Tilburg School of Social and Behavioral Sciences

Supervisory Board's Team Effectiveness in Family Firms: the Role of Information and Faultlines

''the Moderating Effect of Family Diversity Ratio on the Relationship between Access to Information and Resources and Supervisory Board Performance in Family Businesses''

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Student: Marc Kuijken

ANR: 900506

SNR: 2029670

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Thesis supervisor: Dr. B. Kroon

Second supervisor: Dr. S.C. Kilroy

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Abstract

This paper examines the team effectiveness of supervisory boards in Dutch family firms. Every family firm has to deal with its corporate governance issues. One way to organize good governance is by installing an effective supervisory board to deal with these issues. Supervisory boards are teams of outside directors who advise and control management boards. Their effectiveness can be understood from a team effectiveness and a group dynamics perspective. Specifically, this study aimed to examine the relationship between access to information and resources and supervisory board performance within family firms and the moderating role of family diversity ratio. Family diversity ratio, access to information and resources, and supervisory board performance were measured based on a questionnaire. The final sample consisted of 102 participants. Using linear regression analysis, the results of this study found that access to information and resources are a positively related to supervisory board performance, and family diversity ratio is a negative factor for supervisory board performance. There is a reversed moderation effect for family diversity ratio such that the higher presence of family members in the board positively influences the relationship between access to information and resources and supervisory board performance, provided that the access to information and resources are also high. A lower presence of family members positively influences the relationship of access to information and resources and supervisory board performance, provided that the access to information and resources is also low. Finally, this paper will discuss the theoretical and practical implications of the study.

Keywords: access to information and resources, family diversity ratio, supervisory board performance, family businesses

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Introduction

Family businesses are the predominant form of business organizations around the world, and they contribute extensively to global wealth creation (Bammens, Voordeckers, & Van Gils, 2010). Therefore, good governance of family firms is critical for economic development and growth (Gabrielsson & Huse, 2005). Family governance refers to the structures and processes families use to organize themselves and guide their relationship with their enterprise, to improve organizational efficiency and market competitiveness (Berent-Braun & Uhlaner, 2010; Sarbah & Xiao, 2015). Good governance practices are related to the creation of firm value, improved organizational structures, (financial) results, and organization continuity (Van den Heuvel, Van Gils, & Voordeckers, 2006; Neubauer & Lank, 2016). One way to organize good governance is by installing a supervisory board. Supervisory boards (i.e., non-executive directors) are responsible for the supervision of the management board (i.e., executive directors) (Bezemer, Peij, De Kruijs, & Maassen, 2014). The formal tasks are supervising and advising the management board and giving approval of significant decisions (Maassen & Van den Bosch, 1999). Within this paper, the focus is on the effectiveness of the supervisory board in family businesses.

Concerning the supervisory board performance and their effectiveness, supervisory board performance can encompass two roles: the control- and service task role (Van den Heuvel et al., 2006). The control task role includes activities like monitoring the CEO, monitoring strategy implementation, planning CEO succession, and evaluating and rewarding the CEO/top managers (Hillman & Dalziel, 2003; Pearce & Zahra, 1992). The service task role means that the supervisory board has a role in advising the CEO and top managers, as well as initiating, and formulating a firm strategy (Johnson, Daily & Ellstrand, 1996).

A supervisory board is a team which can consist of diverse members in terms of family membership (i.e., part of the family or not), gender, age, and role (i.e., being a chair or member) (Vandebeek, Voordeckers, Lambrechts & Huybrechts, 2016). Supervisory boards within the Netherlands are comprised of a minimum of one and a maximum of ten members (having five members on average)

(Postma, van Ees & Sterken, 2000). A meta-analytic review by Horwitz and Horwitz (2007) shows that diverse members in a team creates unique challenges and often results in non-optimal performance. Although team diversity can potentially create positive synergy, due to the same unique expertise and experience leading to advantages, it can also engender significant difficulties resulting from coordination, tension, and intra/intergroup conflict (Horwitz & Horwitz, 2007). In a recent study on the actual behavior of boards, it is suggested that more attention should be given to team dynamics in the supervisory board (Vandebeek et al., 2016). Therefore, it is important to look at the diversity of a supervisory board and its role in influencing supervisory board performance.

In order to be effective as a team, challenges in the boardroom are that the supervisory board often lacks information about the day-to-day operations of the organization in order to monitor the board of directors effectively and provide advice (Peij, Bezemer & Maassen 2012). Supervisory boards, like every group of decision-makers, need knowledge, information, power, motivation, and time to adequately fulfill their role in the governance of organizations (Conger, Finegold & Lawler 1998; Dyer, 1994). A lack of these factors may negatively impact supervisory board performance. Thus, one potential area for research is access to information and resources needed for supervisory board performance. Based on the I-P-O model of McGrath & Altman (1966), which is a framework for conceptualizing teams, it suggests that many factors influence a team's productivity and cohesiveness. It can be argued that more informed people (i.e., input) within the supervisory board would lead to better supervisory board performance (i.e., output). This, in turn, should complement effective governance within the family business. Therefore, this research focuses on getting access to information and resources, supervisory board performance, and team diversity.

To move forward on team diversity, this study will focus on examining 'family' diversity. In family firms, supervisory boards can be composed of both family members and outsiders. Family members and outsiders have different roles and behaviors, which possibly results in diverging viewpoints and interests (Bammens et al., 2010). According to the social identity theory, individuals tend to classify themselves and others into various social categories, such as organizational membership, religious

affiliation, gender, and age cohort (Tajfel & Turner, 1985). Further, individuals adapt attitudes, behavior, and beliefs to their social context and to the reality of their own past and present situation (Salancik & Pfeffer, 1978). So, one can learn most about individual behavior by studying the social and informational environment within which that behavior occurs and to which it adapts (Salancik & Pfeffer, 1978). From this theory, the concept of faultlines arises, which argues that the same people with the same attributes prefer to and work best together (Vandebeek et al., 2016). A strong faultline includes different attributes of people (e.g., family membership), which can result in subgroup formation, which in turn could have a detrimental effect on board cohesiveness, which is linked to board role performance (Vandebeek et al., 2016; Forbes & Milliken, 1999). Therefore, to have an effective board role performance (i.e. performing service and control tasks), it is important to look at the 'family' diversity of the board.

To gain more understanding of the intervening processes through which family diversity influences supervisory board performance, researchers must explore the effect of board diversity on board functioning (e.g., having access to information and resources) and the supervisory board performance (i.e., control- and service tasks) (Vandebeek et al., 2016; Gabrielson & Huse, 2005).

The aim of this paper is to find out if family diversity within the supervisory board results in a hindering relationship between access to information and resources and supervisory board performance. Earlier research reports that family diversity are typically related with increased subgroup formation, what lead to lower group cohesion and information asymmetries, which lead to decreased board performance (Kaczmarek, Kimino, & Pye, 2011). In addition, there is a lack of sufficient empirical information within the family business literature with regard to family diversity. Furthermore, scholars have argued that supervisory boards create value by providing advice to the board of directors and need access to critical information and resources, in order to be effective (Geletkanycz and Boyd, 2011; Gabrielson & Huse, 2005; Pfeffer and Salancik, 1978). Practically, the findings of this study adds to the existing literature on how to improve the effectiveness of supervisory boards with regard to the role of information and faultlines within family businesess. Therefore, the following research question is formulated:

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"To what extent does family diversity within the supervisory board moderate the effect of access to information and resources and supervisory board performance?"

