Does Family Involvement Influence Firm Performance? Exploring the Mediating Effects of Board Processes and Tasks

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Following calls to capture the consequences of family involvement in the business, this article empirically investigates the mediating role of board processes (i.e., effort norms, use of knowledge and skills, and cognitive conflicts) and board (control and strategy) tasks in the relationship between family involvement and firm performance in small and medium-sized companies. To address this purpose, we developed a theoretical model using family business and corporate governance literature. We collected data from one sample of small and medium-sized enterprises, and we applied structural equation modeling to validate and test constructs and relationships. Our results show that (a) family involvement in the business has a positive impact on effort norms and use of knowledge and skills, and a negative one on cognitive conflicts, (b) board processes have generally a positive influence on board tasks performance, and (c) board strategy task performance positively influences firm financial performance, while board control tasks do not have a significant impact. Results have implications for both research and practice.

Keywords: board processes; board tasks performance; corporate governance; family firms; small and medium-sized enterprises

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Over the past decades, family business research has been dominated by considerable efforts to investigate the influence of family involvement in the business on firm financial performance. A recent review of the literature (e.g., Gomez-Mejia, Cruz, Barrone, & de Castro, 2011) revealed that the empirical evidence is mixed, but on average family involvement exerts a small positive impact on firm financial performance.

Previous studies have explored the direct impact of family involvement in the business on firm financial performance (e.g., Anderson & Reeb, 2003; Sacristán-Navarro, Gómez-Anson, & Cabeza-García, 2011) or have investigated how board composition affects the performance of family firms (e.g., Anderson & Reeb, 2004; Chen & Nowland, 2010), while they have devoted relatively little attention to examining the implications of family involvement in the business on intermediate variables such as board processes and tasks (Bammens, Voordeckers, & van Gils, 2011; Bettinelli, 2011). The lack of attention to board processes and tasks is a common characteristic of both family business and corporate governance research as access to the boardroom has been often difficult, forcing scholars to rely on archival information as a proxy for board behaviors (Daily, Dalton, & Cannella, 2003; Hambrick, Werder, & Zajac, 2008). For the same reason, previous family business studies have explored boards of directors of large U.S.-listed companies (Chrisman, Kellermanns, Chan, & Liano, 2010) and have mostly neglected boards of small and medium enterprises (SMEs), even if family businesses are especially prevalent among SMEs (Bammens et al., 2011).

Following calls for going beyond input–output models and the almost exclusive focus on listed companies (e.g., Bammens et al., 2011; Chrisman et al., 2010), the aim of this article is to explore the mediating effects of board processes and board task performance in the relationship between family involvement in the business and firm financial performance. Relying on family business literature (e.g., Bammens et al., 2011; Habbershon, Williams, & MacMillan, 2003) and a team effectiveness perspective (e.g., Cohen & Bailey, 1997; Hackman, 1987), we argue that family involvement can influence firm performance in three sequential steps. First, we explain the underlying mechanisms through which family involvement in the business influences board processes (e.g., effort norms, use of knowledge and skills, and cognitive conflicts; Bammens et al., 2011; Forbes & Milliken, 1999). Second, we propose that processes are important determinants of board-level effectiveness in fulfilling control and strategy tasks (Bammens et al., 2011; Forbes & Milliken, 1999; Gabrielsson & Winlund, 2000; Johnson, Daily, & Ellstrand, 1996). Finally, we show that board effectiveness results in superior firm performance (Forbes & Milliken, 1999; Minichilli, Zattoni, Nielsen, & Huse, 2012; Zahra & Pearce, 1989).

We tested our hypotheses on a data set combining survey data with archival data on small and medium Norwegian enterprises. Our results show that (a) family involvement in the business has a positive impact on effort norms and use of knowledge and skills, while it has a negative influence on cognitive conflicts, (b) almost all board processes have a positive influence on board (control and strategy) task performance, and (c) board strategy task performance influences positively firm financial performance, while board control tasks do not have a significant impact.

The study contributes to family business and board research in three related ways. First, the study goes beyond input–output models exploring the relationship between family involvement in the business and firm financial performance (e.g., Bammens et al., 2011;
Chrisman et al., 2010). Our results extend prior studies by showing that boards of directors, that is, board internal processes and task performance, play a mediating role in the understanding of the relationship between family involvement and firm financial performance (Chrisman et al., 2010). Second, the study explores the relevance of board internal processes for board tasks performance in family SMEs (e.g., Bammens et al., 2011; Habbershon et al., 2003). Our results show that internal processes do matter for board effectiveness and invite governance scholars to open the black box of board research (e.g., Daily et al., 2003; Hambrick et al., 2008; Pettigrew, 1992). Finally, the study underlines the relevance of the board strategy tasks as key antecedents of firm financial performance in family SMEs (e.g., Castaldi & Wortman, 1984), while it casts some doubt on the importance of board control tasks in the same business context. Overall, our results underline that boards are critical strategic assets that can enrich and refine the strategic decision making at the top of organizations (e.g., Kim, Burns, & Prescott, 2009; Pugliese, Bezemer, Zattoni, Huse, Van Den Bosch, & Volberda, 2009).

Theoretical Background

Corporate Governance in Family Businesses

Family firms are the dominant business form on the economic landscape. They are common among large firms and are even more diffused among SMEs (Bammens et al., 2011). Despite numerous attempts having been made to articulate conceptual and operational definitions of family firms, none of these definitions has gained widespread acceptance. Nevertheless, they have emphasized the important role of the family in terms of determining the vision and control mechanisms used in the firm, creating unique resources and capabilities, and affecting the strategic decisions and performance of the firm (Habbershon et al., 2003).

Family business literature explores the differences between family and nonfamily firms to understand the specificities of family businesses and their consequences on firm financial performance. These specificities are particularly relevant in the area of corporate governance (Debicki, Matherne, Kellermanns, & Chrisman, 2009) because at the top of the company family and business are so entangled that they are difficult to separate. Ownership and control are in the hands of one or a few individuals who are members of the same family (van den Heuvel, Van Gils, & Voordecker, 2006). Because of the overlap between ownership and control, boards of directors are usually dominated by shareholders (Gersick, Davis, Hampton, & Lansberg, 1997). Moreover, because of their dominant position, shareholders have a significant influence over the appointment of outside board members and favor the selection of people with whom they have close social ties (e.g., relatives not involved in the business, personal friends, or consultants of the firm; Johannisson & Huse, 2000).

The large majority of previous studies on corporate governance of family firms have focused on publicly traded family firms and have explored the direct effect of family involvement in the business on firm performance (Anderson & Reeb, 2003; Sacristán-Navarro et al., 2011) or have analyzed how boards of directors’ composition influences financial performance of family firms (e.g., Anderson & Reeb, 2004; Chen & Nowland, 2010). After having recognized the relevant contribution of these studies to open a debate on
the corporate governance of family firms, a recent review (Bammens et al., 2011) criticized them for overreliance on input–output models and the almost exclusive focus on listed companies. This review encouraged governance and family business scholars to take into account the role of the intermediate board processes and tasks, as this line of enquiry can significantly advance our understanding of the corporate governance of family firms and of its implications for firm financial performance (Bammens et al., 2011).

Boards of Directors’ Processes and Tasks

Boards of directors are “elite, and episodic decision-making groups that face complex tasks pertaining to strategic-issue processing” (Forbes & Milliken, 1999: 492). Unlike many other decision-making groups, boards meet periodically and consist of interdependent groups of people. Because of their characteristics, boards—more than other groups—face interaction difficulties that can prevent them from fulfilling their tasks (Hambrick et al., 2008). In these circumstances, board effectiveness is likely to profoundly depend on social-psychological processes, particularly those relating to group participation (effort norms), coordination (use of knowledge and skills), and open discussions (cognitive conflicts; Finkelstein & Mooney, 2003; Forbes & Milliken, 1999; Hambrick et al., 2008). The relevance of these three processes for the effectiveness of board strategic decision making has been advanced theoretically by Forbes and Milliken (1999) and supported empirically by some recent studies focused on large companies (e.g., Minichilli et al., 2012; Zona & Zattoni, 2007).

Boards of directors perform some crucial tasks and through them influence firm performance (Zahra & Pearce, 1989). Despite some disagreements about the number and the content of board tasks, many governance scholars argue that boards of directors are responsible for accomplishing two primary tasks (e.g., Finkelstein & Mooney, 2003; Forbes & Milliken, 1999): (a) control tasks, that is, to safeguard shareholders’ and stakeholders’ interests through the monitoring of top management’s behavior and the control of company’s results, and (b) strategy tasks, that is, to provide some sort of support and counsel to the management of the firm.

