurations of family governance are anticipated to have a wide range of influences on the firm and ultimately its performance (Daspit et al., 2018). Additionally, the configuration of the management and ownership structre may in itself impact the choice of family governance mechanisms (Arteaga & Escribá-Esteve, 2021).

2.2 What We Know (and Don't Know) About Family Governance

Much has been written about corporate governance in family firms (for thorough reviews of this literature, see Azila-Gbettor, Honyenuga, Berent-Braun, and Kil (2018) and Suess (2014)). What is evident from this body of work is that broadly speaking, family business scholars and practitioners alike seem to agree that governance practices, no matter how they are defined, are at the core of what differentiates family firms from other forms of business (Azila-Gbettor et al., 2018). For example, a family's involvement in governance has been attributed to firm-level differences in behavioural characteristics, such as a longer investment time horizon (Sharma & Sharma, 2019) and a greater focus on non-economic goals (Berrone, Cruz, & Gomez-Mejia, 2012), as well as differences in end outcomes, such as firm performance (Lohwasser et al., 2022), continuity (Sharma & Sharma, 2019), and investor perception (Duncan & Hasso, 2018). Differences in outcomes have been observed both in developed and developing nations (Kussudyarsana et al., 2020; Saidat, Silva, & Seaman, 2019). Additionally, governance structures and mechanisms are not only what separates family firms from other forms of business but also within themselves (Daspit et al., 2018), and can often be crucial in improving dynamics between family generations as well as between the family and external shareholders (Sacristán-Navarro & Cabeza-García, 2020). We also know that the effects of

family governance may be contingent on other factors such as the industry the family business operates in (Pittino, Visintin, Minichilli, & Compagno, 2021), the behavioural integration of the top management team (Rosenkranz & Wulf, 2019), and institutional stability (Lohwasser et al., 2022).

Yet despite its enormous practical importance and the said breadth of studies on the topic, major gaps in the family governance literature are also evident. So much so that some claim that "family business governance research is in its infancy" (Goel, Jussila, & Ikäheimonen, 2014). Supporting this claim are the most recent literature reviews, which highlight very similar unanswered questions and avenues for future research. The most basic of these is: How does family governance impact firm performance? Although the conceptual and descriptive literature is extensive, compelling *empirical* evidence on this question is still scarce (Azila-Gbettor et al., 2018; Gersick & Feliu, 2014; Goel et al., 2014; Suess, 2014).

Common criticisms about the state-of-the-art in the family governance literature pertain to both methodological and theoretical issues. From a methodological perspective, many studies to date have focused on family and non-family comparisons, which often rely on the assumption that all firms within the two groups are homogeneous (Lohwasser et al., 2022). Although this assumption is useful when distinguishing *between* family and non-family businesses, in order to account for heterogeneous configurations of family governance and their impact on firm performance, observations *within* a population of family businesses are required (Daspit et al., 2018).

Data are also an issue. For example, despite the fact that the vast majority of family firms are privately owned, the most influential quantitative family governance studies utilise data from large public firms (Koji, Adhikary, & Tram, 2020; Lohwasser et al., 2022). This is problematic since it leads to a market model bias, i.e. not all governance "best practices"

endorsed to large publicly-traded family firms will be suitable for their small closely-held counterparts (Lane, Astrachan, Keyt, & McMillan, 2006).

From a theoretical perspective, there are ambiguous links between family governance and firm performance, and only a few perspectives by way of theory to shed light on these apparent relationships. Most studies overwhelmingly use agency theory and the stewardship perspective when analysing governance-performance connections (Azila-Gbettor et al., 2018), and both of these theories have their benefits and limitations (Chrisman, 2019). Consequently, other complimenting theoretical approaches, such as the resource-based view (RBV) and stakeholder theory, have also started to gain traction (Azila-Gbettor et al., 2018; Lohwasser et al., 2022; Mucci, Frezatti, Jorissen, & Bido, 2020).

Another theoretical issue is an overreliance on "input–output" governance studies which do not consider the underlying processes behind governance-performance relationships (Bammens, Voordeckers, & Van Gils, 2011). These studies simply consider family governance as an input and examine firm performance as an output. More advanced studies employ multilayered theoretical approaches that link family governance to various intermediate outcomes which must occur in order to reach the higher-level, end outcome of firm performance (Bammens et al., 2011; Mucci et al., 2020). For example, Le Breton-Miller and Miller (2018) propose that the seemingly contradicting good and bad performance outcomes observed due to family governance are the result of either stewardship or agency orientations, respectively. These orientations can be linked to various intermediate outcomes, i.e. either competitive advantages or disadvantages, which in turn influence firm performance accordingly.

This multilayered perspective of the governance-performance relationship postulates that family governance can have both positive and negative effects on intermediate outcomes and firm performance (Suess, 2014). Others have empirically tested very specific intermediate

outcomes such as strategic decision-making quality (Mustakallio, Autio, & Zahra, 2002), board processes and tasks (Zattoni, Gnan, & Huse, 2015), and business-owning family team dynamics (Berent-Braun & Uhlaner, 2012). However, these studies have not broadly considered the various FG_{bus} and FG_{fam} configurations that family governance can take, nor do they consider the concurrent intermediate outcomes related to both the firm *and* the family, and how these might endogenously relate to performance.