Theoretical Framework

Conditions for supervisory board performance

Supervisory board performance is defined as the success with which the core tasks of the board are performed, as evidenced by the cohesiveness of the board (Forbes & Milliken, 1999). Supervisory boards are small teams that range from 1 to 10 persons. Within the Netherlands, family businesses can be defined as organizations in which one family has the majority of control and owns the majority of shares. Furthermore, the family needs to be formally involved in the organization's management, and the organization needs to be legally transferable to the next generation (CBS, 2017). Implementing a supervisory board can contribute to achieving these results (Van den Heuvel et al., 2006). Supervisory boards in family businesses perform two different board roles: control and service task performance (Forbes & Milliken, 1999; Van den Heuvel et al., 2006). The service task performance refers to strengthening the company's reputation, providing access to additional resources for the company, advising the board of directors, and advising on the organizational strategy (Van den Heuvel et al., 2006; Johnson et al., 1996). The main goal with respect to control task performance is to ensure the continuity of the firm. These activities include planning for top management succession, monitoring strategic initiatives, selecting and replacing executives, and managing during crises (Payne, Benson, & Finegold, 2009; Pearce & Zahra, 1992; Van den Heuvel et al., 2006). Within this paper, those two roles are taken together and are measured as the overall supervisory board performance. Supervisory board performance can be understood by drawing from the team effectiveness literature. A supervisory board is a self-managing work team, which is a group of interdependent individuals that can self-regulate their behavior on relatively whole tasks (Spreitzer, Cohen, & Ledford, 1999). In order to perform well as a team, the supervisory board needs access to information and resources (i.e., conditions for performance). One way to look at this is to understand the conditions under which teams perform best. Teams that have the

resources and support they need are better able to perform their assigned tasks (Kirkman & Rosen, 1999). This has been suggested in the team empowerment literature. Below, we zoom in on the importance of supervisors boards having access to information and resources.

Access to information and resources

Access to information and resources to perform are essential conditions for the performance of supervisory boards. For example, the supervisory board gets information about the strategy and goals of the organization and is given access to the strategic information necessary to be able to carry out its monitoring and advisory tasks. This can be linked to the empowerment theory, which emphasizes that having access to information and resources, resulted in that individuals and teams made decisions the best when they have sufficient information to weigh possible consequences of various choices (Chamberlin & Schene, 1997; Spreitzer, 2008; Perkins & Zimmerman, 1995). Conger and Kanungo (1988) argue that empowering organizational practices such as the availability of information and resources can result in higher board initiative and motivation, but only to the extent that these practices provide informational resources that increase the board effort–performance expectancies or feelings of self-efficacy (Lawler, 1973). To explain this, Spreitzer (1995) found that two types of information are critical for empowerment: (1) information about an organization's mission, (2) information about performance. Information about the mission is important, as it helps to create a sense of meaning and purpose. With regard to information about performance, this is fundamental to reinforcing a sense of competence and believing that someone is a valued part of an organization. These are two essential antecedents of empowerment. In the same line, theory on high performing teams suggests that boards with sufficient knowledge, power, external information, and opportunity are more effective in accomplishing control task performance (Payne, Benson, & Finegold, 2009). The proper use of giving access to information and resources is linked directly to empowerment, and this practice leads to higher quality performance (Geroy, Wright, & Anderson, 1998).

From a social exchange perspective the management need to support the supervisory board, so information and resources have to be provided, that the supervisory board members can perform their control and service task role, in order to perform well (Wu, Chuang, & Hsu, 2014). Based on this perspective it can be concluded that supervisory board members might be more willing to reciprocate with higher performance (Wayne, Shore, & Liden, 1997).

Research by Zattoni, Gnan, and Huse (2012) found a positive relationship between access to information and resources and supervisory board performance. Moreover, the meta-analysis of Seibert, Wang, and Courtright (2011) found that access to information and resources, such as the amount of information that is available about the goals of the organization, is likely to facilitate higher levels of empowerment of the supervisory board. Researchers have linked access to information and resources to team performance, as mentioned supervisory board performance (Spreitzer, 1995).

Based on the findings above, it can be argued that access to information and resources can be linked to supervisory board performance.

Hypothesis 1a: Access to information and resources is positively related to supervisory board performance.

Family diversity and supervisory board performance

An important antecedent of team effectiveness is team diversity (Drach-Zahavy & Somech, 2002). Team diversity can be defined: "as differences on any attribute that may lead to the perception that another person is different from the self between individuals who interdependently work together on a task" (Van Dijk & Van Engen, 2013, p. 224).

In family firms, supervisory boards can be diverse in terms of family membership: some board members can be family members and work together with 'outsiders.' So, we zoom into the family diversity ratio, which can be defined as the ratio of family / non-family supervisory board members. In other words, the family diversity ratio is the presence of family members vs. non family members within the total supervisory board.

Family members share common values, norms, and culture inherited from their parents and

members of the family, along with a familiar pattern of education, and usually feel rewarded and satisfied with their occupation in the family firm (Chua, Chrisman, & Sharma, 2003). Family members have a stronger emotional attachment to the firm. Emotional attachment enhances the level of commitment and involvement individuals have towards organizations since they identify with the organization itself (Sharma & Irving, 2005). For non-family members, this is not true; they share similar professional experiences as those of family members but have a shared feeling of exclusion from the controlling family. It can be hypothesized that when there are few members of one or the other party, the minority party has less power to contest decisions, but also have less access to information and resources. This will be explained next.

Family diversity and supervisory board performance can be linked to social identity theory, which argues that a person's sense of who they are, is based on their group membership(s) (Ashforth & Mael, 1989). Tajfel (1979) proposed that the groups (e.g., family) which people belonged to were a valuable source of pride and self-esteem. It can be proposed that a group that has high positive pride and self-esteem would be more effective and are potential for high performance (Swogger, 1993). The concept of faultlines arises from the social identity theory and is defined as ''the alignment of several diversity attributes of individuals, and faultlines become stronger as more characteristics align themselves in the same way'' (Lau & Murnighan, 1998, p. 328). In the setting of family firms, the board can be composed of both family members and outsiders. The roles and behaviors of family versus other board members may be different due to possibly diverging viewpoints and interests. When more attributes of the members of a board align, members likely identify themselves more with their respective subgroups rather than with the group as a whole. The result of these faultlines and subgroups may cause decreased cohesiveness of the group, lesser decision-quality, which may subsequently result in lower supervisory board role performance (Forbes & Milliken, 1999).