The control tasks are the primary responsibility of boards of directors as board members are legally responsible for monitoring both the actions of top executives and the company’s performance (Finkelstein & Mooney, 2003; Forbes & Milliken, 1999; Johnson et al., 1996). Agency theory, grounded in economics and finance, stresses the importance of the directors’ control tasks (Hillman & Dalziel, 2003). In this theoretical perspective, boards of directors are governance mechanisms aimed at solving the problems associated with the separation between ownership and control in large public companies (Jensen & Meckling, 1976). Inspired by this theory, early governance studies assumed that family firms do not have agency problems as their ownership structure is concentrated in the hands of one or a few families (Fama & Jensen, 1983). Recent governance literature has challenged this traditional wisdom (Gomez-Mejia et al., 2011; Schulze, Lubatkin, Dino, & Bucholtz, 2001) and highlighted that the board control tasks play a critical role also in family SMEs as there are always important stakeholders (e.g., banks, suppliers, employees), and sometimes also minority shareholders (e.g., other entrepreneurs, banks, venture capitalists), with partially
diverging interests from those of the controlling family (e.g., Bammens et al., 2011; Gabrielsson, 2007).

Resource dependence theory stresses the importance of the board strategy tasks (Hillman & Dalziel, 2003) and underlines that boards can provide the management of a firm with important advice and may contribute to the strategic decision making (Finkelstein & Mooney, 2003). From this perspective, boards of directors may reinforce the top management team’s competencies and experiences by providing feedback or refining their strategic proposals (Westphal, 1999). The board strategy tasks may be particularly important in family SMEs as directors may provide advice and counsel on numerous issues to compensate for the managerial deficiencies of entrepreneurs (van den Heuvel et al., 2006). Furthermore, boards can help managers solve critical strategic issues (Fiegener, 2005) or explore new market opportunities (Zahra, Neubaum, & Huse, 2000).

Hypothesis Development

Family Involvement in the Business and Board Processes

In a family firm the confluence of family and business systems leads to a specific management situation that determines relevant consequences for the firm. Habbershon et al. (2003) developed the term familiness to define the unique combination of involvement and interaction between the family and the business that creates a distinctive firm-level bundle of resources and capabilities. Even though the concept of familiness may be difficult to capture, previous studies have shown that family businesses differ along several dimensions from nonfamily businesses (Ensley & Pearson, 2005). These differences are particularly relevant concerning corporate governance, as it is at the top of the organization—and particularly in board of directors—that family members and nonfamily members meet and interact in formal circumstances to evaluate current performance and to take strategic decisions.

Despite the collection of abundant empirical evidence on the governance of family firms, there remain calls for gaining new insight and knowledge on how family involvement in the business affects boards’ processes and tasks and how they can in turn affect firm financial performance (e.g., Bammens et al., 2011; Chrisman et al., 2010). Building on family business and governance literature, we argue that (a) family involvement in the business influences the key board internal processes identified by Forbes and Milliken (1999), that is, effort norms, use of knowledge and skills, and cognitive conflicts, (b) the board processes influence positively the board performance in its control and strategy tasks, and (c) the board task performance has a positive impact on firm financial performance. The theoretical model here developed is presented in Figure 1.

Family involvement in the business and board effort norms. Effort norms is a “group-level construct that refers to the group’s shared beliefs regarding the level of effort each individual is expected to put towards a task” (Forbes & Milliken, 1999: 493). As norms exert a strong influence on member behavior, especially in groups that are interdependent as boards (Wageman, 1995), strong effort norms can be expected to enhance the effort of individual
group members and so to contribute to the performance of work groups (Forbes & Milliken, 1999; Sonnenfeld, 2002). Effort can manifest itself in terms of both time that directors devote to the board and attentiveness and participation to board tasks (Forbes & Milliken, 1999).

The family involvement in the business can influence positively the board effort norms. The overlap among shareholders, directors, and managers that is typical of family firms leads to a peculiar board composition, where board members are in large part majority shareholders of the company (Gersick et al., 1997). Family directors are motivated to provide an effective contribution to the board as they are owners of the firm and have strong economic incentives. Moreover, parental altruism fosters commitment as well as loyalty by family members to the organization (Lubatkin, Schulze, Ling, & Dino, 2005).

The presence of family members in the boardroom can positively affect also the behavior of nonfamily directors. First, the family directors will do their best to encourage the creation of strong effort norms favoring a positive commitment to the board from all directors (Bettinelli, 2011). Owner-directors and representatives of the family will elevate effort norms through a direct monitoring role on boardroom activities. Moreover, in family firms, the dominance of shareholders inside the boardroom provides them significant influence over the appointment of nonfamily directors (Ng & Roberts, 2007). Accordingly, the family members will favor the appointment of either personal friends or persons with whom they have or share close personal relationships (Johannisson & Huse, 2000) and who, for this reason, will feel obliged to strengthen the family norms. Hence we hypothesize,
Hypothesis 1: Family involvement in the business will positively influence board effort norms.

Family involvement in the business and board use of knowledge and skills. Use of knowledge and skills refers to “the board’s ability to tap the knowledge and skills available to it and then apply them to its tasks” (Forbes & Milliken, 1999: 495). Board members are typically persons with a high degree of specialized knowledge and skills that may be beneficial to group decision making. However, the episodic decision making of boards and the highly interdependent behavior of board members can limit directors’ contribution to the group effectiveness. In other words, despite the implicit assumption that, if present, expertise will be used by groups, psychological research indicates that the availability of knowledge and skills does not guarantee their use (Forbes & Milliken, 1999).

The use of knowledge and skills available in the board is particularly relevant in family firms, as the management team has advantages in terms of firm-specific knowledge but may be at disadvantage regarding general business knowledge (Bammens et al., 2011). Literature on group effectiveness shows that two conditions can facilitate the use of knowledge and skills available to boards of directors. First, knowledge and skills of individual members are more effectively used when group members are more aware of each other’s competencies (Kearney, Gebert, & Voelpel, 2009). Second, social ties among board members enhance mutual trust and respect and encourage the propensity of insiders to use knowledge and skills of outsiders (Westphal, 1999).

Both aspects—awareness of individual knowledge and skills and presence of social ties among group members—are common characteristics of the boards of family businesses. Regarding family and inside directors, they know each other’s competencies well as they work closely in the day-by-day management of the business. Moreover, the intimate knowledge that family and nonfamily directors have about each other facilitates communication and decision making (Gersick et al., 1997). At the same time, nonfamily directors typically have close social ties with shareholders and are usually chosen for the relevance of their peculiar knowledge and skills (Johannisson & Huse, 2000). Hence we hypothesize,

Hypothesis 2: Family involvement in the business will positively influence board use of knowledge and skills.

Family involvement in the business and board cognitive conflicts. Cognitive conflicts refer to task-oriented differences in judgment among group members, often manifested in “disagreements about the content of the task being performed, including differences in viewpoints, ideas and opinions” (Jehn, 1995: 258). Cognitive conflicts are common in groups, like boards, that are interdependent (Forbes & Milliken, 1999). Moreover, as the issues facing boards are complex and ambiguous, board members are likely to have different perceptions and different opinions on the most appropriate solutions (Dutton & Jackson, 1987). Nevertheless, boards show a large variance in the degree to which they experience cognitive conflicts (Lorsch & MacIver, 1989; Mace, 1971). Although some boards tend to “rubber-stamp” decisions taken elsewhere by top managers, other boards have been able to develop structures and processes that promote open debate and positive disagreement.
The characteristics of family firms can lead boards of directors to have lower cognitive conflicts. First, relational issues have been found to be central to the sustainability and success of family firms as good relationships can overcome bad business decisions, while the opposite is more difficult to achieve (Olson, Zuiker, Danes, Stafford, Heck, & Duncan, 2003). This happens because relationships inside family firms, mostly among family members but also among family and nonfamily members, are densely linked, wherein the tremors of one bad relationship are felt throughout the tight web of other relationships. It is so important to maintain good relationships that family businesses have developed some formal mechanisms—for example, family councils, family assemblies, family constitutions, and regular family meetings—aimed at ensuring family health and stability (e.g., Aronoff & Ward, 1992). Finally, family members prefer to manage potential conflicts among them outside the board meetings to avoid the potential embarrassment of exposing nonfamily directors to conflicts within the family (Bettinelli, 2011).