3. HYPOTHESES DEVELOPMENT

In this section, we employ a multi-theoretical approach using both the resource-based and stakeholder perspectives to hypothesise the simultaneous relationships between family governance (of both the business and the family), the intermediate outcomes of the firm's competitive advantage and the family's functioning, and the end outcome of firm performance. In doing so, we move beyond a simple input-output model of governance and performance, and account for the various mediated relationships that are likely to exist. Figure 1 summarises our hypothesised relationships, which are further developed in this section.

< INSERT FIGURE 1 HERE>

3.1 Family Governance and Competitive Advantage

A firm is said to have a competitive advantage "when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors" (Barney, 1991). According to the RBV, through the crafting of a competitive strategy and by managing the firm's resources, family governance structures can lead to competitive advantages or disadvantages (Le Breton-Miller & Miller, 2018). In addition to having a mediating influence in resource management, family involvement in corporate governance can also represent a key competitive resource in itself (Sirmon & Hitt, 2003). For example, Carney (2005) argues that family governance structures generate particular organisational propensities that can lead to competitive advantages and disadvantages. He defines three dominant propensities stemming from family governance: *parsimony*, the

tendency toward careful resource conservation, *personalism*, the ability of the family to project its own vision onto the business, and *particularism*, the tendency of owner–managers to view the firm as "our business". These propensities, can give advantages in scarce environments (parsimony), facilitate the creation and utilisation of social capital (personalism), and engender opportunistic investment processes (particularism).

While the parsimonious, personalistic, and particularistic tendencies of family firms can combine to generate competitive advantages, family governance can at the same time create capital and managerial constraints, which is a source of competitive *disadvantage* relative to other firms operating under other governance forms (Carney, 2005). When family governance is especially pronounced, i.e. the family has enough ownership for unchallenged control, the family can also begin to abuse its power by taking resources out of the business (Lohwasser, Hoch, & Kellermanns, 2022). Based on this discussion, we wish to empirically test this fundamental, yet bidirectional, argument by formulating the following hypothesis:

H1: Family governance will significantly impact a firm's competitive advantage

Rather than attempting to predict the direction of this hypothesised relationship, we acknowledge that family governance can both positively and negatively impact a firm's competitive advantage. Therefore, further to Hypothesis 1, we are interested in which specific family governance mechanisms significantly impact competitive advantage, and in which direction.

3.2 Family Governance and Family Functioning

The discussion thus far has focused on how family governance can affect the *business* unit via the management (or mismanagement) of resources that give rise to competitive advantage. New research in the family business field has outlined the importance of focusing on the family as an equally important unit of analysis as the business (Bettinelli, Mismetti, De Massis, & Del Bosco, 2022). Similarly, an important part of the family governance literature

also looks at the capacity for governance to affect the *family* unit (Dutot, Bergeron, & Calabrò, 2021).

Considering stakeholder theory, which implies that managers must pay attention to all constituencies that can affect, or are affected by, the firm (Freeman, Dmytriyev, & Phillips, 2021), we acknowledge that family governance is also a means to serve the potentially salient family stakeholder group (Le Breton-Miller & Miller, 2018). Drawing on the stakeholder theory literature, family governance itself can enhance the family's relative prominence through its power to influence, its legitimate relationship with, and its urgent claim on the firm (Freeman et al., 2021). As family stakeholders may also have non-economic objectives, such as harmony, jobs for family members, and dynastic control, from the governing family's perspective, family governance mechanisms can enhance communication, cooperation and trust, resolve conflict, and safeguard as well as align business and family goals (Azila-Gbettor et al., 2018; Bettinelli et al., 2022).

Berent-Braun and Uhlaner (2012) argue that mechanisms related to the governance of the family, such as a family constitution, family code of conduct, clear selection and accountability criteria, along with family councils, family reunions and formal family communication, can enhance cooperation between family members to build a strong and unified family "team". This was supported by the work of Arteaga and Menéndez-Requejo (2017), as well as by González-Cruz, Clemente-Almendros, and Puig-Denia (2021) who found that family constitutions improved business performance as they provide alignment and improve communication. On the other hand, family governance also has the capacity to create conflict within the family, e.g. when the establishment of processes and agreements are made without the common consensus of *all* family members, or when one group of family members use governance mechanisms (either FG_{bus} or $FG_{fam)}$ to monitor or expropriate wealth from other

family members (Bettinelli et al., 2022). This discussion leads to the formulation of our next hypothesis:

H2: Family governance will significantly impact a family's functioning

Based on measures often used in the therapy and medical field to assess the functional integrity of a family, we specifically define "family functioning" as the family group's ability to adapt and grow, as well as their ability to collaborate, and show affection and resolve in their relationships (Smilkstein, Ashworth, & Montano, 1982). As with Hypothesis 1, we do not attempt to predict the direction of the relationship, but rather acknowledge that family governance can both positively and negatively impact family functioning. Furthermore, we are interested in which specific family governance mechanisms significantly impact family functioning, and in which direction.

