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Family Control and Innovativeness in Private Firms: The Mediating Role of Board Task Performance

Abstract

Purpose – Whereas the majority of research explores the direct relationship between family control and innovativeness, this research paper investigates mediators that explain how family control is related to innovativeness. Grounded in agency theory, resource dependence theory, and the resource-based view of the firm, we suggest that this relationship operates through board task performance, that is, the level of directors' involvement in (1) control and (2) service tasks.

Design/methodology/approach – To test the hypotheses, structural equation modeling is applied to cross-sectional survey data collected from 329 private firms that are located in Belgium. Family control is defined as 50 percent family ownership in combination with at least one family member being involved in the management or board of directors of the firm.

Findings – Four key results emerge from our analysis. First, family control is negatively associated with control task performance but does not affect service task performance. Second, control and service task performance positively influence innovativeness. Third, the negative relationship between family control and innovativeness is partially mediated by control task performance. Fourth, the presence of a family CEO and the percentage of family directors address heterogeneity among family-controlled firms.

Originality/value – This paper complements and extends existing research on the relationship between family control and innovativeness by adopting a governance perspective. We contribute to a deeper understanding of *why* family-controlled firms are more or less innovative than nonfamily-controlled firms and reveal underlying mechanisms previously uncovered.

Keywords Family control, innovativeness, board task performance, private firm

Paper type Research paper

1. Introduction

Why are some firms more innovative than other firms? This is a pivotal question, given the crucial role of innovation in shaping firm performance, whether firms are new entrants or incumbents (Rosenbusch et al., 2011). Relying on the innovativeness dimension of the entrepreneurial orientation (EO) construct to delineate innovative firms from more conservative ones (Covin and Slevin, 1991; Lumpkin and Dess, 1996), this study focuses on family control as an antecedent of innovativeness. According to Dibrell et al. (2011), innovativeness can be defined “as a firm’s willingness to place a strong emphasis on technological developments, new products, new services, and/or improved product lines or processes” (p.469). As such, innovativeness is an entrepreneurial behavior that leads to innovation. By focusing on innovativeness rather than innovation output as its outcome, we aim to open up the black box on innovation in SMEs and offer more insight on possible mechanisms that may enable family-controlled firms (FCFs) to achieve superior performance than nonfamily-controlled firms (NFCFs). Indeed, Schumpeter (1934) and other scholars (e.g., Lumpkin & Dess, 1996) argue that innovativeness can lead to a competitive advantage that in turn drives increased firm financial performance.

Family-controlled firms (FCFs) quite plausibly vary in their level of innovativeness relative to nonfamily-controlled firms (NFCFs) since they are governed by a unique set of preferences and goals (Miller et al., 2015). In particular, scholars have focused on two opposing perspectives regarding the implications of family-based idiosyncrasies on innovativeness: a facilitative and a restrictive approach. In the facilitative approach, scholars suggest that FCFs present a context for innovativeness to thrive because family-based idiosyncrasies such as a long-term investment horizon (Lumpkin et al., 2010), a stewardship culture (Dibrell and Moeller, 2011), and the social capital created by familiness (Salvato and Melin, 2008) are complementary to innovative attitudes and behaviours whose benefits may only emerge in the long run (Rosenbusch et al., 2011). In contrast, the restrictive approach argues that families tend to be conservative and avoid a risky strategic orientation such as innovativeness in order to protect family members’ socioemotional and financial wealth resided in the FCF (Gómez-Mejía et al., 2011; Miller et al., 2015).

The ambiguity in these theoretical arguments is also reflected in empirical results on this topic. Some findings demonstrate a positive relationship (e.g. Dibrell and Moeller, 2011), others a negative relationship (e.g. Kraiczy et al., 2015), and some findings show a nonsignificant (e.g. Short et al., 2009) connection between family control and innovativeness. Hence, “whether family businesses are more or less innovative than comparable, nonfamily ones remain an open question” (De Massis et al., 2015, p.2).

