BOARDS OF DIRECTORS IN FAMILY FIRMS:

A GENERATIONAL PERSPECTIVE*

Yannick Bammens • Wim Voordeckers • Anita Van Gils

Corresponding author: Yannick Bammens, Hasselt University, KIZOK Research Center, Agoralaan – Building D, B-3590 Diepenbeek, Belgium, tel. +32 11 268633, fax +32 268700, email: yannick.bammens@uhasselt.be

Abstract: The purpose of this study is to advance the understanding of boards of directors in family firms. Building on generational changes in family attributes, we argue that firms in a different generational phase have different governance needs and characteristics. With regard to board task needs, the empirical results indicate a convex generational evolution in the need for board advice, and a rise over the generations in the need for board control. With regard to board composition, we find that the likelihood of having an outside director on the board has a convex generational trend. This relationship seems to be fully mediated by the firm's board task needs. Furthermore, the number of family directors seems to increase over the generations. This study demonstrates that it is important to consider the generational phase of the family firm in order to understand its governance system.

Keywords: family firms, board tasks, board composition, generational differences

^{*} Published as: Bammens Y., Voordeckers W. & Van Gils A. "Boards of directors in family firms: A generational perspective". *Small Business Economics*. DOI: 10.1007/s11187-007-9087-5

1. Introduction

Family firms are the predominant form of business in economies around the world, and they contribute extensively to gross national products and job creation (IFERA, 2003). A strategic theme in these firms is the generational transition (Morris et al., 1997). Although a long term commitment to continue the firm as a family firm is often a dream of the founder, only about one-third of these firms are successfully transferred into the second generation and barely ten percent continue into the third one (Birley, 1986, Neubauer and Lank, 1998). Several positive (e.g. a successful acquisition) as well as negative (e.g. failure) explanations exist for this pattern (Raskas, 1998). Nevertheless, the exit or failure of a significant number of these family ventures could be avoided by implementing good functioning governance mechanisms, such as a board of directors. These mechanisms may stimulate survival among a larger group of businesses, as they enhance the cohesiveness of the family controlling the company and corporate performance (Neubauer and Lank, 1998; Schulze et al., 2001).

Family firm governance and accountability differ from practices in non-family businesses. Most family business definitions emphasize the idea of family influence through ownership and management (Chua et al., 1999). Hence, governance entails avoiding conflicts between the family members' family and business roles, while preserving unity among the family members (Lane et al., 2006). Over the past few years, academics have extensively studied the distinguishable characteristics of family firm governance systems (cf. Corbetta and Montemerlo, 1999; Davis and Pett, 2000; Schulze et al., 2001; Lane et al., 2006; Miller and Le Breton-Miller, 2006; Van den Heuvel et al., 2006). However, fairly little is known about the relationship between the generation in charge of the company and its governance design.

As firms evolve, different forms of corporate governance may be needed (Filatotchev and Wright, 2005). A number of life cycle perspectives have been provided, but these

generally focus on the business system while family firms are more complex (Morris et al., 1997). The generation in charge of the family business is a central component of its life cycle as important changes in family attributes will occur (Gersick et al., 1997; Steier, 2001). In the academic literature, in depth theoretical explanations of expected governance patterns over generations are just emerging and these are mainly grounded within an agency theory framework (Schulze et al., 2003; Lubatkin et al., 2005). In the appendix we provide an overview of the main empirical research findings concerning governance differences between generations. These studies have primarily examined board composition characteristics on the basis of anecdotal or exploratory evidence.

In this study, we will present an integrated governance framework which builds on (1) previous research discussing generational changes in family attributes (e.g. Raskas, 1998; Davis and Harveston, 2001; Steier, 2001), and (2) current evolutions in the governance literature, in which the importance of aspects beyond board composition – such as board roles and tasks – has been emphasized (Forbes and Milliken, 1999; Gabrielsson and Winlund, 2000; Huse, 2005; Van den Heuvel, et al., 2006).

Our first goal is to examine generational evolutions in board task needs. Boards can perform several tasks that may contribute to the organizational value-creation process, and these tasks can have either an external or an internal orientation. Externally oriented tasks concern the firm's relationship with external constituencies, and include legitimizing the firm in society and providing access to crucial resources (Zahra and Pearce, 1989). Internally oriented tasks concern the internal functioning of the firm, and include advising and controlling the managers (Sundaramurthy and Lewis, 2003). In this study, we adopt an internal perspective and focus on the board's advice and control task. When discussing these board tasks, governance scholars make a distinction between *board task needs or expectations* (Grundei and Tallaulicar, 2002; Huse, 2005) and *board task performance* [i.e. the degree to

which boards actually succeed in fulfilling their tasks (Forbes and Milliken, 1999)]. In this article, we examine board task needs because contextual factors such as the generational phase can be argued to primarily influence board task needs, before any other governance element such as board composition is affected (Huse, 2005).

The second aim of this article is to scrutinize the influence of these board task needs on the relationship between the generational phase and board composition. As theoretical and empirical studies suggest that board task needs may have a significant influence on board composition (cf. Grundei and Talaulicar, 2002; Huse, 2005; Audretsch and Lehmann, 2006; Voordeckers et al., 2007), we hypothesize and test the mediating effect of board task needs in the generation-board composition relationship. The presented framework will advance theory development in the domain of family firm governance and allows us to explain both diverging and converging generational trends in board characteristics.

The structure of the article is as follows. In the model development section, we first discuss three family attributes that have been demonstrated to change over the generations: task conflict, family experience, and intentional trust. This discussion forms the basis for our hypotheses development part, in which we analyze the impact of the family firm's generational evolution on board task needs and board composition. Hereafter we clarify our research method, followed by a discussion of the empirical results. Finally, in the conclusion, we summarize our main findings and formulate directions for future research.

2. Model Development

2.1 *Generational changes in family attributes*

2.1.1 Task conflict

A first argument for the contention that board characteristics in family firms might alter over the generations, relates to the level of task conflict. Task conflict refers to disagreements about the content of tasks, such as discussions about goals and strategies (Jehn, 1995; Kellermanns and Eddleston, 2004). Family firms have been argued to be a ripe context for conflict due to the overlap of the family and business systems (Sharma, 2004).

A number of researchers have demonstrated that the level of task conflict among the relatives involved in the family firm increases over the generations (Raskas 1998; Davis and Harveston, 1999; 2001; Ensley and Pearson, 2005). This is due to the fact that the likelihood of diverging views concerning the firm increases as different generations and family branches get involved (Dyer, 1994; Ward and Aronoff, 1994). In addition, the number of passive family shareholders typically augments from one generation to the next (Jaffe and Lane, 2004). These shareholders tend to prefer short-term dividend pay-outs whereas active family members mostly emphasize long-term performance (Vilaseca, 2002; Schulze et al., 2003). As will be demonstrated in section 2.2, this increase over the generations in the level of task conflict can be linked to the need for advice and control by the board of directors.

2.1.2 Family experience

A second argument for the claim that the generational evolution of family firms influences board characteristics is related to the level of family experience. The concept of family experience is derived from the F-PEC scale (Astrachan et al., 2002; Klein et al., 2005), which is an acknowledged scale for assessing the extent of family influence in a business organization (cf. Sharma, 2004). Family experience is one of the subscales of the F-PEC scale, and refers to the tacit organizational knowledge that families develop over time (Astrachan et al., 2002).

