

Research Article

**Stewardship-oriented Culture and
Family Firm Performance:
A Study on the Moderating Effects
in an Emerging Economy**

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Received 25 November 2018. This paper was with the authors for three revisions. Accepted 3 April 2020. First published online 5 May 2020.

João Mauricio Gama Boaventura was the associate editor for this article.

Editor-in-chief: Carlo Gabriel Porto Bellini

Editorial assistant: Luciane Kato Kiwara

Abstract

Prior literature has provided inconclusive evidence on the effects of family involvement in management (FIM) on family business (FB) performance. However, so far in the literature, there have been very few attempts to investigate FIM and family essence simultaneously as antecedents of FB performance. Therefore, we address this gap by studying how a stewardship-oriented culture (being a feature of FB essence) moderates the relationship between FIM and FB performance. We test our hypotheses with the Structural Equation Modeling technique using survey data in combination with archival data on a sample of 69 medium and large private Brazilian FBs. We find that a stewardship-oriented culture makes the relationship between a family CEO and FB performance weaker and observe that a stewardship has no moderating effect on the relationship between FIM and FB performance. These findings contradict prior literature on the beneficial role of stewardship in family-managed FB. Only in case of a nonfamily CEO, a stewardship-oriented culture positively moderates the relationship with FB performance. In addition, our study reveals a U-shaped nonlinear relationship between the level of FIM and FB performance, which is consistent with recent literature on the existence of faultlines derived from heterogeneous TMT and the impact on firm outcome.

Keywords: stewardship theory; performance; family firm; family involvement in management; family CEO.

JEL code: M1, M100

Introduction

A lot of research on the effect of family involvement over family business (FB) performance can be found in the literature (e.g., Basco, 2013; González-Cruz & Cruz-Ros, 2016; Wagner, Block, Miller, Schwens, & Xi, 2015). Favorable and unfavorable perspectives based on different theoretical frameworks such as agency theory, stewardship theory, faultlines, the resource-based view, and socioemotional wealth are used in the literature to discuss this relationship (e.g., Basco, Campopiano, Calabrò, & Kraus, 2019; Chirico & Bau', 2014; Kim & Gao, 2013). This literature has mainly focused on the comparison between family and nonfamily firm performance (Rutherford, Kuratko, & Holt, 2008) and, more recently, some studies have focused exclusively on FBs, addressing FB heterogeneity (Nordqvist, Sharma, & Chirico, 2014) based on different levels of family involvement (Basco, 2013; Basco et al., 2019; González-Cruz & Cruz-Ros, 2016).

Despite the existence of a whole stream of literature on FB performance, the empirical evidence is still inconclusive (Garcia-Castro & Aguilera, 2014; González-Cruz & Cruz-Ros, 2016). There are some attempts in recent studies to provide a more compelling direction regarding the antecedents of FB performance in multiple contexts (Wagner et al., 2015). Most studies in the literature have looked at ability variables (such as family involvement in management and ownership) and there have been few attempts to investigate these elements together with family essence (such as orientation or cultural aspects), which might simultaneously capture FB particularities and their effects on performance (Basco, 2013; Basco & Voordeckers, 2015; De Massis, Kotlar, Chua, & Chrisman, 2014). According to Basco (2013), the essence approach follows the behavioral perspective (Chrisman, Chua, & Sharma, 2005) and the resource-based view (Habbershon & Williams, 1999) and intends to depict what happens inside the firm while the ability captures the potential family influence in the FB. In fact, researchers have proposed that the association between family involvement in management (FIM) and FB performance might be moderated by family-longevity goals (Kim & Gao, 2013), identity (Calabró, Campopiano, & Basco, 2017), and listed versus unlisted status (Minichilli, Corbetta, & MacMillan, 2010; O'Boyle, Pollack, & Rutherford, 2012). Other studies have looked at mediators, such as a long-term orientation among management (Hoffmann, Wulf, & Stubner, 2016) and objective achievement perceptions (Basco et al., 2019). Drawing attention to the importance of considering both ability and family essence variables, Wagner, Block, Miller, Schwens and Xi (2015) suggest that individualistic versus collectivist settings might help to explain the conflicting evidence from prior literature regarding FB performance. Hence, we address this gap in the literature regarding the circumstances that might enhance or damage the FIM-performance relationship, particularly concerning cultural aspects encompassed by the stewardship-oriented culture (e.g., Zahra, Hayton, Neubaum, Dibrell, & Craig, 2008). Stewardship-oriented culture has been defined as "a collective, supportive, and caring environment" (Zahra et al., 2008, p. 1043) which relates to a collectivist setting (Wagner et al., 2015) and to a long-term orientation (Kim & Gao, 2013). Prior literature indicates that a stewardship-oriented culture (Zahra et al., 2008) can be seen as a component of the level of familiness in a FB since it is expected to enhance the bright side of the presence of family members in the top management team (Kim & Gao, 2013; Miller & Le Breton-Miller, 2006).

Considering that a stewardship-oriented culture might assist a FB in enhancing the bright side of family influence (e.g., Habbershon & Williams, 1999) and suppressing particular family agency problems resulting from the dark side of family influence on the business (e.g., Lubatkin, Schulze, Ling, & Dino, 2005), we propose the following research question: **Does a stewardship-oriented culture favorably moderate the association between the level of family involvement in management and the family firm's financial performance?** We discuss the association between family involvement in management and FB financial performance and investigate whether a stewardship-oriented culture plays a moderating role in this relationship. We focus on family involvement in management, particularly the Top Management Team (TMT), since these top executives have a relevant influence on the firm's performance. The Chief Executive Officer (CEO) might also play a role due to his/her strategic leadership in the top team (D'Allura, 2019). In terms of the essence of FBs, we focus on the stewardship-oriented culture, which might moderate the FIM-performance relationship.

First, this study contributes to prior literature by addressing the claim that familiness cannot be solely captured by the level of family involvement in the business (Irava & Moores, 2010; Pearson, Carr, & Shaw, 2008). This topic is relevant since the prevalent reasoning of most studies is that the level of family involvement in the group of top executives reflects the level of familiness of the FB (Minichilli et al., 2010). Hence, this study addresses the need to investigate ability and family essence variables simultaneously to explain the association between FIM and FB performance (Basco, 2013; Basco & Voordeckers, 2015). We focus on the presence of a stewardship-oriented culture in the FB, bringing more evidence to the family business literature on existing possible moderators on the relationship between FIM and FB performance. Prior literature has focused on family goals, family identity, firm listing status as possible moderators (e.g., Calabró et al., 2017; Kim & Gao, 2013). Stewardship theory can shed additional light on the understanding of how family involvement in management is related to FB performance, particularly focusing on the agency-suppressing and stewardship-enhancing roles of a stewardship-oriented culture, as a moderator variable. The focus on stewardship as a cultural dimension might provide additional evidence to prior literature that has used mainly a behavioral agency lens (e.g., Basco, 2013; Basco et al., 2019). Our study also considers two different aspects of family involvement in the management of a FB, namely whether a family CEO is present and the ratio of family managers present in the family firm's Top Management Team (TMT). Most of the prior literature on family firm performance has focused exclusively on the ratio of family involvement in the board or management, but not on family CEOs, especially when considering moderating effects on this relationship (e.g., Kim & Gao, 2013).