When a supervisory board is composed of family and non-family members, there could be status differences which result in detrimental board performance, for example, status is not attributed based on actual task competence (Van Dijk & Van Engen, 2013). In addition, when status aligns with competence

it enhances board performance (Van Dijk & Van Engen, 2013). To be more precise, higher-status members frequently dominate team discussions, and lower status members are often excluded from decision-making. In this context, a reduction in perceived status differences is likely to enhance performance outcomes (Mitchell et al., 2015). When for example, non-family supervisory board members feel that their status in the group is low, this has a negative impact on their commitment and functioning (Van Dijk & Van Engen, 2013). Conversely, when there are a lot of non-family members and only one family member, the minority group feels that their status in the group is low. Therefore, when there is a minority in the group, not everyone in the supervisory board is committed, which can lead to an ineffective team. In the end, this could lead to a lower effective board task performance. Concerning the family faultlines, research shows that, in a team with family and non-family members, the minority party has less power to decision making. This can lead to conflicts and disruptions between those two parties, which influences team performance. Organizations with a ratio of family to non-family members which are either high or low will perform better than organizations that have a strong representation of both parties (i.e., a strong fault line) (Minichilli, Corbetta & MacMillan, 2010). A high amount of non-family members engenders the risk that the board may become a formal monitoring body challenging the family's sense of control and taking strategic decisions that may conflict with the family's preferences and objectives (Basco & Voordeckers, 2015). Other research shows that there is a need to explore more about status differences between group members, as it is also mentioned above. Status differences between group members automatically emerge when members differ in their characteristics, beliefs and/or associated resources (Van Dijk & Van Engen, 2013). Other earlier findings revealed that family members have more power than non-family members (Chua, Chrisman, & Sharma, 1999). Accordingly, as there is a high presence of family members, it is rational to say that according to the theory of faultlines, that the minority part of outside members are often considered as unofficial advisors to the family, having less formal power to dispute decisions (Jaskiewicz & Klein, 2007). This reduces the cooperative interaction between family members and outsiders, which is not optimal for the performance (Anderson & Reeb, 2004). At least, a board with a high presence of family members with a lot of power

could lead to behavioral disruptions or family conflicts in a way that they take self-serving actions, which in the end could threaten supervisory board performance (Combs, Ketchen, Perryman, & Donahue, 2007). Practically, family diversity ratio is the presence of family members vs. non-family members in the total board. Either, a team diversity ratio with more family members is negatively related to supervisory board performance.

Based on the arguments above, the following hypothesis is proposed.

Hypothesis 2a: Family diversity ratio is negatively related to supervisory board performance.

Family diversity as a moderator

The existence of faultlines between family and non-family members within the supervisory board leads to behavioral disruptions that consequently influence how access to information and resources is used in the supervisory board, which may negatively affect supervisory board performance (Li & Hambrick, 2005).

The relationship between access to information and resources and the overall supervisory board performance might be influenced by the ratio of family and non-family members. Research found that a higher degree of family diversity in the boardroom seems beneficial for performance, owing to the increased availability of functional knowledge and skills (Vandebeek et al., 2016). Within a diverse team with an equal ratio of family and non-family members is called a strong fault line (meaning strong diversity), access to information and resources can be unevenly distributed within these teams because family members have more channels to have more access to information and resources than non-family members. More access to information and resources also lead to more functional knowledge and result in better performance. As performance is related to information and resources, this relationship may be influenced by the ratio of family and non-family members in a team. With more family members in a team, so a higher family diversity ratio, the relationship between access to information and resources and supervisory board performance may be better. An theoretical explanation for this is that family members enlarges the potential information pool and the availability of complementary information within the board, which leads to a better information collection process and positively influences board performance

(Basco & Voordeckers, 2015).

Also, family members have a higher status than non-family members. It can be said that higher status is related to more power. Evidence for this is that non-family members show that they believe more strongly than family members that the successor in the board will be a family member and that they are excluded from senior positions or important decisions (Chua, Chrisman, & Sharma, 2003). To go more in depth, if there is low access to information and resources family members would use their own functional knowledge about the organization, where non-family members uses their external knowledge to perform their service and control task role performance. Family members have a greater knowledge of the firm than do non-family members, but non-family members often have critical external insights which are valuable by performing within the supervisory board (Arosa, Iturralde, & Maseda, 2010). This could lead to team conflicts or tensions (i.e., different views), even mentioned as a weak group dynamic, because of the way of decision making, as mentioned earlier within this paper. In the end, if there are sufficient or insufficient access to information and resources this is automatically related to the supervisory board performance and the family diversity ratio will influence this relationship.

The alignment of the attribute 'family diversity ratio' will influence the relationship between access to information and resources and supervisory board performance.

Hypothesis 3: The relation between access to information and resources and supervisory board performance is moderated by the ratio family diversity of the supervisory board.

Conceptual model

The conceptual model contains three variables: access to information and resources, family diversity ratio (i.e., family vs. non-family), and supervisory board performance. There is one model, existing of a positive direct relationship, between access to information and supervisory board performance. Second, the family diversity ratio is argued to have a direct negative effect on supervisory board performance. Lastly, family diversity ratio functions as a moderator in the relationship between access to information and resources and supervisory board performance.
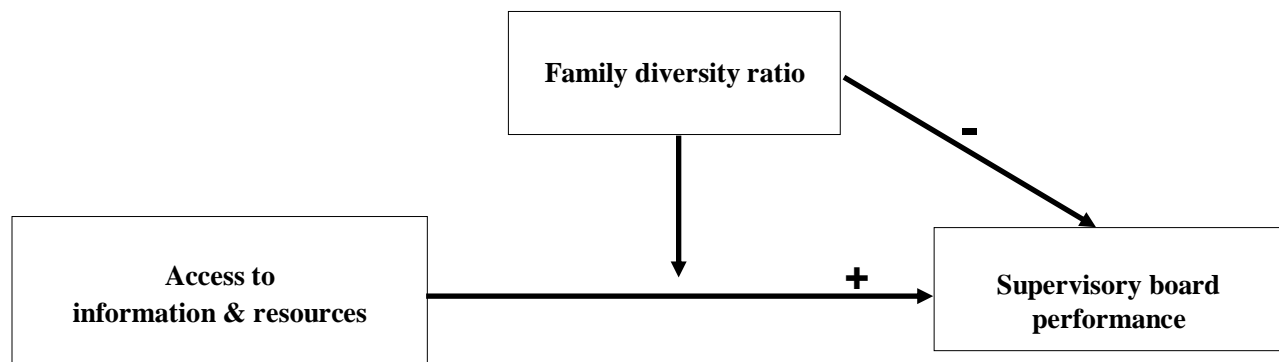
Figure 1: Conceptual model

Methods

Research design

This thesis is part of a larger project on supervisory boards in family firms, for which the data collection had already started. Further, it is a cross-sectional study whereby members of the supervisory board were asked to fill in an online questionnaire about characteristics of the organization, the owning family, and the supervisory board. The supervisory board members are working in Dutch family businesses. The survey was created in Qualtrics, which is an online survey tool. All data were collected at one point in time, which makes that this research is a cross-sectional, quantitative study.

Sample

The population included only members of the supervisory board of a family business within the Netherlands. These members were used to measure the effectiveness of the supervisory board. It is important to note, in the Netherlands, firms with 100 employees or more need a supervisory board (i.e., two-tier board structure), and it was necessary that that specific firm was a family firm. Each member of the supervisory board within a family business could participate; however, not more than one supervisory board member per supervisory board. The target group was very particular and it became difficult to reach them. Particular in a sense of identifying if a firm is a family firm and if they have a supervisory board and who are members of that supervisory board. The procedure used for creating the sample for the

dataset was as follows. First, the ORBIS database was used, which can be defined as a global business information databank with financial and business information of over 200 million companies. The goal of using this database was to make a list of Dutch family firms having a supervisory board. Various strategies were used to identify whether an organization is a family firm (Diéguez-Soto, López-Delgado, & Rojo-Ramírez, 2014). The ORBIS database did not indicate whether a firm is a family firm. Therefore first, all Dutch firms with a supervisory board were selected. Second, to check whether a firm is a Dutch 'family' firm, the name of the company was used to gives some indication (e.g., ''& sons'' or ''family). After that, it has been checked if the last name of the members of the board of directors and, or, the supervisory board was the same. If there were find resemblances in the names of the members and in the firms' names, these were identified as a potential family firms'. In total, there were 354 family firms identified with a supervisory board using this procedure, which amounts to a total of 987 members. It is important to note is that 95 individuals were a member of two or more boards. What this means is that the list has a total of 892 supervisory board members. For each member, the birth names were identified in ORBIS. A second database was used, which is called 'Company Info,' in this way, the first names of the respondents could be checked. In order to get in contact with those members, LinkedIn was used.