In this study we address this question and aim at complementing and extending existing research on the relationship between family control and innovativeness by adopting a governance perspective. Based on the idea that the presence of a dominant family coalition leads to distinctive governance processes within a FCF (Pindado and Requejo, 2015), we focus on the board of directors as an internal governance mechanism and assess its role as a mediator in the relationship between family control and innovativeness. More specifically, we consider in this study what the board actually does and take into account board task performance, rather than focusing on board composition like most studies do. In line with prior research, board task performance is defined as the extent to which directors are involved in two separate tasks: monitoring management and firm performance (i.e. the control task), and providing advice and access to resources (i.e. the service task) (Hillman and Dalziel, 2003; Huse, 2005). Drawing from agency theory (AT) (Fama and Jensen, 1983), resource dependence theory (RDT) (Pfeffer and Salancik, 1978), and the resource-based view of the firm (RBV) (Barney, 1991), we suggest that (1) boards of directors in FCFs are confronted with dissimilar abilities and motivations to execute the control and service tasks compared to boards in NFCFs, and (2) the level of control and service task performance is positively associated with innovativeness. Combining these arguments leads to the hypothesis that board task performance mediates the relationship between family (versus nonfamily) control and innovativeness.

In addition, we acknowledge that “differences among family firms are potentially as great as, or greater than, differences between family and nonfamily firms” (Chua et al., 2012, p.1111) and investigate within the subsample of FCFs the direct, indirect, and total effects of family CEO and the percentage of family directors on the FCF’s level of innovativeness. Our models will be tested by applying structural equation

modeling (SEM) on a sample of 329 Belgian private firms. These firms are active across various industries and legally required to set up a board of directors that operates in a one-tier governance system.

Our contributions to the literature are threefold. First, by examining control and service task performance as mediators in the relationship between family control and innovativeness, we contribute to a deeper understanding of why FCFs are more or less innovative than NFCFs and reveal underlying mechanisms previously uncovered. As argued by Gudmundson et al. (1999), understanding why FCFs and NFCFs adopt different strategic orientations to compete in the marketplace is crucial to gain a more complete understanding of the ubiquity of the family form of governance. Second, by investigating the board's actual level of control and service task performance, we respond to scholarly calls to focus on board behaviour rather than relying on board composition variables (e.g. independent directors) as proxies for board effectiveness (Finkelstein and Mooney, 2003; Forbes and Milliken, 1999). Finally, we provide a theoretical explanation, inducted from our empirical results, for the distinctive governance challenges that family control poses for innovativeness, and shed light on how FCFs can address those challenges in practice.

The remainder of the paper is structured as follows. In the next section, we review the literature on the interrelationships between family control, board task performance, and innovativeness, and subsequently derive our hypotheses. We also elaborate on the potential effects of family CEO and the percentage of family directors. In section 3 we describe the research method, including data, measurement of variables, and statistical methods of analysis used. In section 4 and 5 we respectively discuss the findings and draw a conclusion.

2. Theoretical framework

2.1. Relationship between family control and board task performance

A general distinction in board task performance made by scholars is between control task performance (i.e. the monitoring of management and firm performance) and service task performance (i.e. the provision of advice and access to resources) (Forbes and Milliken, 1999; Huse, 2005). Governance literature

suggests that boards perform these two tasks in FCFs as well as in NFCFs (Bammens et al., 2011; Huse, 2000). Decades of scholarly work on boards have made clear that “task performance depends on the joint presence of ability *and* motivation” (Hambrick et al., 2015, p.324). On their own, these two qualities are insufficient to induce a high level of board task performance. Without a proper motivation or a willingness of directors to commit their energy to perform a particular task, the positive effects of directors’ abilities are substantially mitigated and may even be cancelled out (Hillman and Dalziel, 2003; Shen, 2005). In a similar way, motivation does not substitute for a lack of proficiency. It follows that the level of board task performance will be higher when directors are able *and* motivated to execute these tasks compared to situations in which directors lack either ability or motivation, or both (Hambrick et al., 2015).