3.3 Family Governance and Firm Performance

Consistent with a multilayered approach to theorising governance-performance connections, we further hypothesise that intermediate outcomes, i.e. the firm's competitive advantage and the family's functioning, will be positively related to firm performance:

H3: There is a positive relationship between competitive advantage and firm performance

H4: There is a positive relationship between family functioning and firm performance

Hypothesis 3 is in line with the strategy and RBV literature which outlines that competitive advantages can be realised to enhance performance (Porter, 1998), and Hypothesis 4 is in line with the notion that a functioning family is more likely to exhibit a single objective across all stakeholders, as well as cooperation, purposeful behaviour, and therefore value maximising outcomes for the firm. A functioning family, through FG_{bus} and FG_{fam}, can reconcile the sometimes competing interests within the family and nurture the emergence of the family's shared dream, which can engender a greater family commitment to the firm's success and continuity (Bloemen-Bekx, Van Gils, Lambrechts, & Sharma, 2021). If the family's goals are aligned with the firm's goals, then competitive advantages can also

materialise, which implies that family functioning itself can be a distinctive resource to the firm (Camison & González, 2019). For example, family unity, a likely outcome of family functioning, may be a unique resource that can be converted into more powerful informal monitoring mechanisms, an organisational culture that is rooted in close interpersonal relationships with customers and suppliers, as well as ownership commitment and patient capital advantages (Sharma & Sharma, 2019). Further, a highly functioning family may be better suited to transfer unique and tacit knowledge across generations, which may also lead to competitive advantages. Thus the firm's competitive advantage and the family's functioning are expected to be related as follows:

H5: Family functioning will positively impact a firm's competitive advantage

The arguments presented in H1 through to H5 are in line with a unified systems model of family firm performance (Habbershon et al., 2003), which focuses not only on describing stakeholder constituencies and conditions, but also shows how the parts of the system interact to generate idiosyncratic antecedents to firm performance. Therefore families who are able to balance family and business systems can create a positive environment where the family thrives, and the business performs well.

4. RESEARCH DESIGN

4.1 Data

In order to test our hypotheses, we require data that measure family governance of both the business and family, competitive advantage on a firm level, functioning on a family level, and firm performance. The data sample utilised in this study is derived from a survey designed and administered under the auspices of the global *Successful Transgenerational Entrepreneurship Practices* (STEP) project. The STEP global survey data, collected by STEP partner universities[1] and led by Babson College, explores the trans-generational entrepreneurial

[1] The STEP project operates in five regions of the world: Europe, Latin America, Asia, North America, and Africa, and consisted of 43 affiliated research institutions at the time of data collection.

practices of successful family businesses across the globe. The survey was built around the "STEP model", which was designed to increase the understanding of how family businesses successfully develop entrepreneurial mindsets and employ family resources to foster entrepreneurship across multiple generations (for more information on the STEP model, see Habbershon, Nordqvist, and Zellweger (2010)).

Targeted toward family businesses, the STEP survey was developed by a team of leading scholars, and a large part of the survey uses well-established instruments and scales, which at times are modified for family businesses specifically. The survey was executed from September 2013 to February 2015, was translated into 14 languages, and distributed by 35 University teams across 24 countries. The survey used a multi-respondent methodology as two family members from each nominated firm were invited to complete the survey. Invitations were sent out to 3,900 respondents, and 1,056 surveys were completed resulting in a response rate of 27%. These respondents were clustered in 686 firms, with 370 firms having two respondents.

Participants in the survey represent top leaders in their organisations possessing significant experience. For example, 34% were currently the CEO, 40% were members of the board, 45% were members of the top management team, and 17% were the founders of the business (items are not mutually exclusive). Respondents averaged 18 years of experience within their family businesses, and 6 years of experience outside the family business, at the level of manager or higher.

4.2 Sample

Some narrowing of the STEP data was necessary for the purpose of our study, in that we removed all responses that had any missing values for our variables of interest. This treatment results in a sample of 548 complete responses across 424 firms.[2] As we are interested

[2] The missing data can be attributed to the fact that the survey did not force respondents to reply to every question. 260 responses were dropped because they did not provide any information on our control variables (industry

in firm-level effects, we further narrowed our sample via the process suggested by (Biemann, Cole, & Voelpel, 2012), i.e. we aggregated, by averaging, the responses for the 124 firms where we have two respondents. To substantiate this treatment, we calculate the average intra-class correlation (ICC_1=.24; ICC_2=.88) (Shrout & Fleiss, 1979) and within-group agreement indices (mean r_{wg}=.87; median r_{wg}=.97; standard deviation of r_{wg}=.11) (James, Demaree, & Wolf, 1993), which show that there is a high agreement between the within-firm responses. Consequently, we are confident with the choice to aggregate, which results in a final total sample of 424 family firms.

4.3 Family Governance

We use eight items from the STEP survey to assess family governance mechanisms. Of these eight items, five items relate to FG_{fam} mechanisms. These are measured on a 5-point Likert scale anchored at "Not at all" and "Very much". The family governance questions asked, "To what extent does your Family Business Group use the following?" The items were formal meetings, informal meetings, family constitution, family protocols, and family foundation. In addition, we also include three FG_{bus} mechanisms in our model that have been used in much of the prior literature; to this extent, we also measure the proportion (in percentage) of family ownership, family members on the board, and family members in the top management team.