In addition, despite an extensive screening of multiple databases to identify papers that have discussed the antecedents of FB performance, there is little evidence regarding Brazilian FBs (Beuren, Politelo, & Martins, 2016; Brandt, Kroenke, & Pletsch, 2018; Wagner et al., 2015). For instance, Brazilian FBs have a higher sense of tradition and heritage than Anglo-Saxon FBs (Frezatti, Bido, Mucci, & Beck, 2017; Gupta & Levenburg, 2010) and face particular governance challenges that might affect their performance (Instituto Brasileiro de Governança Corporativa [IBGC], 2019). Hofstede (2001) indicates that Brazilian culture presents a higher level of power distance, collectivism, and risk avoidance than developed economies such as those in the US and

Germany, which might have implications for the role that family and nonfamily managers play in influencing FB performance. Prior studies developed in Brazil have focused on the ownership-performance relationship by comparing FBs to nonfamily businesses (NFBs) (Beuren et al., 2016; Peixoto & Buccini, 2013), while there is little evidence on FIM. Finally, in the international literature, most studies concentrate on small and medium enterprises (SMEs) or on publicly listed firms (e.g., Basco, 2013) from the US and Europe, while there is little attention paid to how FIM affects performance, especially in private FBs, such as those featured in this study. Medium and large private FBs might encompass a higher level of tradition, age, and involvement of different generations of the family in the firm, which might result in different interpretations of the findings of prior studies.

This paper is organized into five sections, including this introduction. In second section, we present the literature and the conceptual model and research hypotheses. In third section, we show the methodology, and in fourth section, we explore the results of the Structural Equation Modeling analysis. Finally, we present the discussions and conclusions and highlight the limitations of this study.

Literature Review and Hypotheses

There is a vast stream of research that has investigated the effects of family involvement in management on FB performance (Rutherford et al., 2008; Wagner et al., 2015). Basically, there are two opposing views on the family's influence on firm performance, depending on whether family involvement is considered an advantage (the bright side of family influence) or a disadvantage (the dark side of family influence) to the firm (Chirico & Bau', 2014; Miller & Le Breton-Miller, 2006; Rutherford et al., 2008). The literature has mainly focused on comparing FBs and NFBs. More recently, there has been emerging literature focusing on the heterogeneity among FBs (e.g., Basco, 2013; Basco et al., 2019; Kim & Gao, 2013) with respect to family involvement (for instance, in ownership, management, and generations) (Chrisman et al., 2012) and family essence characteristics and behaviors (e.g., long-term orientation and stewardship).

The overall model discussed later in this section includes three hypotheses regarding the direct effects, which are grounded in the prior literature concerning the consequences of family involvement in management, and two moderator hypotheses, which are based on the stewardship theoretical background. Family involvement in management is divided into two components: the family affiliation of the CEO and the ratio of family managers in the TMT (Ensley & Pearson, 2005; Minichilli et al., 2010). In the next subsections, we present the underlying rationale for the hypotheses of this study.

The relationship between the presence of a family CEO and firm performance

Chief Executive Officers (CEOs) are leaders of the Top Management Team and are considered the most powerful actors in the organization (Finkelstein & Hambrick, 1996; Finkelstein, Hambrick, & Cannella, 2008). They have the most significant power to influence the FB's

performance because they dominate all the firm's decision-making processes, such as the delegation of responsibilities in the firm's governance structure (González-Cruz & Cruz-Ros, 2016; Minichilli et al., 2010).

Prior literature has suggested that a family CEO might behave altruistically in a firm (Chrisman et al., 2005; Schulze, Lubatkin, & Dino, 2003) and might also have a long-term view of the decision-making process (Miller & Le Breton-Miller, 2006). A family CEO is expected to behave as a steward in the firm, presenting a high level of loyalty, commitment, and identification (Davis, Allen, & Hayes, 2010; Henssen, Voordeckers, Lambrechts, & Koiranen, 2014), which has been conceptualized as the bright side of family involvement (e.g., Minichilli et al., 2010).

In addition, family CEOs usually have lengthy job tenures and long-term investment horizons, and these characteristics have been associated with superior performance (Miller & Le Breton-Miller, 2006). Finally, a FB that has a family CEO would have reduced traditional agency costs for aligning managers' and principals' goals in the firm (Jensen & Meckling, 1976; Madison, Holt, Kellermanns, & Ranft, 2016), which is also expected to enhance FB performance. Based on the previous literature (Anderson & Reeb, 2003; González-Cruz & Cruz-Ros, 2016; Minichilli et al., 2010; Villalonga & Amit, 2006), we hypothesize that:

H1: There is a positive association between the presence of a family CEO and the family firm's financial performance.

The relationship between the ratio of family managers in the TMT and firm performance

The previous empirical literature has suggested that family involvement in management, in terms of the ratio of family managers present in the Top Management Team, is positively associated with FB performance (Rutherford et al., 2008; Sciascia, Mazzola, & Chirico, 2013). These studies indicate that the benefits of a high level for the ratio of family managers in the TMT consist of reduced agency problems, lower agency costs, and reduced information asymmetry (Chrisman, Chua, & Litz, 2004; Miller & Le Breton-Miller, 2006).

With respect to manager behavior, family managers are expected to behave as stewards, generating an individual sense of identification, loyalty, commitment, and trust, among other pro-organizational attitudes and behaviors (Davis et al., 2010; Davis, Schoorman, & Donaldson, 1997; Neubaum, Thomas, Dibrell, & Craig, 2017) expected to be positively related to higher FB financial performance. Family managers, as stewards, might have an intrinsic motivation to serve the principals' interests and, consequently, the firm's goals (Davis et al., 1997; Davis et al., 2010). Therefore, we hypothesize that:

H2a: There is a positive association between the ratio of family managers in the TMT and the family firm's financial performance.

Recent studies have presented conflicting evidence regarding the linear association between family involvement in management, in terms of the presence of family managers in the TMT, and performance (Garcia-Castro & Aguilera, 2014; González-Cruz & Cruz-Ros, 2016). These conflicting findings have motivated researchers to discuss nonlinear relationships among the ratios of family managers both on the board of directors and in the TMT and firm performance (Basco et al., 2019; De Massis, Kotlar, Campopiano, & Cassia, 2015; González-Cruz & Cruz-Ros, 2016; Mazzola, Sciascia, & Kellermanns, 2013; Minichilli et al., 2010).

These studies reveal that the benefits of having family managers in the TMT in terms of the firm's performance are significant only if their involvement is of a certain level (Sciascia & Mazzola, 2008). However, when this involvement reaches a higher degree, the FB faces typical family agency costs (Madison et al., 2016; Villalonga & Amit, 2006) such as nepotism (Jaskiewicz, Uhlenbruck, Balkin, & Reay, 2013) and entrenchment (Chrisman et al., 2005). We argue that at extreme levels of family involvement in the TMT, the within-family agency costs resulting from family managers' conflicts and emotional involvement with the firm exceed the benefits of reduced traditional principal-agent costs (Chirico & Bau', 2014; Chrisman et al., 2004; Lubatkin et al., 2005).

Moreover, a high level of family managers in the TMT leads to a lower diversity of professional skills or a lack of expertise in them (González, Gúzmán, Pablo, & Trujillo, 2020; Patel & Cooper, 2014; Vandekerckhof, Steijvers, Hendriks, & Voordeckers, 2015), which might negatively influence the firm's performance. The presence of nonfamily managers could bring diverse perceptions and expertise to the TMT that are complementary to those of family managers. The presence of nonfamily managers in the TMT might improve the FB's decision-making processes (Chrisman, Memili, & Misra, 2014; De Massis et al., 2015; Vandekerckhof et al., 2015), such as formal strategic and financial planning (Filbeck & Lee, 2000; Speckbacher & Wentges, 2012). In sum, as family managers are constrained by a lack of professional competencies (Dyer, 1989), a high level of family managers in the TMT might negatively influence performance.