With regard to the operationalization of the family experience subscale, Klein et al. (2005) have demonstrated that the generational phase of the family firm is its main indicator. Anecdotal evidence indicates that families do well at passing on tacit organizational

knowledge from one generation to the next (Miller and Le Breton-Miller, 2006). The older generation is typically very willing to share wisdom with the next generation of family managers, and to discuss their own mistakes with them (Miller and Le Breton-Miller, 2006). Furthermore, each generation adds valuable business experience and skills to the family (Corbetta and Salvato, 2004; Klein et al., 2005). In section 2.2, we will link this generational increase in the level of family experience to the need for board advice.

2.1.3 Intentional trust

The third argument for the contention that board characteristics in family firms may be influenced by the generational evolution relates to changes in the level of intentional trust. Intentional trust can be defined as the willingness to be vulnerable to the actions of another individual based on a perception of integrity or altruism (Mayer et al., 1995). In the family business literature, intentional trust among relatives is often referred to as one of the main advantages of this organizational form (Tagiuri and Davis, 1996; Habbershon and Williams, 1999). The frequent social interactions in the family system provide the opportunity to build strong trusting relationships.

Yet several researchers found empirical evidence for a decrease of intentional trust over the generations (Raskas, 1998; Steier, 2001). This decrease is attributable to the fewer social interactions taking place among the relatives, which limits the opportunity to develop mutual intentional trust (Mayer et al., 1995). Simply put, family members in parental firms generally have closer relationships than those in sibling partnerships, and siblings mostly have stronger ties than the members of a cousin consortium (Gersick et al., 1997; Ensley and Pearson, 2005). Seeing that the perception of altruism is one of the antecedents of intentional trust, this line of reasoning can also be linked to the discussion of Schulze and colleagues (Schulze et al., 2003; Lubatkin et al., 2005). They argue that relatives belonging to a later generation have

incentives to attach a greater weight to the welfare of their own nuclear household than to the welfare of their extended family (Schulze et al., 2003). Moreover, many of the altruistic attributes which make family firms theoretically distinct are often completely lost during the cousin consortium generational stage (Lubatkin et al., 2005). In the next section, we will link this decrease over the generations in the overall level of intentional trust to the need for control by the board.

2.2 Board task needs and board composition over the generations.

In the above section we have provided an overview of generational changes in three important family attributes – task conflict, family experience, and intentional trust – which have been identified by family business scholars. In this section, we build on the findings of these scholars and consider the possible resultant adaptations of the family firm's governance system. More specifically, we examine the relationship between the generational phase of the firm, board task needs concerning advice and control, and board composition.

2.2.1 Need for board advice & outside directors

The board's advice task relates to the resource-based view, which emphasizes that directors can be used as resources for the firm through their expertise and experience (Huse, 2005). One of the main contributions of active boards in family firms is the provision of advice and counsel (Ward and Handy, 1988). In this section, we will link generational changes in the level of task conflict and family experience to the need for board advice. Furthermore, seeing that it are mainly outside directors who can provide valuable advice (Ward and Handy, 1988; Ward and Aronoff, 1994), the generational phase can also be linked to the likelihood of having outside directors on the board.

As demonstrated by Jehn (1995), moderate levels of task conflict can enhance performance through the generation of new ideas and insights. However, when task conflict concerns strongly held preferences and consensus is difficult to attain, the functioning of the family firm may be paralyzed (Miller et al., 1998). In this case, arbitration by a third party may prove imperative for the sustainability of the organizational value-creation process. The board of directors, and especially the outsiders in it, are commonly attributed this role of arbitrator in family firms because of their objectivity and expertise (Nash, 1988; Ward and Aronoff, 1994). As the level of task conflict has been shown to increase over the generations, board task needs concerning advice and the likelihood of having outsiders on the board can be expected to increase.

In contrast, the rise over the generations in the level of family experience may have the opposite effect. As indicated by Huse (1990), boards can augment the expertise and know-how of the management team. This may be especially valuable for family firms, where management teams are typically small and dominated by a single decision-maker (Feltham et al., 2005). However, seeing that the level of family experience increases over the generations, this need for board advice can be expected to decrease. As the level of organizational knowledge develops over the generations (e.g. Astrachan et al., 2002; Miller and Le Breton-Miller, 2006), the need for complementary know-how held by outside directors should decrease.

Therefore, in order to formulate hypotheses regarding the generational evolution of advice needs and the likelihood of having outsiders on the family firm board, a more detailed depiction of the generational changes in the level of task conflict and family experience is required. Anecdotal evidence indicates that the threat of task conflict is most prevalent in third generation family firms (Neubauer and Lank, 1998). This is in line with the empirical results of Davis and Harveston (1999; 2001), who found only a moderate increase in the level of task

conflict from the first to the second generation, and a more substantial increase from the second to the third generation. With regard to the level of family experience, family business scholars have argued that its increase is most substantial from the first to the second generation, since first generation firms typically build up a great amount of capabilities and rituals. Second and subsequent generations tend to contribute far less to this knowledge-development process (Astrachan et al., 2002; Klein et al., 2005).

The more detailed depiction of these generational changes suggests a significant decrease in the need for complementary outside know-how from the first to the second generations, which is not likely to be compensated by the increased need for outside arbitration. From the second to the third generation, however, a substantial increase in the need for outside arbitration takes place, which is not likely to be compensated by the further decreasing need for complementary outside know-how. These trends are summarized in Figure 1. The suggested convex generational trend in the likelihood of having outside directors may explain why Ward and Handy (1988) and Schwartz and Barnes (1991) found that third and subsequent generations firms seem more likely to have outside boards, whilst Fiegener et al. (2000b) found no such difference between firms led by founders and firms led by successors (see appendix).

**** INSERT FIGURE 1 ABOUT HERE ****

Therefore, we propose the following:

Hypothesis 1a: Advice needs decrease from the first to the second generation, and increase from the second to the third generation.

Hypothesis 1b: The likelihood of having an outside director on the board decreases from the first to the second generation, and increases from the second to the third generation.

So far, we related the generational evolution to board task needs and board composition without discussing explicitly the causal chain between these variables. However, recent studies investigating boards (cf. Grundei and Talaulicar, 2002; Huse, 2005; Voordeckers et al., 2007) suggest that board task needs will mediate the relationship between the generational phase of the firm and board composition. Huse (2005), for example, argues that internal contingencies – such as the family generation and the family attributes discussed above – are a central element in the delineation of board task needs. Subsequently, board composition is likely to be adapted in line with these board task needs (Huse, 2005; Voordeckers et al., 2007). Analogously, Grundei and Talaulicar (2002) argued that – even though external contingencies, such as legal obligations, may influence board composition – in reality companies follow mainly their governance needs and set up boards that reflect these needs. Therefore, we hypothesize that the generational phase of the firm influences the likelihood of having outsiders on the board via its effect on the need for board advice.

Hypothesis 1c: Advice needs mediate between the generational phase and the likelihood of having outside directors.