4.4 Family Functioning

We use a modified APGAR scale[3] to assess family functioning (Smilkstein et al., 1982). The APGAR scale measures perceived family support on five dimensions (Adaptation,

affiliation, number of employees, age, or generation involved). Further 107 responses were dropped because they did not provide information about FG_{fam}, whereas 48 responses were dropped because they did not include information about level of family ownership or involvement in top management team. The largest drop in responses, 344, was due to the removal of firms that did not have a board of directors. We removed these as we were interested in understanding the simultaneous effects of all FG_{bus} mechanisms, including the proportion of family directors on the board. It is important to note that our results do not change if we exclude board of directors from analyses and thus include these 344 responses. Finally, 37 responses were removed, as they did not include information on either performance, competitive advantage, or family functioning.

[3] Developed for use in family therapy, the original APGAR scale is an established, reliable, and validated instrument that measures the components of family function (Smilkstein et al., 1982). The scale was modified by the STEP team for use in a business type environment.

Partnership, Growth, Affection, and Resolve) using a five-item 5-point Likert scale anchored at "Never" and "Always". The questions focus on the emotional, communicative, and social interactive relationships between the respondent and their family. Specifically, survey participants were asked about their level of satisfaction with their family's dependability, openness, supportiveness, expression of emotion, and time spent together. A higher score indicates a greater degree of family functioning. Principle component analysis was used to reduce the five items to one factor, explaining 66% of the variance.

4.5 Competitive Advantage

Following Steffens and Senyard (2009), the STEP survey measures a firm's competitive advantage by using a four-item 5-point Likert scale that asks respondents how difficult (general difficulty, time and cost investment, and access to substitutes) it would be for competitors to "copy" the resources that generate the firm's competitive advantage. Principle component analysis was used to reduce the four items to one factor, explaining 51% of the variance. A higher score indicates a stronger competitive advantage.

4.6 Firm Performance

We measure firm performance using a question that asked participants to rate the firm's performance as compared to that of their competitors in the last three years across eight items on the performance dimension (return on equity, return on total assets, profit margin on sales, ability to fund growth from profits, growth in sales, growth in market share, growth in number of employees, and growth in profitability). The specific items were based on the work of Eddleston and Kellermanns (2007), who ultimately relied on a subjective measurement of performance since privately-held firms (such as those within the STEP survey sample) are typically unwilling to report their objective performance data. The items used a 5-point Likert scale anchored at "Much worse" and "Much better". Principle component analysis was used to reduce the eight items to one factor, explaining 60% of the variance.

4.7 Control Variables

Following numerous studies measuring the governance-performance relationship, we utilise variables in the STEP survey that control for firm age (log of years in business), firm size (log of the number of employees), and which generation is currently involved in the firm in our primary analysis. We also control for industry (1 digit SIC code) by centering all variables to the industry mean, thereby allowing us to partial out the industry effect from the data.

4.8 Analysis

Since our model involves a number of inter-related latent constructs, we use structural equation modelling to test our hypothesised relationships. While the use of structural equation modelling in family business research is still in its early stages, the method is well established in many neighbouring disciplines, such as marketing, management accounting, psychology, and others (Sarstedt, Ringle, Smith, Reams, & Hair, 2014). Structural equation modelling allows us to simultaneously examine the series of interrelated relationships between our constructs of interest, while at the same time accounting for any possible measurement error in our latent constructs.

As we propose full mediation in our model, we follow the procedure of Schneider, Ehrhart, Mayer, Saltz, and Niles-Jolly (2005) to test for the presence of full mediation by comparing the chi-square values of the partially mediated model to the fully mediated model. As the difference in the values is not statistically significant, we use the fully mediated model since it is more parsimonious. Furthermore, we also consider a number of alternative specifications in our further testing to ensure that our results are not sensitive to choices in our research design.

5. RESULTS

Table 1 presents an overview of the industry and region composition of our sample. The composition shows that there is a greater representation of more developed regions

(Europe and North America) as compared to developing regions (Asia-Pacific and Latin America). This is common due to the enhanced networks and collaboration of developed economies. Moreover, the industry composition does show a highly diverse sample in terms of industry membership.

<INSERT TABLE 1 HERE>

We proceed to provide a descriptive overview of the sample based on firm size groupings (number of employees), which is reported in Table 2. The variables reported in this table have not been transformed for the purposes of analysis but are meant to give the reader an indication of what the average response is for these constructs. It is clear from looking at this table that firm size plays an important role in explaining what form of governance structure a family firm uses, both in terms of governance of the business and governance of the family. While the level of Family Functioning slightly decreases as the firm grows, Competitive Advantage and Firm Performance both increase considerably for larger firms.

<INSERT TABLE 2 HERE>

We also observe the level of professionalisation of firms as they grow in several ways. First, the usage of Formal Meetings increases while Informal Meetings decrease with firm size. Second, the usage of Family Protocols, Constitutions, and Foundations also increases as the firm gets larger. Also, as part of the process of professionalisation, the families in the sample reduce their direct participation within the business as they grow; we see strong decreases in family members in the Top Management Team and on the Board of Directors. In contrast, the Family Ownership percentage only experiences a slight decrease with growth.

