THE ENTREPRENEURIAL ORIENTATION IN FAMILY FIRMS: HOW DO THE FAMILY FIRM INTERNAL CULTURE AND THE BOARD OF DIRECTOR AFFECT IT?

Unai Arzubiaga

Profesor e Investigador del Departamento de Economía Financiera II, Facultad de Ciencias Económicas y Empresariales de Bilbao UPV/EHU (Universidad del País Vasco)

Amaia Maseda

Vicerrectora de Proyección y Transferencia de la UPV/EHU

Profesora e Investigadora del Departamento de Economía Financiera I, Facultad de Ciencias Económicas y Empresariales de Bilbao UPV/EHU (Universidad del País Vasco)

Txomin Iturralde

Director de la Cátedra de Empresa Familiar de la UPV/EHU

Profesor e Investigador del Departamento de Economía Financiera II, Facultad de Ciencias Económicas y Empresariales de Bilbao UPV/EHU (Universidad del País Vasco)

Área Temática: C) Dirección y Organización

Palabras Clave: entrepreneurial orientation, family firms, board of directors, strategic involvement
Abstract

The present article analyzes the influence that some internal factors, most of them inherent to the family firm culture, have in the Entrepreneurial Orientation of family firms. Through the structural equation modelling, it has been empirically tested that there is a positive relation between the family firm image, the willingness to change and the strategic involvement of the board of directors. In this sense, it is supported that the more important it is the family firm image, the more implemented it is the willingness to change culture and the more involved gets the board of directors in the strategy of the firm, the more entrepreneurially oriented gets the firm. On the contrary, the effect that the generation factor, and the access to financial resources may have in the entrepreneurial orientation of a family firm has not been empirically supported. This leads us to think that, although generation and the access to financial resources could enhance the EO of a firm sometimes, they may do it in combination with other factors.
1. INTRODUCTION

Being conscious that one of the main objectives of family firms is long-term survival, it becomes almost essential for this kind of firm to involve in entrepreneurial activities for fortifying their business and maintaining its competitiveness (Cruz and Nordqvist, 2010). In this sense, corporate entrepreneurship, which has been recognized as a potentially viable means for promoting and sustaining firm performance (Schollhammer 1981, 1982; Burgelman 1984; Kanter 1982; Rule and Irvin 1988; Guth and Ginsberg 1990; Zahra 1991), results not important but crucial in the case of family firms (Astrachan, 2003). At this point, there is a lack of consensus about how the factors which are inherent to the family firm and its entrepreneurial orientation (EO) are related (Casillas and Moreno, 2010; Casillas, et al., 2010; Kellermanns and Eddleston, 2006; Kellermanns et al. 2008; Naldi et al. 2007; Zahra et al. 2007). Therefore, one of the major challenges of literature in this area is to conduct a study where the effects of these family firm internal factors in its EO are analyzed.

Nevertheless, some of the main internal family firm variables remain almost without been analyzed. Specifically, we focused in the family firm image, the willingness to change, the strategic involvement of the board of directors, the generation in control, the generation involvement and the access to financial resources.

The first variable analyzed, family firm image, has to do with the efforts made for preserving the good image of a family firm, and we focused on how may it affect in the entrepreneurial orientation of a family firm. Secondly we consider the possibility that the willingness to change inside the firm may affect the entrepreneurial attitude of it. Afterwards, we measure the effects that may have in EO the quantity of generations involved in the management of the business and which the generation in control of the firm is. Apart from that, as EO is a strategic orientation intensive in resource consumption (Wiklund and Sheperd, 2005), we measure the influence that the access to financial resources may have in the EO of the firm. Lastly, considering that advisors can complete the tacit knowledge of family members increasing that way the corporate entrepreneurship of the family firms (Eddleston, 2008), we measured the direct effect that the strategic involvement of the board of directors may have in the EO of a family firm.

This paper aims to contribute to the literature in two specific ways. On the one hand, we empirically demonstrate the causal relationship between some concrete internal factors and the EO of a family firm being, in the case of the family firm image and the strategic involvement of the board of directors, the first study analysing it. On the other hand, in this paper, by means of the use of the structural equation modeling (SEM), a technique which has not been too extended in family firm research community, the obtention of more robust and reliable empirical results has been pretended.

This paper is structured as follows. In the next section, we complete a literature review through we develop theoretically the potential effect that some of the main internal family business variables may have in the entrepreneurial orientation of a family firm. In the end of each relationship, we hypothesize the causality of each one. Subsequently, we describe the methodology that was used. The following section shows the results of the study while in the last section of the paper those results are discussed highlighting our major conclusions, the limitations of this study and the implications of it.

2. LITERATURE REVIEW AND THEORETICAL DEVELOPMENT
The interaction between the family and the business may influence corporate entrepreneurship in family firms. Indeed, the impact of individual family members and overall family involvement may be critical to entrepreneurial behavior and firm success (Astrachan, 2003). In this sense, research needs to investigate how “familiness” may foster or inhibit entrepreneurial behaviors in family firms (Kellermanns and Eddleston, 2006). Therefore, first of all it is convenient to define how we measure this kind of behaviors.