Nonfamily directors are also likely to avoid open dissent and to create tensions during board meetings. To the extent that they will provide their contribution at the request of family members, they will be motivated to reduce conflicts and disagreements among board members and to maintain a cohesive board environment (Bettinelli, 2011). Moreover, nonfamily board members are usually motivated to support the family members who are owners of the firm and responsible for their nomination to the board (Daily & Dalton, 1995). Finally, family members have an emotional attachment to the company that they consider their own creature and do not like to be challenged by nonfamily members (Gomez-Mejia et al., 2011). The family leadership may be so strong that other board members could be hesitant to question ideas, creating a sort of family-imposed “groupthink” (Ensley & Pearson, 2005). Hence we hypothesize,

Hypothesis 3: Family involvement in the business will negatively influence board cognitive conflicts.

Board Processes and Board Task Performance

Board effort norms and board task performance. Empirical evidence shows that the time directors devote to their boards differs considerably among firms and that these differences influence the ability of boards to fulfill their tasks (Lorsch & MacIver, 1989: 23-25; Zona & Zattoni, 2007). On the one hand, members of passive boards attend meetings and take decisions without mental engagement or merely “rubber-stamp” management decisions (Lorsch & MacIver, 1989; Mace, 1971), that is, often the only contribution made by directors is to satisfy the requirements of company law. On the other hand, members of active boards participate vigorously in board decision making and devote necessary time to board assignments. Hence, preparation for and participation in board meetings—in terms of carefully scrutinizing information provided by management before meetings, being always available if the board work should demand it, and actively participating during meetings with questions—can influence the board’s ability to effectively perform its tasks (Forbes & Milliken, 1999; Wageman, 1995). Such efforts ensure constructive and fruitful discussions,
thereby improving the quality of decision making and contributing to the performance of cognitive and intellective tasks (Watson & Michaelsen, 1988).

Based on the arguments above, we contend that directors’ involvement and commitment to board activities—inside and outside meetings—will facilitate both control and strategy tasks (Forbes & Milliken, 1999; Gabrielson & Winlund, 2000; McNulty & Pettigrew, 1999; Sonnenfeld, 2002). Concerning the board control tasks, board members’ careful scrutiny of management reports, availability to contribute to the board work if necessary, and active participation with critical questions during meetings favor an independent view on a company’s issues and effective board oversight (Forbes & Milliken, 1999). At the same time, preparation for board meetings and active participation during meetings with questions secure constructive and fruitful discussions (Wageman, 1995) and improve the quality of strategic decision making (Forbes & Milliken, 1999). So we hypothesize the following:

**Hypothesis 4:** Board effort norms will positively influence (a) board control task performance and (b) board strategy task performance.

**Board use of knowledge and skills and board task performance.** The “use of knowledge and skills” construct represents the minimization of “process losses” and the occurrence of “collective learning” among members (Hackman, 1987: 327) and is related to behavioral dimensions of social integration (Cohen & Bailey, 1997). The use of knowledge and skills is associated with the process by which board members’ contributions are coordinated and specifically refers to the flows of information among board members, the clear division of tasks and responsibilities, and the awareness board members have of each other’s competences and areas of expertise (Forbes & Milliken, 1999). The use of knowledge and skills is particularly relevant in determining group effectiveness when groups are highly interdependent and share a sense of collective responsibility for performance outcomes (Wageman, 1995).

This construct differs from the presence of knowledge and skills, which conversely refers to the presence of functional (e.g., finance, marketing, accounting) and/or firm-specific knowledge and expertise. Boards are usually populated by highly competent and reputed individuals; however, the mere presence of knowledge does not imply per se that board members will use their knowledge in performing board tasks (Forbes & Milliken, 1999; Kor & Sundaramurthy, 2009; Zona & Zattoni, 2007). An effective board requires the active use and integration of the directors’ expertise and skills for the benefit of group decisions. To perform effectively their control tasks, boards should integrate their expertise in accounting and strategy with their knowledge of the firm’s business. Moreover, to perform effectively their strategy tasks, boards should combine their competencies in different functional areas and apply them properly to address firm-specific issues (Forbes & Milliken, 1999). Hence, we hypothesize the following:

**Hypothesis 5:** Board use of knowledge and skills will positively influence (a) board control task performance and (b) board strategy task performance.

**Board cognitive conflicts and board task performance.** Groups performing an intellectual task are more effective if their members can express multiple viewpoints and exchange
positive and negative comments (Watson & Michaelsen, 1988). Directors believe that constructive conflict, that is, when board members hold and debate diverse views among themselves and with the CEO, is a very important ingredient of board effectiveness (Finkelstein & Mooney, 2003). According to abundant anecdotal evidence, group processes including groupthink (Janis, 1972), undiscussability (Argyris, 1985), and pluralistic ignorance (Westphal & Bednar, 2005) are common in the corporate boardroom, preventing board members from candid discussions (Hambrick et al., 2008).

The presence of cognitive conflict in the boardroom, through the asking of tough questions, is crucial for board effectiveness (Finkelstein & Mooney, 2003; Hambrick et al., 2008; Sonnenfeld, 2002). Cognitive conflicts are beneficial to board control task performance as long as they make it easier for directors to discuss professional opposing views, to gain a clearer picture of the firm’s situation, and to openly express a personal judgment on managerial behavior (Forbes & Milliken, 1999). Open debate and disagreements inside the boardroom facilitate evaluations of company performance and result in feedback for appropriate corrective actions (Zahra & Pearce, 1989). Cognitive conflicts are also of particular relevance with regard to the board strategy tasks, as they increase the group members’ tendency to scrutinize task issues and to engage in deliberate processing of task-relevant information (De Dreu & Weingart, 2003). Moreover, open debate and disagreements among board members may induce the top managers to consider other strategic alternatives and to evaluate more carefully the ones on the table and, occasionally, may also lead to the initiation of strategic proposals (Zahra & Pearce, 1989). Hence, we hypothesize the following:

**Hypothesis 6:** Board cognitive conflicts will positively influence (a) board control task performance and (b) board strategy task performance.

**Board Task Performance and Firm Financial Performance**

Board effectiveness in performing its control and strategy tasks influences firm financial performance respectively by monitoring management misappropriation and firm performance (Fama & Jensen, 1983; Finkelstein & Mooney, 2003; Forbes & Milliken, 1999) and bringing qualified advice and counsel to top managers (Finkelstein & Mooney, 2003; Forbes & Milliken, 1999; Mace, 1971). Hillman and Dalziel (2003) recognized that both monitoring and provision of resources and advice are crucial for the board’s contribution to firm performance. Similarly, Westphal (1999: 11) argued that the quality of board contribution will be higher when board control is complemented with high levels of directors’ advice and counsel. In line with these conclusions, a recent review of literature and studies on boards of directors in family businesses (Bammens et al., 2011) affirms that both primary tasks of the board have a positive impact on firm financial performance. In line with these arguments, Forbes and Milliken (1999) proposed that boards that are effective in fulfilling their control and strategy tasks will have a positive influence on corporate performance. Accordingly, we hypothesize,

**Hypothesis 7:** Board effectiveness in (a) control tasks and (b) strategy tasks will have a positive impact on firm financial performance.
Method

Samples and Data Collection

This project is part of a long-term research program aimed at investigating boards of directors. In this project, we spent a lot of time and attention in the development of the questionnaire to enhance the construct validity of the survey measures. In a first phase we organized 15 guided discussions about the survey instrument with governance scholars to develop and validate a preliminary draft of the questionnaire. Then we made 20 in-depth pilot interviews with potential respondents to check for consistent understanding of terms and to validate our assumptions about the appropriate level of vocabulary (Fowler, 1995). We also conducted a pretest (Fowler, 1993) to enhance the construct validity of the survey measures, and we interviewed 10 board members participating in the pilot study to assist us in the fine-tuning of the questionnaire, and particularly in identifying potentially misleading items (Carpenter & Westphal, 2001). To reduce response bias, multiple response formats were used and items measuring each construct were scattered through the survey (DeVellis, 1991).

The survey was sent to 1,400 Norwegian nonpublic medium-sized and small firms, that is, firms having between 10 and 500 employees, in 2003. We obtained 488 replies, with a response rate about 35%. The mean number of employees was 83, and 43% of the firms had 30 or fewer employees. Final analyses were based on 421 companies due to the lack of archival data on firm performance for 67 companies.