The current number of respondents filled in the survey is 102. In total, 11 of the respondents were women (10.8%), and 91 of the respondents were men (89.2%). In total, 41.2% of the respondents indicate that their function is the chair of the board, which means that the other 58.8% are members of the board. The average firm size was 856, whereby the size of the board ranged from 1 to 9 members, with a mean of 3.45 and a standard deviation of 1.25. At least 14% of the respondents were part of the family, and 86% were not part of the family.

Procedure

Identified supervisory board members received an invitation via LinkedIn to connect to one of the researchers, after which the survey could be filled out. Further, the research proposal was drafted and accorded to adhere to the guidelines of the Tilburg University ethical conduct code for researchers. It

implied that the data was safely stored and the respondents signed for informed consent before they participate in the questionnaire. Besides that, the data collection was anonymous. At least, during this study, the participants signed a letter of consent before they had participated, which was in line with the ERB ethic research procedures (NVMO, 2018).

To get there, students of the current circle repeated the procedure to identify new supervisory board members. The project leaders had contacted the supervisory board members through LinkedIn, or email if people did not have a LinkedIn account. In total, the current data collection is set on 102 completed questionnaires (i.e., N=102).

Furthermore, some people who were already identified as a supervisory board member of a family firm had no Linked-In profile. These people were invited by a formal letter; the addresses were identified by using 'Company Info.' In total, there were still 160 people who were also contacted by the project leaders via the formal letter with the accompanying questionnaire.

Measures

All measures of the survey are based on existing scales but adapted to fit with the perspective of the supervisory board members. A pilot study (N=46) was conducted on part of the sample (March 2019) to examine the quality of the measures. For the thesis, measure quality was checked on the final dataset by conducting factor- and reliability analysis. To test if all measures were valid and measure one concept, a Principal Component Analysis (PCA) was performed, and the scree plot was checked. This was done by using IBM SPSS and was required. According to the scree plot, the "elbow" of the graph where the eigenvalues seem to level off was found, and factors or components to the left of this point should be retained as significant (Basto & Pereira, 2012). The validity was measured using the Kaiser-Meyer-Olkin (KMO) score, which needs to exceed 0.6, and Bartlett's test of sphericity needs to be significant ($p<0.05$) (George & Mallery, 2003). Next, Cronbach's alpha was calculated to check if the measures are reliable, which had to be equal or higher than 0.6 (Cronbach $\alpha \geq 0.60$) (Verhoeven, 2011).

Supervisory board performance: was measured with twelve items based on van den Heuvel, van Gils & Voordeckers (2006), which are included in appendix A. This is an overall variable which consists of control task performance and service task performance. Example items were ''controlling the operating results'' and ''advising the board of directors''. A 5-point Likert scale measured this item (1= Very poor, 2= poor, 3= Average, 4= Good, 5= Excellent). The validity of the construct was tested with a principal component analysis (PCA). Considering the KMO of .841 and a significant Bartlett's test of Sphericity (66) = 537.124, p<.00, the construct supervisory board performance was summarized into one component explaining 42.4% of the variance which is displayed in the scree plot (Appendix C.1). Within this study, overall supervisory board performance is measured and therefore, three dimensions were found. However, one construct was chosen and not three separately, a theoretical explanation for this is that the study of Heuvel, van Gils & Voordeckers (2006) also had more dimensions but forced it to load in one construct, the reason for this is that the diversified set of roles are close together. The reliability of supervisory board performance was good. Cronbach's alpha for this 'overall' performance item, as based on the factor analysis (N=102), is 0.867.

Access to information and resources: was measured using six items by Spreitzer (1996), which are included in the appendix A. Example items were ''the supervisory board has access to the strategic information and goals of the organization'', ''when the supervisory board need additional resources to do their job, they can usually get them'' and ''the supervisory board has an insight into top management's vision of the organization.'' A 5-point Likert scale measured this item (1= Totally Disagree, 2= Disagree, 3= Neither agree or disagree, 4= Agree, 5= Totally Agree). Previous research showed the reliability of 0.83 (Spreitzer, 1996). Based on this output, the scree plot showed that there was one component, which explained 60.1% of the variance, with all factor loadings above .750 (Appendix C.2). According to the factor analysis that was conducted, the construct access to information and resources has a KMO value of .793 and a significant Bartlett's test of Sphericity (15) = 320.973, p<.00. The reliability of the access to

information and resources was good. Cronbach's alpha for this item as based on the factor analysis (N=102), is 0.865.

Family diversity ratio: was measured based on the procedure suggested by Basco & Voordeckers (2015), which are included in appendix A. Two items were used to define the diversity within the supervisory board. These items were measured by, ''How many members does the supervisory board consist of?'' and ''How many members of the supervisory board are members of the family?''. The level of measurement for both items is the ratio level. Family diversity ratio was measured as the family presence in the board as the total number of family members (i.e., inside board members), divided by the total board size. The ratio could be between 0 - 1 or 0% - 100%, whereby 0.5 or 50% indicates the highest level of diversity. The family diversity ratio within this research is 0.20 or 20% with a standard deviation of 0.21, whereby, N=84. This means that, on average, 20% of the entire supervisory board are family members, and the other 80% are outside board members. Important to note is that there was only one firm whereby the entire board consisted of family members (100%), all the other firms ranging from 0% to 50%. Therefore within this research, it should be taken into account that the range of family diversity ratio is small, and there was only one firm where the entire supervisory board consisted of family members.

Control variables: within this analysis, three control variables were used to capture supervisory board performance that could indicate the spuriousness of the relationships under study. These are included in Appendix B. Firstly, the family firm level; there is controlled for firm size, measured as the number of employees in the firm. Firm size has been an important factor in board research, as, for instance, supervisory boards of larger firms can be expected to engage more in strategic decisions and goals (Fiegener, 2005). Secondly, there is controlled for the role within the supervisory board, measured as being ''chair'' or '' member''. This variable was included as it can be said that chairs have more access to information and additional resources than members of the supervisory board have, and their perception of the research variables may differ from regular board members (Vandebeek et al., 2016). Thirdly, we controlled for the attribute gender, measured as being '' male'' or ''female''. This variable was included

as it can be said that gender differences within a subgroup can be that women in family firms face

problems with not being viewed in the same way as men and being invisible, which may affect their

perceptions of supervisory board functioning (Cole, 1997; Jimenez, 2009). Finally, there is controlled for

the attribute family membership, measured as being ''part of the family'' or ''not part of the family''.

This variable was included as it can be said that family and non-family members are aligned with

subgroups and deviate between subgroups (Shaw, 2004). Family members often having easier access to

information and resources than non-family members have (Vandebeek et al., 2016).