In addition, family managers may attribute more value to nonmonetary aspects (e.g., emotions, status) to the detriment of monetary returns, which could have an impact on the firm's financial performance. Therefore, in the case of a high ratio of family managers in the TMT, the controlling family might base decision making on the preservation of their socioemotional wealth to the detriment of financial goals (Gomez-Mejia, Cruz, Berrone, & De Castro, 2011; Kellermanns, Eddleston, & Zellweger, 2012).

In sum, Sciascia and Mazzola (2008) argue that:

the benefits of FIM induced by lower agency costs, the stewardship effect, and lower compensation are not so evident until a certain level of FIM is reached, while, on the other hand, the negative effects deriving from conflict between family managers, nonmonetary goal orientation, reduced professional competencies, and less social capital are more likely to manifest themselves once the FIM percentage approaches 100 (p. 337).

Complementarily, González-Cruz and Cruz-Ros (2016) propose that “an equal mix of family and nonfamily managers brings all the benefits of low agency costs, high and healthy stewardship behavior, and managerial competences” (p. 1453). Hence, we hypothesize that:

H2b: There is an inverted-U-shaped association between the ratio of family managers in the TMT and the family firm’s financial performance.

Moderation by a stewardship-oriented culture

Motivated by the controversial findings in the current literature (Anderson & Reeb, 2003; Garcia-Castro & Aguilera, 2014; Minichilli et al., 2010; Rutherford et al., 2008), recent studies claim there is a need to extend this discussion by also looking at potential essence variables (Basco, 2013; Basco & Voordeckers, 2015), particularly as moderators that could suppress the agency behavioral costs while enhancing the stewardship behavioral benefits (Kellermanns et al., 2012; Le Breton-Miller, Miller, & Lester, 2011; O’Boyle et al., 2012). Considering that a collectivist setting (Wagner et al., 2015) and a long-term perspective (Kim & Gao, 2013) towards the firm might enhance the association between family involvement and performance, we focused on a construct called stewardship-oriented culture (e.g., Zahra et al., 2008). This construct is based on the stewardship theoretical background (Davis et al., 1997). According to Zahra, Hayton, Neubaum, Dibrell and Craig (2008), stewardship-oriented culture indicates the extent to which firms have “developed a collective, supportive, and caring environment for their employees, and provided opportunities for them to reach their potential” (p. 1043).

Therefore, we follow the understanding proposed by Dibrell and Moeller (2011), who argue that a stewardship culture acts as an operant resource by enhancing trust and shared goals within an organization. Our main argument is that when a stewardship-culture is present in FBs, it might suppress family agency behaviors (such as nepotism and entrenchment). In other words, a long-term and collectivist culture might curb family self-interested behaviors that are detrimental to business continuity. Moreover, as a consequence, it may enhance the association between family involvement in the TMT and performance, which has been previously considered a proxy for the bright side of familiness (Kellermanns et al., 2012; Minichilli et al., 2010; Villalonga & Amit, 2006).

Stewardship theory is considered relevant for understanding the performance of FBs, particularly looking at different levels of family involvement (Corbetta & Salvato, 2004; Zahra et al., 2008). There are several arguments that consider a stewardship-oriented culture as a resource (Dibrell & Moeller, 2011; Eddleston & Kellermanns, 2007). According to the resource-based view, a firm’s culture cannot be easily copied by the firm’s competitors. Notably, a stewardship-oriented culture positively relates to the level of communication and cohesion among managers, as well as pro-organizational behaviors, which all create sustainable and inimitable competitive advantage for the firm (Miller & Le Breton-Miller, 2006; Zahra et al., 2008).

The sources of competitive advantage of FBs arise from the differential relational advantages of family-managed firms that are related to the stewardship perspective (Dibrell & Moeller, 2011; Eddleston & Kellermanns, 2007; Eddleston, Kellermanns, & Sarathy, 2007; Zahra et al., 2008). Additionally, the prevalence of altruism, collectivism, and trust in the relationships among the FB managers (Corbetta & Salvato, 2004) can avoid self-interested behaviors and promote congruent efforts to achieve better performance in the firm. The benefits of stewardship derive from a long-term orientation, which favors patient investments (Eddleston, Kellermanns, & Zellweger, 2012). For instance, Kim and Gao (2013) show how a firm's family-longevity goals moderate the relationship between family involvement in management and performance, which can "engender a sense of shared identity and connections among family managers and instill in them strong loyalty and commitment to, and identification with, their organizations" (p. 268).

Prior literature has also conceptualized that a stewardship-oriented culture leads to higher strategic flexibility (Zahra et al., 2008) and an entrepreneurial orientation (Eddleston et al., 2012). However, there is little support regarding how it might enhance performance. Based on the stewardship literature (Davis et al., 2010; James, Jennings, & Jennings, 2017; Madison et al., 2016), we argue that a stewardship-oriented culture might enhance the bright side and also suppress the dark side of family involvement and its effects on performance. Therefore, the degree to which a stewardship-oriented culture exists in the firm may influence the relationship between FIM and performance.

Finally, James, Jennings and Jennings (2017) state that stewardship mechanisms "will empower pro-organizational attitudes and behaviors amongst the majority of steward-like family managers" (p. 264), while agency mechanisms will dampen their motivation. Stewardship governance is aligned with a culture that fulfills managers' needs for autonomy, belonging, and competence (James et al., 2017; Zahra et al., 2008). Particularly, we propose that a stewardship-oriented culture maximizes the benefits of the presence of a family CEO and a high ratio of family managers in the TMT, enhancing the positive effect of familiness on the FB's financial performance. This is aligned with Miller and Le Breton-Miller (2006), who suggest that stewardship "can engender far-sighted contributions that feed distinctive capabilities and produce superior performance" (p. 74). Therefore, we hypothesize that:

H3: The positive association between the presence of a family CEO and the family firm's financial performance will be stronger for higher levels of stewardship-oriented culture than for lower levels of stewardship-oriented culture.

H4: The positive association between the ratio of family managers in the TMT and the family firm's financial performance will be stronger for higher levels of stewardship-oriented culture than for lower levels of stewardship-oriented culture.

We present the theoretical model and hypotheses in Figure 1.

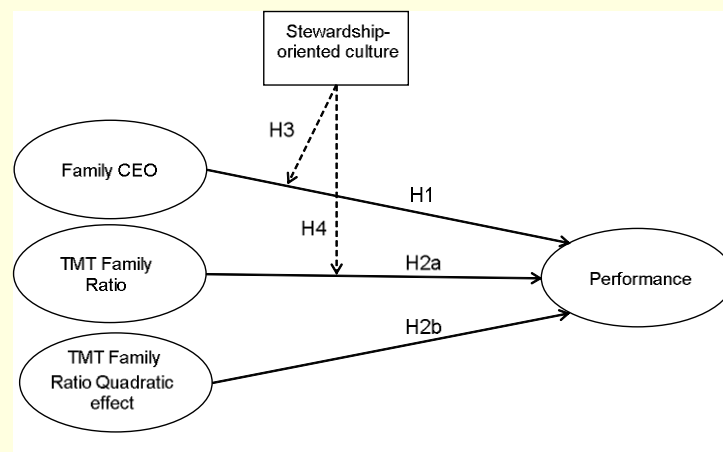


Figure 1. Theoretical model and hypotheses

Methodology

Sample

Since there is not an available dataset with Brazilian private family firms (e.g., Bressan, Schiehl, Procianny, & Castro, 2019), we delimit our target population based on a list of 2,953 firms collected from EMIS® database¹ in 2016 (<https://www.emis.com>). These firms are medium and large-sized, have limited liability or public limited legal status and are not banks, non-profit organizations, multinationals, or semi-state companies. For Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social [BNDES]), medium firms have an annual operating revenue between 4.8 and 300 million BRL, while the figure for large firms is more than 300 million BRL (BNDES, n.d.).