2.2.2 Need for board control & family directors

The need for control by the board is grounded in agency theory which assumes that (1) the interests of shareholders and managers often diverge, and that (2) managers seek to advance their own interests (Eisenhardt, 1989). As will be discussed below, the generational changes in the level of task conflict can be related to the first agency assumption, and those in the level

of intentional trust to the second. As such, the generational phase of the family firm can be linked to the need for board control.

In the previous section, we have argued that outside directors may play a vital role as arbitrator in the case of task conflict between family members. However, a family manager may not always open up the organizational processes to other relatives, and instead address strategic issues behind the scenes (Miller et al., 1998). Therefore, as the divergence of preferences increases over the generations, the need for control by the board can also be expected to increase in order to ensure that the management team considers the preferences and interests of all family owners.

Furthermore, perceptions of integrity or altruism are the possible antecedents of intentional trust (Mayer et al., 1995). Both integrity and altruism can be viewed as non-rational sources of a manager's behavior, which reduce his/her propensity to behave opportunistically (Nooteboom, 2002). As the level of intentional trust – and thus perceptions of integrity or altruism – decrease over the generations, family managers may be viewed as being exclusively concerned with the interests of their own nuclear household rather than the interests of the entire extended family (Raskas, 1998; Lubatkin et al., 2005). Consequently, the need for board control can be expected to increase. Sibling partnerships often require the installation of formal governance mechanisms to control employed siblings, and this can be considered even more important for the cousin consortium generational stage (Steier, 2001; Lubatkin et al., 2005).

Family firm boards are typically dominated by family directors (Westhead et al., 2002; Voordeckers et al., 2007). Seeing that each family branch is likely to require the presence of a fully trusted relative on the board in order to represent that branch's interests when controlling the management team, we expect a rise over the generations in the presence of family directors (cf. Fiegener et al., 2000a; Van den Berghe and Carchon, 2002; Cabrera-Suárez and

Santana-Martín, 2003). The discussion about the mediating effect of board task needs in the previous subsection also applies for the control task. Therefore, we expect that the generational phase will influence the number of family directors via its effect on the need for board control. As a result, we propose the following three hypotheses:

Hypothesis 2a: Control needs increase from one generation to the next.

Hypothesis 2b: The number of family directors increases from one generation to the next.

Hypothesis 2c: Control needs mediate between the generational phase and the number of family directors.

The hypotheses of this study are summarized in the framework presented in Figure 2.

**** INSERT FIGURE 2 ABOUT HERE ****

3. Methodology

3.1 Sample

The empirical data presented in this article are derived from a study exploring a wide range of characteristics – strategic and environmental issues, management, governance, succession and performance – in a representative sample of Belgian family businesses. The time frame for the survey was end 2002 – beginning 2003. Based on the common selected criteria of ownership and management control (Chua et al., 1999) and the CEO's perception (Westhead and Cowling, 1998), the following businesses were included in the sample: (1) at least 50% of ownership and management is controlled by the family or (2) at least 50% of ownership is controlled by the family but less than half of the managers are part of the family, or (3) less than 50% of ownership is controlled by the family, at least 50% of the managers are part of

the family, and the majority of the shares is owned by an investment company or a venture capital firm. In addition, in all the cases the CEO had to perceive the firm as a family firm.

In total, 3400 limited liability firms (*Naamloze Vennootschap*) were randomly selected from a family business data-base and a survey was mailed to the CEOs¹. After sending a reminder, 311 surveys were returned (9.1%) of which 295 firms could be classified as family firms according to our definition used. In 246 firms (83.4%) the family owned at least 50% of the shares and at least half of the management team was part of the family. In 41 cases (13.9%) the family owned at least half of the shares, but less than 50% of the managers were part of the family. In eight companies (2.7%) the family owned less than 50% of the shares, but at least half of the managers were part of the family. All companies were privately-owned enterprises employing at least five people, and were situated in the Flemish part of Belgium.

As CEOs have a major impact within management teams (e.g. Feltham et al., 2005), we also required the CEO to be part of the family. This assured us that the management team would be substantially influenced by family members, something we implicitly assumed in the hypotheses development, even when less than 50% of the managers were part of the family. This additional requirement reduced the sample by nine cases so that 286 family firms were included in the final sample. The total sample characteristics are presented in Table 1.

Potential response bias was evaluated by two separate procedures. First, we contacted a random sample of non-respondents by telephone and requested data about their firm size, board size, board composition, and meeting frequency. Comparing this data for non-respondents with the respondents in our sample suggests that the total population of Flemish family firms may be characterized by slightly more ghost or rubber stamp boards of directors

directors). Auditors are not allowed to fulfill a director position. Accountants and attorneys are only allowed to take a director position under very special circumstances. Belgium could be classified as a French-civil law country (La Porta et al., 1998) with a one-tier board system. Since 2005, Belgium has a corporate governance code (Code Buysse) for closely held (family) corporations, which does not imply a legal obligation to comply.

13

¹ Only limited liability companies were selected because in Belgium, only this category of corporations has the legal obligation to have a board of directors with at least three directors (some exceptional cases allow only two directors). Auditors are not allowed to fulfill a director position. Accountants and attorneys are only allowed to

(cf. Lane et al., 2006) in terms of board size, outside representation and frequency of board meetings than the firms in our sample. Secondly, following the argument that late respondents are expected to be similar to non-respondents (Kanuk and Berenson, 1975), we differentiated between the 20% earliest respondents and the 20% latest respondents and conducted several t-tests and Chi²-tests on the variables included in the analyses. The results showed no significant differences on any of the variables, indicating that there is no significant response bias in the results. Robustness checks with cut-off points on 10% or 30% showed exactly the same result.

**** INSERT TABLE 1 ABOUT HERE ****

3.2 Measures

3.2.1 Intervening and dependent variables

As measure for board task needs, and in line with Van den Heuvel et al. (2006), the respondents were asked in two separate questions (one for each board task) to evaluate the *importance of the control task* and *the importance of the advice task* of the board on a Likert scale from 1 (not important) to 5 (very important). They were also asked to specify the *number of family directors* and outside directors on their board. A family director is defined as a member of the family who has a position as director in the firm. The variable *presence of an outside director* was 0 if no outside directors were on the board and 1 otherwise. As no consistency exists in the literature regarding the definition of an outside director (e.g. Ward and Handy, 1988; Schwartz and Barnes, 1991; Westhead et al., 2002), we applied an approach that seemed most appropriate in the context of this article. Therefore we define an outsider as someone who is neither a member of the family, nor part of the management team, nor

affiliated to the company (such as an attorney or accountant). As such, the outside director can provide objective and impartial advice.

3.2.2 Independent variables

To determine the *generation in charge of the company*, the survey included a question in which the respondents had to indicate the generation currently having the decision power in the firm. We recoded this variable in three categories: first generation; second generation; third and subsequent (a.s.) generations.

3.2.3 Control variables

In this study, we include five control variables in the analysis. First, several authors claim that the economic development of the company may have a substantial impact on its governance practices (e.g. Fiegener et al., 2000b; Lynall et al., 2003). We therefore add the *size of the company* (logarithm of total assets) and the *phase in the business life cycle* (start, growth, maturity or consolidation) to the analyses. Since no starting firms are present in the sample, phase of the business life cycle was treated as a set of categorical dummy variables consisting of three phases. This enables us to distinguish governance changes exclusively due to generational issues from alterations due to the economic evolution of the business.