With respect to the question what kind of abilities and motivations are important to predict board task performance, we draw from AT (Fama and Jensen, 1983), RDT (Pfeffer and Salancik, 1978), and RBV (Barney, 1991). AT underlines two key motivational factors to perform the control and service tasks, namely (1) directors’ independence from management, and (2) directors’ financial stake or equity in the firm (Hillman and Dalziel, 2003; Payne et al., 2009; Shen, 2005). By being independent (i.e. having no (former) personal or professional relation with the firm), a director is argued not to feel reluctant to genuinely question a CEO’s actions and behaviours and to formulate alternative propositions because their position, salary, and perquisites are not attributable to management (Hambrick et al., 2015). By having a personal equity stake, directors “share in the upside potential and downside risk of firm performance” (Hillman and Dalziel, 2003, p.390) and, hence, feel motivated to provide advice and counsel and to monitor more vigorously with the purpose of maximizing shareholder wealth (Hambrick et al., 2015; Shen, 2005).

While AT offers insights into motivational factors, RDT and RBV are more concerned about ability and consider directors’ human and social capital as key predictors of control and service task performance (Hillman and Dalziel, 2003). In particular, according to RDT, the level of board task performance is constrained by directors’ external or bridging social capital (Hillman et al., 2000; Kim and Cannella,

2008). External social capital reflects directors' social ties with various firm stakeholders, including customers, suppliers, competitors, and government agencies (Kim and Cannella, 2008). Directors who have a large stock of external social capital are argued to connect the firm with these stakeholders and to facilitate access to timely and valuable information from outside the firm (Hillman and Dalziel, 2003). In turn, an increase in the breadth and/or scope of information available to directors' enhances their ability to perform the control and service tasks (Huse, 2007).

From a RBV perspective, directors' knowledge, skills, and experience (i.e. their human capital, Khanna et al., 2014) as well as their internal social capital are highlighted. Boards with greater levels of human capital are more likely to comprehend the issue at hand and to understand large amounts of new and/or complex information quickly (Khanna et al., 2014). This allows directors to ask the right questions (control task) and/or to provide compelling answers (service task) (Hambrick et al., 2015). Further, internal or bonding social capital, defined as a director's intrafirm social connections with organizational members, is argued to benefit control and service task performance in two ways (Kim and Canella, 2008). First, internal social capital among directors reduces various costs associated with communication and cooperation at the board level while also engendering mutual trust among directors. Second, internal social capital also facilitates the exchange of information and knowledge. This makes directors more aware of each other's knowledge and allows them to become involved in monitoring and providing advice more efficiently.

Turning to the question how family control influences the level of board task performance, literature offers on the one hand rationales to expect a *higher* level of control and service task performance in FCFs relative to NFCFs. First, since boards of directors in private FCFs tend to be composed of family members with a substantial equity stake in the FCF (Wilson et al., 2013), the board feels motivated to engage in the control and service tasks, as predicted by AT. Indeed, by being alert to the potential for (honest) mistakes and misjudgements by managers and by providing advice and counsel, family directors avoid putting at risk the family's financial and socioemotional wealth (Gómez-Mejía et al., 2011). Second, boards in

private FCFs may also dispose of higher ability to perform control and service tasks because nonfamily directors are usually appointed based on their close, personal relationship with the family (Gabrielsson and Huse, 2005). The result is a board with high internal social capital among family and nonfamily directors. The enhanced mutual trust increases effective collaboration and communication inside the boardroom with positive repercussions for board task performance, as predicted by RBV (Huse, 2007). In contrast, in NFCFs the proportion of shares owned by directors tends to be relatively small and the appointment of directors is mainly driven by satisfying business needs instead of relational criteria (Fiegenger et al., 2000; Wilson et al., 2013). The potential lack of financial incentives and internal social capital can in turn lead to lower levels of board task performance in NFCFs compared to FCFs (Huse and Zattoni, 2008). We hypothesize:

Hypothesis 1a: Family control is positively related to control task performance.

Hypothesis 1b: Family control is positively related to service task performance.