We were able to send the invitation of the survey to most of the firms from this database and received 165 questionnaires. However, we only had available archival information on performance in 2016 for 72 of the firms that completed our survey. Thereafter, we employed an operational definition for family firms, considering that the firms in our sample had to meet at least one of the following criteria: (a) firms that have at least one family member in the top management team or (b) at least 50% of the shares have to be owned by the family (e.g., Basco, 2013; Basco et al., 2019). After applying this operational definition, we obtained a convenience sample of 69 family firms.

We combined the data collected in the questionnaire and archival information collected from the EMIS® database related to performance in 2016. By combining the survey and archival data, we mitigate the problems related to common method variance (Podsakoff, MacKenzie, & Podsakoff, 2012). This research design, which combines two different data sources (survey and archival), has been uncommon in the FB performance literature (e.g., Basco et al., 2019).

The survey procedure follows the recommendations of the research method design established in Dillman (2007). First, as a validity procedure for the stewardship-oriented culture items (Zahra

et al., 2008), the questionnaire was translated into Portuguese and adapted to a five-point Likert scale. Then we translated the questionnaire back into English and compared it to the original English version to check for face validity of the stewardship-oriented culture construct. Second, we applied a pre-test to nonfamily and family managers from medium and large family businesses as well as to an academic. We did not make any changes related to the measures used in this study after the pretest. After the validation of the questionnaire, we sent the first email to invite the respondents to participate, followed up by four reminders between September/2016 and February/2017.

In Table 1, we present the characteristics of the respondents of our survey. Our sample is composed of firms that have a heterogeneous distribution regarding the ratio of family managers in the TMT as well as a high percentage of family managers as the CEOs of the FBs (75.36%). In the case of 66.67% of the respondents, the controlling family owns 100% of the firm's shares. Most of the firms in our sample have been operating for more than 51 years (75.36%). Regarding the respondents, 49.28% report to the board of directors (Tier 1), 47.83% report to the TMT, and 2.9% report to middle managers. Our informants are mainly nonfamily managers (81.16%) and have been working in the respective firms for more than ten years (62.32%). Prior studies have also focused on experienced managers as informants regardless of whether they are family or nonfamily managers (e.g., Basco et al., 2019; Minichilli et al., 2010). According to the EMIS® database, 52.17% of our sample is composed of firms whose financial information was audited. Despite this limitation, we argue that this characteristic of our sample is not particularly adverse since the sample is composed of private FBs.

Table 1

Sample descriptive information

	n	%		n	%
<u>Panel A: Firm information</u>			<u>Panel B: Respondent information</u>		
Panel A1: Percentage of family members in the TMT			Panel B1: Respondent's hierarchical level		
No family members	14	20.29%	Tier 1	34	49.28%
More than 0% and up to 25%	15	21.74%	Tier 2	33	47.83%
More than 25% and up to 50%	20	28.99%	Tier 3	2	2.90%
More than 50% but less than 100%	9	13.04%	Panel B2: Family affiliation		
100%	10	14.49%	Nonfamily manager	56	81.16%
Missing	1	1.45%	Family manager	11	15.94%
Panel A2: Is the CEO from the controlling family?			Founder	2	2.90%
Yes	52	75.36%			
No	17	24.64%			

Continues

Table 1 (continued)

	n	%		n	%
Panel A3: Family involvement in ownership*			Panel B3: Respondent's tenure		
The family owns 100% of the shares	46	66.67%	Between 1 and 5 years	10	14.49%
There are majority and minority shareholders	23	33.33%	Between 6 and 10 years	16	23.19%
			More than 10 years	43	62.32%
Panel A4: Firm age					
Between 1 and 20 years	3	4.35%			
Between 21 and 50 years	13	18.84%			
More than 51 years	52	75.36%			
Missing	1	1.45%			

Note. * Family involvement in ownership is a control variable in the model and was measured as a dummy variable indicating whether the controlling family holds 100% of the family business' shares (value=1).

Measures

The study combines measures obtained in a survey that contains validated scales that were used in studies published in the FB literature with archival information related to FB performance (See Table 2).

Table 2

Description of the measurement of the independent and dependent variables

Construct	Variable	Item	Scale	Source	Reference
Family involvement in management	Family CEO	Is the CEO (or another executive that holds the highest position in the business) from the controlling families?	Dummy	Survey	
	The ratio of family managers in the TMT	(i) Number of executives in the Top Management Team (TMT). (ii) Number of executives in the TMT that are from the controlling families. Members of the Top Management Team (TMT) are those executives that report directly to the CEO or to a similar executive that holds the highest position in the organization, including the CEO.	The ratio of ii/i (from zero to one)	Survey	D'Allura (2019); Minichilli, Corbetta and MacMillan (2010)
Stewardship-oriented culture	Stewardship-oriented culture (4 reflective-items)	STEWcult_1. Your company allows managers to reach their full potential in terms of contributing to the company. STEWcult_2. Your company promotes a professionally orientated workplace. STEWcult_3. Your company inspires managers' care and loyalty to the company. STEWcult_4. Your company encourages a collectivist culture focused on the business group rather than an individualistic culture.	Likert-type scale (5 points)	Survey	Zahra et al. (2008)

Continues

Table 2 (continued)

Construct	Variable	Item	Scale	Source	Reference
Financial performance	ROA (Return on Assets)	The ratio of EBIT and Total Assets. ^a	Percentage	Archival (EMIS database)	Martins, Diniz and Miranda (2012)
	ROS (Return on Sales)	The ratio of Net Profit after Tax and Net Operating Sales. ^a	Percentage	Archival (EMIS database)	

Note. ^a Prior studies (e.g., Basco et al., 2019; Minichilli et al., 2010) used the numerator: net operating income before extraordinary items. For ROA, we used EBIT as the numerator, since NOPAT (Net Operating Income after Taxes) was not available in the database, and we used profit after tax for ROS.

Family involvement in management. We used two indicators for family involvement in management. One is the percentage of family managers in the Top Management Team (TMT Family Ratio), also treated as a quadratic variable, and the other is a dummy variable measuring if a family member is the CEO of the FB (Family CEO).

Stewardship-oriented culture. We captured stewardship-oriented culture (Stewardship) based on a 4-item multidimensional scale adapted from Zahra et al. (2008), which indicates “the degree to which a stewardship culture exists within the family firm” (p. 1042). This latent variable presented convergent validity and composite reliability based on the following parameters: (a) 0.897 for Composite Reliability and (b) 0.686 for Average Variance Extracted (AVE).