Analysis

For the data analysis, all the survey results of the respondents who took part in the research were

first imported into the statistical program IBM SPSS. The first step was cleaning data (i.e., removing

missing data) and giving the labels of the items which were needed to test the conceptual model, and the

remaining items were removed. Also, the respondents who did not finish the questionnaire were removed.

The second step was analyzing the data by searching for outliers and missing values, and this was done by

computing a histogram and frequencies tables. Further, no more outliers and missing values were found.

Within this way, all data was clean and could be used for the analysis.

The last step was testing the conceptual model. This was done by performing hierarchical linear

regression analysis in IBM SPSS 25 including an interaction term. Because of the interaction, the

predictor variables in the interaction ('access to information and resources' and 'family diversity') was

mean-centered (Aiken, West, Pitts, Baraldi, & Wurpts, 2012). This meant that the score of each

responded is reduced with the sample mean score of that variable. The argument for doing this is that

centering reduces multi-collinearity among predictor variables and centering can make otherwise

uninterpretable regression coefficients meaningful (Aiken et al., 2012). The interaction variable is

computed by multiplying the independent variable (access to information and resources) with the

moderating variable (family diversity ratio). To interpret if the significant interaction is in the direction as

expected in the moderation hypothesis, the interaction effect will be visually represented in a graph. At

least, control variables were also added within the analysis. This would indicate whether the findings were robust or subject to spuriousness.

Results

Descriptive statistics

The means, standard deviations, Likert point scale range, and Pearson's correlations of the variables included within this study are provided in the correlation matrix (Table 1). Firstly, as expected, access to information and resources was positively correlated with supervisory board performance ($r = 0.636$, p < 0.01). Secondly, concerning the family diversity ratio, it was negatively correlated with supervisory board performance ($r = -0.192$, p < 0.1). Thirdly, gender was negatively correlated with family diversity ratio ($r = -0.194$, p < 0.1). At least, family membership was negatively correlated with family diversity ratio ($r = -0.282$, p < .01) and positively correlated with gender ($r = .412$, p < 0.01). Furthermore, no more significant correlations between the variables were found.

Table 1: *Means (M), standard deviations (SD), scale range and Pearson correlations*

	M	SD	Scale range	1	2	3	4	5	6	7
1. Access to information and resources	4.14	0.57	1-5	-						
2. Supervisory board performance	3.75	0.52	1-5	0.636**	-					
3. Family diversity ratio	0.20-20%	0.21	-	0.010	-0.192†	-				
4. Firm size	856	1467.28	-	0.035	0.010	-0.075	-			
5. Board role	0.41	-	-	0.164	0.147	0.022	-0.100	-		
6. Gender	0.89	-	-	0.140	0.134	-0.194†	0.069	0.098	-	
7. Family membership	0.86	-	-	.117	.140	-.282**	.059	.163	.412**	-

Notes: **. Correlation is significant at 0.01 level (2-tailed). †. Correlation is significant at 0.1 level (2-tailed).
Board role is coded (0= member 1= chair). Gender is coded (0= women, 1= men).
Family membership is coded (0= part of the family 1= not part of the family).
N varies from 84 to 102 due to missing values.

Model testing

The model that is used for this paper is a simple moderation model. Therefore, three hypotheses were formulated based on previous literature. For these three hypotheses (H1, H2 & H3), the program IBM SPSS 25 was used to test this simple moderation model. Therefore, a simple linear regression was used to test the model (Aiken, West & Reno, 1991).

Hypotheses 1 and 2 were tested simultaneously, by regressing the variables 'access to information and resources' and 'family diversity ratio' on the overall supervisory board performance. The alpha level was set at .05, which had to be smaller than the p-value in order to know whether there was a significant effect. Hypothesis 3 concerns the moderation. The regression coefficient for the interaction term provided an estimate of the moderation effect. If the additional explained variance after adding the interaction term was statistically different from zero (as should be shown in the F-test of R-Square change), there was significant moderation of the X-Y relation in the data (Aiken, West, & Reno, 1991). The tested conceptual model controlled for firm size, board role, and gender. First, the direct effects were tested; second, the moderating effect was tested, and at least if the model proves to be significant, control variables were added.

Firstly, hypotheses 1 and 2 were tested simultaneously, as mentioned above, and these hypotheses concern non-moderated paths from access to information and resources and family diversity ratio to supervisory board performance. Hypothesis 1 stated that access to information and resources is positively related to supervisory board performance. Hypothesis 2 stated that the family diversity ratio is negatively related to supervisory board performance. By using linear regression in SPSS, supervisory board performance was used as the dependent variable. Access to information and resources and family diversity ratio were used as the independent variables in model 1. The model summary of the linear regression (table 2) shows that the positive effect of access to information and resources on supervisory board performance was indeed significant (B = 0.621, $p < 0.01$). Also, the negative effect of family diversity ratio on supervisory board performance was significant (B = -0.480, $p < 0.05$). Therefore, hypotheses 1 and 2 are supported.

Secondly, hypothesis 3 was tested as a simple moderation effect. This hypothesis concerns the moderated path from family diversity ratio on the relationship between access to information and resources and supervisory board performance. The hypothesis supposed that the relationship between access to information and resources, and supervisory board performance is influenced by the family diversity ratio of the supervisory board. By using linear regression in SPSS, the moderating variable was added in model 2. The family diversity ratio was tested within this moderation model to examine whether it affects the relationship between access to information and resources and supervisory board performance. Based on the model (table 2) below, by adding the interaction term, the explained variance increased by 3%. The model summary proposed that the F-test did significantly change, $F_{(1, 79)} = 5.284$, $p < 0.05$. Also, it can be concluded that there was a significant interaction effect of family diversity ratio was found ($B = 0.677$, $p < 0.05$). The family diversity ratio changes the relationship between access to information and resources and supervisory board performance. To understand the nature of this change, the interaction effect is visualized in figure 2. This figure shows the family diversity ratio as a moderator in the relationship between access to information and resources (horizontal axis) and supervisory board performance within family businesses (vertical axis). The interaction effect shows that the effect of low access to information and resources on performance are more harmful for performance in firms with a high family diversity ratio than in boards with low family diversity. The opposite is the case for boards where much information is shared (i.e., high access to information and resources). This has a more significant effect on performance for high family diverse boards than for low family diverse boards. Therefore, it can be concluded that hypothesis 3 is not supported. Although, there is a positive significant effect, there is no full moderation. An argument for this is that the line of high family diversity starts lower and ends higher. When the line of high family diversity ratio intersect the low family diversity ratio line one can speak about a positive moderation. It appears that there is little difference in low or high family diversity ratio, hence little indication for a moderator effect (Mitchell, 2012).