2.1 Defining EO

For measuring entrepreneurial orientation-performance relationship, there is a multidimensional construct named as Entrepreneurial Orientation (EO) by Lumpkin and Dess (1996) which permits authors comparing the entrepreneurial behavior of different firms or, even, comparing this behavior in a firm in different spaces of time. For this purpose, most authors have defined EO in a similar way, this is, as an organizational phenomenon related to the firm’s processes, methods, and decision-making activities (e.g., Covin and Slevin, 1989; Hughes and Morgan, 2007; Jantunen, et al., 2005; Lumpkin and Dess, 1996; Rauch, et al., 2009; Wiklund and Shepherd, 2005). Miller (1983), who was a pioneer in using EO construct, considered it as a multidimensional construct consisting of three dimensions -innovativeness, risk taking and proactiveness-, having to covary positively between them (Covin and Wales, 2001). In fact, although Lumpkin and Dess (1996) stretched the domain of EO construct adding two additional dimensions like autonomy and competitive aggressiveness, the use of the EO construct as it was conceptualized by Miller has been more extended.

2.2 Family firm image and EO

According to the Organizational identity theory, family firm image has to do with how the firm members suppose others see their organization and the manner that this firm’s leader would like the organization be perceived (Gioia and Thomas, 1996, Ravasi & Schultz, 2006; Scott & Lane, 2000). Recent research on family firms seems to suggest that a family firm image contributes to a family firm’s ability to attract customers and increase sales, and it may be a key source of competitive advantage for family firms since their family identity is unique and therefore impossible to completely copy (Zellweger et al., 2009).

In fact, family businesses are usually associated with the family name so that the organizational image becomes highly important for family firm members (Dyer and Whetten, 2006). Thus, a wrong or negative perceived action conducted by a family firm might worsens that family firm’s image and, in turn, the image of each family firm member (Dyer and Whetten, 2006). In that sense, the principal way of projecting a good image and having a considerable respectability is developing and advertising attractive branding (Einwiller and Will, 2002) which involves the differentiation of the firm from competitors through advertising and promoting the integrity of the brand (Karreman and Rylander, 2008; Miller and Le Breton-Miller, 2006), ultimately becoming a competitive advantage for family firms (Sundaramurthy and Kreiner, 2008).

Thus, according to Memili et al. (2010) “the successful creation and maintenance of a coherent brand can lead to a positive image, forming the basis for a favorable organizational reputation (Craig et al., 2008; Einwiller and Will 2002).” In this regard, maintaining a positive family business image, fosters the connection between the family and the business (Zellweger et al. 2012) and reinforces the feeling of employees of belonging to the family firm. With the purpose of maintaining the good name and, by extension, the good image of the family firm and its brand, the family firm members tend to work together (Dyer and Whetten, 2006) for taking entrepreneurial risky initiatives (Memili et al. 2010). These initiatives can take different forms as
launching new products or services in the market or even starting new processes inside the company, developing the innovativeness dimension of the family firm, which is inevitably joined to risk taking, as it is impossible to guarantee beforehand the success of them. In this sense, Fillis (2003) indicate that it is a strong family firm image which might stimulate the entrepreneurial risk.

Apart from all of that, it is worth noting that taking already mentioned new initiatives for preserving the good image of the family firm requires a proactive attitude of the family members. This behavior, that usually is inherent to the tendency of working together into groups, is one of the main key factors for the mere fact of arising initiatives. Thus, the proactiveness of the firm results of great importance for preserving the good image of a family firm.

Summing up, taking into account the effect that innovativeness, risk taking and proactiveness dimensions compound the entrepreneurial orientation of a firm, we can consider that the efforts made for preserving the good image of a family firm will enhance the entrepreneurial orientation of a family firm.

**Hypothesis 1:** Family firm image is positively associated with the entrepreneurial orientation of the family firm.

### 2.3 Willingness to change and EO

Despite the fact that each family firm has its own way of acting, it is remarkable that historically, family firms have been catalogued as conservative organizations. This condition implies that some family firms are hesitant to change (Beckhard and Dyer, 1983; Vago, 2004; Ward, 1987). The main causes for this reluctance are the expensiveness of change (Vago, 2004), the lack of interest on modernizing (Beckhard and Dyer, 1983; Handler, 1989; Stavrou, 1999) and the conflicts that can be caused by the mere fact of changing (Kellermans and Eddleston, 2006). However, due to today’s global competition, diverse workforce, short business cycles (Vago, 2004), and the rapid changing environment, this kind of attitudes against change can take very negative consequences. Indeed, the lack of environment adapting strategies and rigidity in the way of acting can produce the end of a company although it had been successful in the past. For all these, the culture of the family firm results of a great importance for making easier the rapid and effective adaptation to the changing demands of today’s environment. This adaptation will be quicker and easier as the willingness to change of the family firm is higher.

On the other hand, considering that the adaptation to the changing demand of today’s environment requires of pursuing entrepreneurial activities (Zahra, 2004), and taking into account that the willingness to change can accelerate this adaptation to the new environment, we can conclude that willingness to change will promote the entrepreneurial orientation of a family firm. Indeed, family firms with a developed willingness to change may have a higher degree of corporate entrepreneurship (Kellermans & Eddleston, 2006).