Due to difficulties in gaining access to process data on boards of directors (e.g., Daily et al., 2003; Pettigrew, 1992), studies using primary survey data are often based on a single respondent (e.g., Minichilli et al., 2012; Pearce & Zahra, 1991; Zahra et al., 2000). In line with previous studies, we considered the CEOs as the best possible key informants because they are knowledgeable about the board processes, while at the same time they are also in a better position than other board members to report on the board’s contribution to board control and strategy tasks (Zahra et al., 2000). Board members are part of a group that meets episodically, which suggests potential downsides of having multiple respondents. Kumar, Stern, and Anderson (1993) emphasize that having multiple respondents in some specific circumstances can enhance the risk of constructing averaged measures that reflect divergence across respondents rather than representing the constructs being investigated.

The self-report method is a primary data-collection tool in management studies (e.g., Podsakoff & Organ, 1986). This is particularly suitable for studies focused on process variables inside the boardroom because these variables are extremely difficult to measure without the use of self-reports (Daily et al., 2003; Pettigrew, 1992). Studying board processes requires the collaboration of directors, and they are reticent to invite researchers to investigate what happens inside the “black box” (e.g., Pettigrew, 1992). Recent scandals may have also aggravated problems because the risk of being subject to a shareholder lawsuit is greater nowadays than it was in the past (Daily et al., 2003).

In our study, we adopted some procedural remedies to reduce potential common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003): (a) our cover letter guaranteed anonymity and confidentiality, (b) dependent and independent variables in questionnaires
were kept separate from each other, (c) we devoted careful attention to the wording of questions to avoid vague concepts and to reduce item ambiguity, (d) we stated clearly in the questionnaire that there were no right or wrong answers and that respondents should answer questions as honestly as possible, and (e) we carefully worded questions to minimize the likelihood of social desirability bias, using inputs from the pilot interviews.

**Variables**

Most of the variables were collected using 5-point Likert-type scales. The items used to measure the different variables were adapted from the literature and previous studies on boards of directors. In developing the wording of the questions, we drew from available qualitative research on boards of directors (Westphal, 1999). All constructs have Cronbach’s alphas greater than .7.

**Dependent variables.** Control task performance measures the board’s contribution in controlling the company’s performance on different issues. Board control task performance was developed based on the theoretical work of Fama and Jensen (1983) and Forbes and Milliken (1999), and it was operationalized using items developed in previous studies (e.g., Gabrielsson & Winlund, 2000; Westphal, 1999). Board control task performance (Cronbach’s $\alpha = .71$) was built using five items measuring the extent to which the board (a) is involved in following up with and reassessing investments, (b) sets CEO remuneration, (c) is active in controlling and evaluating strategic decisions, (d) establishes plans and budgets for the firm’s activities, and (e) keeps itself informed about the financial position of the firm.

Board strategy task performance measures the board’s contribution in providing advice to strategic decisions. Board strategy task performance was developed based on the theoretical framework of Forbes and Milliken (1999) and Fama and Jensen (1983), and it was operationalized using items developed in previous empirical studies (e.g., Gabrielsson & Winlund, 2000). Board strategy task performance (Cronbach’s $\alpha = .73$) was built using six items measuring the extent to which the board provides advice on (a) management issues, (b) financial issues, (c) technical issues, and (d) market issues, and how the board actively (e) initiates strategy proposals and (f) makes decisions on long-term strategy.

To assess firm financial performance, we used return on assets (ROA), defined as the net operating income before extraordinary items divided by total assets. ROA is a well-understood and common measure used in several studies on the impact of boards and top management teams on firm performance (e.g., Finkelstein & D’Aveni, 1994; Geletkanycz & Hambrick, 1997). We measured firm financial performance using both ROA 2003 and ROA 2004. The firm financial performance construct presents a Cronbach’s alpha of .72.

**Independent variables.** Independent variables include family involvement in the business and the board processes (e.g., effort norms, use of knowledge and skills, and cognitive conflicts).

Family involvement in the business was measured using the most stringent definition of family firms proposed by Astrachan and Shanker (2003). Following this definition, we asked
the CEO if (a) one or more families have voting control of the firm and (b) more generations of the same family are active in the firm. A firm is considered a family firm if both conditions are satisfied.

Effort norms were developed following Forbes and Milliken (1999: 494) and drawing on Wageman’s (1995) example. The effort norms (Cronbach’s $\alpha = .83$) variable was measured by asking the CEO the extent to which board members (a) carefully scrutinize information provided by management before the meetings, (b) are always available if board work demands it, and (c) actively participate with critical questions during meetings.

The use of knowledge and skills was measured relying on what was first elucidated by Hackman and Morris (1975) and was adapted to the board context following Forbes and Milliken (1999: 496). As such, use of knowledge and skills (Cronbach’s $\alpha = .77$) was measured by asking the CEO about the extent to which (a) board members know each other’s competences well, (b) the division of work in this board is a good match between board members’ knowledge/competencies and the character of the work, and (c) the most knowledgeable board members use their knowledge when an issue is discussed.

The cognitive conflicts measure was developed for the purposes of this study based on Jehn’s (1995) operationalization of conflicts and relying on Forbes and Milliken’s (1999) arguments to adapt such a measure to corporate boards. Hence, cognitive conflicts (Cronbach’s $\alpha = .79$) were measured by asking the CEOs to evaluate the extent to which conflicts and disagreements emerged in the boardroom on (a) decisions to be taken during the board meetings, (b) how to define what is the best for the firm, (c) decision processes, and (d) the firm’s owners and stakeholders’ interests.

Control variables. Control variables relate to firms’ and boards’ characteristics. At the firm level, we controlled for firm size measured as the logarithmic transformation of firm sales. We also controlled for the industry, measured with dummy variables at the second digit of NACE (the European Classification of Economic Activities). Firms in our sample belong to 10 industries: (a) fishing, (b) mining and quarrying, (c) manufacturing, (d) electricity, gas, and water supply, (e) construction, (f) wholesale and retail trade, (g) transport, storage, and communication, (h) financial intermediation, (i) real estate, renting and business activities, and consulting, and (j) other.

At the board level, we controlled for traditional demographic variables (Finkelstein & Mooney, 2003): (a) board size, measured as the number of board members (Zahra et al., 2000); (b) the nonexecutive ratio, measured as the percentage of nonexecutive board members over the total number of directors (Mallette & Fowler, 1992); and (c) the presence of CEO duality, coded as 1 if the CEO was also the board chairperson and 0 otherwise (Finkelstein & D’Aveni, 1994). Due to the Norwegian origin of the sample, we controlled also for the number of board members elected by employees. This variable was measured as the percentage of employee-elected board members over the total number of directors.

Statistical Remedies for Common Method Bias

To deal with potential common method bias (Doty & Glick, 1998), we obtained measures of predictor and dependent variables from different sources (Podsakoff et al., 2003). While
our independent and mediating variables are based on self-reported subjective measures, firm performance data were collected from archives.

Moreover, to assess the degree to which common method bias may be a problem, we applied several statistical remedies as suggested by Podsakoff et al. (2003). Specifically, we performed Harman’s one-factor test and partial correlation analyses, and we controlled for an unmeasured latent methods factor. First, the exploratory factor analysis of the 23 items measuring the three board process constructs (effort norms, use of knowledge and skills, and cognitive conflicts), the two board effectiveness constructs (control and strategy task performance), and firm financial performance exhibited six clear factors, thus suggesting that the majority of the variance between the variables cannot be accounted for by one general factor. Second, the partial correlation procedure suggested that common method bias does not appear to be a problem in our data (Lindell & Whitney, 2001). Finally, we reestimated the hypothesized model with all indicator variables loading on an unmeasured latent method first order factor. This technique controls for any systematic variance among the survey items that is independent of the covariance due to the constructs of interest (Podsakoff et al., 2003). While the introduction of the unmeasured latent method factor leads to an increase in model fit, thus indicating some degree of common method variance in the data, the estimated path coefficients remained significant.

Analysis

We applied structural equation modeling (SEM) using the LISREL 8.53 software to test for the hypothesized relationships among family involvement in the business, board processes, board task performance, and firm performance. SEM is particularly suitable to test the proposed theoretical model because it allows simultaneous estimation of multiple relationships between latent constructs involving mediation and accounts for measurement error in the constructs.