Secondly, since several studies reported that CEO power seems to be a main determinant of board characteristics in SMEs (Fiegerer et al., 2000b; Voordeckers et al., 2007), we include *CEO duality* as a control variable. Moreover, results concerning the relationship between generational changes and board tasks or board composition may be driven by the possible increasing *number of employed family members* (Voordeckers et al., 2007) or the *number of family shareholders* which could be considered as a proxy for ownership dispersion. Hence, we also include these variables as control variables.

3.3 Method

To test the various hypotheses concerning the direct effects, we initially apply the most obvious and straightforward statistical analyses. Depending on the question under consideration, we used an analysis of variance (ANOVA) or a Chi-square test. With regards to the ANOVAs, we employ the F-test to determine the overall significance level, and the commonly used Tukey procedure for the pairwise comparisons. In the case of heteroscedasticity problems, we utilize the Welch-test and the Games-Howell procedure instead.

To test for mediation effects, we followed the procedure proposed by Baron and Kenny (1986). These authors propose to estimate three regression equations: (1) regressing the mediator on the independent variable, (2) regressing the dependent variable on the independent variable, and (3) regressing the dependent variable on both the independent variable and the mediator. We also regress the dependent variable on the mediator as this provides information for differentiating between mediation and direct effects (Mathieu and Taylor, 2006).

4. Results and discussion

Hypothesis 1a relates to the need for board advice. Both the ANOVA (Table 2, part a) and the regression analysis (Table 4, model 1) demonstrate that the trend in this board task need is as hypothesized, although only significant at the 10% level. The advice needs decline from the first to the second generation, and increase again in third and subsequent generation firms. A statistically significant difference exists between the second generation and both the first and third or later generations. These results support hypothesis 1a.

**** INSERT TABLE 2 AND TABLE 3 ABOUT HERE ****

Table 3 (part a) and Table 4 (model 2) present the results concerning the likelihood of having outside directors on the board (hypothesis 1b). The empirical results show that this likelihood follows a similar convex trend over the generations as the need for board advice. The second generation has a lower likelihood of having outside directors than the first and third or later generations, and this difference is statistically significant. This supports hypothesis 1b.

Our empirical results thus indicate a convex relationship between the generational phase and the governance elements under study. These hypotheses were the result of previous research findings concerning generational changes in two family attributes, task conflict and family experience, with opposing effects on the need for advice and the likelihood of having outside directors. The rise in the level of task conflict over the generations (e.g. Raskas 1998) was argued to augment the need for board advice and thus outside directors, whilst the rise in the level of family experience (e.g. Klein et al., 2005) was argued to have the opposite effect.

The convex trend in our results suggests – as expected and in line with the literature – that the increase in family experience is the main determinant of governance changes from the first to the second generation, and that the level of task conflict is the main driver of governance changes from the second to the third generation. Moreover, our results also shed light on prior seemingly contradictory and puzzling evidence concerning the likelihood of having outside directors in family firm boards over the different generations (cf. Schwartz and Barnes, 1991; Fiegener et al., 2000b; Voordeckers et al., 2007).

**** INSERT TABLE 4 ABOUT HERE ****

In order to test the mediation effect of the need for board advice (hypothesis 1c), we estimated six regression models which helped us to examine the formulated hypothesis (Table 4, models 1 to 4) and to verify whether the addition of control variables significantly changes the results (models 5 and 6). First, in model 1 of Table 4, we regressed the advice needs on generation. Secondly, in model 2 we regressed the likelihood of having outside directors on generation. As indicated above, in both regressions generation is statistically significant. Following the procedure of Baron and Kenny (1986), we then estimated a third regression (model 4) in which the likelihood of having outside directors is regressed on both the need for board advice (the mediator) and the generational phase. In this regression, the advice needs have a significant effect on the likelihood of outside directors while the generational phase is no longer statistically significant.

This set of results indicates that the need for board advice is a *fully mediating* variable for the relationship between generation and the likelihood of having outside directors on the board: when we include advice needs as independent variable, the effect of generation on the likelihood of having outside directors disappears. Model 3 already indicated that the need for board advice has a significant positive effect on the likelihood of having outside directors. Hence, our tests extend current knowledge about the relationship between the generational phase and the presence of outside directors as it illuminates the precise nature of the relationship and the causal chain. The hypothesized generational effects seem to affect the likelihood of having outside directors fully through their influence on the need for board advice.

The addition of the control variables in model 5 and 6 (Table 4) does not change the results of the mediating analysis. In these additional regressions, only two control variables were found to be significant. In line with the majority of empirical evidence in the field, CEO duality has a negative effect on the likelihood of having outside directors on the board.

Furthermore and as expected, a higher number of working family members also decreases this likelihood.

Table 2 (part b) contains the analyses concerning the generational evolution in the need for board control (hypothesis 2a). We observe a rise in the need for the control task, with the largest increase occurring from the first to the second generation. The differences between the generations are, however, not statistically significant in the ANOVA set-up. The regression results (Table 5, model 1) confirm the mounting trend with only the difference between the first and the third or later generations being significant. Hypothesis 2a is thus only partially supported.

**** INSERT TABLE 5 ABOUT HERE ****

The average number of family members on the board of directors (hypothesis 2b) also increases over the generations (Table 3, part b). The ANOVA test indicates that the impact of the generation-factor is significant at the 0.01 level. The Tukey pairwise comparisons indicate that the difference between the first and the second generation is significant at the 0.10 level, and the difference between the first and the third or later generations at the 0.01 level. However, the disparity between the second and the third or later generations is not found to be significant. Regression model 2 in Table 5 confirms the ANOVA results. Hence, hypothesis 2b is also partially supported.

The mediation effect of the need for control (hypothesis 2c) was tested by estimating the same set of six regression models (Table 5) as for the need for advice. As mentioned, the results of the first two regressions confirm the ANOVA results. In model 1, we estimated the effect of generation on the control needs. We find a positive effect, but only the difference between the first and the third or later generations is statistically significant. The results of

model 2 show that generation also has a significant positive effect on the number of family directors. The nature of the relationship is revealed in model 3. Since the regression coefficient in this model is not significant, our tests suggest a *direct effect* of the generational phase on the number of family directors on the board (Mathieu and Taylor, 2006). Consequently hypothesis 2c, postulating that the need for board control mediates between generation and the number of family directors, was not supported by our regression results.

Although the direct effect of generation on the number of family directors is puzzling at first sight, it might suggest that other needs or desires than the need for board control mediate this relationship. A potentially important board task that we have not included in our study is the board's active involvement in the strategic decision-making process (cf. Pearce and Zahra, 1992). As discussed above, previous research has demonstrated that the degree of task conflict tends to increase over the generations. Therefore, one might expect that over the generations more family members will demand a seat on the board in order to present their personal or the nuclear family's strategic views of the family business during board discussions. This would also explain the significance of the control variables 'number of family shareholders' and 'number of working family members' in model 5 and 6. In brief, as more generations, family branches, and family members get involved in the company, cognitive divergence concerning strategic issues is likely to increase (cf. Ensley and Pearson, 2005), and consequently more family members may want to have a say on major strategic issues in board discussions. Of course this line of reasoning will need to be tested in future research since we were unable to test it with our data. However, based on the present data, we can conclude that other needs or desires than the need for control underlie the generational increase in the number of family directors.