**Hypothesis 2.** Willingness to change is positively associated with the entrepreneurial orientation of a family firm.

### 2.4 Generation in control and the Entrepreneurial Orientation

Gersick et al. (1997) argue that the ownership of a family firm generally passes through three broad stages of dispersion: controlling owners, with most shares held by the founder, or in the case of later generations, by a single individual; the sibling partnership, with relatively equal proportions of ownership for members of a single
One of the main important objectives of the family firms is to pass throw from generation to generation maintaining its idiosyncrasy, its well-built name and its main characteristics. However, being the first generation, the second one or the third-and-beyond-generations in control of the family firms, have important effects among different variables (Bammens et al., 2008; Sonfield and Lussier, 2004) as the EO of the firm. In this sense, the results of some studies that have analyzed how the generational involvement affects the level of EO are mixed (Cruz and Nordqvist, 2011). These authors defend the necessity of analyzing separately the influence of external factors and the internal ones on the level of the EO from a generational perspective.

In first-generation family firms with an organizational structure in which the family, the business, and the ownership roles overlap, the decision-making structure has often been highly centralized by the founder (Uhlaner et al. 2007). Controlling founders often establish norms, attitudes, and values that are rarely questioned openly; therefore, these family firms tend to have less participation of the family in the firm’s strategies and processes (Kellermanns and Eddleston 2004). Here, when the first generation or the founder is in control of the family firm, its personality, priorities and values (Kelly et al., 2000; Schein, 1983) are the factors that derive in an internal culture (Zahra, 2004). Thus, this culture affects the way that decisions are taken and put into practice so as the EO will be clearly conditioned by founder’s intuition, business idea and strategies instead of more objective factors as industry characteristics and competitors moves (Cruz and Nordqvist, 2011). In first-generation family firms the principal-owner is a steward, having a patriarchal and entrepreneurial approach towards the business.

When later generations are in control, family firms tend to adopt a more professional style of management, in comparison with the more paternalistic, informal, and subjective management style in first-generation family firms (Cruz and Nordqvist 2010). Founder centrality reduces in second-generation family firms, and decision-making becomes less centralized (Carney, 2005; Kelly et al., 2000). When more family members are in control of the firm, a greater diversity of perspectives is held, which should therefore have a positive impact on the firm. In fact, the second-generation managers have to deal with the shadow of the founder (Davis and Harveston, 1999) in the form of an established way of acting while they have to adapt the company to the changes of the external environment in the form of market demands and industrial characteristics (Cruz and Nordqvist, 2011). Moreover, the second-generation managers have usually more formal education and work experience apart from the family firm (Sonfield and Lussier, 2004; Kelly et al. 2000) being more capable to analyzing markets and competitors for implementing new entrepreneurial activities (Cruz and Nordqvist, 2011). Summing-up, it can be concluded that in dynamic environments the second-generation family firms identifies opportunities for growing that the founder would not taken into account (Peiser and Wooten, 1983).

When the third- and beyond-generations are in control of family firms, the management style will tend to be more professional (Coleman and Carsky 1999; McConaughy and Phillips 1999). Therefore, the strategic and the design of the entrepreneurial activities of these firms are usually based on a more developed planning and on more formal strategies (Miller, 1983), instead of the founder’s own intuition and the perceptions of the CEO of the second generation (Cruz and Nordqvist, 2011). According these authors “the positive influence of a CEO’s perceived environmental characteristics on EO is reduced in third-and-beyond-generation family
firms compared to second-generation companies”. In this sense, the excessive formalism and bureaucracy of third and beyond generation family firms due to its complicate structure, tend to make slower the response to the changes of the environment, loosing for that purpose the chance to implement entrepreneurial initiatives. Therefore, we expect that the EO of a family firm will be higher in the second-generation family firms comparing it to the EO in the first-, third- and beyond-generation family firms.

**Hypothesis 3:** The EO of a family firm will be higher when the second-generation is in control of the family firm than when the first or third- and beyond-generation are in control.

**2.5 Generational involvement and EO**

Although it is quite ordinary that an only generation is involved in the ownership and the management of a family firm, there are not so rare the organizations where different generations get involved in these topics. In fact, more than a few research works has developed the topic of the differences in the management between firms where only one generation is involved and firms where more than are in it.

On the one hand, we can distinguish the family firms where only one generation is involved in ownership and management. In most of the times, this unique generation is the one which belongs to the founders one, where all family members are from the the first and founding generation. These family firms started their activity based on innovative and entrepreneurial initiatives. More even, they had to assume some considering risk-taking activities which were neccessary for starting the new business. However, after some years, this kind of family firms tend to loose their entrepreneurial attitude (Salvato, 2004). That occurs because the founders of family firms are willing to maintain their lasting legacy (Morris, 1998) and they are fear about losing family wealth (Sharma et al. 1997). Therefore, these first generation family firms will avoid taking risky decisions, so it can be concluded that this kind of family firms will have less entrepreneurial orientation (Kellermans & Eddleston, 2006).

On the other hand, when the second and later generations take part in the ownership and the management of the firm, apart from learning the ordinary way of function of the firms, they tend to pursue new ways of doing things (Kepner, 1991), in order to renew, modernize and revitalize their way of acting with the final aim of achieving a sustainable level of growth and financial performance comparable of previous generations (Jaffe & Lane, 2004). Besides, the turbulent environment of these days strenghtens the disposition of family firms’ for seeking up innovative and entrepreneurial initiatives. Therefore, we can conclude that as more generations gets involved in the ownership and management of a family firm, the more developed will be the entrepreneurial orientation of it.