On the other hand, literature also offers arguments to expect a *lower* level of board task performance in FCFs relative to NFCFs. First, the overlap of memberships between ownership, management, and board of directors that is typical for private FCFs reduces the likelihood of the board being independent vis-à-vis management (Jaskiewicz and Klein, 2007). From an AT point of view, dependence on management represents a disincentive to perform the control task (Hambrick et al., 2015). Second, it has been argued in literature that families are inclined to “assemble a board that will actively support, or at least not interfere with, the family’s preferences” (Gómez-Mejía et al., 2011). It can be expected that this propensity negatively affects the board’s external social capital, as directors with a large stock of external social capital bring to the board different perspectives and opinions (Kim and Cannella, 2008). According to RDT, this implies a reduced ability to perform the control and service tasks in FCFs relative to NFCFs. We hypothesize:

Hypothesis 1c: Family control is negatively related to control task performance.

Hypothesis 1d: Family control is negatively related to service task performance.

2.2. Relationship between board task performance and innovativeness

Although boards of directors that are actively involved in control and service tasks are suggested to facilitate corporate value-creation (Huse, 2007), there is still a quest for more empirical evidence on how they do so and to what ends. In this regard, calls have been made to study how boards actually work in order to gain more insight in their potential contributions (Finkelstein and Mooney, 2003; Forbes and Milliken, 1999). In response to these calls, a surge of empirical studies has emerged that captures boards' level of involvement in control and service tasks. However, with few exceptions (e.g. Gabrielsson, 2007), only few studies have examined the relationship between board task performance and innovativeness. Yet, there are theoretical insights offered by AT, RDT, and RBV to believe that board task performance is positively related to innovativeness.

Innovativeness is a resource-consuming strategic orientation (Covin and Slevin, 1991; Lumpkin and Dess, 1996) that also requires substantial commitment and support from the firm's management (Zahra et al., 2000). From an AT point of view, nonfamily managers are assumed to be focused on short-term firm performance while family managers are loss averse with respect to the family's financial and socioemotional wealth (Fama and Jensen, 1983; Gómez-Mejía et al., 2011). These preferences are incongruent with innovativeness which is a risky strategic orientation by nature and whose benefits for firm performance only emerge in the long run and may be hampered by family members' commitment to family-based preferences and goals (Miller et al., 2015). In this regard, AT predicts that by executing control, the board of directors can limit nonfamily managers' short-termism (Hambrick et al., 2015) and family managers' loss aversion (Bammens et al., 2011). This in turn increases the likelihood that CEOs in FCFs and NCFs support innovativeness to create value in long run (Gabrielsson, 2007; Zahra et al., 2000).

The contributions of service task performance to innovativeness can be regarded from RDT as well as RBV perspectives. RDT views directors as boundary spanners that help the business to acquire important resources from the environment, thereby mitigating environmental uncertainty and reducing transaction

costs associated with environmental interdependency (Hillman et al., 2000; Huse, 2007). For example, by performing service tasks such as networking, directors can help legitimize the firm vis-à-vis stakeholders and supply the firm with valuable information about how other firms deal with innovative endeavours (Hillman et al., 2000). Hence, a high level of service task performance aids FCFs and NFCFs to get access to managerial and financial resources such that innovativeness is supported and the associated risk is reduced.

Through the RBV perspective, directors are viewed not only as resources through their networks, but also through their competency (Huse, 2007). Therefore, the RBV emphasizes the service task of providing advice and counsel to management, that is, the collaboration between board members and managers (Huse, 2007). Such collaborative ties have been shown to nurture stewardship and support stewards in pro-organizational endeavours (Huse and Zattoni, 2008), bridge gaps in knowledge and skills of (family) managers (Gabrielsson and Huse, 2005), and mitigate the likelihood of familial conflicts (Bammens et al., 2011). It follows that a high level of service task performance facilitates the adoption of an innovative strategic orientation. We hypothesize that:

Hypothesis 2a: Control task performance is positively related to innovativeness.

Hypothesis 2b: Service task performance is positively related to innovativeness.

2.3. Mediating effect

In the sections above, we argued first that family control is a significant contingency factor that provides the FCF's with dissimilar abilities and incentives to perform the control and service task compared to boards in firms under nonfamily control. Subsequently, we expected that control and service task performance are positively associated with innovativeness. Taking together these arguments leads us to propose that control and service task performance are mediators in the relationship between family control and innovativeness. We hypothesize that:

Hypothesis 3a: The relationship between family control and innovativeness is mediated by control task performance.