Our analyses indicate that the rise in the need for board control over the generations is not reflected in the number of family directors. However, these increased control needs might influence the likelihood of having outsiders on the board. Family members may rely primarily on outside directors with the required functional skills and 'independence of mind' (cf. Forbes and Milliken, 1999; Roberts et al., 2005) to perform the board's control task. In order to test this alternative hypothesis, we estimated a third set of regressions (not reported) in which we examined the control needs as possible mediator between the generational phase and the likelihood of having outside directors. Both generation and control needs seem to have a significant effect on this likelihood. When estimated together as independent variables, however, neither the coefficients nor the significance levels changed. Moreover, the convex generational trend found in the regression models with advice needs also shows up in these regressions. This set of results suggests that generation influences the likelihood of having outside directors primarily through changes in advice needs, and that once on the board these outsiders may also fulfill the need to control the management team.

As indicated, we measured board task needs by asking respondents to evaluate the importance of the board's advice and control task in two separate single-item questions. No other direct measures for these board task needs were available. In order to test the *robustness* of our findings, we retested our hypotheses with an alternative proxy for board task needs that is closely related to our direct measures. This alternative proxy is the percentage of time the board spends on a specific board task. We propose that a board which experiences a changing need for a specific board task will first spend less or more time on that task, before this changed need is reflected in board composition (cf. Huse, 2005). Spending more time on a specific board task can be executed immediately without significant constraints, whereas board composition can be expected to be less flexible. Therefore, we propose that the percentage of time spent on the advice and control task by the board (evaluated in two separate questions) is an acceptable indirect proxy for board task needs to test the robustness

of our results. This retest of our statistical models showed exactly the same patterns as with our direct measures (importance of the two tasks), although the statistical significance of the effects was lower.

5. Conclusion

The purpose of this study was to scrutinize the relationship between an important dimension of a family firm's life cycle, namely the generation in charge of the company, and board characteristics, namely two board main task needs (advice and control) and its composition. Moreover, we tested the mediating effect of board task needs in the generation-board composition relationship. This study not only contributes to the literature on governance in family firms, but also adds to the recent literature examining behavioral perspectives of corporate governance (Forbes and Milliken, 1999; Huse, 2005). Board task needs are theoretically distinct from board task performance, and the majority of prior board role research has concentrated on the latter. Nevertheless, these underresearched board task needs take a central position in models about understanding actual board behavior (Huse, 2005).

Our results suggest that the advice needs decrease from the first generation to the second, and rise again in third and subsequent generation firms. An analogical trend is found for the likelihood of having outsiders on the board. The effect of the generational phase on the likelihood of having outside directors seems to be fully mediated by the need for board advice. This convex trend can be explained by two underlying opposing generational evolutions, namely the increase in task conflict among the family members and the rise in family experience (e.g. Davis and Harveston 1999; 2001; Klein et al., 2005).

Further, our results suggest a mounting trend in the need for board control and in the number of family directors over the generations. This evolution in the need for control may be explained by the fact that further generation companies are, on the whole, characterized by

higher levels of task conflict and less intentional trust (e.g. Raskas, 1998). Surprisingly, the relationship between generation and number of family directors does not seem to be mediated by the need for board control. More specifically, the results suggest a direct relationship between generation and number of family directors. This may be interpreted as an indication that family members will require a direct representation on the board based on other desires than the need to control the management team. One such desire may be to become actively involved in major strategic decisions in order to express one's 'diverging' opinion. However, future research will need to examine this possibility. A further analysis of how the control needs are reflected in board composition revealed that outside directors are adopted on the board because of both advice and control needs. Yet the primary board task needs mediating the relationship between generation and the inclusion of outside directors seem to be those related to the advice task.

This study has some limitations that should be acknowledged and addressed in future research. First, we discussed generational changes in various family attributes and integrated them to derive implications for board characteristics. However, future research should incorporate direct measurements of these family attributes in the empirical models in order to get a clearer understanding of the precise impact of each of these different attributes. Secondly, the proxies for board task needs were measured by two separate single-item perspective measures. Although our results remain robust with an alternative proxy for these variables, future research may develop more detailed and multiple-item perspective measures for board task needs.

Furthermore, several challenges remain for future research. First, we concentrated on two important board tasks, namely advice and control. Nevertheless, other board tasks have been described in the literature such as management of external dependencies and involvement in strategic decisions (Pearce and Zahra, 1992; Hillman et al., 2000). Secondly,

in this study we concentrated on generational differences in board task needs and board composition. A next step would be to explore generational differences in actual board task performance. However, with regard to this dependent variable a whole range of intervening process variables will need to be taken into consideration such as, for example, board cohesiveness and effort norms (Forbes and Milliken, 1999; Huse, 2005).

Thirdly, we examined generational differences in board characteristics by asking the respondents to indicate the generation currently having the decision power in the firm. This approach indicates the most dominant generation involved in the running of the firm. However, different hybrid forms may exist, with varying degrees of involvement by several generations. Scholars may therefore refine our model by taking a more continuous approach and examining the level of involvement of different generations in ownership, board of directors, and management.

Lastly, the family firm's life cycle should not be viewed as a static phenomenon. As mentioned by Filatotchev and Wright (2005), this life cycle takes place "within the life cycle of the market environment in which the firm is operating and, more broadly, the institutional life cycle of the country in which the firm is located" (Filatotchev and Wright, 2005, p. 9). Future studies may therefore examine to what extent governance reforms, and more specifically the recent development of governance codes specifically for non-quoted companies (e.g. Code Buysse in Belgium) influence the generational changes in the characteristics of family firm boards.

APPENDIX – Literature Overview of Governance Differences between Generations

Authors	Definition of family firm	Sample		Analytical approaches	Control variables	Differences in governance aspects		
		N	Country					
Ward and Handy (1988)	The authors make a distinction between three kinds of firms: entrepreneurial, family and widely held companies. Family firms are those businesses owned by a family successor or several family members.	Founder- owned and family- owned: 85	USA	Not indicated.	None.	Firms with 3 rd or 4 th generation family owners seem more likely to have <i>outside boards</i> (in this article an outsider is someone who is nor an owner nor a manager nor a family member. An outside board is a board with at least 2 outsiders).		
Schwartz and Barnes (1991)	"We define a family firm as one where controlling ownership is held by an individual or by members of a single family. We also require the company to be managed by a member or descendant of the founding family"	262	USA	Not indicated.	None.	Family firms of the 4 th and subsequent (a.s.) generations are more likely to have <i>outside boards</i> (in this article an outsider is someone who is neither a member of the controlling family, an active or retired employee, a retained professional adviser, nor a close family friend of the CEO. An outside board is a board with at least one outsider).		
Fiegener, Brown, Dreux and Dennis (2000a)	With regard to the testing of generational effects, no working definition of a family business is given. The sample also includes non-family firms, and the respondents were asked to indicate whether the CEO was the founder, a family member successor, or none of these.	2365	USA	Regression.	Organizational age; Organizational size; CEO-tenure; Board size; (CEO-ownership stakes); (CEO-family stakes).	Larger board representation by family directors in multi-generation enterprises.		
Van den Berghe and Carchon (2002)	"one person owns more than 50% of the shares or one family owns more than 50% of the shares or one family is capable of exercising considerable influence on the company's policy or the	154	Belgium	Chi-square tests.	None.	Higher <i>family member ratio</i> in board of directors in 3 rd a.s. generations (60%) than in 1 st and 2 nd generation (both 50%). Concave trend in occurrence of <i>CEO-duality</i> : 1 st generation 33% / 2 nd generation 44% / 3 rd a.s. generations 23%		
	company's management consists (partially) of one family."					Higher <i>meeting frequency</i> of the board in 3 rd a.s. generations (on average 5 times per year) than in 1 st and 2 nd generation (both on average 3 times per year).		