**Hypothesis 4:** As more generations gets involded in the management of a family firm, the more developed will be the entrepreneurial orientation of it.

**2.6 Access to financial resources and the Entrepreneurial Orientation**

The entrepreneurial orientation is a strategic orientation which is intensive in resource consumption (Wiklund and Sheperd, 2003, 2005) as it is based on a developed experimentation culture. In this regard, the financial resources provide the means to experiment with new strategies and innovative projects that would not be approved in a constrained environment (Cyert and March, 1963, Levinthal and March, 1981; Cooper et al. 1994). In this respect, it is common, especially among smaller companies, to have a certain degree of scarcity of some resources to implement entrepreneurial activities. This lack of resources can be solved with access to financial
resources, taking into account the ease of them to be converted into other resources such as physical or human ones. Thus, these financial resources will protect these companies from the uncertainty of these projects, thereby stimulating the "innovativeness" of the organization (Wiklund and Shepherd, 2005). That innovativeness will be accompanied by the firm’s risk-taking in its effort to achieve higher returns through these innovative and, in many cases, risky investments. Risk taking consists of the degree to which managers want to commit large amounts of resources to undertake risky investments (Lumpkin and Dess 1996; Miller and Friesen 1978). In this sense, a higher amount of financial resources will decrease the probabilities to fail, so as stimulating risk taking (Wiklund and Shepherd, 2005). In many cases, in order to carry out innovative projects like launching new products or implementing of new processes (Venkataraman, 1989b) within the organization, companies need to withdraw funds invested in products that are in the mature phase of its life cycle. This means that the company must have a proactive character. Thus, taking into account that such processes require reinvestment, these will be easier if the company have a greater access to financial resources (Wiklund and Shepherd, 2005).

For all these, and taking into account that Entrepreneurial Orientation of a company is based on these three dimensions (innovativeness, risk taking and proactiveness), we conclude that a greater access to financial resources will facilitate a greater entrepreneurial orientation of the firm (Burgeois 1981; Zahra, 1991):

**Hypothesis 5:** Firms with a higher access to to financial resources will have a higher entrepreneurial orientation.

### 2.7 The strategic involvement of the board of directors and EO

In recent years, the corporate governance research issue has focuse mainly on the board of directors (Anderson and Reeb, 2004; Huse, 2000; Zahra and Pearce, 1989), the most prominent governance mechanism of the internal control systems (Jensen, 1993). As a proof of it, proponents of the stewardship theory recognize that the role of a board goes beyond its service and control function to active participation in the strategy formulation of the firm (Donaldson and Davis 1991; Davis et al. 1997).

In fact, boards of directors may assist the strategic planning of family firms through their influence on the owners (Chrisman et al., 2004). Its main activities are shaping mission, vision and values, identifying important strategic activities and scanning the environment with the purpose of recognizing different trends and opportunities (Hendry and Kiel, 2004), that is, board strategic involvement (Andrews 1981a, b; Baysinger and Hoskisson 1990; Finkelstein and Hambrick 1996; Golden and Zajac 2001; Huse 2007; McNulty and Pettigrew 1999; Zahra and Pearce 1990). In this sense, the more SIBD, the more important activities will identify and a wider scanning of the environment will make the board of directors. For that reason, the company will submit more entrepreneurial initiatives, projects and activities, increasing that way the EO of the firm.

Apart from that, literature has widely demonstrated that there are clear advantages in having a board of directors. These advisors are able to monitor firm performance, discipline firm managers and offer needed expertise and perspectives to the firm (Schulze et al. 2001). Following to Eddleston et al., (2008), by combining the tacit knowledge of family members with the perspectives of advisors, family firms may be able to increase their corporate entrepreneurship. For all these, we can conclude
that a higher strategic involvement of the board of directors will enhance the entrepreneurial orientation of a family firm.

Hypothesis 6: Family firms with a great strategic involvement of the board of directors will have a higher entrepreneurial orientation of a family firm.

3. METHODOLOGY

3.1 Context of study and characteristics of sample

The present study is focused on Spanish family SMEs included in the SABI (Iberian Balance Sheet analysis System) database for May, 2013. Firms in special situations such as insolvency, winding-up, liquidation or zero activity were eliminated in order to obtain a representative sample of the population. Although there are different criteria for delimitating the family firm concept, the following two has been selected (Astrachan, Klein, & Smyrnios, 2002; Chua, Chrisman, & Sharma, 1999; Dyer, 2003): (a) ownership, that is, whether one family or more had the control of the ownership of the business and (b) an active participation in its management. In this sense, we considered 50% as the minimum percentage of firm’s equity for considering that a family have the control of the business (Arosa et al. 2010; Voordeckers, 2007; Westhead and Howorth, 2006). Following this criteria, we conducted a detailed examination of shareholding structure (percentage of common stock) and the identity of the ownership. At this point, the population under study included 1.953 non-listed Spanish family firms, reducing this number to 1.710 after a process of refinement (entries without mailing addresses, those with incongruent data).

The questionnaires were previously tested and pre-tuned through nine “face-to-face” interviews made to CEOs of family firms. After receiving their feedback, we completed and improved our questionnaire making it more clear and understandable.