Hypothesis 3b: The relationship between family control and innovativeness is mediated by service task performance.

2.4. Heterogeneity of FCFs

The heterogeneity of FCFs has long been recognized and many sources that explain variation among FCFs have been uncovered (Chua et al., 2012). In this study, we consider the presence of a family CEO and the percentage of family directors as two sources of heterogeneity that may explain why some FCFs are more or less innovativeness than other FCFs. As we investigate the role of board task performance as a mediator in the relationship between family control and innovativeness, in this paragraph we elaborate on the effects of family CEO and the percentage of family directors on control and service task performance. On the one hand, as a member of the owning family, family CEOs have more power than nonfamily CEOs in FCFs to appoint directors who support the family's preferences and goals (Gómez-Mejía et al., 2011). According to AT, this dependence on management is a disincentive to perform the control task. However, according to RBV, the social ties between directors and the CEO derived from this appointment facilitates the creation of internal social capital, leading to an enhanced ability to perform the service task (Westphal, 1999). On the other hand, with respect to percentage of family directors, RBV predicts that boards with a higher percentage of family directors will have high ability to perform the control and service tasks as they mutually trust each other and exchange information on a frequent basis (Zattoni et al., 2015). In addition, family directors often hold shares and therefore have strong economic incentives to perform both tasks (Zattoni et al., 2015). These theoretical rationales lead to the following hypotheses:

Hypothesis 4a: Family CEO is a source of heterogeneity that explains variation in the effects of family control on board task performance and innovativeness.

Hypothesis 4b: Percentage of family directors is a source of heterogeneity that explains variation in the effects of family control on board task performance and innovativeness.

3. Methodology

3.1. Data collection and sample

In July 2011 we sent a postal questionnaire to the CEOs of all Belgian non-listed limited liability firms with more than 20 employees that were registered in the Bel-First database of Bureau van Dijk in 2010 ($N=8,297$). This type of firm is legally obliged to establish a board of directors that operates in a one-tier governance system. In line with previous studies examining board tasks (e.g. Pugliese et al., 2014), we targeted the CEO as key informant because s/he is knowledgeable about all the issues investigated in this study. After sending a reminder to complete the questionnaire in October 2011, we received in total 664 responses, a response rate of 8.00 percent. In a next step, we removed firms that are controlled by another corporation ($N=92$) and firms with missing data ($N=243$). This leads us to retain a final sample of 329 private FCFs and NFCs. To assess nonresponse bias, we applied the Kolmogorov-Smirnov two-sample test to examine differences between firms in our final sample ($N=329$) and the remaining population ($N=7,968$). No significant differences were found between these groups with regard to firm size (value of total assets in 2011, $p=0.20$) and firm performance (EBIT divided by value of total assets in 2011, $p=0.35$), which at least partially mitigates nonresponse concerns.

3.2. Measures

Dependent variable: Innovativeness. To measure innovativeness we rely on the EO scale proposed by Covin and Slevin (1989). Respondents were asked to indicate on a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), the extent to which the firm (i) emphasizes innovations and R&D technological leadership, (ii) has launched many new lines of products or services in the past five years, and (iii) has dramatically changed product or service lines in the past five years. Innovativeness was then computed as a mean of these items ($\alpha = 0.70$).

Independent variable: Family control. A firm is classified as family-controlled when (i) a family holds more than 50 percent of ownership and a family member is the CEO, or (ii) a family holds more than 50 percent of ownership, the firm is not managed by a family CEO, but at least one family member

resides in the board of directors. This definition is consistent with a number of studies in extant literature on private family firms (see Carney et al., 2015). The firm's ownership structure was measured by asking respondents the identity as well as the level of ownership of the largest, second largest, and third largest shareholder. Family CEO and the number of family directors were measured by the questions 'is the CEO a member of the owning family?' and 'how many directors belong to the owning family?', respectively.