APPENDIX continued – Literature Overview of Governance Differences between Generations

Westhead, Howorth and Cowling (2002)	"more than 50% of ordinary voting shares are owned by members of the largest single family group related by blood or marriage, and the company is perceived by the CEO/managing director/chairman to be a family business."	272	UK	Matched paired methodology; Chi-square tests; Student's t-tests.	Employment size; Location (rural vs. urban); Industrial activity.	Multi-generation companies have, on average, <i>more directors</i> than 1 st generation companies (3.0 compared with 2.5). A larger proportion of multi-generation (19%) rather than 1 st generation companies (9%) employ a <i>non-executive director</i> (this category also excludes family members in this article).		
Mustakallio, Autio and Zahra (2002)	The research population comprised family businesses that were member (or on the recruitment list) of the Family Business Network Finland. One of the criteria that had to be met to be included in this study, was that the firm had to be controlled by a single family.	192	Finland	Correlations.	None.	A significant positive correlation (0.14) exists between generation and <i>the use of family institutions</i> .		
Cabrera- Suárez and Santana- Martín (2003)	The research population comprised family companies belonging to 14 regional family company associations throughout Spain.	112	Spain	Mann-Whitney tests.	None.	The <i>presence of a board</i> (vs. sole administrator) increases over the generations (1 st : 58% vs. 2 nd : 80% vs. 3 rd a.s.: 94%). The average <i>percentage of family directors</i> augments with successive generations (67% vs. 77% vs. 83%). The average <i>percentage of external directors that are family members</i> rises with successive generations (50% vs. 66% vs. 73%). Convex trend in occurrence of <i>CEO-duality</i> : 1 st generation 59% / 2 nd generation 25% / 3 rd a.s. generations 30%. A larger proportion of firms in 3 rd a.s. generations do <i>not pay their board members</i> (27% , 26% vs. 41%). In the case where the directors are paid, the use of a <i>fixed pay system</i> is common and increases with the generations. With regards to <i>family governance</i> , informal meetings increase in importance from the 2 nd generation on, and the presence of formal mechanisms and family protocols rises with the passing generations.		
Sonfield and Lussier (2004)	"a family business is one in which family members dominate the ownership and management of a firm and perceive their business as a family business."	161	USA	Anova; Ancova; Chi-square tests; Discriminant Analysis.	Employment size; Service vs. manufacturing; Years of operation; Legal form of business.	The 1 st generation firms do less <i>succession planning</i> than the 2 nd and 3 rd a.s. generations.		

References

- Astrachan, J., S. Klein, and K. Smyrnios, 2002, 'The F-PEC Scale of Family Influence: A Proposal for Solving the Family Business Definition Problem', *Family Business Review*, **15**, 45-58.
- Audretsch, D. and E. Lehmann, 2006, 'Entrepreneurial access and absorption of knowledge spillovers: Strategic board and managerial composition for competitive advantage', *Journal of Small Business Management*, 44, 155-166
- Baron, R. and D. Kenny, 1986, 'The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations', *Journal of Personality and Social Psychology*, **51**, 1173-1182.
- Birley, S., 1986, 'Succession in the Family Firm: The Inheritors' View.', *Journal of Small Business Management*, **24**, 36-43.
- Cabrera-Suárez, K. and D. Santana-Martín, 2003, 'Corporate and Family Governance in the Spanish Family Firms', Working paper, University of Las Palmas de Gran Canaria.
- Chua, J., J. Chrisman and P. Sharma, 1999, 'Defining the Family Business by Behavior', Entrepreneurship Theory and Practice, 23, 19-39.
- Corbetta, G. and C, Salvato, 2004, 'The Board of Directors in Family Firms: One Size Fits All?', *Family Business Review*, **17**, 119-134.
- Corbetta, G. and D. Montemerlo (1999), 'Ownership, Governance, and Management Issues in Small and Medium-Size Family Businesses: A Comparison of Italy and the United States,' *Family Business Review*, **12**, 361-374.
- Davis, P. and P. Harveston, 1999, 'In the Founder's Shadow: Conflict in the Family Firm', *Family Business Review*, **12**, 311-323.

- Davis, P. and P. Harveston, 2001, 'The Phenomenon of Substantive Conflict in the Family Firm: A Cross-Generational Study', *Journal of Small Business Management*, **39**, 14-30.
- Davis, P.S. and T.L. Pett, 2000, 'Governance and Goal Formation among Family Businesses:

 A resource Dependency Perspective.', *The International Journal of Entrepreneurship and Innovation*, **1**, 137-149.
- Dyer, G., 1994, 'Potential Contributions of Organizational Behavior to the Study of Family-Owned Businesses', *Family Business Review*, **7**, 109-131.
- Eisenhardt, K., 1989, 'Agency Theory: An Assessment and Review', *Academy of Management Review*, **14**, 57-74.
- Ensley, M. and A. Pearson, 2005, 'An Exploratory Comparison of the Behavioral Dynamics of Top Management Teams in Family and Non-family New Ventures: Cohesion, Conflict, Potency, and Consensus', *Entrepreneurship Theory and Practice*, **29**, 267-284.
- Feltham, T., G. Feltham, and J. Barnett, 2005, 'The Dependence of Family Businesses on a Single Decision Maker', *Journal of Small Business Management*, **43**, 1-15.
- Fiegener, M., B. Brown, D. Dreux, and W. Dennis, 2000a, 'CEO Stakes and Board Composition in Small Private Firms', *Entrepreneurship Theory and Practice*, **24**, 5-24.
- Fiegener, M., B. Brown, D. Dreux, and W. Dennis, 2000b, 'The Adoption of Outside Boards by Small Private US Firms', *Entrepreneurship & Regional Development*, **12**, 291-309.
- Filatotchev and Wright, 2005, *The Life Cycle of Corporate Governance*, Edward Elgar Publishing, Cheltenham, UK.
- Forbes, D., and F. Milliken (1999). "Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups," *Academy of Management Review*, **24**, 489-506.