Performance. We used two indicators that have been widely used in the FB literature for the familiness-performance relationship (De Massis et al., 2015; Garcia-Castro & Aguilera, 2014; Minichilli et al., 2010; Rutherford et al., 2008; Wagner et al., 2015), these being: (a) Return on Sales (ROS) and (b) Return on Assets (ROA). All these indicators were obtained from the EMIS® database, and for six firms we complemented them by using the information available in the Valor® 1000 publication. Financial performance was measured as a percentage for 2016. Return on Sales was measured as the ratio between the net profit after taxes and total net operating sales. Return on Assets was measured as the ratio between the EBIT (Earnings before Interests and Taxes) and total assets. We used these two indicators of performance because they might capture different facets of performance that are influenced by different decisions of the TMT. We considered industry-adjusted measures, which were calculated by subtracting the firm performance measure from the median industry level (De Massis et al., 2015), taking into account the firms’ activity described in the EMIS® database, which includes the firms’ financial information for 2016. We estimated the performance measures adjusted with respect to the median of the industry. To do this for each firm in our sample, we paired the firms and their competitors, matching the first activity of the firms in our sample with the other firms’ activity description. This procedure is relevant due to differences between industries regarding, for example, market opportunities and constraints. For five firms, due to the lack of information in the EMIS® database about competitors that operate in the same industry as the firms, we did not adjust their profitability measures in relation to their industry.

Controls. We controlled the FB's performance by the firm's size, which was measured as the logarithm of total assets, and by the firm's age (measured as age in years). We also controlled for family involvement in ownership using a dummy variable indicating if the controlling family holds 100% of the family business' shares (value=1). These variables were also used in prior studies (e.g., Basco et al., 2019; Kim & Gao, 2013).

Data analysis methods

We applied the Structural Equation Modeling (SEM-SmartPLS) multivariate technique to test the theoretical model. We used the variance-based SEM technique in the SmartPLS software because it has a number of advantages (Hair, Hult, Ringle, & Sarstedt, 2013; Hair, Sarstedt, Ringle, & Gudergan, 2017; Nitzl, 2016; Sarstedt, Ringle, Smith, Reams, & Hair, 2014): (a) it does not impose the data distribution assumptions as in regression analysis, and in our model some items have a nonnormal distribution, such as stewardship-oriented culture; and (b) it is possible to estimate complex models reliably with fewer observations.

We checked the post-hoc results in the GPower 3.1.9.2 software (Faul, Erdfelder, Lang, & Buchner, 2007) to evaluate the application of SmartPLS with our sample size, as suggested by Nitzl (2016). We obtained a statistical power higher than 0.8 (less than 20% type II error) for a minimum sample of 52 respondents, based on the following parameters (Nitzl, 2016): (a) 5% significance level (type-I error); (b) detection of strong relative effect (f^2 higher than 0.35); and (c) having eight predictors in our model. Therefore, despite our small sample size, our model can show statistically significant relationships.

Data Analysis

Descriptive statistics

We present the descriptive statistics of the constructs in Table 3. We show the firms' financial information for 2016 in terms of Total Operating Revenue, Total Assets, and Total Equity. The firms' Total Assets range between 13.91 million and 14.80 billion reais (BRL). We use the logarithm of Total Assets as a control variable for firm size.

Table 3

Sample descriptive statistics

Variable	n	Mean	Std. Dev.	Min	Max
TOpRev_16 (million BRL)	69	694.07	886.65	2.38	4,228.95
Tassets_16 (million BRL)*	69	878.02	1,990.97	13.91	14,801.59
Tequity_16 (million BRL)	69	273.58	487.01	-1,645.36	2,648.36
EBIT_16 (%)	69	50.11	103.05	-108.21	467.42
Net_profit_16 (%)	69	2.88	226.07	-1,746.94	303.41
ROS_16 (%)	69	2.43	14.38	-49.97	37.55
ROA_16 (%)	69	7.40	14.40	-50.62	73.82
STEWcult_1	69	3.81	1.00	1.00	5.00
STEWcult_2	69	3.67	1.11	1.00	5.00
STEWcult_3	69	4.20	0.80	2.00	5.00
STEWcult_4	69	3.90	1.05	1.00	5.00

Note. TOpRev_16 (Total Operating Revenue in 2016), Tassets_16 (Total Assets in 2016), Tequity_16 (Total Equity in 2016), EBIT_16 (Earnings before Interests and Taxes in 2016), Net_profit_16 (Profit after taxes in 2016) ROS_16 (Return on Sales in 2016), ROA_16 (Return on Assets in 2016). STEWcult_1 to STEWcult_4 are stewardship-oriented culture indicators. On July 28, 2019, US\$ 1 was equivalent to BRL 3.78.

* Firm's size is a control variable in the model and was measured as the logarithm of total assets. Of these firms, 52.17% are audited.

Additionally, we present the statistics of the performance measures, which are ROS (Return on Sales) and ROA (Return on Assets). The average scores for these variables are 2.43% and 7.40%, respectively. It is important to mention that in our analysis, we used the industry-adjusted performance measure, which was estimated by subtracting the firm's performance from the median in the industry (see second subsection of Data Analysis).

Concerning stewardship-oriented culture, the highest mean score the respondents indicated was for the firm inspiring managers' care and loyalty to the company (4.20) and the lowest mean score was for the statement related to promoting a professionally-orientated workplace (3.67).

Measurement model assessment

We validated the measurement model for the analysis of reflective measurement models in accordance with Hair, Hult, Ringle and Sarstedt (2013). The evaluation of reflective models includes convergent validity, internal consistency, and discriminant validity. We conducted this evaluation exclusively for the stewardship-oriented culture latent variable since the other variables are single items that are directly observable variables. Our results meet the criteria suggested by Hair et al. (2013) regarding the validity and reliability of stewardship-oriented culture, whose parameters we present in second subsection of Methodology. According to Hair et al. (2013): (a) composite reliability should be above 0.7; (b) outer loadings should be above 0.7 or at least above 0.4; and (c) the Average Variance Extracted should be above 0.5. In terms of the discriminant validity, we used both cross-loadings and the Fornell-Larcker criterion (Fornell & Larcker, 1981).

For the Fornell-Larcker matrix, the diagonal (which is the square root of the AVE) of each latent variable is expected to be greater than the highest correlations between the latent variables (Hair et al., 2013). After applying these analyses, we validated the stewardship-oriented culture latent variable.

Structural model analysis

We analyzed the structural model following a set of steps (Hair et al., 2013). In the first step, we analyzed multicollinearity based on the Variance Inflation Factor (VIF). Our results indicate values below 2.24 (e.g., for the ROS dependent variable in Model 7), while the recommendation is lower than five. Second, we analyzed the statistical significance of the structural path coefficients by running the bootstrapping procedure (1,000 subsamples, bias-corrected confidence level, and two-tailed tests). Additionally, we calculated the R^2 , which indicates the percentage of a dependent variable's variance that is explained by the independent variables and moderators in the model. We also present the results for the adjusted coefficient of determination ($Adj R^2$), as suggested by Hair et al. (2013).

Our model shows a quadratic effect of the ratio of family managers in the TMT (TMT Family Ratio²) and has a moderator variable, which is stewardship-oriented culture. Hair et al. (2013) indicate three different procedures for moderator effects. The three procedures are the product indicator approach, the two-step approach, and the orthogonal. Hair et al. (2013) explain that for reflective constructs the two-step approach can be used to reveal the significance of the moderating effect, while the orthogonal approach is recommended to minimize estimation bias (due to multicollinearity between the predictive variables and the multiplicative term of the interaction) and maximize predictive ability. Due to the objectives of this study, we ran the analysis based on the orthogonal approach for moderation. The orthogonalization approach uses standard residuals as indicators for the interaction term (Hair et al., 2013). Additionally, we ran two different models based on two different financial industry-adjusted performance measures (e.g., De Massis et al., 2015), which are (a) Return on Sales (ROS) and (b) Return on Assets (ROA). We present the results in Tables 4 and 5. We present seven models that were built step by step considering the inclusion of the independent and moderating variables. In Model 1, the results are presented for the presence of a family CEO, and Model 7 includes all the independent and moderating variables.