We followed the commonly established two-stage procedure (Anderson & Gerbing, 1988; Medsker, Williams, & Holahan, 1994). In the first step, a confirmatory factor analysis (CFA) was conducted to assess the validity of the measurement model and the discriminant validity of individual constructs. In the second step, a structural model was used to estimate the path coefficients and test for the relationships between constructs.

Results

Descriptive Results

Means and standard deviations of independent, dependent, and control variables are presented in Table 1. Almost half of the sample includes family firms, and this allows a fair test of hypotheses. Firms have median sales of €6.98 million. Boards of directors are relatively small (about five members) and have about two thirds of nonexecutive members, and in only a few cases is the CEO also the board chairperson. Finally, employee directors are not common in SMEs. In Table 2 we present variances and covariances among key variables of the research.
Measurement Models Results

The first stage of the analysis involves assessing the psychometric properties of the latent constructs. Each latent variable in the model was measured by multiple indicators and evaluated in terms of reliability and validity. The psychometric properties of the multi-item constructs (effort norms, use of knowledge and skills, cognitive conflicts, control tasks, and strategy tasks) were assessed simultaneously in one CFA. The CFA results showed a good model fit (CFI = .82, RMSEA = .058). We assessed reliability by calculating a composite reliability for each construct (Fornell & Larcker, 1981). Along with the reliability calculations, we also examined the parameter estimates and their associated t-values as well as the average variances extracted (Anderson & Gerbing, 1988). The reliabilities of the scales range from

### Table 1
Means and Standard Deviations

<table>
<thead>
<tr>
<th>#</th>
<th>Variable</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The board establishes plans and budgets for the firm’s activities</td>
<td>4.08</td>
<td>0.97</td>
</tr>
<tr>
<td>2</td>
<td>The board keeps itself informed about the financial position of the firm</td>
<td>4.55</td>
<td>0.60</td>
</tr>
<tr>
<td>3</td>
<td>The board is involved in following up and reassessing investments</td>
<td>4.21</td>
<td>0.91</td>
</tr>
<tr>
<td>4</td>
<td>The board sets the CEO remuneration</td>
<td>4.04</td>
<td>1.26</td>
</tr>
<tr>
<td>5</td>
<td>The board is active in controlling and evaluating strategic decisions</td>
<td>3.64</td>
<td>0.99</td>
</tr>
<tr>
<td>6</td>
<td>The board provides advice on management issues</td>
<td>3.36</td>
<td>1.07</td>
</tr>
<tr>
<td>7</td>
<td>The board provides advice on financial issues</td>
<td>3.68</td>
<td>1.08</td>
</tr>
<tr>
<td>8</td>
<td>The board provides advice on technical issues</td>
<td>2.74</td>
<td>1.18</td>
</tr>
<tr>
<td>9</td>
<td>The board provides advice on market issues</td>
<td>3.44</td>
<td>1.00</td>
</tr>
<tr>
<td>10</td>
<td>The board actively initiates strategy proposals</td>
<td>3.02</td>
<td>1.21</td>
</tr>
<tr>
<td>11</td>
<td>The board actively makes decisions on long-term strategy</td>
<td>3.92</td>
<td>1.03</td>
</tr>
<tr>
<td>12</td>
<td>ROAt (firm performance)</td>
<td>0.02</td>
<td>0.87</td>
</tr>
<tr>
<td>13</td>
<td>ROAt+1 (firm performance)</td>
<td>0.04</td>
<td>0.35</td>
</tr>
<tr>
<td>14</td>
<td>Family involvement</td>
<td>0.54</td>
<td>0.50</td>
</tr>
<tr>
<td>15</td>
<td>Board members carefully scrutinize information provided by management before the meetings</td>
<td>3.36</td>
<td>0.89</td>
</tr>
<tr>
<td>16</td>
<td>Board members are always available if the board work should demand it</td>
<td>4.00</td>
<td>0.89</td>
</tr>
<tr>
<td>17</td>
<td>Board members actively participate with critical questions during meetings</td>
<td>3.42</td>
<td>1.04</td>
</tr>
<tr>
<td>18</td>
<td>Extent to which board members know each other’s competences well</td>
<td>4.25</td>
<td>0.78</td>
</tr>
<tr>
<td>19</td>
<td>Extent to which the division of work in this board is a good match between board members’ knowledge/competencies and the character of the work</td>
<td>3.64</td>
<td>0.93</td>
</tr>
<tr>
<td>20</td>
<td>Extent to which when an issue is discussed the most knowledgeable board members use their knowledge</td>
<td>3.79</td>
<td>0.95</td>
</tr>
<tr>
<td>21</td>
<td>Extent to which conflicts and disagreements emerged in the boardroom on decisions to be taken during the board meetings</td>
<td>1.84</td>
<td>0.90</td>
</tr>
<tr>
<td>22</td>
<td>Extent to which conflicts and disagreements emerged in the boardroom on how to define what is the best for the firm</td>
<td>2.17</td>
<td>0.99</td>
</tr>
<tr>
<td>23</td>
<td>Extent to which conflicts and disagreements emerged in the boardroom on decision processes</td>
<td>1.77</td>
<td>0.85</td>
</tr>
<tr>
<td>24</td>
<td>Extent to which conflicts and disagreements emerged in the boardroom on firm’s owners and stakeholders’ interests</td>
<td>1.93</td>
<td>1.07</td>
</tr>
<tr>
<td>25</td>
<td>Firm size (sales)</td>
<td>4.62</td>
<td>1.04</td>
</tr>
<tr>
<td>26</td>
<td>Board size</td>
<td>4.91</td>
<td>1.97</td>
</tr>
<tr>
<td>27</td>
<td>Nonexecutive ratio</td>
<td>0.63</td>
<td>0.38</td>
</tr>
<tr>
<td>28</td>
<td>CEO duality</td>
<td>0.10</td>
<td>0.29</td>
</tr>
<tr>
<td>29</td>
<td>Employees’ directors</td>
<td>0.64</td>
<td>1.00</td>
</tr>
</tbody>
</table>
.88 to .94, the factor loadings range from .45 to .82 ($p < .05$), and the average variances extracted range from 71% to 80% (see Table 3). The items were also found to be reliable and valid when evaluated based on each item’s error variance, modification index, and residual covariation.

We established discriminant validity by two independent methods. First, we calculated the shared variance between each pair of constructs and verified that it was lower than the variances extracted for the involved constructs (Fornell & Larcker, 1981). The shared variances between pairs of all possible scale combinations indicated that the average variances extracted were higher than the associated shared variances in all cases. Second, we examined all possible pairs of constructs, as suggested by Bagozzi and Phillips (1982), in a series of two-factor CFA models. The pairwise analysis tests showed that CFA models representing two factors fitted the data significantly better than the one-factor models, that is, $\Delta \chi^2 (1) > 4.32$ was exceeded in all cases.

In addition, we tested for the invariability of the constructs and their measurement across two samples of the same Norwegian population of SMEs. The first sample is that one described above; the second one is a comparable sample of 451 Norwegian nonpublic small companies, that is, firms with between 5 and 30 employees. We conducted two tests to check for the absence of sample biases. First, we evaluated nonresponse biases with chi-square tests between the two samples, finding no significant differences for industries ($\chi^2 = 0.03647$, $df = 11$) or sales ($\chi^2 = 0.01578$, $df = 5$). Second, we compared early respondents (first half) to late respondents (second half; Armstrong & Overton, 1977), finding no significant differences on industries or sales. Then a multigroup analysis was conducted to validate the factorial structure of the proposed constructs and test whether the regression coefficients were invariant across the two samples (Williams, Edwards, & Vandenberg, 2003). We tested for equality with respect to the measurement model (invariance of factor loadings, factor variance and error terms), including all multi-item constructs. Our results provide support for the validity of our constructs across the two samples.