- Gabrielsson, J. and H. Winlund, 2000, 'Boards of Directors in Small and Medium-Sized Industrial Firms: Examining the Effects of the Board's Working Style on Board Task Performance', *Entrepreneurship & Regional Development*, **12**, 311-330.
- Gersick, K., J. Davis, M. Hampton, and I. Lansberg, 1997, *Generation to Generation: Life Cycles of the Family Business*, Harvard Business School Press, Boston.
- Grundei, J. and T. Talaulicar, 2002, 'Company Law and Corporate Governance of Start-ups in Germany: Legal Stipulations, Managerial Requirements, and Modification Strategies', *Journal of Management and Governance*, **6**, 1-27.
- Habbershon, T. and M. Williams, 1999, 'A Resource-Based framework for Assessing the Strategic Advantages of Family Firms', *Family Business Review*, **12**, 1-26.
- Hillman, A., A. Cannella, and R. Paetzold, 2000, 'The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change', *Journal of Management Studies*, **37**, 235-255
- Huse M., 1990, 'Board Composition in Small Enterprises'. *Entrepreneurship & Regional Development*, **2**, 363-373.
- Huse, M., 2005, 'Accountability and Creating Accountability: a Framework for Exploring Behavioral Perspectives of Corporate Governance', *British Journal of Management*, **16**, 65-79.
- IFERA, 2003, 'Family Businesses Dominate', Family Business Review, 16, 235-240.
- Jaffe, D. and S. Lane, 2004, 'Sustaining a Family Dynasty: Key Issues Facing Complex Multigenerational Business- and Investment-Owning Families', *Family Business Review*, **17**, 81-98.

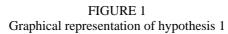
- Jehn, K., 1995, 'A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict', *Administrative Science Quarterly*, **40**, 256-282.
- Kanuk, L. and C. Berenson, 1975, 'Mail Surveys and Response Rates: A Literature Review', Journal of Marketing Research, 22, 440-453.
- Kellermanns, F. and K. Eddleston, 2004, 'Feuding Families: When Conflict does a Family Firm Good', *Entrepreneurship Theory and Practice*, **28**, 209-228.
- Klein, S., J. Astrachan and K. Smyrnios, 2005, 'The F-PEC Scale of Family Influence: Construction, Validation, and Further Implication for Theory', *Entrepreneurship Theory and Practice*, **29**, 321-339.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny (1998). 'Law and Finance', Journal of Political Economy, 106, 1113-1155
- Lane, S. J. Astrachan, A. Keyt and K. McMillan, 2006, 'Guidelines for Family Business Boards of Directors', *Family Business Review*, **19**, 147-167.
- Lubatkin, M., W. Schulze, Y. Ling and R. Dino, 2005, 'The Effects of Parental Altruism on the Governance of Family-Managed Firms', *Journal of Organizational Behavior*, **26**, 313-330.
- Lynall, M., B. Golden, and A. Hillman, 2003, 'Board Composition from Adolescence to Maturity: A Multitheoretic View', *Academy of Management Review*, **28**, 416-431.
- Mathieu, J. and S. Taylor, 2006, 'Clarifying Conditions and Decision Points for Mediating Type Inferences in Organizational Behavior', *Journal of Organizational Behavior*, **27**, 1031-1056.
- Mayer, R., J. Davis and D. Schoorman, 1995, 'An Integrative Model of Organizational Trust', *Academy of Management Review*, **20**, 709-734.

- Miller, C., L. Burke and W. Glick, 1998, 'Cognitive Diversity among Upper-Echelon Executives: Implications for Strategic Decision Processes', *Strategic Management Journal*, **19**, 39-58.
- Miller, D. and I. Le Breton-Miller, 2006, 'Family Governance and Firm Performance: Agency, Stewardship, and Capabilities', *Family Business Review*, **19**, 73-87.
- Morris, M., R. Williams, J. Allen and R. Avila, 1997, 'Correlates of Success in Family Business Transitions', *Journal of Business Venturing*, **12**, 385-401.
- Mustakallio, M., E. Autio, and S. Zahra, 2002, 'Relational and Contractual Governance in Family Firms: Effect on Strategic Decision Making', *Family Business Review*, **15**, 205-222.
- Nash, J., 1988, 'Boards of Privately Held Companies: Their Responsibilities and Structure', Family Business Review, 1, 263-269.
- Neubauer, F. and A. Lank, 1998, *The Family Business: Its Governance for Sustainability*, McMillan Press, London.
- Nooteboom, B., 2002, *Trust: Forms, foundations, functions, failures and figures*. Cheltenham: Edward Elgar.
- Pearce, J. and S. Zahra, 1992, 'Board Composition from a Strategic Contingency Perspective', *Journal of Management Studies*, **29**, 411-438.
- Raskas, D., 1998, 'Familiarity Breeds Trust As Well As Contempt...What about Familiarity?

 An Examination of Familial Involvement and Trust in Family Firms', Doctoral Dissertation, Columbia University.

- Roberts J., T. McNulty, and P. Stiles, 2005, 'Beyond Agency Conceptions of the Work of the Non-Executive Director: Creating Accountability in the Boardroom', *British Journal of Management*, **16**, 5-26.
- Schulze, W., M. Lubatkin, and R. Dino, 2003, 'Exploring the Agency Consequences of Ownership Dispersion among the Directors of Private Family Firms', *Academy of Management Journal*, **46**, 179-194.
- Schulze, W., M. Lubatkin, R. Dino, and A. Buchholtz, 2001, 'Agency Relationships in Family Firms: Theory and Evidence', *Organization Science*, **12**, 99-116.
- Schwartz, M. and L. Barnes, 1991, 'Outside Boards and Family Businesses: Another Look', Family Business Review, **4**, 269-285.
- Sharma, P., 2004, 'An Overview of the Field of Family Business Studies: Current Status and Directions for the Future', *Family Business Review*, **17**, 1-36.
- Sonfield, M. and R. Lussier, 2004, 'First-, Second-, and Third-Generation Family Firms: A Comparison', *Family Business Review*, **17**, 189-202.
- Steier, L., 2001, 'Family Firms, Plural Forms of Governance, and the evolving Role of Trust', Family Business Review, 14, 353-367.
- Sundaramurthy, C. and M. Lewis, 2003, 'Control and Collaboration: Paradoxes of Governance', *Academy of Management Review*, **28**, 397-107.
- Tagiuri, R. and J. Davis,1996, 'Bivalent Attributes of the Family Firm', *Family Business Review*, **9**, 199-208.
- Van den Berghe, L. and S. Carchon, 2002, 'Corporate Governance Practices in Flemish Family Businesses', *Corporate Governance: An International Review*, **10**, 225-245.

- Van den Heuvel, J., A. Van Gils and W. Voordeckers, 2006, 'Board Roles in Small and Medium-Sized Family Businesses: Performance and Importance', *Corporate Governance:*An International Review, 14, 467-485.
- Vilaseca, A., 2002, 'The Shareholder Role in the Family Business: Conflict of Interests and Objectives between Nonemployed Shareholders and Top Management Team', *Family Business Review*, **15**, 299-320.
- Voordeckers, W., A. Van Gils, and J. Van den Heuvel, 2007, 'Board Composition in Small and Medium Sized Family Firms', *Journal of Small Business Management*, **45**, 137-156.
- Ward, J. and C. Aronoff, 1994, 'Managing Family-Business Conflict', *Nation's Business*, **82**, 54-55.
- Ward, J. and J. Handy, 1988, 'A Survey of Board Practices', *Family Business Review*, **1**, 289-308.
- Westhead, P. and M. Cowling, 1998, 'Family Firm Research: The Need for a Methodological Rethink', *Entrepreneurship Theory and Practice*, **23**, 31-56.
- Westhead, P., C. Howorth, and M. Cowling, 2002, 'Ownership and Management Issues in First Generation and Multi-generation Family Firms', *Entrepreneurship & Regional Development*, **14**, 247-269.
- Zahra, S. and J. Pearce, 1989, 'Boards of Directors and Corporate Financial Performance: A Review and Integrative Model', *Journal of Management*, **15**, 291-334.