The data collect were made through telephone interviews with the purpose of ensuring a high response rate. Before it, a letter was sent to the CEOs of these businesses by letter, presenting our research and asking for their collaboration. The main reason of selecting CEOs is their global vision of the strategy of the firm and due to the tendency to be responsible for entrepreneurial behavior (Memili et al. 2010). In fact, in previously works this approach has been utilized (e.g. Kellermanns et al. 2008; Zahra, 2005).

Some techniques for reducing the potential response bias were used. On the one hand, we assured the confidentiality of the respondents in the cover letter that accompanied the survey for protecting their anonymity (Podsakoff, Mackenzie, Lee, & Podsadoff, 2003). On the other hand, we conducted a non-response analysis for assuring there were not statistical significant differences between respondents and non-respondents in each industry.

Of the 1.710 non-listed Spanish firms we obtained 232 responses (13.60% of the sample). The interviewees were CEOs in the % 68,1 cases and persons responsible of any department management in the rest of the cases.

3.2 Measures and questionnaire construction

All items used to assess the dependent and independent variables are based on published works in different well-known journals.
Dependent variable

The firm level Entrepreneurial Orientation was measured using the nine-item, eleven-point scale proposed by Covin and Slevin (1989), which was based on the works of Khandwalla (1977), Miller and Friesen (1982) and Miller (1983). This construct, which is a multidimensional one as it consists of three first-order dimensions (innovativeness, proactiveness and risk taking), is considered as a second order reflective construct due to changes in the underlying latent construct are reflected by changes in the indicators (Jarvis, McKenzie, & Podsakoff, 2003).

Independent variables

The family firm image scale includes five items, eleven-point scale previously created by Memili et al. (2011), which had been inspired on Dyer and Whetten (2006). This scale refers to aspects such as the recognition of the family firm name in the community, whether the condition of a family business is mentioned in the advertisement, whether that condition is known by customers and the use of the family name as a brand, among others.

The willingness to change variable was measured using the four items, eleven-point scale utilized by Kellermanns and Eddleston (2006). These four items for measuring the family members’ willingness to change were adapted from the personal characteristics inventory of Barrick and Mount (1993). This scale refers to the readiness of family members to take on any new challenges that their family firm faces, to their openness to try new things for their firm, whether they get fascinated by novel ideas, and whether they find it hard to change.

With regard to the generation in control variable, which refers to the which generation controls the family business (Cruz & Nordqvist, 2007, 2008; Davis & Harveston, 2000; Kellermanns & Eddleston, 2006; Kellermanns et al., 2008), was measured asking a direct question, eleven-point scale to the respondents to indicate which generation was primarily managing the business (Bammens, Voordecker, & Van Gils, 2007; Casillas et al. 2011; Cruz & Nordqvist, 2007, 2008). There were three possible answers: first-generation, second generation, or three or a higher generation.

The generational involvement variable was measured with a single-item, eleven point scale asking how many generations were currently involved in the management of the family firm (Kellermanns and Eddleston, 2006). This variable can take three different values: one generation, two generations, or three and more generations (multiple generations).

For measuring the access to financial resources variable single item, eleven-point scale was used where the respondents were asked to estimate in a eleven-point-scale indicating how the Entrepreneurial Orientation of their firm could be affected by the access to financial resources (Wiklund and Shepard, 2005).

The strategic involvement of the board of directors scale includes four items, eleven point scale previously used by Machold, Huse and Minichilli (2011). This scale refers to the grade of active involvement of the board of directors in initiating strategy proposals, in making decisions on long term strategies and main goals, in implementing strategy decisions, and in controlling and evaluating strategy decisions.

Control variables

We included several control variables with the aim to ensure proper model specification and consider possible alternative explanations for performance variations. We introduce several firm-level variables such as firm size, measured as a
log of the number of full-time employees; firm-age, measured as the log of the number of years since founding; and sector, classifying firms between service or manufacturing according to their type of activity.

3.3 Data analysis

We selected the SEM, unlike other multivariate statistical techniques, provides an overview of the phenomena studied at the same time that allow to perform analysis of models that attend unseen variables, also called factors or constructs. Besides, SEM can be understood as several models of factorial analysis which permit focusing on direct and indirect effects among factors, as it is in our case.

Thus, following the Anderson and Gerbing (1988) methodological recommendations, the approach to the model was performed in two steps: first, we carried out an analysis of the measurement model, in this case a confirmatory factor analysis (CFA), to give construct validity to the instruments and to evaluate the psychometric properties of the scales. Second, we proceeded to test the hypothesis in the structural model (eg. Eddelston & Kellermanns, 2007; Martins & Kellermanns, 2004; Memili, Eddelston, Kellermanns, Zellweger, & Barnett, 2010) in order to analyze the assumptions that reflect the relationships and effects between the independent variables of the model (the family firm image, the willingness to change, the generation in control, the generational involvement, the access to financial resources, and strategic involvement of board of directors) and the dependent variable (the entrepreneurial orientation). Both approaches to the model have been carried out through the EQS statistical package version 6.2 (Bentler, 1995), which enables assessment of the relations among the different variables in the model using structural equations modeling and the robust maximum likelihood estimation method.