### Table 2

<table>
<thead>
<tr>
<th>#</th>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control tasks</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Strategy tasks</td>
<td>.62**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Effort norms</td>
<td>.37**</td>
<td>.50**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Use of knowledge and skills</td>
<td>.66**</td>
<td>.65**</td>
<td>.04</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cognitive conflicts</td>
<td>.01</td>
<td>.10*</td>
<td>–0.02</td>
<td>–0.02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Firm performance</td>
<td>.06</td>
<td>.18*</td>
<td>.09†</td>
<td>.10†</td>
<td>.02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>CEO duality</td>
<td>.03†</td>
<td>.05†</td>
<td>.01</td>
<td>.01</td>
<td>.00</td>
<td>.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Nonexecutive ratio</td>
<td>.04†</td>
<td>.03†</td>
<td>–0.01</td>
<td>–0.01</td>
<td>.01</td>
<td>.00</td>
<td>–0.01</td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Board size</td>
<td>.24*</td>
<td>–.29*</td>
<td>–.15†</td>
<td>–.15†</td>
<td>.08</td>
<td>–.08</td>
<td>–.20†</td>
<td>.10</td>
<td>3.23</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Family involvement</td>
<td>.05†</td>
<td>.11*</td>
<td>.10*</td>
<td>.10*</td>
<td>–.05†</td>
<td>.02</td>
<td>.02</td>
<td>–.03</td>
<td>–.36*</td>
<td>.24</td>
</tr>
</tbody>
</table>

$p < .1. *p < .05. **p < .01.$
Table 3
Theoretical Constructs and Measures

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measures</th>
<th>Estimate</th>
<th>Average Variance</th>
<th>Construct Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Effort norms</td>
<td>The extent to which board members:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Carefully scrutinize information provided by management before the meetings</td>
<td>0.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are always available if the board work should demand it</td>
<td>0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Actively participate with critical questions during meetings</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Use of knowledge and skills</td>
<td>The extent to which:</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Board members know each other’s competences well</td>
<td>0.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The division of work in this board is a good match between board members’ knowledge/competencies and the character of the work</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When an issue is discussed the most knowledgeable board members use their knowledge</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Cognitive conflicts</td>
<td>The extent to which conflicts and disagreements emerged in the boardroom on:</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decisions to be taken during the board meetings</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• How to define what is the best for the firm</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decision processes</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Firm’s owners and stakeholders’ interests</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Control tasks</td>
<td>The extent to which the board:</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Is involved in following up and reassessing investments</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sets the CEO remuneration</td>
<td>0.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Is active in controlling and evaluating strategic decisions</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establishes plans and budgets for the firm’s activities</td>
<td>0.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Keeps itself informed about the financial position of the firm</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Strategy tasks</td>
<td>The extent to which the board:</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provides advice on management issues</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provides advice on financial issues</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provides advice on technical issues</td>
<td>0.58</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provides advice on market issues</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Initiates strategic proposals</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Makes decisions on long-term strategy</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Firm performance</td>
<td>The extent to which:</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Return on assets 2003</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Return on assets 2004</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Structural Models Results

The structural model is used to assess the validity of causal structures among latent variables. Variances in board tasks performance and firm financial performance explained by the model are, respectively, 64% for control tasks, 70% for strategy tasks, 3.6% for firm financial performance. The model presents an RMSEA of .05 and an RMSR of .04. The goodness of fit indices values are as follows: minimum fit function $\chi^2 = 1813.23$, $df = 305$, CFI = .82, and NFI = .79.

Our results suggest that family involvement in the business had a positive and significant impact on board effort norms ($0.40, t = 3.27$) and use of knowledge and skills ($0.41, t = 3.18$), whereas the impact on cognitive conflicts was negative and significant ($-0.21, t = -1.94$). These results support Hypotheses 1 to 3 about the influence of family involvement on board processes.

The path coefficients from board effort norms to board control and strategy task performance were both positive and significant, thus lending support to Hypotheses 4a and 4b ($0.37, t = 4.91$ and $0.48, t = 5.78$). The path coefficients from use of knowledge and skills to board control tasks and board strategy task performance were positive and significant ($0.67, t = 6.60$ and $0.63, t = 6.51$). This result supports Hypotheses 5a and 5b. Furthermore, board cognitive conflicts had a positive and significant impact on board strategy task performance ($0.12, t = 2.34$), while the impact on board control tasks was positive but not significant ($0.02, t = 0.31$). This result provides support only for Hypothesis 6b.

Finally, our results show a positive influence of board strategy tasks on firm financial performance ($0.23, t = 2.52$), but no statistically significant relationship for board control tasks and firm performance ($-0.08, t = -0.86$). This result supports only Hypothesis 7b. The path coefficients and their significance levels are reported in Table 4 and Figure 2.

Table 4
Results of the Structural Model

<table>
<thead>
<tr>
<th>Structural Model Estimates</th>
<th>Unstandardized Estimates</th>
<th>$t$</th>
<th>Variance</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Path between family involvement $\rightarrow$ effort norms</td>
<td>0.40</td>
<td>3.27</td>
<td>0.12</td>
<td>**</td>
</tr>
<tr>
<td>H2: Path between family involvement $\rightarrow$ use of knowledge and skills</td>
<td>0.41</td>
<td>3.18</td>
<td>0.13</td>
<td>**</td>
</tr>
<tr>
<td>H3: Path between family involvement $\rightarrow$ cognitive conflicts</td>
<td>$-0.21$</td>
<td>$-1.94$</td>
<td>0.11</td>
<td>†</td>
</tr>
<tr>
<td>H4: Path between effort norms $\rightarrow$ control tasks</td>
<td>0.37</td>
<td>4.91</td>
<td>0.08</td>
<td>**</td>
</tr>
<tr>
<td>H5: Path between effort norms $\rightarrow$ strategy tasks</td>
<td>0.48</td>
<td>5.78</td>
<td>0.08</td>
<td>**</td>
</tr>
<tr>
<td>H6: Path between use of knowledge and skills $\rightarrow$ control tasks</td>
<td>0.67</td>
<td>6.60</td>
<td>0.10</td>
<td>**</td>
</tr>
<tr>
<td>H7: Path between use of knowledge and skills $\rightarrow$ strategy tasks</td>
<td>0.63</td>
<td>6.51</td>
<td>0.10</td>
<td>**</td>
</tr>
<tr>
<td>H8: Path between cognitive conflicts $\rightarrow$ control tasks</td>
<td>0.02</td>
<td>0.31</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>H9: Path between cognitive conflicts $\rightarrow$ strategy tasks</td>
<td>0.12</td>
<td>2.34</td>
<td>0.02</td>
<td>**</td>
</tr>
<tr>
<td>H10: Path between control tasks $\rightarrow$ firm performance</td>
<td>$-0.08$</td>
<td>$-0.86$</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>H11: Path between strategy tasks $\rightarrow$ firm performance</td>
<td>0.23</td>
<td>2.52</td>
<td>0.09</td>
<td>**</td>
</tr>
</tbody>
</table>

Note: RMSEA = .05; RMSR = .04; minimum fit function $\chi^2 = 1813.23$; $df = 305$; CFI = .82; NFI = .79.

† $p < .1$, ** $p < .01$. 

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Some of our control variables have significant effects on board task performance. CEO duality has a positive and significant impact on both control tasks ($0.60$, $t = 3.45$) and strategy tasks ($0.48$, $t = 2.88$). Board size has a positive and significant impact only on control tasks ($0.15$, $t = 4.72$). Finally, the nonexecutive ratio has a positive and significant impact on both control tasks ($0.34$, $t = 2.48$) and strategy tasks ($0.36$, $t = 2.69$). No significant relationships have been found with the other control variables.

### Test for Mediating Effect

We compared the model with some nested alternative models (Anderson & Gerbing, 1988) considering a direct effect of family involvement in the business to board tasks performance and firm performance. Our results show that alternative models with direct paths from family involvement to board tasks performance or firm performance—when compared to the hypothesized model—yielded no or minimal gains of goodness of fit indicators and a nonsignificant chi-square difference. Thus, also for parsimony on the model parameters, our final model did not include any of the direct paths of family involvement in the business to board tasks or to firm performance tested in alternative models.

Four conditions are necessary for the presence of a mediation effect (Baron & Kenny, 1986). First, the independent and dependent variable(s) must be correlated. Second, the
independent and mediator variable(s) must be correlated. Third, the mediator and dependent variable(s) must be correlated. Fourth, the effect of the independent variables on the outcome variable must change when controlling for the mediating variables.

Our results provide support for the conditions necessary for mediation in both steps of the model. On the first part of the model (i.e., the relationships among family involvement, board processes, and board tasks performance), our results show that (a) effort norms and use of knowledge and skills influence the relationships between family involvement and board (strategy and control) tasks performance, while (b) cognitive conflicts influence only the relationships between family involvement and strategy tasks (see Table 2, Table 5, and Figure 2). For the second part of our model (i.e., the relationships among board processes, board tasks performance, and firm financial performance), our results show that (a) board strategy tasks influence the relationships between the three board processes (i.e., effort norms, use of knowledge and skills, and cognitive conflicts) and firm financial performance, while (b) board control tasks do not influence the relationships between board processes and firm financial performance (see Table 2, Table 5, and Figure 2).