Finally, control variables were added to test if the model is still significant. By using linear regression in SPSS, the control variables were added in model 3 (Table 2). The model summary proposed

that the F-test did not significantly change, $F_{(4, 75)} = 0.576$, $p > 0.05$. With a significance level of 5%, it can be concluded that adding control variables does not lead to a significant improvement of the regression model.
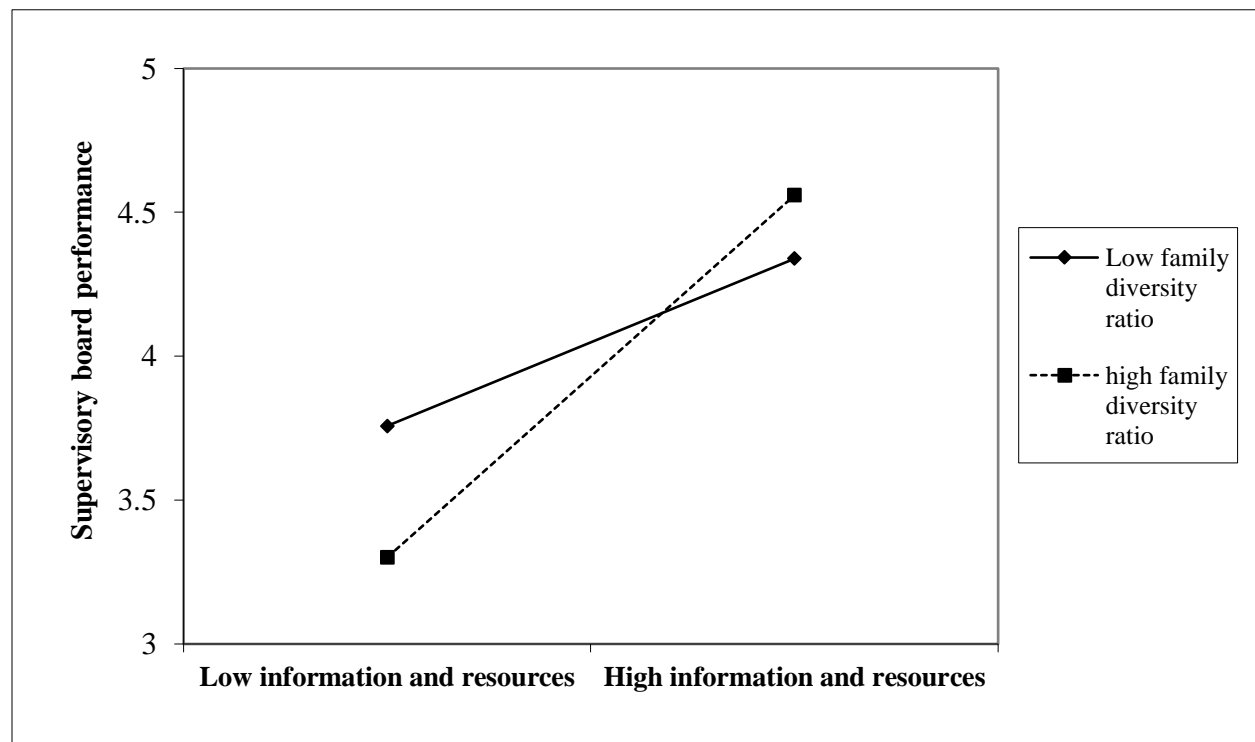

Figure 2
Interaction plot; the moderating effect of family diversity ratio on the relationship between access to information and resources and supervisory board performance

Supervisory Board's Team Effectiveness in Family Firms: the Role of Information and Faultlines

Table 2

Simple moderation model: direct effects access to information and resources and family diversity ratio on supervisory board performance, moderated by family diversity ratio and control variables (N=83)

Predictor variable	Model 1 Direct effects				Model 2 Moderating effect			Model 3 Control variables added		
	b	β	SE	t	*b*	SE	t	*b*	SE	t
Constant	3.760		.040	94.529	3.758	.039	96.940	3.926	.157	25.062
Access to Information and Resources	.621**	.693**	.070	8.928	.581**	.070	8.301	.589**	.072	8.143
Family diversity ratio	-.480*	-.199*	.188	-2.557	-.457*	.183	-2.498	-.515**	.195	-2.647
Interaction: (Access to information and resources X Family diversity ratio)					.677*	.294	2.299	.846**	.320	2.646
Firm size								.000	.000	-.342
Board role								.008	.028	.270
Gender								-.199	.153	-1.301
Member of family								.000	.145	-.003

Model summary	R²			R-Square Change	F	F change	Df 1	Df 2	Sig. F change	
Model 1	.518**			.518	42.905	42.905**	2	80	.000	
Model 2	.548*			.030	31.897	5.284*	1	79	.024	
Model 3	.561			.013	13.706	.576	4	75	.681	

Notes: **.Correlation is significant at 0.01 level (2-tailed). *.Correlation is significant at 0.05 level (2-tailed)
Model 1: Unstandardized and standardized coefficients are used
Model 2 and 3: Unstandardized coefficients are used
Predictor variable: Supervisory board performance

Discussion

In this cross-sectional study of 102 supervisory board members working each for a different family firm, the research examined the relations between access to information and resources and family diversity ratio to supervisory board performance. More specifically, the relationship between access to information and resources and supervisory board performance influenced by family diversity ratio was examined. Recently, supervisory board performance and access to information and resources have gained increasing attention from researchers. However, the role of family diversity ratio is unclear, because there is a lack of sufficient empirical evidence. It is for these reasons that the relationship between access to information and resources and supervisory board performance – moderated by family diversity ratio – at the supervisory board-level has been examined.

Main findings

First and foremost, our results reveal that the level of supervisory board performance will be higher when there is a large degree of access to information and resources (Hypothesis 1). This is in line the empowerment theory of Perkins and Zimmerman (1995), with our theoretical argument stating that access to information and resources, such as the amount of information that is available about the goals of the organization, is likely to facilitate higher levels of empowerment of the supervisory board (Seibert, Wang & Courtright, 2011). In the same line, theory on high performing teams suggests that boards with sufficient knowledge about the mission and goals of the organization (i.e., strategic information), are more effective in accomplishing control- and service task performance, either supervisory board performance (Payne, Benson, & Finegold, 2009).

As for the second hypothesis, based on the linear regression between family diversity ratio and supervisory board performance, it seems that the level of supervisory board performance will be lower when there is a larger ratio of family diversity (Hypothesis 2). Based on the significant negative relationship found between family diversity ratio and supervisory board performance, hypothesis 2 is also confirmed. This is in line with the faultlines theory: When more attributes of the members of a board

align, members likely identify themselves more with their respective subgroups rather than with the group as a whole. The result of these faultlines and subgroups may result in decreased cohesiveness of the group, lesser decision-quality, which may finally result in lower supervisory board performance (Forbes & Milliken, 1999). When the family diversity ratio is 0%, the entire board consist of non-family members, then, there is no diversity within the board, and this does not hamper the performance. When there is a presence of family members on the board and these increases, there could be status differences, and knowledge hiding within the board. As a result, this can lead to family conflicts, family altruism and little focus on the business environment. Another explanation for the negative relationship could be that as the number of family members on the board rises, the less group cohesion there will be among the other members in the group. In other words, sub-groups may continue to exist as asserted by the fault-lines theory, and this could result in behavioral disintegration that is harmful to the performance of the board (Lau & Murnighan, 1998; Li & Hambrick, 2005). Besides that, an overrepresentation of non-family members in the board engenders the risk that the board may become a formal monitoring body. This is challenging with the family's sense of control and taking strategic decisions that may be in conflict with the family's objectiveness (such as – family values and culture either, conversations of the family itself) and preferences, harming the family's socioemotional wealth. In the end, this could also be negative for the performance of the board (Gomez-Mejia, Cruz, Berrone & Castro, 2011). To facilitate the discussion of the effect of family diversity ratio on the supervisory board performance, the presence of family members' continuum between 0% and 100%. Within this research, it should be taken into account that the range of family diversity ratio was much smaller, and there were no firms where the entire supervisory board consisted of family members.