4. RESULTS

4.1. Analysis of the measurement model

4.1.1 First-order constructs

Before proceeding to the analysis of the measurement model, we analyzed the psychometric properties of each first order construct in our model, all but the EO, and the reliability and validity of their measurement scales. EQS 6.2 shows a series of statistics to measure the goodness of fit, such as chi-square, Bentler-Bonett normed fit index (BBNFI), Bentler-Bonett non-normed fit index (BBNNFI) comparative fit index (CFI), Bollen’s fit index (IFI), McDonald’s fit index (MFI) and root mean squared error of aproximation residual (RMSEA).

In this sense, some of the fit indices of first-order CFA led us to dispense with some of the items of different construct scales. Specifically, the following items where deleted: one out three from the proactiveness and risk taking dimensions, three out of five from the family firm image scale, one out of four from the strategic involvement of board of directors scale and two out of four from the willingness to change scale. Thereafter, the measurement model acquired appropriate values suggested by the literature ($?^2(83) = 141.10$, BBNFI=0.924; BBNNFI= 0.945; CFI=0.966; IFI= 0.967; MFI= 0.882; and RMSEA= 0.055). Thus, the CFA results suggest that the measurement model fit the data well.

According to the reliability of the measurement scales, the Cronbach's alpha coefficient, the composite reliability index (Bagozzi & Yi, 1988; Baker, Parasuraman, Grewal, & Voss, 2002; Nunnally, 1978) and the AVE coefficient exceed the
recommended minimum levels, as it is shown in Table 1. Regarding to validity, the
results shown in Table 1 confirm the convergent validity of measurement scales, as it in
all cases the "standardized factor loadings" exceed the recommended 0.6 level. In turn,
the discriminant validity was tested in three ways. First, we constrained the correlation
between each pair of constructs, one at a time, to be equal to 1 (Anderson & Gerbing,
1988; Hult et al., 2000), and then performed a chi-square test comparing this model to
the model freeing that correlation. In all cases, the chi-square difference was significant
at p<0.001 level, thereby further indicating discriminant validities among all pairs of
constructs in every measurement model. Secondly, the confidence interval for each
pairwise correlation estimate (ie, ± two standard errors) should not include 1 (Anderson
& Gerbing, 1988). This condition was satisfied for all pairwise correlations in three
measurement models. Lastly, for every construct, the percentage of variance extracted
should exceed the construct's shared variance with every other construct (ie, the
square of the correlation) (Fornell & Larcker, 1981; Hult, Hurley, Giunipero, & Nichols,
2000). Nomological validity is assured as the difference between the measurement
model and the theoretical model (structural model) ?²s is not significant (Anderson &
Gerbing, 1988; Hatcher, 1994).

Finally, content validity, understood as the degree to which the content of the
items is consistent with the definition of the construct, is solely based on the judgment
of the researcher. That is why, we both focused on the literature and performed a pre-
test before conducting the empirical study. In this case, both are true as the scales
were validated in other previous studies and our pilot study checked the
appropriateness of the content of the items to the definition of the construct.

<table>
<thead>
<tr>
<th>Source</th>
<th>Constructs</th>
<th>Items</th>
<th>Standardized Loading</th>
<th>Robust t-value</th>
<th>CA</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memili et al. (2010)</td>
<td>Family Firm Image</td>
<td>FFI1</td>
<td>0.912</td>
<td>13.888</td>
<td>0.885</td>
<td>0.902</td>
<td>0.212</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FFI2</td>
<td>0.873</td>
<td>11.857</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kellermanns and Eddleston (2006)</td>
<td>Willingness to Change</td>
<td>WTC1</td>
<td>0.825</td>
<td>9.125</td>
<td>0.787</td>
<td>0.758</td>
<td>0.192</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WTC2</td>
<td>0.792</td>
<td>9.900</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machold, Huse and Minichilli</td>
<td>Strategic Involvement of</td>
<td>SIBD1</td>
<td>0.968</td>
<td>15.222</td>
<td>0.943</td>
<td>0.945</td>
<td>0.135</td>
</tr>
<tr>
<td>(2011)</td>
<td>Board of Directors</td>
<td>SIBD2</td>
<td>0.877</td>
<td>14.612</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SIBD3</td>
<td>0.883</td>
<td>12.977</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S-B ?² (83 df)=141.1025 (p=0.0007); BBNFI = 0.924; BBNNFI = 0.945; CFI = 0.966; IFI= 0.967; MFI= 0.882; RMSEA= 0.055; Cronbach= 0.800

Notes: ***p<0.001. CA= Cronbach's a; CR= Composite Reliability; AVE= Average Variance Extracted

Source: Own research

Because of the multidimensional nature of the EO construct, it is necessary to
conduct also a second order CFA.

4.1.2 Second-order constructs

The second-order CFA aims to examine whether the three sub-dimensions of
EO converge on a single latent factor. In this regard, the model fit indices are
satisfactory (?²(95 df) = 153.2887; BBNFI=0.918; BBNNFI= 0.952; CFI = 0.966; IFI= 0.967; MFI= 0.882; and RMSEA= 0.052), suggesting that the measurement model fit
the data well. Convergent validity was demonstrated as the standardized factor
loadings levels achieve above 0.4 (Ford, McCallun, & Tait, 1986), to be significant in all
cases by 95%. Furthermore, according to the Table 2, the Cronbach's alpha values, the
Average Variance Extracted (AVE) and composite reliability are above 0.7, 0.6 and 0.5
respectively. Lastly, the discriminant validity was checked through the three ways
mentioned in the first order construct analysis, concluding its existence. In view of all
these results, they imply that the EO can be understood as a second order reflective construct.