Prior to hypothesis testing, we establish the measurement validity within the model and the overall fit of the structural elements. Table 3 presents descriptive statistics and correlations of the transformed variables that are used in the analysis. It should be noted that all observations are adjusted at their industry mean, while the latent constructs are zero-centered, leading to all

of our variables having a mean of zero. This treatment controls for industry effects and reduces the impact of multicollinearity[4]. The treatment also affects the interpretation of the statistics presented. For example, the minimum and maximum values shown in columns 2 and 3 represent the deviation from the respective industry mean; hence all minimum values are negative. The coefficient alphas of our latent constructs are all within an acceptable range. Their item loadings ranged from .55 to .87 and were all statistically significant ($p < .05$), indicating convergent validity (Bagozzi & Yi, 1988). Moreover, the average variance extracted for each construct was above the recommended threshold of .50 for all three constructs (Functioning, Competitive Advantage, and Firm Performance) (Fornell & Larcker, 1981). In combination, our results provide sufficient evidence of measurement validity within our model, and we proceed to test the structural part of our model.

<INSERT TABLE 3 HERE>

Table 4 presents the results of the structural equation model. Focusing on the overall model fit, we observe that both the Comparative Fit Index (CFI) and Tucker Lewis Index (TLI) are above the commonly used .90 threshold (CFI = .99, TFI = .96), while the Standardised Root Mean Square Residual (SRMR) and Root Mean Square Error of Approximation (RMSEA) are below the .08 threshold (SRMR = .01, RMSEA = .02) (Hu & Bentler, 1999). The fit indices indicate that it is appropriate to proceed to hypotheses testing as the proposed model fits the data well.

<INSERT TABLE 4 HERE>

We begin by exploring the direct effects within the structural model. H1 posits that family governance is significantly related to competitive advantage. The results in Table 4 suggest that only family involvement in the top management team is related to competitive

[4] The estimated variance inflation factors (VIFs) for our independent variables range from 1.03 to 2.78, indicating that multicollinearity is not an issue.

advantage (β = -.54; p < .01). As our hypothesis was non-directional, this provides evidence of a negative relationship. Interestingly, none of the family-specific FG_{fam} mechanisms are directly related to competitive advantage. In contrast, we find that these mechanisms appear to have a significant direct relationship to family functioning, supporting H2. The usage of formal meetings (β = .06; p < .1), informal meetings (β = .20; p < .01), and family protocols (β = .14; p < .01) are all positively and significantly related to family functioning. Interestingly we do not find that FG_{bus} affects family functioning in any way. We also find that competitive advantage (β = .19; p < .01) and family functioning (β = .19; p < .01) are positively and significantly related to firm performance, providing support for H3 and H4. Finally, we also observe there is evidence to support H5, as family functioning is positively related to competitive advantage (β = .13; p < .05).

We continue by exploring the indirect and total effects within the structural model, as summarised in Table 4. While the direct effects suggest that only family involvement in top management team is related to competitive advantage, we now observe that two other family governance mechanisms are indirectly related to competitive advantage through the mediating variable of family functioning. We find that informal meetings (β = .03; p < .05) and family protocols (β = .02; p < .05) have significant and positive indirect relationships to competitive advantage. Furthermore, we observe that family functioning has an indirect positive relationship to firm performance through competitive advantage (β = .03; p < .05), above and beyond its direct effect. Finally, we observe that formal meetings (β = .02; p < .1) and informal meetings (β = .04; p < .05) have a positive and significant indirect effect upon firm performance, while family involvement in management (β = -.12; p < .05) has a negative and significant effect upon firm performance. These results support our hypotheses as well as highlight the endogenous nature of the broader governance-performance relationship. To

continue our exploration and ensure the robustness of our results, we conducted several additional analyses. These are presented in the next section.

6. ROBUSTNESS OF RESULTS

6.1 Feedback Loops

We consider the potential of a feedback loop on our results by constructing a reciprocal path between firm performance and family functioning. The impact of firm performance upon family functioning is not found to be significant and the overall structural model fit does not improve. The relationship between formal meetings and family functioning is no longer found to be significant at the 0.10 level, while all other significant relationships remain.

We also consider the potential of a feedback loop between firm performance and competitive advantage. However, the estimated structural model that accounts for this reciprocal relationship shows very poor model fit and consequently cannot be used for hypotheses testing.

6.2 Regional Impact

As our firm performance construct is based on self-reported comparisons to competitors we do not expect that this variable is determined by region. To ensure robustness of our results we estimate a model that controls for regional effects by including observed dummy variables for three regions. The model shows relatively good fit, however the fit indices are not statistically different from our primary model. The variables representing the regional membership are not found to be related to either of our three latent constructs. Furthermore, our results from our primary analysis remain.

6.3 Nonlinear Relationships

As we find a strong negative relationship between family involvement in the top management team and competitive advantage in our primary results, we further explore this relationship by estimating its quadratic term and including it as an explanatory variable for

competitive advantage and family functioning. While the model shows a slight decrease in the fit indices, these changes are not statistically different from our primary model, furthermore, the quadratic term is not significantly related to either competitive advantage or family functioning. We further estimate quadratic terms for all family governance variables, but again, fail to find any significant relationships for these variables.