Mediating variables: Control task and service task performance. The execution of control and service tasks are theoretically derived latent constructs denoting the collective cognitive outcomes of board members' work (Forbes and Milliken, 1999). Our measures for these constructs are derived from the classification made by Huse (2005). Their underlying items have been used in multiple studies (Pugliese et al. 2014). Specifically, to measure control task performance, respondents were asked to rate on a five-point Likert scale (1=to a low extent; 5=to a high extent) the level of board members' involvement in: (i) evaluating CEO's efforts behaviours, (ii) setting the CEO's financial rewards, (iii) supervising the CEO, (iv) setting management's compensation, (v) developing plans and budgets for the firm's operations, (vi) overseeing that these operations are well organized, (vii) collecting information about the financial position of the company, and (viii) monitoring and evaluating strategic decisions. Next, we calculated the average score on these items ($\alpha = 0.89$). Service task performance is measured in a similar way, asking the respondents the extent to which board members are engaged in (i) advising on management issues, (ii) advising on financial issues, (iii) advising on technical and operational issues, (iv) advising on market issues, (v) advising on legal issues and taxation, (vi) providing linkages to external stakeholders, (vii) providing legitimacy and reputation, (viii) promoting strategic initiatives, (ix) taking strategic decisions, and (x) participating in the implementation phase of strategic decision-makings. An average score was calculated for these items ($\alpha = 0.94$).

Control variables. Our selection of control variables is inspired by prior research on board tasks (e.g. Pugliese et al., 2014) and innovativeness (e.g. Zahra et al., 2000). At the firm level we control for firm size (natural logarithm of the value of total assets in million euros), firm age (natural logarithm of the

number of years since incorporation), past performance (EBIT divided by value of total assets in 2010, sector-adjustment based on the NACEBEL 5-digit industry classification), internationalization (percentage of revenue realized outside Belgium), high-tech industry (dummy variable equalling 1 if the firm produces medium- or high-technology products and/or provides knowledge-intensive services, 0 otherwise, based on the Eurostat (2010) guidelines), and ownership dispersion (number of shareholders).

At the level of the board we control for board size (number of directors), the percentage of independent directors (ratio of independent directors), the percentage of shareholding directors (ratio of shareholding directors), and CEO duality (dummy variable equalling 1 if the CEO is the board's chairperson, 0 otherwise). Finally, we control for CEO tenure (natural logarithm of the number of years in which the CEO has been employed in his or her current position).

3.3. Statistical analysis

We apply covariance-based SEM using STATA13.1 software to, in a first step, conduct a confirmatory factor analysis (CFA) to assess the measurement model fit as well as the convergent and discriminant validity of the self-reported variables (i.e. innovativeness, control task performance, and service task performance). In a second step, we set up structural models to estimate the hypothesized path relations. Because of discriminant validity concerns (see below), we estimate separate structural models that incorporate either control or service task performance as mediator. Further, the control variables are included for all path estimations.

To test whether the direct, indirect, and total effects of family control on innovativeness are statistically significant, we estimate bias-corrected bootstrap confidence intervals (Edwards and Lambert, 2007). In particular, we opt for a critical value of $\alpha = 0.05$ to generate 95 percent bias-corrected confidence intervals based on $k = 1000$ replications (Edwards and Lambert, 2007). If zero is outside of the upper and lower limits of the confidence interval, the effect is at least statistically significant at $p < 0.05$.

3.4. Assessing validity and reliability

As mentioned above, the convergent validity, discriminant validity, and reliability of our self-reported, latent variables were evaluated based on a CFA. Results revealed satisfactory fit ($\chi^2(176)=478.44$; $\chi^2/df=2.72$; $p<0.01$; CFI=0.94; RMSEA=0.07; SRMR=0.05). We inspected convergent validity based on the items' standardized loadings and the average variance extracted (AVE) statistic (Hair et al., 2010). Results show that all standardized loadings are higher than 0.50 and significant at $p<0.01$. The AVE for innovativeness equals 0.62, for control task performance 0.55, and for service task performance 0.62. In total, this indicates adequate convergent validity (Hair et al., 2010). The reliability of our constructs is assessed based on their Cronbach's alphas (see section 3.2.) and composite reliability (CR) scores. The CR score for innovativeness equals 0.83, for control task performance 0.91, and for service task performance 0.94, indicating sufficient reliability (Hair et al. 2010). Finally, to appraise discriminant validity, we checked whether the AVE statistics of our constructs were higher than the squared inter-construct correlations (Hair et al. 2010). We find that this is not the case for control task performance and service task performance. To mitigate discriminant validity concerns, we conduct separate structural models in which either one of these variables is taken into account as mediator.