<table>
<thead>
<tr>
<th>Source</th>
<th>Second-order construct</th>
<th>Dimensions</th>
<th>Standardized Loading</th>
<th>Robust t-value</th>
<th>CA</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covin and Slevin (1989)</td>
<td>EO</td>
<td>INN 0.739</td>
<td>1</td>
<td>PRO 0.917</td>
<td>5.961</td>
<td>RIS 0.601</td>
<td>5.133</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S-B² (?²(95 df)=153.2887 (p=0.00007); BBNFI = 0.918; BBNNFI = 0.952; CFI = 0.966; IFI= 0.967; MFI= 0.882; RMSEA= 0.052; Cronbach= 0.800

Notes: **p<0,001. CA= Cronbach’s a; CR= Composite Reliability; AVE= Average Variance Extracted

4.2 Testing the hypothesized structural model

As in the CFA process, the hypotheses were examined using the EQS 6.2. Paths between constructs represent individual hypotheses, and each was assessed for statistical significance of the path coefficient. The hypothesis relationships were tested one by one into a full model. Table 3 reports the results of the final structural model, showing the path coefficients, t-values, and construct relationships. Each hypothesis was measured in a full model where the chi-square and the various goodness-of-fit indices also suggested a very good fit, as it is reported in Table 3.

As hypothesized, there is a positive relationship between family firm image and entrepreneurial orientation and (?1=0.139, t=2.087). Therefore, H1 is supported. This results support the proposition that the two concepts are in fact related, supporting the conclusions, which propose that family firm image is important to enhance the entrepreneurial orientation of a firm. A positive relationship between willingness to change and entrepreneurial orientation is settled (?2=0.597, t=5.794). Therefore, H2 is supported. This way, the proposition that the entrepreneurial orientation is enhanced by the willingness to change of the firm is demonstrated.

However, the proposition that entrepreneurial orientation is more or less affected depending on which the generation in control is, do not find support (?3=0.996, t=0.021). Therefore, H3 is not supported. The same result as in the Hypothesis 4 (?4=1, t=1.014), where the proposition that the entrepreneurial orientation is affected by the number of the generations that takes part in the management of the firm is not supported. According to the proposition that upholds the idea that a greater access to financial resources enhances the entrepreneurial orientation do not find support (?5=0.000, t=0.035). Therefore, H5 is not supported.

Finally, as hypothesized, there is a positive relationship between the strategic involvement of the board of directors and entrepreneurial orientation (?6=0.167, t=2.470). Therefore, H6 is supported. The results supports that a higher involvement in strategy of the board of directors results in a higher entrepreneurial orientation of the board of directors.
<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variables</th>
<th>Path coefficient</th>
<th>t-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Family firm image is positively associated with the entrepreneurial orientation of the family firm.</td>
<td>0.139</td>
<td>2.087</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Willingness to change is positively associated with the entrepreneurial orientation of a family firm.</td>
<td>0.597</td>
<td>5.794</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>The EO of a family firm will be higher when the second-generation is in control of the family firm than when the first or third- and beyond-generation are in control.</td>
<td>0.996</td>
<td>0.021</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4</td>
<td>As more generations gets involved in the management of a family firm, the more developed will be the entrepreneurial orientation of it.</td>
<td>1</td>
<td>1.014</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5</td>
<td>Firms with a higher access to to financial resources will have a higher entrepreneurial orientation.</td>
<td>0.000</td>
<td>0.035</td>
<td>Not supported</td>
</tr>
<tr>
<td>H6</td>
<td>Family firms with a great strategic involvement of the board of directors will have a higher entrepreneurial orientation of a family firm.</td>
<td>0.167</td>
<td>2.470</td>
<td>Supported</td>
</tr>
</tbody>
</table>

S-B $\chi^2$ (100 df)= 196.2177 (p=0.07); BBNFI = 0.894; BBNNFI = 0.924; CFI = 0.944; IFI= 0.945; MFI= 0.813; RMSEA= 0.065; Cronbach= 0.800

S-B $\chi^2$ (100 df)= 161.2821 (p=0.10); BBNFI = 0.913; BBNNFI = 0.952; CFI = 0.964; IFI= 0.965; MFI= 0.876; RMSEA= 0.052; Cronbach= 0.800

S-B $\chi^2$ (100 df)= 164.4014 (p=0.06); BBNFI = 0.912; BBNNFI = 0.949; CFI = 0.963; IFI= 0.963; MFI= 0.870; RMSEA= 0.053; Cronbach= 0.800

S-B $\chi^2$ (100 df)= 181.3333 (p=0.00007); BBNFI = 0.902; BBNNFI = 0.936; CFI = 0.953; IFI= 0.954; MFI= 0.839; RMSEA= 0.059; Cronbach= 0.800

S-B $\chi^2$ (95 df)= 178.8876 (p=0.09); BBNFI = 0.904; BBNNFI = 0.938; CFI = 0.954; IFI= 0.955; MFI= 0.844; RMSEA= 0.058; Cronbach= 0.800

S-B $\chi^2$ (100 df)= 194.8630 (p=0.08); BBNFI = 0.895; BBNNFI = 0.925; CFI = 0.945; IFI= 0.946; MFI= 0.815; RMSEA= 0.064; Cronbach= 0.800

| Source: Own research |

### 5. DISCUSSION, CONCLUSION AND IMPLICATIONS

Based on the Resourced Based View, the present paper pursues to test the potential effect that some of the main internal family firm variables may have in the entrepreneurial orientation of this type of firms. Overall, our empirical results provided support for three of the six hiphotesized relationships.