Table 4

Structural model – ROS dependent variable

Dependent variable: ROS Path coefficients n=69	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Controls							
Firm size	0.172	0.135	0.136	0.111	0.073	0.076	0.079
Firm age	-0.047	-0.076	-0.072	-0.081	-0.095	-0.091	-0.090
Ownership	0.092	0.150	0.148	0.142	0.132	0.131	0.131
Independent variables							
Family CEO	0.252†	0.345*	0.356*	0.301	0.323*	0.347†	0.356
TMT Family Ratio		-0.246†	-0.272	-0.257	-0.245	-0.294	-0.298
TMT Family Ratio ²			0.038	0.041		0.067	0.067
Stewardship				0.010	0.014	-0.003	-0.005
Interactions Stewardship							
Family CEO * Stewardship					-0.441***	-0.445***	-0.455**
TMT Family Ratio * Stewardship				-0.174			0.029
R ²	0.074	0.117	0.119	0.139	0.284	0.288	0.288
Adj R ²	0.016	0.047	0.033	0.025	0.202	0.193	0.180

Note. † 0.10-level. * 0.05-level. ** 0.01-level. *** 0.001-level.

Table 5

Structural model – ROA dependent variable

Dependent variable: ROA Path coefficients n=69	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Controls							
Firm size	0.114	0.109	0.109	0.081	0.054	0.055	0.049
Firm age	0.099	0.095	0.096	0.058	0.049	0.052	0.047
Ownership	0.237*	0.246**	0.245*	0.240*	0.228*	0.225*	0.224*
Independent variables							
Family CEO	0.163	0.178	0.180	0.138	0.183	0.208	0.179
TMT Family Ratio		-0.039	-0.045	-0.062	-0.045	-0.100	-0.091
TMT Family Ratio ²			0.008	0.061		0.078	0.080
Stewardship				-0.120	-0.111	-0.136	-0.133
Interactions Stewardship							
Family CEO * Stewardship					-0.403**	-0.407**	-0.370*
TMT Family Ratio * Stewardship				-0.272†			-0.105
R ²	0.086	0.087	0.087	0.150	0.239	0.243	0.250
Adj R ²	0.029	0.015	0.000	0.037	0.151	0.143	0.135

Note. † 0.10-level. * 0.05-level. ** 0.01-level. *** 0.001-level.

The relationship between family CEO and firm performance

Table 4 shows a statistically significant and positive association between Family CEO and ROS (Models 1, 2, 3, 5, and 6), thus supporting H1. However, our results do not support a positive association between the presence of a family CEO and ROA (see Table 5).

This result is aligned with previous empirical evidence that a family CEO may behave altruistically and as a steward (e.g., loyalty, commitment), serving the best interests of the principals (González-Cruz & Cruz-Ros, 2016; Miller & Le Breton-Miller, 2006; Minichilli et al., 2010). In alignment with empirical evidence from prior literature, we suggest that family leadership, concerning the CEO position, has a positive influence on the FB's performance. Some authors interpret this association as the bright side of family involvement in the firm (Minichilli et al., 2010; Villalonga & Amit, 2006).

The relationship between the ratio of family managers in the TMT and firm performance

Our results contradict hypothesis H2a regarding the positive association between family involvement in management and FB performance. Our analysis mainly supports a negative association between the ratio of family managers in the TMT and ROS (only in Model 2) and a nonsignificant association between TMT Family Ratio and ROA. In addition, unlike in prior literature, our result does not support a nonlinear association, whose discussion has been based on the inverted U-shape relationship (expertise and competences mix among family and nonfamily managers) (González-Cruz & Cruz-Ros, 2016; Sciascia & Mazzola, 2008). Therefore, hypotheses H2a and H2b were not supported. Based on a study of non-listed Spanish firms focused on the board of directors, Arosa, Iturralde, and Maseda (2010) claim that a significant relationship between involvement and performance cannot be assumed since individuals have particular roles and characteristics (e.g., behavioral, expertise). Another interpretation for this nonsignificant result might come from the sample's characteristics. Most of the firms of the sample are large-sized, founded more than 50 years ago and owned by the second and third generations of the family. This means that those FBs are able to hire nonfamily managers with expertise and that those family managers involved in the firm might also show professional skills that are aligned with a top management position. In addition, those complex and mature FBs might also have implemented formal governance mechanisms that are expected to suppress family agency conflicts (e.g., Purkayastha, Veliyath, & George, 2019). Therefore, different from our hypotheses and based on our sample's characteristics, family involvement in management might not induce a higher level of performance (H2a), even when there is a mix of family and nonfamily expertise (H2b).

Moderation by a stewardship-oriented culture

Table 4 and Table 5 show a significant moderating effect for the association between the presence of a family CEO and performance (H3) and not for the ratio of family managers in the TMT

(H4). These results were supported by both dependent variables, these being ROS (Models 4, 5, and 6) and ROA (Models 4, 5, and 6). In Figure 2 (Panel A), we show that firms without a family CEO and that have a higher stewardship-oriented culture perform slightly better than those with a lower stewardship-oriented culture, in terms of ROS. The difference is much more representative with the presence of a family CEO, however not as we hypothesized. A FB that has a family CEO and a low level of stewardship-oriented culture shows a higher performance than one that has a family CEO and a high level of stewardship-oriented culture. It could be that through excessive trust and absence of formal monitoring and incentive systems, principal-agent costs and within family agency costs are not controlled.

Additionally, the difference among the points on the graph (Figure 2, Panel A) is much more representative in the case of a low level of stewardship-oriented culture than for a high level. We expected a family CEO who theoretically behaves as a steward to increasingly influence performance in the case of a high level of stewardship-oriented culture, which was not supported by our results. This finding contradicts previous literature that suggests that stewardship governance and culture improve the financial performance of FBs (James et al., 2017; Madison et al., 2016; Madison, Kellermanns, & Munyon, 2017). It might be the case that a stewardship-oriented culture relates to a low level of adoption of formal monitoring mechanisms. Therefore, when there is a family CEO, stewardship can foster (instead of curbing) family agency problems, which consequently decreases FB performance. On the other hand, for a nonfamily CEO, a stewardship-oriented culture might help to mitigate type-I agency costs and to align interests more easily, which consequently increases FB performance. Another element that might generate these contradictory results is that we have not considered the level of CEO autonomy and CEO stewardship behavior (Henssen et al., 2014).

Finally, a stewardship-oriented culture's moderating effect on the association between the ratio of family managers in the TMT and FB performance was not statistically significant at the 5% significance level (H4). Based on this result, a stewardship-oriented culture might not enhance the bright side or suppress the dark side of familiness derived from family managers' involvement in the TMT (Kellermanns et al., 2012). This finding contradicts Kim and Gao (2013), who found a moderating effect of family-longevity goals on the FIM-performance relationship. However, Kim and Gao (2013) focused on young FBs (about 65% with less than 10 years) and also on small and medium FBs, while our study focused on medium and large FBs founded more than 50 years ago and which are owned by second and third generations. Therefore, due to the size and underlying complexity of the family businesses in our sample, there might be other antecedents regarding governance that are expected to have an influence on the performance of those FBs. For instance, the design of monitoring and incentive, which are agency-type governance mechanisms, might deserve further investigations (e.g., Madison et al., 2017). On the other hand, based on a meta-analysis, O'Boyle, Pollack and Rutherford (2012) show that at a national level, power distance and collectivist cultures do not moderate the FIM-performance relationship. Our study contributes to this debate at an intra-firm cultural level and opens the debate if a stewardship-oriented culture is a crucial moderator for FIM-performance relationship.