6.4 Meeting Characteristics

Our main results indicate that both formal and informal meetings have a significant impact on the functioning of a family. We further explore the characteristics of these meetings to see if there are ways to maximise their benefits. We utilise sub-questions from the STEP survey that asked about the number of times the family met, the number of family members at the meeting and number in the family in total, and the number of generations present. The model shows relatively good fit; however, the fit indices are not statistically different from our primary model. The variables representing the meeting characteristics for both formal and informal meetings are not found to be related to either of our three latent constructs. Thus, we defer to our main findings which focus on the broader relationships.

7. DISCUSSION AND CONCLUSIONS

Despite extensive research and a long-standing interest in how family governance may impact firm performance, important questions still remain. One of the most fundamental of these questions is how family governance simultaneously affects both the business and the family, and ultimately firm performance. Taking a holistic, unified systems approach, our study sheds empirical light on this issue by revealing the intermediate mechanisms of firm competitive advantage and family functioning as important pathways through which the family and business systems interact to impact firm performance.

Notably, our exploration reveals the central role that *family* outcomes can play in a holistic system of family governance. In particular, our results indicate that the strength of emotional, communicative, and social interactive relationships within the family (i.e., family functioning) is an important piece of the governance-performance puzzle, as it has a direct positive relationship to both competitive advantage and firm performance, and indirectly to firm performance through competitive advantage. Since the early years of inquiry into family business, practitioners have (anecdotally) emphasised that positive family outcomes are fundamental to realising the full potential of family firms. Utilising a global data set and advanced estimation techniques, we can empirically confirm that governing the family system is just as (if not more) important to firm performance as governing the business system.

As to which family governance mechanisms matter most, and in what way, we find that family meetings of all types and family protocols to be the most effective, while family involvement in the top management team can be especially detrimental. Considering the separate role of governance mechanisms related to FG_{fam} and FG_{bus}, we find that most of the positive effects of family governance arise from FG_{fam} mechanisms. Family meetings (both formal and informal) and family protocols have a direct positive effect on family functioning, and informal meetings and family protocols have an indirect effect on competitive advantage through the family's functioning. This contributes to the emerging literature on the importance of family meetings (Cicek, Kelleci, & Vandekerkhof, 2021).

On the other hand, FG_{bus} mechanisms are relatively less effective than one might expect. Specifically, family involvement in the top management team has a direct negative effect on competitive advantage and firm performance. This result is robust to multiple estimation specifications. To explain, we conjecture that a smaller talent pool within the family may lead to the hiring of suboptimal managers in a functional area requiring expertise, consequently decreasing the competitive advantage of the firm. Additionally, prior research

has suggested familial top management teams are especially vulnerable to relationship conflict, which can be debilitating and difficult to overcome (Bettinelli et al., 2022). Akin to other studies, our results thus suggest that professionalisation of the top management team is beneficial for competitive advantage and firm performance, especially in privately-held family firms.

Given our holistic perspective, our study has a number of interesting implications for family business owners, practitioners, and scholars. First, considering the heterogeneity of family firms, we provide empirical evidence to family owners about the various means to improve their firm's performance. We show that providing appropriate family governance structures can increase firm performance, including the use of both formal and informal meetings and by establishing family protocols. We also show that the professionalisation of management has measurable benefits to competitive advantage and firm performance.

Second, although the professionalisation of the family firm has long been discussed, the "professionalisation" of the family system, with guidance from the business system, has not. In particular, we find that the enhanced structure that FG_{fam} mechanisms may impose on the family system, such as a structure that defines roles, provides methods of communication and dispute resolution, and involves multiple stakeholders, is important to the functioning health of the family. Specifically, the family itself functions better if it adopts more discipline and processes that are characteristic of a business environment. Given the important role of family functioning revealed in our study, we also draw attention to the potential benefits of a multidisciplinary approach to advising family firms, including engaging family therapists to help improve relationships within the family and thereby also improving business performance.

Finally, while the end results of this study are both confirming and surprising, it is the strength of the holistic framework, the STEP global data set, and the simultaneous estimation techniques employed that significantly improve our understanding of the family

governance/firm performance puzzle. In utilising a broad, process-based framework between family governance and firm performance (using the resource-based and stakeholder perspectives), we consider both the business and family system, and advance a more accurate representation of the complexity of these systems and their simultaneous interactions.

Crucially, we also allow for heterogeneous configurations of family governance to measure how various mechanisms affect our hypothesised relationships. As one of the first to Utilising the STEP survey data, which importantly relates to private family firms, we are able to explore how variation *within* heterogeneous family firm governance practices impacts firm performance beyond the traditional family/non-family comparisons. We thus provide future researchers with a blueprint for using the STEP data, as well as the appropriate aggregation techniques necessary to process data where multiple respondents per firm exist.