The support of the empirical data to our first hypothesis, which establishes that the family firm image is positively associated with the entrepreneurial orientation of the family firm, reinforces the importance that this subject plays in the strategy of this type of firms. Indeed, based on the Organizational identity theory and the Resurce Based View, recent researches suggest that the family firm brand (Einwiller and Will, 2002), and by extension its image, is a key source of competitive advantage (Sundaramurthy and Kreiner, 2008; Zellweger et al., 2009). In fact, this empirical support reinforces the idea that due to the purpose of maintaining the good name and, by extension, the good image of the family firm and its brand, the family firm members tend to work together (Dyer and Whetten, 2006) for taking entrepreneurial risky initiatives (Memili et al. 2010), enhancing the entrepreneurial orientation of the family firm.

Regarding to the effects that the willingness to change may have in the entrepreneurial orientation, the support of the empirical data reinforces the idea of the important role that the cultural factor may play in the entrepreneurial orientation. Indeed, it is this internal culture which enables and catalysts rapid and effective responses for adapting the firm to the changing demands of today’s environment. In fact, the willingness to change, which is one of the charactoristics derivated from a family culture, will allow a quicker and an easier adaptation. Going on this way, considering that the entrepreneurial initiatives are one of the main tools for adapting to the rapid changing environment (Zahra, 2004), it seems logic to conclude that willingness to change will promote the entrepreneurial orientation of a family firm (Kellermans & Eddleston, 2006).
Thirdly, the empirical test supports the hypothesis that a higher strategic involvement of the board of directors (Andrews 1981a, b; Baysinger and Hoskisson 1990; Finkelstein and Hambrick 1996; Golden and Zajac 2001; Huse 2007; McNulty and Pettigrew 1999; Zahra and Pearce 1990) will reinforce the entrepreneurial orientation. In fact, it seems logic that, due to its main activities are shaping mission, vision and values, identifying important strategic activities and scanning the environment with the purpose of recognizing different trends and opportunities (Hendry and Kiel, 2004), the more SIBD, the more important activities will identify and a wider scanning of the environment will make the board of directors. For that reason, the company will submit more entrepreneurial initiatives, projects and activities, increasing that way the EO of the firm. Apart from that, a higher SIBD will be a great source for providing with expertise and perspectives to the firm (Schulze et al. 2001) for starting new entrepreneurial initiatives.

However, the fact that three of the six hypotheses have not obtained empirical support may lead us to reflect on the reasons that have led to the rejection of them. In the case of the variable which indicates which the generation in control is, the literature suggest that the EO of a family firm will be higher when the second-generation is in control of the family firm than when the first or third- and beyond-generation are in control. Based on the classification of the broad stages of dispersion of Gersick (1997), some previous researches measured the moderating role of the generation in control suggesting that the first generation family firms, held by the founders and with highly centralized decision making structure (Uhlner et al. 2007), and third and later generation family firms, with a high content of formalism and bureaucratic steps that can make slower the response to the changes in the environment, had less entrepreneurial orientation than second generation family firms. The fact that in our research the generation in control variable is not a significative factor in the EO may indicate that, which the generation in control is not but the personal characteristics of these managers may be the significative factor. In the case of the generation involvement variable, the lack of support of the empirical data may indicate something similar as in the generation in control case, that is, more significant than how many generations are involved in the management of the family firm is the fact that which are the personal and professional characteristics of the managers.

Finally, the fact that the hypothesis that assess that the family firms with a higher access to financial resources will have a higher entrepreneurial orientation, does not obtained support. Despite the fact that the literature suggests that, as the entrepreneurial orientation strategy is intensive in resource consumption (Wiklund and Sheperd, 2003, 2005) and this may be a problem especially among smaller companies because of their scarcity of some resources, the access to financial resources will enhance the EO of a family firm. Nevertheless, the fact that our data do not support this idea makes us think about the real link between these two factors. In this sense, it is obvious that a higher financial capacity will allow family firms, specially the smallest ones, to tackle entrepreneurial initiatives. However, the fact that this access to financial resources may help starting entrepreneurial initiatives, these do not depend, ultimately, in this access. It seems that the initiative itself usually is taken according to different variables to the access to financial resource.

This work suffers from several limitations. One of them is that the measurements were based on the subjective perceptions of a single respondent in each firm, which can provoke common method bias. However, the use of multiple respondents may reduce the response rate, making difficult the generalization of the results. Literature suggests that data should be collected from several sources with the purpose of avoiding this problem. Another limitation is the fact that the research is
based on cross-sectional data, make impossible to assure that the causal relations identified by the results will not vary or even lose their significance over time.

Finally, is remarkable that this study provides opportunities for future research. One of them is the replication of this study in different geographical contexts and with different samples. Another possible future line of research is the analysis that the internal family firm variables may have, in a direct way, in the performance of the family firm, without taking into consideration the mediating effect of the EO.

6. REFERENCES