To further probe the nature of the mediation, we used the Sobel test (Baron & Kenny, 1986; Preacher & Kelley, 2011; Sobel, 1982). Given that our model has a two-step mediation process, we ran multiple Sobel tests on the actual mediation effects of all relationships. There is no significant indirect effect if the Sobel test $z$-value is not significant (< 1.96), the mediation relationship is partial if the Sobel test $z$-value is significant (> 1.96) and the effect ratio is lower than 0.8, and the mediation relationship is full if the Sobel test $z$-value is significant (> 1.96) and the effect ratio is greater than 0.8 (Jose, 2008). The tests support the significant mediating role for the above-mentioned mediator variables (see Table 6).

### Table 5

Results of Structural Nested Model Comparisons With Family Involvement in the Business Connected to Board Task Performance and Firm Performance

<table>
<thead>
<tr>
<th>#</th>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMSR</th>
<th>$\Delta\chi^2$</th>
<th>Coeff.</th>
<th>Control Tasks</th>
<th>Strategy Tasks</th>
<th>Firm Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hypothesized model</td>
<td>1813.23</td>
<td>305</td>
<td>.82</td>
<td>.05</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hypothesized model and family involvement → control tasks direct effect</td>
<td>1708.22</td>
<td>304</td>
<td>.80</td>
<td>.06</td>
<td>.06</td>
<td>-105.01</td>
<td>0.43, 1.96*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Hypothesized model and family involvement → strategy tasks direct effect</td>
<td>1709.36</td>
<td>304</td>
<td>.81</td>
<td>.06</td>
<td>.04</td>
<td>-103.87</td>
<td>0.47, 1.98*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Hypothesized model and family involvement → control and strategy tasks direct effect</td>
<td>1605.24</td>
<td>303</td>
<td>.82</td>
<td>.06</td>
<td>.05</td>
<td>-207.99</td>
<td>0.34, 1.76 † 0.31, 1.68 †</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Hypothesized model and family involvement → firm performance</td>
<td>1598.63</td>
<td>304</td>
<td>.81</td>
<td>.61</td>
<td>.53</td>
<td>-214.60</td>
<td>0.31, 1.73 †</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$p < .1. *p < .05.$
Discussion

This study makes a number of contributions to the existing literature on family business and corporate governance by exploring the relationships among family involvement in the business, board processes, board effectiveness, and firm performance.

First, the study sheds new light on the effects of family involvement in the business on firm financial performance, exploring the mediating effects of board processes and tasks (e.g., Bammens et al., 2011; Habbershon et al., 2003). Our findings show that family involvement in the business has both positive and negative effects on board processes and, through them, has a positive impact on board tasks performance (Bammens et al., 2011; van den Heuvel et al., 2006), and ultimately on firm financial performance (Habbershon et al., 2003). The study goes beyond input–output models and extends the results of prior studies by showing that board processes and tasks performance play a mediating role in the understanding of the relationship between family involvement and firm financial performance (Chrisman et al., 2010).

Second, the study is grounded in the growing body of research focusing on board behavior, arguing that intermediate processes are crucial for board effectiveness (Finkelstein & Mooney, 2003; Letendre, 2004). Despite numerous calls (Forbes & Milliken, 1999; Hambrick et al., 2008; Pettigrew, 1992), board processes have rarely been investigated in previous empirical research, mainly due to the difficulties in gaining access to boards (e.g., Bettinelli, 2011). Our results extend prior studies on boards of directors of family firms suggesting that processes do matter for board effectiveness, and ultimately for firm financial performance (Forbes & Milliken, 1999; van den Heuvel et al., 2006; Zona & Zattoni, 2007).

Finally, this article contributes to existing research by linking board tasks performance to firm-level performance. A number of influential scholars have theoretically asserted that board tasks effectiveness will increase firm financial performance (Forbes & Milliken,
By linking subjective self-reported measures of board tasks performance to objective firm performance data, we found partial support for the hypothesized relationships between board tasks performance and corporate financial performance. It is interesting that we found that board strategy task performance enhances firm financial performance, whereas board control task performance does not. These results underline that boards are critical strategic assets that can enrich the strategic decision making at the top of family SMEs (e.g., Kim et al., 2009; Pugliese et al., 2009), while they cast some doubt on the importance of board control tasks in the same business context.

Implications for Theory and Practice

Family involvement in the business and board processes. Our results underline the importance of the unique psychodynamic processes and features of family involvement in the business (e.g., Ensley & Pearson, 2005; Kellermanns & Eddleston, 2007). Specifically, our results support a strong effect of family involvement in the business within the board context, with both positive and negative consequences on board internal processes. In this way, we extend family business and governance literatures showing how boards can represent a proper context to explore the advantages and disadvantages of family firms (Bammens et al., 2011).

Our results show that family involvement in the business encourages effort norms and use of knowledge and skills, at the expense of lower cognitive conflicts. Family firms tend to avoid cognitive conflicts because the uncomfortable atmosphere created from the increase in disagreements (Jehn, 1995) can have negative consequences on the harmony of the family. Previous studies have shown that in family firms there is a higher risk that cognitive conflicts are misperceived as personal attacks and escalate in animosity and personal conflicts (Kellermanns & Eddleston, 2007). The negative relationship between family involvement and cognitive conflicts is intriguing as cognitive conflicts could be particularly beneficial to prevent the risk of “groupthink” (Ensley & Pearson, 2005). The avoidance of cognitive conflicts in the boardroom can produce relevant negative consequences as family firms have the tendency to let their core competencies develop into core rigidities, so undermining their ability to cope with unexpected environmental changes (Ward, 1987). However, family firms can have lower board cognitive conflicts because they prefer to manage and solve potential tensions among family members in other contexts—for example, family councils, family assemblies, and family meetings—aimed at ensuring family health and stability (e.g., Aronoff & Ward, 1992). As cognitive conflicts can be raised either in boards or in other formal meetings, our findings encourage future studies to develop a better understanding of the relationship among family involvement in the business, cognitive conflicts in boards or in other governance bodies, and firm financial performance (Kellermanns & Eddleston, 2007).

Finally, our study challenges the idea that governance models and practices are universal and similar for all companies. Our results, showing that family involvement in the business influences board processes and tasks, suggest that a deep understanding of the specific context may open promising avenues for governance research. This finding is a call for future studies to develop theoretical models that take into account firm-specific characteristics.
(e.g., Bamberger, 2008; Hambrick et al., 2008). Beyond family involvement in the business, other firm and environmental characteristics may have a strong impact on board of directors’ processes and tasks. Consider, for example, firm life cycle (e.g., Huse & Zattoni, 2008; Lynall, Golden, & Hillman, 2003), market and environmental conditions (e.g., Kim et al., 2009), and deviations from previous performance (Tuggle, Sirmon, Reutzel, & Bierman, 2010).

**Board processes and tasks.** Our results show that board internal processes do have a positive influence on board tasks performance. In particular, our results provide support for the relevance of effort norms and use of knowledge and skills as key antecedents of board tasks performance (Forbes & Milliken, 1999). They underline the benefits of directors doing their “homework” to understand a firm’s specificities and key strategic problems (Forbes & Milliken, 1999). They are consistent with best practices suggesting empowering corporate boards by creating teamwork such that executive and nonexecutive directors understand one another’s roles and responsibilities and collaborate to achieve corporate success (Lorsch & MacIver, 1989; Sonnenfeld, 2002). Furthermore, they show that effort behaviors can counteract habits of “pluralistic ignorance” in work groups that potentially affects nonexecutive directors (Westphal & Bednar, 2005). Similar considerations apply to the use of knowledge and skills, as our results support the benefits of an active use and integration of board members’ expertise for group decisions. The use of knowledge and skills may prevent “process losses” and help interdependent decision-making groups, such as boards of directors, to build effectively on each other’s contributions (Forbes & Milliken, 1999; Zona & Zattoni, 2007).