As in all studies, our analysis has limitations that provide research opportunities for future work. Characteristically, the STEP survey utilised a convenience sample technique which raises questions regarding the generalizability of our findings as the underlying data may not represent the general population of family firms. Also, following the dominant trend in the extant literature, we focus on firm performance as the primary outcome, whereas it could be argued that this may not be the primary goal for all family firms. To this end, it would be interesting to explore how other types of performance outcomes, such as family, social or environmental performance, may be related to various governance structures within family firms. Notwithstanding these limitations, we believe our study connects fundamental pieces of the governance-performance puzzle and provides an excellent starting point for future research, especially with regard to the antecedents and effects of family functioning. Although this study suggests that the lowest hanging fruit for improving family firm performance is improving family functioning via family governance, we wish to inspire future research that may further develop the constructs of family functioning and performance. While firm performance is a

relatively easy and tangible measure, *family* performance, i.e. outcomes related to the impact that the business has upon the family, are inherently connected to firm performance, a basic characteristic that defines the uniqueness of family firms, and arguably the most understudied aspect of the family governance/firm performance relationship.

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Figure 1. Intermediate and Final Performance Outcomes of Family Governance

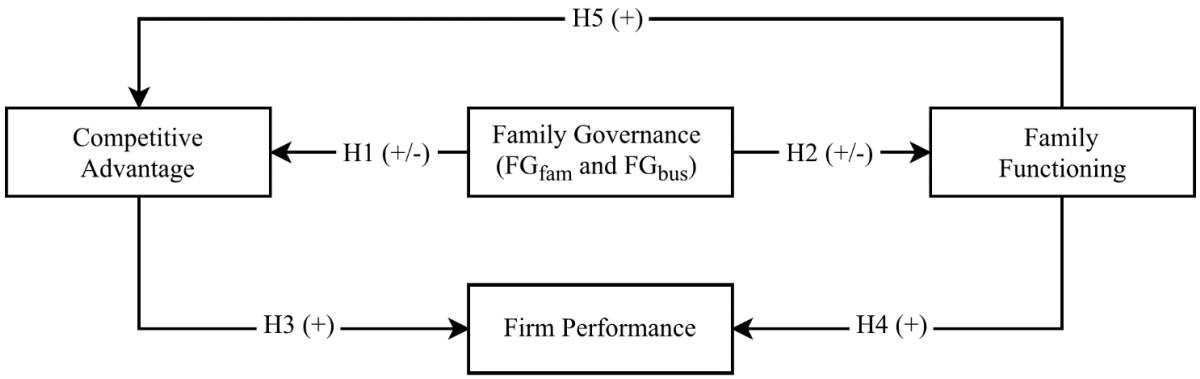

Table 1. Descriptive Statistics for Industry and Region Composition

	Region				
Industry	**Asia-Pacific**	**Europe**	**Latin America**	**North America**	**Total**
Agriculture, Forestry, & Fishing	1	23	11	7	42
Construction	1	16	6	9	32
Finance, Insurance, & Real Estate	4	12	1	7	24
Manufacturing	5	79	22	25	131
Mining	0	0	2	3	5
Non-classifiable Establishments	0	2	0	3	5
Retail Trade	5	35	6	22	68
Services	6	41	10	22	79
Transportation & Public Utilities	0	8	3	4	15
Wholesale Trade	3	7	7	6	23
Total	25	223	68	108	424

Table 2. Descriptive Statistics Based on Firm Size

	Micro (1-9)	Small (10-49)	Medium (50 - 249)	Large (> 250)	Total
Functioning	4.05	4.15	4.04	3.87	3.99
Competitive Advantage	3.15	3.52	3.50	3.58	3.52
Firm Performance	3.13	3.61	3.60	3.77	3.66
Formal Meetings	2.63	2.63	2.75	3.06	2.85
Informal Meetings	4.06	3.95	3.68	3.26	3.58
Family Protocols	2.16	2.01	2.04	2.50	2.23
Family Constitution	2.19	2.12	2.12	2.51	2.28
Family Foundation	1.75	1.91	1.80	2.15	1.97
Family Ownership (%)	0.97	0.95	0.93	0.87	0.91
Family Top Management Team (%)	0.94	0.75	0.51	0.33	0.50
Family Board of Directors (%)	0.94	0.80	0.71	0.54	0.67
Family Generation	2.69	2.65	2.82	3.15	2.92
Size (number of employees)	5.31	26.10	118.42	3365.58	1457.10
Age (years)	39.94	43.75	52.11	66.89	56.02
Observations	16	93	137	178	424

Notes. Means for groups based on firm size (number of employees). Means for Functioning, Competitive Advantage and Performance are based on the arithmetic means of the underlying survey questions (range of 1 to 5). All variables are in their original form and have not been factored, mean-centered, or logged.