For that reason, a point for discussion might be that the relationship between family diversity ratio and supervisory board performance in family businesses follows a U-shaped pattern (50%) (Basco & Voordeckers, 2015). To define this U-shaped pattern, it is expected that when a team is more homogeneous because of either predominantly family members or predominantly non-family members (i.e., outsiders), the performance will be better than when the division between family and non-family

members is equal. For future research, one could use hypothetical points on the proportion of family members. These hypothetical points should look like 0%, 25%, 50%, 75%, and 100% percentage of family members in the supervisory board concerning supervisory board performance. This can be investigated by using the stratified sampling method (Acharya, Prakash, Saxena, & Nigam, 2013). It is important that stratified random sampling is performed in future research, so for each of the percentages, as stated above, have 20 organizations participating. This gives a different total sample size of 100, like the research performed by Basco and Voordeckers (2015). The advantages are that it assures the representation of all groups in the population needed (Acharya et al., 2013). The characteristics of each stratum can be estimated, and comparisons can be made (Acharya et al., 2013).

Hypothesis 3 proposed: "The relation between access to information and resources and supervisory board performance is moderated by the ratio family diversity of the supervisory board." Previous research findings showed that a higher degree of family diversity in the boardroom seems beneficial for performance, owing to the increased availability of functional knowledge and skills, either access to information and resources (Vandebeek et al., 2016). After adding the interaction effect, the results of the analysis show a reversed positive significant effect of family diversity on the direct relationship between access to information and resources and supervisory board performance (Figure 2). Even though, this positive significant effect, it can be concluded that this hypothesis 3 is not confirmed. It appears that there is little difference in low or high family diversity ratio, hence little indication for a moderator effect. First, the hypothesis is partly supported; in the case of high family diversity ratio and high access to information and resources, supervisory board performance is better than when there is a low family diversity ratio. Besides that, a higher family diversity ratio can also enlarge the potential information pool and the availability of complementary information within the board, which leads to a better information collection process and positively influences board performance (Basco & Voordeckers, 2015). Second, the hypothesis is not supported; in the case of low access to information and resources, a high family diversity ratio seems to be worse than a low family diversity ratio on supervisory board performance. An explanation for this finding might be that when the organization provides little

information about the strategies and goals, and there is a high presence of family members in the board that they are unwilling or unable to share their knowledge and having few insights about the external environment when the performance will be low. With a low presence of family members on the board, this might not be the case, while the outsider members could use their external knowledge even when the organization provides little information about the strategies and goals. In that way of using external knowledge, the supervisory board performance automatically will be better. In fact, research has shown that when the organization gives few information and resources, that family members seek additional compensation in the form of perquisites or through non-pecuniary rewards, such as withholding of information, misappropriation of firm resources, or merely reducing the efforts in the job, which resulted in a lower supervisory board performance (Minichilli, Corbetta & MacMillan, 2010).

In contradiction, status differences within the supervisory board, either a board composition of 50% family members and 50% non-family members, could result in a strong fault line, where information and resources are not shared between all team members of the supervisory board, which results in conflicts and disruptions which in the end, results in low supervisory board performance. In the end, this research found that within family businesses, the composition of the board has an important influence on the relationship between access to information and resources and supervisory board performance. This means that either the organization provides low information and resources a low family diversity (i.e., more outsiders) is needed results in better supervisory board performance, because outsiders can use their external knowledge in order to perform well. Alternatively, rather high information and resources are provided by the organization, high family diversity (i.e., more insiders) results in better supervisory board performance. Therefore, when there are a few members of one or the other side, the minority side has less power to make important decisions. Conflicts and disruptions between family and non-family members increase as the proportion of both factions increases on the board. This argues for the existence of a U-shaped relationship: firms with boards whose ratio of the family to non-family is either high or low will perform better than the firms that have a strong representation of both sides (Minichilli, Corbetta & MacMillan, 2010).

Limitations and future research

This study filled a theoretical gap in the literature by being the first to investigate the relationship between access to information and resources, moderated by family diversity ratio. This paper is not without limitations, but these can be regarded as important challenges for future research. First, due to the fact that this research had a relatively small sample size, this could influence the level of the examined relationships. An argument for this small sample size could be that the questionnaires which were used for data collection were relatively long. This might have resulted in satisficing results, which means that the cognitive investment of respondents resulted in sufficient answers. This is supported by the number of respondents that did not finish the questionnaire is 37%. Adding to this, due to the small sample size that comes from the difficulty in reaching the members of the supervisory board, one respondent was used to measure the firm and its supervisory board performance. One should be aware that relying on a single respondent is an important limitation to this study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Future research should try to extend the results and add more general information by considering multiple respondents from the same supervisory board.

Second, the hypotheses which were developed building on the faultlines and diversity arguments (Li & Hambrick, 2005; Vandebeek et al., 2016; Lau & Murnighan, 1998). There was a lack of research on family diversity ratio, either the presence of family members in the supervisory board. Indicating that it may be a complex construct to aggregate conceptually. Future studies should explore more in-depth the impact of factional faultlines between family vs. non-family members on board dynamics and board effectiveness. The debate could also be extended toward other potential factional faultlines, such as, for example, the potential divides between the family presence of different family branches, or family firms represented on a supervisory board that is solely composed of only family members or totally without family members. Besides that, intersectionality could also be taken into account, one should use other specific diversity characteristics, for example, gender and family. What means that a female family member could be different as a male family member.

Finally, supervisory board performance is measured as an overall construct, consisting of service

task performance and control task performance. Future research could divide supervisory board performance into the control and service tasks. Therefore, it becomes more concrete on what tasks the supervisory board performs better by looking to access to information and resources.

Practical implications

The results of this study confirm that access to information and resources is indeed related to supervisory board performance. On the other hand, the family diversity ratio strongly influences the relationship between access to information and resources and supervisory board performance. That means that the more family members represent the board, the better is the relationship between access to information and resources and the supervisory board performance. As a result, it is essential for organizations that they provide enough information and resources to the supervisory board, in particular when there are family members on the board as well so that they can perform better. Higher levels of access to information and resources and higher levels of family members on the board strengthen the effect of supervisory board performance.

In the end, family firms bear in mind that allowing a higher number of family members on the board has a better effect on the relationship between access to information and resources and supervisory board performance.

Conclusion

The research question of this study was, "*To what extent does family diversity within the supervisory board moderate the effect of access to information and resources and supervisory board performance?''.* The results of this study revealed that access to information and resources predicts supervisory board performance, which becomes stronger with the family diversity ratio. These findings are in line with the theory of faultlines, which have been applied throughout this thesis (Lau & Murnighan, 1998). It shows that when there is limited access to information and resources, the presence of family members also have to be lower, to have higher supervisory board performance. When there is much access to information and resources, the presence of family members also have to be higher to have

better supervisory board performance. In the case of faultlines, it is crucial to avoid subgroup formation. All in all, this research has shown that family businesses should have high access to information and resources, which predicts supervisory board performance and family diversity ratio, either the presence of family members on the board makes this relationship stronger. As such, the article extends the faultlines perspective into the family business literature with several exciting insights for family firms' supervisory board performance.