It is interesting to note that while board effort norms and use of knowledge and skills have a positive influence on both control and strategy tasks, board cognitive conflicts have a positive influence on only the board strategy tasks. This result challenges mainstream predictions arguing that cognitive conflicts have beneficial effects for both board tasks (e.g., Finkelstein & Mooney, 2003; Forbes & Milliken, 1999). A potential explanation for the lack of a significant relationship between cognitive conflicts and board control tasks, in corporate boards of family SMEs, is that the customary reluctance toward open and candid discussion (Hambrick et al., 2008) can make conflict an unpleasant experience for board members. This experience can be particularly stressful in the case of the board control tasks due to the overlap between ownership and control in the family’s hands (van den Heuvel et al., 2006), the close personal ties among board members (Daily & Dalton, 1995), and the higher emotional attachment to and interdependency on one another (Cruz, Gomez-Mejia, & Becerra, 2010). Another potential explanation for the lack of significance of the relationship between board cognitive conflicts and control tasks can be that disagreements in the boardroom weaken the board control task. This may be a pronounced situation in family firms where family managers are particularly powerful as they are shareholders and top managers at the same time. In these circumstances, extensive disagreements and intense discussions among board members can enhance the board’s involvement in strategy tasks, but they can also weaken the cohesiveness of the board and thus undermine a strong control task with respect to issues such as setting CEO compensation, establishing plans and budgets for the firm’s activities, and being involved in following up and reassessing investment decisions.
Finally, our study encourages governance scholars to go beyond simple input–output models (Hambrick et al., 2008; Pettigrew, 1992) and to explore the mediating role of board internal processes as key factors for board effectiveness and good corporate governance (e.g., Finkelstein & Mooney, 2003; Forbes & Milliken, 1999; Minichilli et al., 2012; Sonnenfeld, 2002). Future studies can extend our results by investigating the impact of family involvement in the business on board internal processes over time through the use of different research methods including multiple cases (e.g., Nicholson & Kiel, 2007; Ravasi & Zattoni, 2006), direct interviews with board members (e.g., McNulty & Pettigrew, 1999), action research (Samra-Fredericks, 2000), and many others. The richness provided by alternative methods can contribute to producing a better understanding of the mediating effects of board processes and tasks in the relationship between family involvement in the business and firm financial performance.

**Board tasks and firm financial performance.** Our results show that board strategy tasks lead to an increase of firm financial performance, while board control tasks do not. These findings support the idea that board strategy tasks can significantly contribute to the financial performance of family SMEs. First, as SMEs are less complex and formalized than large listed companies, the range and depth of the board strategy tasks are likely to be greater (Castaldi & Wortman, 1984; Judge & Zeithaml, 1992). Moreover, because firm size is thought to be negatively related to inertia, there may be a stronger link between board strategy tasks and firm financial performance (Hambrick & Finkelstein, 1987). Finally, because entrepreneurs and managers of SMEs do have relatively little general management experience, board strategy tasks can greatly contribute to firm performance (Forbes & Milliken, 1999). Overall, our results underline that boards, and particularly boards of family SMEs, should be considered as critical strategic assets that contribute to enriching and improving the strategic decision-making process (Kim et al., 2009; Machold, Huse, Minichilli, Nordqvist, 2011; McNulty & Pettigrew, 1999; Pugliese et al., 2009).

The lack of an effect of board control tasks on firm financial performance is an intriguing result as it departs from recent developments in family business literature and studies (Bammens et al., 2011; Gabrielsson, 2007). Our results show that in this specific context, where the ownership structure is concentrated and it is common to have direct representation of shareholders on the board (van den Heuvel et al., 2006), board control tasks do not significantly affect firm financial performance (e.g., Fama & Jensen, 1983; Forbes & Milliken, 1999). A potential explanation for this result is that the boards of family SMEs are only formally involved in control tasks as owning families do not want to create real control mechanisms and processes in order not to lose discretion over decision making (Bammens et al., 2011). Previous studies have shown that family firms use significantly fewer formal internal control systems than nonfamily firms as the family prefers to keep personal control rather than rely on formalized control systems to monitor firm performance (Daily & Dollinger, 1992). Socioemotional theory (Gomez-Mejia et al., 2011) provides an explanation for this phenomenon, emphasizing that the ability of family members to exercise authority and control over the business represents an important source of emotional satisfaction that family tends to preserve (Schulze et al., 2001).

An alternative explanation for the nonsignificant link between board control tasks and firm financial performance is that control tasks are relatively less important than strategic
tasks in family firms (Fama & Jensen, 1983). As family firms involve ownership and management by family members along with pride and loyalty to the family business, there are both economic incentives and intrinsic motivation to make decisions that promote the well-being of the firm. Thus, the agency issues and the associated control tasks of the board are somewhat less pronounced and perhaps different in family firms (e.g., principal–principal problems vs. principal–agent problems). This result is coherent with what happens in entrepreneurial firms at early stages of their development when, due to both the lack of large slacks and the presence of intrinsically motivated founders, the importance of the board’s advisory function is more pronounced than the monitoring function (Kor & Misangyi, 2008).

Finally, we acknowledge that generalization of our findings must take potential biases into account, as the study is based on the perceptions of CEOs of a single country (Norway). Conscious of the potential consequences of common method bias, we applied a number of procedural remedies in the instrument development and data collection phase (Podsakoff et al., 2003). Furthermore, we performed some of the most common statistical remedies designed to explore the presence of this problem (Podsakoff et al., 2003), and we collected objective firm performance data. Despite these efforts, it remains a challenge for future studies—although it will be notoriously difficult—to explore the effects of perceptions by other board members and respondents (Hillman, Nicholson, & Shropshire, 2008).

Beyond perception bias, reliance on data from one country questions the generalizability of our results in other national settings. However, the impact of the specific national context on our results should not be exaggerated as (a) there is a trend toward convergence of governance practices around the world, (b) we did not find a significant impact of the national legislation (i.e., employee representation on board) on the observed relationships, and (c) the informal environment of SMEs attenuates the impact of the national institutional context on the core relationships and variables under investigation. Nevertheless, cross-country research designs (Minichilli et al., 2012), or at least replication of studies across countries, may allow for generalizations of our results.

Practical implications. Our results indicate that family involvement in the business, and in general the firm context, may have a significant impact on board processes and, indirectly, on board tasks and, ultimately, firm financial performance. In particular, they show that family involvement has a negative effect on board cognitive conflicts that is, instead, considered by governance scholars as a key antecedent of board task performance (e.g., Forbes & Milliken, 1999; Zona & Zattoni, 2007). Our results warn family business boards to adopt structures and practices aimed at developing a decision-making environment where board members can openly express different viewpoints and disagreements, without creating animosity and personal conflicts among them. Such an environment is thought to contribute to board effectiveness, and ultimately to firm financial performance (e.g., Finkelstein & Mooney, 2003; Forbes & Milliken, 1999; Gersick et al., 1997; Hambrick et al., 2008).

The relevant role played by board processes in our study challenges the traditional focus of corporate governance and family business literature on a limited number of board demographic characteristics—for example, number of directors, nonexecutive ratio, and separation of CEO and chairperson role—as the main determinants of board effectiveness.
and firm financial performance. Our findings support the view that board tasks performance and firm financial performance are not related only to how boards are composed and structured (Finkelstein & Mooney, 2003; Hambrick et al., 2008). Our study shows that the effectiveness of boards of directors is strongly influenced also by group-level processes such as board effort norms, use of knowledge and skills, and cognitive conflicts (Forbes & Milliken, 1999).

Finally, our results underline the importance of the board strategy tasks for their positive implications on firm financial performance. Previous studies have highlighted that the nomination of outside directors who are business experts and who provide complementary assets of knowledge and skills can be especially valuable for family SMEs, as these directors can fill a managerial vacuum in the top management team and improve the board strategic decision-making process (Kor & Misangyi, 2008; Kor & Sundaramurthy, 2009). Moreover, they have shown that both greater board heterogeneity with respect to members’ tenure and firm or industry experience and the presence of members with a background associated with output functions can favor the effectiveness of the board strategy tasks (Tuggle, Schnatterly, & Johnson, 2010).

Conclusions

This study has investigated the mediating role of board processes and board effectiveness in the relationship between family involvement in the business and firm financial performance in small and medium firms. We developed a theoretical model that combines family business with corporate governance literature and takes into account the specific characteristics of boards of directors. Evidence from our study indicates that family involvement in the business does have a significant influence on board internal processes and tasks, and through them on firm financial performance. In this sense, our study encourages governance scholars (a) to go beyond simple input–output models, (b) to explore the critical role played by board internal processes and tasks, and (c) to develop and test theoretical models taking account of the specific firm governance context.

References


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