4. Results

Means and standard deviations of the variables under investigation in this study are presented in Table 1. In Table 1 we also report on Wilcoxon rank-sum tests and chi-square tests to detect statistically significant differences in these variables between FCFs and NFCFs. Pearson correlations are presented in Table 2.

“Insert Table 1 about here”

“Insert Table 2 about here”

Models 1 and 2 in Table 3 and Models 3 and 4 in Table 4 show the results of the structural models with respectively control task performance and service task performance as mediating variables. The fit measures of all structural models have acceptable levels (not reported) (Hair et al., 2010). Four key results emerge from the analyses. First, family control is significantly and negatively related to control task

performance, but does not affect service task performance. H1c is thus supported, while H1a, H1b, and H1d are rejected. Second, both control and service task performance are significantly and positively associated with innovativeness, confirming H2a and H2b. Third, an assessment of the statistical inference of the direct, indirect, and total effects of family control on innovativeness based on bootstrap analyses shows that family control has a negative, marginally significant total effect on innovativeness. Further, control task performance mediates this relationship, while service task performance does not exert a mediating effect. H3a is thus supported while H3b is rejected. Fourth and finally, within the subsample of FCFs, we find that the presence of a family CEO as well as the percentage of family directors address heterogeneity among FCFs. H4a and H4b are confirmed. In particular, the presence of a family CEO has a positive total effect on innovativeness and service task performance mediates this effect. With regard to the percentage of family directors, we find a marginally significant negative total effect on innovativeness. This effect of the percentage of family directors on innovativeness is not mediated by board task performance.

“Insert Table 3 Here”

“Insert Table 4 Here”

With respect to the control variables, there are some interesting findings. Ownership dispersion has a negative effect on control and service task performance while the percentage of shareholding directors exerts a positive influence on both board tasks. Further, ownership dispersion, internalization, high-tech industry, and CEO tenure are positively related to innovativeness while CEO duality and board size are negatively associated with innovativeness.

4.1. Additional analyses

To add robustness to our results, we conducted two additional analyses. First, to support our claim that family influence drives the effects of family control in Model 1 (Table 3) and Model 3 (Table 4) rather

than an effect of concentrated ownership¹, we computed a dummy for NFCFs with concentrated ownership (i.e. a nonfamily entity owns more than 50 percent of the shares) ($N=44$) and included this dummy along with the family control dummy in the analyses outlined in Model 1 and Model 3 (the reference category becomes private firms without concentrated ownership ($N=57$) and family-owned firms with a nonfamily CEO and zero family directors ($N=9$)). Next, we assessed whether there are significant differences in the direct, indirect, and total effects of the family control dummy and the concentrated nonfamily ownership dummy. Results (available from authors) show that both dummies do not differ in their direct effect on innovativeness (both are nonsignificant) but have different indirect effects ($p<0.05$) and different total effects ($p<0.01$) in Model 1 and Model 3. This suggests that our measurement of family control is a good predictor of family influence.

Second, in the introduction of the paper we stated that innovativeness is an entrepreneurial behaviour that leads to innovation. In this section, we investigate whether we also find this relationship in our sample of 329 firms. For this purpose, we analysed the correlation between the variable innovativeness and two other variables included in the survey that more directly measure a firm's innovation output. First, we checked whether firms that score high on innovativeness are also firms who state that they are typically the first one to launch new services and/or products or use new technologies in the production process ahead of competitors (a five-point Likert scale was provided). Here, we find a positive correlation (0,56; $p<0.01$). Second, we analysed whether firms in our sample that score low on innovativeness are also those firms that responded in a positive way to the question whether they mainly follow the actions of competitors (here again a five-point Likert scale was provided). Here, the correlation is also positive (0,36; $p<0.01$). These additional analyses empirically confirms the argument in the literature that innovativeness is conducive to innovation.”