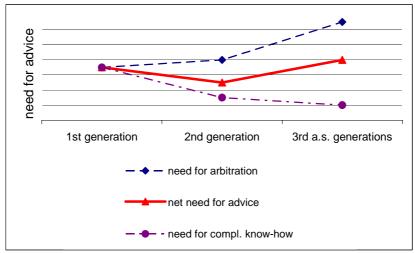


FIGURE 2 Framework of hypotheses

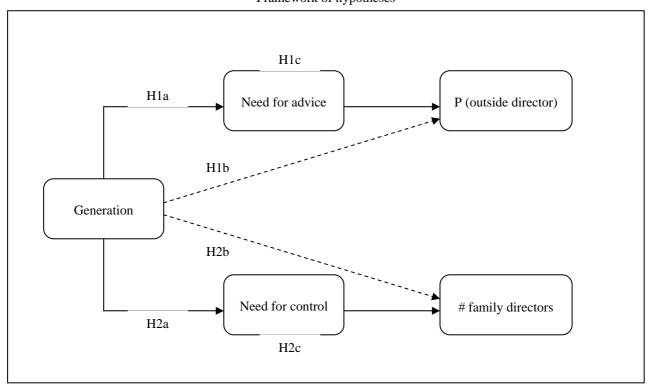


TABLE 1 Total sample characteristics

	<i>N</i> = 286	Percentage
Size		
Micro (<10 employees)	90	31.5
Small (10-50 employees)	144	50.3
Medium (51-250 employees)	18	6.3
Large (>250 employees)	28	9.8
Unknown	6	2.1
Business Life Cycle		
Start phase	0	0
Growth phase	96	33.6
Maturity phase	137	47.9
Consolidation phase	43	15.0
Unknown	10	3.5
Activity		
Industrial	92	32.2
Construction	41	14.3
Retail	103	36.0
Services	50	17.5
Generation		
First generation	66	23.1
Second generation	140	49
Third generation or higher	75	26.2
Unknown	5	1.7

TABLE 2 Results board task needs

	(a) Importance of advi	ce task		
		Means		*** 1 1 1	
ANOVA	I^{st} gen 2^{nd} gen		3 rd a.s. gen	Welch-value 2.760*	
(N=232)	3.89	3.52	3.90	2.700	
	(b) Importance of contr	rol task		
		Means		Walsh sales	
ANOVA	1 st gen	2 nd gen	3 rd a.s. gen	Welch-value 1.78	
(N=239)	3.26	3.57	3.72	1.78	

Mean average score per generation: 1 = not important, 5 = very important * significant at 0.10 level.

TABLE 3 Results board composition

	-	Results board compo.	5111011		
	(a) likelihood o	of having an outside d	lirector on the board	·	
CHICOLLARE	% of con	2 1			
CHI-SQUARE (N=276) -	1 st gen 2 nd gen		3 rd a.s. gen	χ^2 -value 6.882**	
(14-270)	19.0%	9.4%	21.6%	0.002	
	(b)	number of family d	irectors		
_		Means		г 1	
ANOVA	1 st gen	2 nd gen	3 rd a.s. gen	F-value 5.365***	
(N=276)	2.49	2.88	3.19	3.303****	

^{**, ***} significant at 0.05, 0.01 level respectively.

TABLE 4
Regression results of the hypothesized mediation effect on outside directors

	(1)	(2)	(3)	(4)	(5)	(6)
Generation ^a						
2 nd generation	-0.365*	-0.824*		-0.779	-0.507	-0.609
<u>c</u>	(0.202)	(0.433)		(0.474)	(0.558)	(0.537)
3 rd a.s. generations	0.016	0.159		0.224	0.410	0.283
C	(0.229)	(0.427)		(460)	(0.605)	(0.582)
Importance advice task	` ′	` ,	0.534***	0.483**	0.496**	0.471**
•			(0.191)	(0.192)	(0.225)	(0.215)
CEO duality			` ,	, ,	-1.262***	-1.084**
•					(0.475)	(0.446)
Business life cycle ^b					, ,	` ,
Maturity					0.443	0.411
•					(0.486)	(0.468)
Consolidation					0.026	0.081
					(0.714)	(0.696)
LN(firm size)					0.241	0.197
,					(0.194)	(0.189)
Number of working family					-0.422***	, ,
members					(0.159)	
Number of family					, ,	-0.066
shareholders						(0.117)
Number of observations	232	232	232	232	205	207
Adj R ²	0.015*	232	232	232	203	237
Nagelkerke R ²	0.015	0.044***	0.070***	0.110***	0.246***	0.182***

^{*, ***, ****} significant at 0.10, 0.05, 0.01 level respectively. Standard errors reported in parentheses. Intercept not reported. ^a 1st generation is the suppressed comparison category. ^b Growth phase is the suppressed comparison category. The dependent variable in model (1) is the potential mediator "need for advice" (importance advice task). The dependent variable in models (2) till (6) is a dummy variable: no outside directors (=0) or outside directors (=1) included on the board. Model (1) is estimated with OLS, models (2) till (6) are estimated with logistic regressions.

 $\begin{tabular}{ll} TABLE\ 5 \\ Regression\ results\ of\ the\ hypothesized\ mediation\ effect\ on\ family\ directors \end{tabular}$

	(1)	(2)	(3)	(4)	(5)	(6)
Generation ^a						
2 nd generation	0.314	0.464**		0.466**	0.284	0.310
_	(0.196)	(0.216)		(0.217)	(0.224)	(0.223)
3 rd a.s. generations	0.456**	0.734***		0.738***	0.584**	0.555**
_	(0.218)	(0.240)		(0.243)	(0.266)	(0.271)
Importance control task			0.021	-0.009	-0.018	-0.058
-			(0.072)	(0.072)	(0.076)	(0.076)
CEO duality					-0.324	-0.269
•					(0.205)	(0.205)
Business life cycle ^b						
Maturity					-0.157	-0.222
•					(0.186)	(0.188)
Consolidation					-0.577**	-0.606**
					(0.283)	(0.288)
LN(firm size)					0.022	0.071
					(0.082)	(0.081)
Number of working family					0.249***	
members					(0.052)	
Number of family						0.172***
shareholders						(0.044)
Number of observations	239	239	239	239	212	214
Adj R²	0.010	0.030**	0.000	0.026**	0.138***	0.111***

^{**, ***} significant at 0.05, 0.01 level respectively. Standard errors reported in parentheses. Intercept not reported. ^a 1st generation is the suppressed comparison category. ^b Growth phase is the suppressed comparison category. The dependent variable in model (1) is the potential mediator "need for control" (importance control task). The dependent variable in models (2) till (6) is the number of family directors included on the board. All regression models are estimated with OLS.