Table 3. Descriptive Statistics and Correlations

	σ	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Functioning	1.00	-3.85	1.65	1.00												
2 Competitive Advantage	1.00	-2.61	2.19	0.10	1.00											
3 Firm Performance	1.00	-3.28	2.08	0.19	0.18	1.00										
4 Formal Meetings	1.41	-2.52	2.78	0.19	0.02	0.11	1.00									
5 Informal Meetings	1.29	-2.83	1.76	0.33	-0.01	0.05	0.17	1.00								
6 Family Protocols	1.38	-2.40	2.98	0.25	-0.05	0.08	0.48	0.17	1.00							
7 Family Constitution	1.40	-1.60	3.05	0.15	-0.02	-0.01	0.40	0.18	0.59	1.00						
8 Family Foundation	1.35	-1.48	3.36	0.16	-0.09	0.11	0.32	0.13	0.51	0.46	1.00					
9 Family Ownership (%)	0.19	-0.92	0.13	0.01	0.00	-0.05	0.03	0.05	-0.02	-0.05	-0.03	1.00				
10 Family TMT (%)	0.33	-0.59	0.56	0.09	-0.14	-0.09	-0.02	0.20	-0.08	-0.06	-0.01	0.12	1.00			
11 Family BOD (%)	0.28	-0.70	0.39	0.11	-0.02	-0.02	0.03	0.27	-0.04	-0.04	-0.05	0.24	0.46	1.00		
12 Family Generation	1.22	-2.08	6.20	-0.08	0.05	-0.08	0.04	-0.11	0.00	0.08	-0.01	0.01	-0.20	-0.11	1.00	
13 Age (log)	0.80	-2.78	1.99	-0.06	0.18	-0.09	0.08	-0.07	0.04	0.06	-0.01	-0.02	-0.21	-0.13	0.56	1.00
14 Size (log)	1.88	-4.84	6.35	-0.14	0.02	0.13	0.16	-0.19	0.16	0.16	0.12	-0.18	-0.49	-0.37	0.17	0.33

Notes. Correlations equal or greater than 0.08 are significant at 10%. Functioning is a one factor solution of five items from the modified APGAR scale (Smilkstein, 1978). Competitive Advantage is a one factor solution of a three item scale (Steffens & Senyard, 2009). Firm Performance is a one factor solution of an eight item scale (Eddleston & Kellermanns, 2007). All factored variables have been zero centered to minimise the effects of multicollinearity. All variables have been adjusted by the industry mean to control for industry effects and consequently have a mean of zero.

Table 4. Structural Equation Model Results - Direct, Indirect, and Total Effects

VARIABLES	Functioning			Competitive Advantage			Firm Performance		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
Functioning				0.13**		0.13**	0.19***	0.03**	0.21***
				(0.05)		(0.05)	(0.05)	(0.01)	(0.05)
Competitive Advantage							0.19***		0.19***
							(0.05)		(0.05)
Formal Meetings	0.06*		0.06*	0.03	0.01	0.04		0.02*	0.02*
	(0.04)		(0.04)	(0.04)	(0.01)	(0.04)		(0.01)	(0.01)
Informal Meetings	0.20***		0.20***	-0.02	0.03**	0.00		0.04**	0.04**
	(0.04)		(0.04)	(0.04)	(0.01)	(0.04)		(0.02)	(0.02)
Family Protocols	0.14***		0.14***	-0.06	0.02**	-0.04		0.02	0.02
	(0.04)		(0.04)	(0.05)	(0.01)	(0.05)		(0.01)	(0.01)
Family Constitution	-0.03		-0.03	0.02	0.00	0.02		0.00	0.00
	(0.04)		(0.04)	(0.04)	(0.01)	(0.04)		(0.01)	(0.01)
Family Foundation	0.03		0.03	-0.06	0.00	-0.06		-0.01	-0.01
	(0.04)		(0.04)	(0.04)	(0.01)	(0.04)		(0.01)	(0.01)
Family Ownership (%)	-0.11		-0.11	-0.03	-0.01	-0.05		-0.03	-0.03
	(0.21)		(0.21)	(0.26)	(0.03)	(0.26)		(0.07)	(0.07)
Family Top Management Team (%)	-0.07		-0.07	-0.54***	-0.01	-0.55***		-0.12**	-0.12**
	(0.17)		(0.17)	(0.18)	(0.02)	(0.18)		(0.05)	(0.05)
Family Board of Directors (%)	0.02		0.02	0.16	0.00	0.16		0.04	0.04
	(0.20)		(0.20)	(0.22)	(0.03)	(0.21)		(0.06)	(0.06)
Family Generation	-0.04		-0.04	-0.07	0.00	-0.07	-0.01	-0.02	-0.02
	(0.05)		(0.05)	(0.05)	(0.01)	(0.05)	(0.01)	(0.01)	(0.01)
Age (log)	0.03		0.03	0.28***	0.00	0.29***	-0.23***	0.06**	-0.17**
	(0.07)		(0.07)	(0.07)	(0.01)	(0.07)	(0.06)	(0.02)	(0.07)
Size (log)	-0.08***		-0.08***	-0.05	-0.01*	-0.06*	0.11***	-0.02**	0.09***
	(0.03)		(0.03)	(0.03)	(0.01)	(0.03)	(0.03)	(0.01)	(0.03)
Equation by equation R^2	0.17			0.08			0.12		
Overall R^2	0.28								
χ^2	179.77***								
RMSEA	0.02								
CFI	0.99								
TLI	0.96								
SRMR	0.01								
Observations	424								

Notes. Bootstrapped standard errors in parentheses (5000 repetitions), *** p<0.01, ** p<0.05, * p<0.1