¹ The way in which we operationalized family control implies that FCFs in our analyses are always family-owned, that is, a single family holds at least 50 percent of the private firm's shares.

5. Discussion and conclusion

To address the question whether FCFs are more or less innovative than their nonfamily counterparts, in this study we have adopted a governance perspective to examine board task performance as an underlying governance mechanism that triggers differences in FCFs' and NFCFs' likelihood to adopt innovativeness as a dimension of the EO construct (Lumpkin and Dess, 1996). Our results reveal first that FCFs are less innovative than NFCFs and that a lower level of control task performance in FCFs relative to NFCFs partly accounts for this negative relationship (i.e. partial mediation). Second, private firms in which the board of directors actively performs the control and service tasks are more likely to have a high level of innovativeness. Finally, FCFs with a family CEO and FCFs with a low percentage of family directors are more likely to adopt innovative attitudes and behaviours. Furthermore, family CEO has a positive indirect effect on innovativeness through a higher level of service task performance.

These findings add to the debate on the effects of family-based preferences and goals on innovative endeavours in FCFs (see Miller et al., 2015). Prior studies often start from the assumption that differences in innovativeness between FCFs and NFCFs are caused directly by family-based idiosyncrasies such as the preference to be loss averse with respect to the family's financial and socioemotional wealth (Gómez-Mejía et al., 2011). We offer an alternative explanation related to the board of directors as an intervening governance mechanism. As mentioned previously, our focus on board task performance was inspired by a number of theories and prior work on corporate governance in private (family) firms (e.g. Pindado & Requejo, 2015; Gómez-Mejía et al., 2011; Huse, 2000). From a theoretical point of view, the indirect effect of family control on innovativeness through control task performance indicates that FCFs may become as innovative as NFCFs if they provide their boards with additional abilities and/or motivations that aid directors in monitoring management and firm performance.

Further, in addition to the relevant role played by board task performance, our findings also highlight the importance of managerial characteristics as antecedents of innovativeness. Specifically, CEO duality (i.e. the CEO is also the board's chairperson) and CEO tenure significantly influence innovativeness in a

negative and positive way, respectively. Within FCFs, the presence of a family CEO positively affects the level of innovativeness, partly through a higher level of service task performance. The latter result challenges the prevailing logic that family CEOs are less willing than nonfamily CEOs to take risks (Gómez-Mejía et al., 2011). Perhaps family CEOs are highly aware that adopting innovativeness allows for the creation of a strong FCF that they can pass on to offspring (Miller et al., 2015). Indeed, such a transgenerational intent has been suggested to be idiosyncratic to family management in the literature (Zellweger et al., 2012).

Concerning practical implications, we particularly advocate that practitioners should be aware that one potential path towards innovation includes the establishment of a board of directors that is actively involved in performing the control and service tasks. Recommendations by policy makers should hence not only focus on the composition of board of directors (as is often done in current codes of governance), but also stress that empowering the board of directors to execute control and service tasks is equally, if not more, important.

Like any study, this study is subject to a number of limitations which also suggest avenues for future research. First, we rely on a single respondent per observation. Although this is an often used method to gather survey data on board tasks and innovativeness (e.g., Pugliese et al., 2014; Zahra et al., 2000) and our CFA shows favourable results, future research can add robustness to our findings by employing alternative sampling procedures that allow for the combination of CEOs' perceptions with directors' assessments of board task performance and innovativeness. Second, we focused on business-orientated board control and service tasks. However, in family business literature it has been suggested that boards may also get involved in family-oriented tasks, such as succession planning and the maintenance of family relationships (Bammens et al., 2011). The performance of such family-oriented tasks may require time and effort that otherwise could have been invested in the control and service tasks. Future research could address to what extent family-oriented tasks (and family governance practices in general) influence the relationships investigated in this study. Finally, our study has a cross-sectional research design, and so it

would not be appropriate to infer causality from the results. Future research may verify whether our interpretations and conclusions also hold when longitudinal data is taken into account.

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