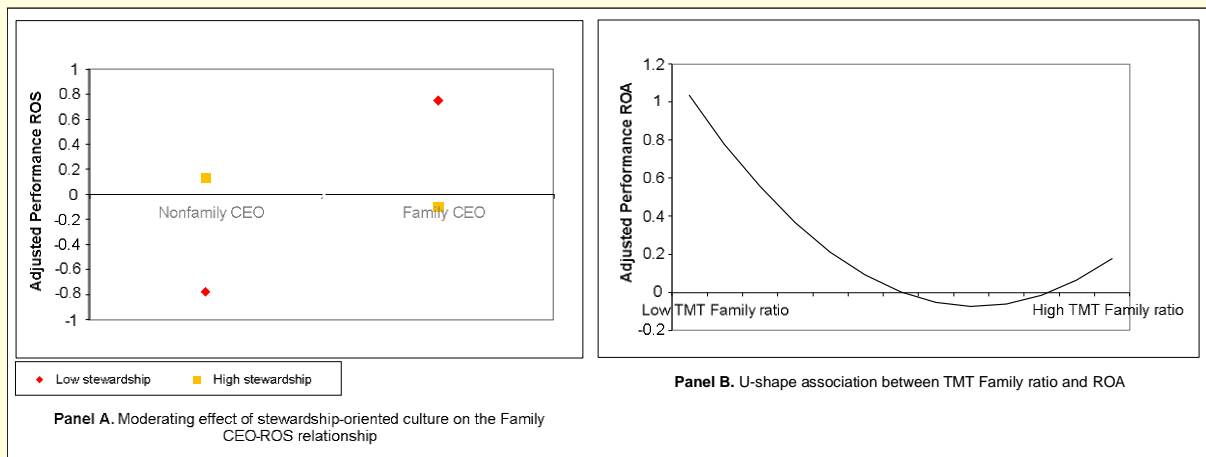


Figure 2. Moderating and quadratic effects

Panel A was plotted using the coefficients of the multivariate model, controlling for the other variables (see Tables 4 and 5). We used the coefficients of Model 5 to plot the graph. Panel B was plotted using the coefficients of the multivariate model. We used the coefficients of Model 6 to plot the graph, considering the results for the subsample of 64 firms discussed in the additional analysis subsection.

Additional analysis

To strengthen our findings, we ran additional analysis based on a subsample of 64 family businesses that were not facing financial distress. Therefore, we excluded from our sample four firms that had negative equity and one that had Return on Sales lower than -30%. In the additional analysis, we ran seven models similar to Table 4 and Table 5, which we detail below. The results are presented in Appendix.

First, the results support the positive association between Family CEO and performance (H1), considering ROA and ROS as dependent variables. As in the sample analysis, our additional analyses support the moderating effect of stewardship on the relationship between Family CEO and performance (H3). This result confirms the findings from the sample analysis and extends prior literature (e.g., Kim & Gao, 2013) concerning the moderating effect on the Family CEO and performance relationship.

With respect to the ratio of family managers in the TMT, the results of the additional analyses contradict hypothesis H2b and support a U-shape association between TMT Family Ratio and performance, both for the ROS and ROA dependent variables. In Figure 2 (Panel B), we demonstrate that a predominance of one subgroup in the TMT, whether family managers or nonfamily managers, is related to a higher level of Return on Sales and Return on Assets. On the other hand, when the TMT mixes both family and nonfamily managers, Figure 2 (Panel B) shows a lower level of performance in terms of ROA. These results contradict the hypothesis regarding an inverted-U-shaped association and support a U-shaped relationship. A TMT composed exclusively of nonfamily managers presents the highest level of performance, which is consistent with Minichilli et al. (2010), who developed a study using small and medium Italian FBs (Chirico & Bau', 2014; Sciascia & Mazzola, 2008).

Minichilli et al. (2010) claim that “tensions and conflicts emerge when both ‘principal’ (owners and family members) and ‘agents’ (nonfamily managers) coexist in the same decision-making arena” (p. 217). In FBs, there are two basic subgroups, which are family and nonfamily managers. While family managers share common values related to their relatives and emotional attachment to the firm, nonfamily managers share professional values and the feeling that they are outsiders of the family clan (Davis et al., 2010; Lubatkin et al., 2005; Verbeke & Kano, 2012). This argument is aligned with the faultlines concept suggested by Minichilli et al. (2010), which determines that faultlines occur in a Top Management Team that is composed of both family and nonfamily managers. These faultlines depend on the schisms due to the presence of both family and nonfamily managers, which has been discussed in the TMT heterogeneity literature (Certo, Lester, Dalton, & Dalton, 2006; Lau & Murnighan, 1998). For instance, these schisms might relate with tensions regarding short and long term outcomes, economic and noneconomic goal tradeoffs (Berrone, Cruz, & Gomez-Mejia, 2012; Gomez-Mejia et al., 2011), as well as the design of agency and stewardship mechanisms that fits the manager’s behaviors (James et al., 2017; Madison et al., 2017). Therefore, these schisms can cause conflicts between the subgroups of family and nonfamily managers, which would negatively affect FB performance. Recently, Basco, Campopiano, Calabrò and Kraus (2019) showed evidence of a U-shaped association between the ratio of family members in the board of directors and performance, in a study developed using small and medium Spanish FBs owned mainly by first and second generations, whose arguments were also based on the faultlines theory. Hence, our study corroborates the findings from Basco et al. (2019) and Minichilli et al. (2010) regarding the existence of faultlines in the management team of medium and large FBs mainly from second and third generations. Finally, in terms of the moderating effect on the FIM-performance relationship, our results from the additional analysis do not support any significant relationship (H4) suggesting that stewardship does not suppress family agency problems neither mitigate the conflicts between family and nonfamily managers in later generations and more complex FBs.

Discussion and Conclusions

This study discusses the association between family involvement in management and the FB’s financial performance, considering stewardship-oriented culture as a moderator of this relationship. Although much evidence on this subject can be found in the literature, prior studies have offered contradictory findings, and one of the reasons is that few studies have contextualized the family involvement and performance relationship by considering ability and essence dimensions simultaneously (Basco, 2013; Basco & Voordeckers, 2015). For instance, recent studies have looked at family-longevity goals (Kim & Gao, 2013) and objective achievement perceptions (Basco et al., 2019). We considered stewardship-oriented culture as a resource that is discussed in the familiness theoretical approach, and that might help to address the call to examine family essence aspects and the moderators that might enhance or suppress this relationship in the family business field.

In line with prior literature (González-Cruz & Cruz-Ros, 2016; Minichilli et al., 2010), we found that family involvement in management is associated with FB performance, in particular given

the presence of a family CEO. Unlike in the previous literature, we considered the moderating role of a stewardship-oriented culture in this relationship, since it was considered a contextual element that might enhance the benefits or suppress the typical agency costs related to family involvement in management. This paper suggests that a high level of stewardship-oriented culture, which means a collective, supportive, and caring environment, combined with the presence of a family CEO, produces a low level of performance (ROS and ROA). However, in the case of a low level of stewardship-oriented culture, the presence of a family CEO enhances the FB's performance.