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Appendix

Appendix A: Questionnaires

Supervisory board performance:
(Heuvel, van Gils & Voordeckers, 2006)

Hoe goed beoordeelt u het functioneren van deze raad van commissarissen op de volgende taken:

	Onvoldoende	Matig	Voldoende	Goed	Zeer goed
1. Het selecteren van bestuursleden	☐	☐	☐	☐	☐
2. Het vaststellen van verantwoordelijkheden van bestuursleden	☐	☐	☐	☐	☐
3. Het vaststellen van de hoogte en aard van beloning van bestuursleden	☐	☐	☐	☐	☐
4. Sturen bij bedrijfsopvolgingsproblematiek	☐	☐	☐	☐	☐
5. Het evalueren en beoordelen van het functioneren van bestuursleden	☐	☐	☐	☐	☐
6. Het controleren van de begroting	☐	☐	☐	☐	☐
7. Het controleren van de bedrijfsresultaten	☐	☐	☐	☐	☐
8. Het versterken van de reputatie van de onderneming	☐	☐	☐	☐	☐
9. Inzetten van netwerken en relaties ten gunste van de onderneming	☐	☐	☐	☐	☐
10. Het adviseren van de raad van bestuur	☐	☐	☐	☐	☐
11. Het adviseren over de organisatiestrategie	☐	☐	☐	☐	☐
12. Het zorgen voor toegang tot extra resources voor de onderneming	☐	☐	☐	☐	☐

Access to information and resources:
(Spreitzer, 1996)

In hoeverre bent u het eens met de volgende stellingen?

	Helemaal oneens	Oneens	Niet eens/ niet oneens	Eens	Helemaal eens
1. De RvC kan de nodige middelen verkrijgen om ideeën/plannen uit te zoeken	☐	☐	☐	☐	☐
2. Wanneer de RvC extra middelen nodig heeft om haar taken uit te voeren, kunnen we deze meestal krijgen	☐	☐	☐	☐	☐
3. De RvC heeft toegang tot benodigde middelen voor een goede uitvoering van haar taken	☐	☐	☐	☐	☐
4. De raad van commissarissen heeft informatie over de strategieën en doelen van het bedrijf	☐	☐	☐	☐	☐
5. De raad van commissarissen heeft inzicht in de visie van de bestuurders op het bedrijf	☐	☐	☐	☐	☐
6. De raad van commissarissen heeft toegang tot de strategische informatie die nodig is om haar controle- en adviestaken uit te kunnen voeren	☐	☐	☐	☐	☐

Family diversity ratio:
(Basco & Voordeckers, 2015)

1. Uit hoeveel leden bestaat de raad van commissarissen? …..
2. Hoeveel leden in de raad van commissarissen zijn familieleden? …..

Appendix B: Control variables

Firm size:

Hoe groot is de onderneming uitgedrukt in het aantal werknemers?   …..

Board role:

Wat is uw rol in de RvC/RvA

        □   Lid
        □   Voorzitter

Gender:

Bent u een?

        □   Vrouw

        □   Man

Family membership

Bent u zelf lid van de familie?

        □   Ja

        □   Nee

Appendix C: Factor Analyses

C.1: Supervisory board performance

Overall supervisory board performance (w/ Varimax rotation)	Factor loadings
1. Advising the board of directors	.768
2. Determining the board of directors responsibility	.754
3. Advising / ratify the organizational strategy	.740
4. Controlling the budget	.740
5. Selecting board members	.699
6. Checking the operating results	.697
7. Managing business succession issues	.630
8. Evaluate / control management performance	.621
9. Building organizational reputation	.603
10. Networking and maintaining relations on behalf of the organization	.445
11. Taking care of access to extra resources for the organization	.463
12. Determining salary/compensation of the board of directors	.545
Eigenvalue	5.08
Explained variance (%)	42.357
Cronbach's Alpha (α)	.867
N	101

Extraction method: Principal Component Analysis

Note: N= number of respondents

Scree Plot
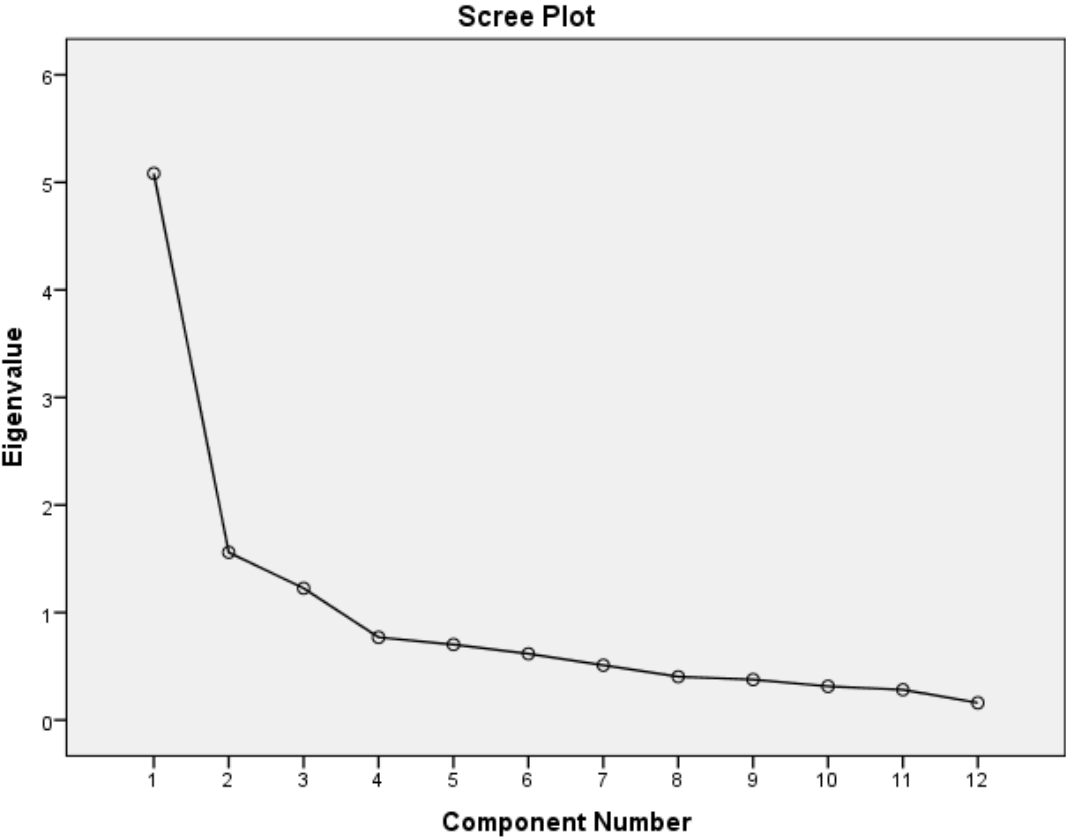
C.2: Access to information and resources

Overall conditions for performance	*Factor loadings*
13. The supervisory board has access to the strategic information and goals of the organization	.811
14. When the supervisory board need additional resources to do their job, they can usually get them	.809
15. The supervisory board has an insight into top management's vision of the organization	.762
16. The supervisory board has access to the resources they need to do their job well	.760
17. The supervisory board has access to the strategic information, they needed to do their control- and service tasks	.758
18. The supervisory board can obtain the resources necessary to support new ideas	.750
Eigenvalue	3.607
Explained variance (%)	60.122
Cronbach's Alpha (α)	.865
N	101

Extraction method: Principal Component Analysis

Note: N= number of respondents