Therefore, we find that a stewardship-oriented culture might not be able to mitigate family agency conflicts in the case of the presence of a family CEO. However, we do observe that a stewardship culture might suppress type-I agency conflicts when a nonfamily CEO is present in private FBs of medium or large size and of a later generation; differences in family involvement in management are still additional variables to consider when explaining family firm performance.

Additionally, the results for the association between the ratio of family managers in the TMT and the FB's performance suggest a nonlinear relationship, in particular, a U-shaped one, which was supported by the additional analysis. In line with prior empirical evidence (Minichilli et al., 2010), we find that the presence of only nonfamily managers or family managers in the TMT is positively associated with the FB's performance. Our findings indicate that when there are two almost equal groups of family and nonfamily managers (U-shape) in the TMT, conflicts and tensions between these family and nonfamily manager subgroups have a negative influence on firm performance (Basco et al., 2019; Lubatkin et al., 2005; Minichilli et al., 2010).

This study contributes to the family business literature in multiple ways. First, as called for by Basco (2013) and the recent advancements in the field (e.g., Basco et al., 2019; Kim & Gao, 2013), we analyzed both the composition of the TMT and family essence as determinants of family firm performance. Family essence was studied in terms of the stewardship-oriented culture. The focus on a cultural dimension such as stewardship is crucial since it might show different findings from prior literature such as Basco et al. (2019), which have used behavioral agency arguments. Notably, the stewardship lens has attracted recent attention from scholars as an element to fit family managers' behaviors as well as to explain family firm performance (e.g., James et al., 2017).

Second, this study focuses on differences related to family involvement in management within FBs. The level of family involvement in the management of the FB in terms of whether a family CEO is present and the ratio of family managers in the TMT has, as far as we know, not been investigated in Brazilian FBs.

Third, we also contribute to the literature in terms of using objective measures for firm performance, and we conduct the research using a sample of medium and large FBs from an emerging economy (Kim & Gao, 2013). Previous studies have mainly focused on small and medium enterprises from Europe and the United States, which might have different institutional and cultural characteristics that tend to influence FBs (Basco, 2013; Wagner et al., 2015). Family

firms from emerging economies such as Brazil may have a concentrated level of family ownership and might be more likely to present a one-tier governance model (Frezatti et al., 2017; IBGC, 2019). In addition, FBs that operate in Brazil may be influenced by a particular national culture in terms of higher levels of power distance, collectivism, and risk avoidance (Hofstede, 2001), which together affect the way family members influence business decisions and consequently performance.

Despite the contributions that this paper provides, our findings are subject to some limitations. First, this study is developed based on cross-sectional data that combine survey data (family involvement in management and stewardship) with archival data (financial information). As a result of the research design and the tests we carried out, we do not think that the data suffer from common method variance (Podsakoff et al., 2012). However, as we focus on cross-sectional data, we are not able to draw causal conclusions.

In addition, we used a convenience sample of medium and large private Brazilian FBs, which involves limitations in terms of generalization. Although we developed analyses using a small sample size ($n=69$), due to the complexity of the information and the availability of the archival data, we consider the sample to be relevant for this study especially with respect to private FBs. Despite these considerations, the results show statistical significance, while some support and others contradict previous literature. Our study focused on two profitability measures, ROA and ROS, which have been commonly used by previous research (e.g., De Massis et al., 2015; Garcia-Castro & Aguilera, 2014; Minichilli et al., 2010).

We suggest future avenues for research. First, future studies could consider the coexistence of both stewardship and agency governance mechanisms as moderators for the relationship between family involvement in management and performance to explain the conflicting findings in prior literature (e.g., Chrisman, 2019; Madison et al., 2017). Family-longevity goals might enhance FIM-performance relation in young small and medium FBs (e.g., Kim & Gao, 2013), however in large FBs there might be other mechanisms, such as agency-type mechanisms, that enhance this relationship. In addition, there is a need for more studies to investigate the faultlines issue, particularly for large and later generation FBs, which could bring more insights to explain family involvement and performance relation (e.g., Basco et al., 2019; Minichilli et al., 2010).

In terms of research design, we suggest future studies to examine these associations based on performance change measures such as change in profitability or growth of total operating revenue (e.g., Rutherford et al., 2008), since the effect of stewardship on performance might be in the long term (Corbetta & Salvato, 2004). Self-reported performance measures (rated as relative performance compared with the main competitor) might also be used (e.g., González-Cruz & Cruz-Ros, 2016; Rutherford et al., 2008; Sciascia & Mazzola, 2008) in periods of economic crisis despite their subjectivity. Additionally, as FBs have both financial and nonfinancial goals related to socioemotional wealth preservation (Berrone et al., 2012), future studies might consider both financial and nonfinancial performance measures as dependent variables. Finally, longitudinal studies could provide a complementary view regarding how the familiness dimensions related to the family's involvement in management influence FB performance, which could capture the

bright and dark sides of family involvement in the firm in the long term (Lubatkin et al., 2005; Minichilli et al., 2010; Villalonga & Amit, 2006).

Note

¹ EMIS is a worldwide database that includes analytical data and reports of organizations for over 125 countries emerging markets (<https://www.emis.com/who-we-are>).

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APPENDIX

Additional analysis

Structural model – ROS dependent variable

Dependent variable: ROS Path coefficients n=64	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Controls							
Firm size	0.061	0.001	0.004	0.021	-0.007	0.003	0.016
Firm age	0.022	-0.028	-0.020	-0.038	-0.093	-0.085	-0.070
Ownership	0.123	0.194	0.179	0.168	0.175	0.144	0.150
Independent variables							
Family CEO	0.224	0.359**	0.394**	0.427**	0.363*	0.435**	0.495**
TMT Family Ratio		-0.384***	-0.468**	-0.540***	-0.409***	-0.581***	-0.615***
TMT Family Ratio ²			0.132	0.245*		0.269*	0.293**
Stewardship				-0.318	-0.237	-0.329	-0.336
Interactions Stewardship							
Family CEO * Stewardship					-0.363**	-0.380***	-0.451***
TMT Family Ratio * Stewardship				0.001			0.200
R2	0.058	0.169	0.185	0.273	0.338	0.398	0.422
Adj R2	0.000	0.097	0.099	0.168	0.255	0.311	0.325

Note. † 0.10-level. * 0.05-level. ** 0.01-level. *** 0.001-level.

Structural model – ROA dependent variable

Dependent variable: ROA Path coefficients n=64	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Controls							
Firm size	0.014	-0.015	-0.012	0.005	-0.017	-0.007	-0.007
Firm age	0.149	0.126	0.132	0.063	0.022	0.022	0.023
Ownership	0.224**	0.257**	0.246**	0.248*	0.237*	0.214*	0.213*
Independent variables							
Family CEO	0.134	0.196	0.223	0.257	0.241	0.317*	0.321†
TMT Family Ratio		-0.178	-0.242	-0.334*	-0.241†	-0.402**	-0.404**
TMT Family Ratio ²			0.100	0.199		0.236*	0.237*
Stewardship				-0.309	-0.253	-0.332	-0.333
Interactions Stewardship							
Family CEO * Stewardship					-0.391**	-0.409***	-0.414**
TMT Family Ratio * Stewardship				-0.180			0.014
R2	0.080	0.103	0.113	0.218	0.295	0.342	0.342
Adj R2	0.017	0.026	0.020	0.105	0.206	0.246	0.232

Note. † 0.10-level. * 0.05-level. ** 0.01-level. *** 0.001-level.