

***Firm Growth in Family Businesses – The Role of Entrepreneurial Orientation and the Entrepreneurial Activity\****

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***Abstract***

*Previous studies show that growth is an important goal for businesses, but little is known of how the EO-performance relationship works in family businesses and how this differs from their non-family peers. We examine that and how entrepreneurial activity mediates the relationship in family and non-family businesses. Our results on 532 firms show that family businesses benefit from innovative orientation which is both directly and indirectly associated with firm growth via entrepreneurial activity. This association does not exist in non-family businesses. Furthermore, risk taking does not influence family business growth even if it does in non-family businesses.*

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***Introduction***

From the family business perspective, firm growth is regarded as a reflection of success and particularly as a source of continuity and trans-generational wealth creation. However, the pursuit of growth does not happen in a vacuum, but is affected by dynamism, uncertainty, and unpredictable changes in the markets (Craig and Moores 2006). In order to perform in the competitive arena, family businesses need to align their behavior with the uncertain and complex environment they operate in

(Sciascia, Naldi, and Hunter 2006). This requires they adopt an entrepreneurial mindset for decision making (Covin and Slevin 1991; Wiklund 1999). Furthermore, it highlights the importance of investigating the role of entrepreneurial orientation (comprising innovation, proactivity, and risk taking orientation) in family businesses and its association with a firm's growth.

The *entrepreneurial orientation-performance* relationship is relevant and widely studied both in family and non-family businesses. Previous studies suggest some differences between family and non-family businesses, particularly when entrepreneurial orientation is measured as a multidimensional construct. If the results have indicated that family businesses lag behind their non-family peers, it has been explained by the family dynamics and factors such as traditions, values, and customs which may have weakened the entrepreneurial mindset in family businesses (Craig and Lindsay 2002; Short, Payne, Brigham, Lumpkin, and Broberg 2009; Zahra 2005). However, the previous research also suggests that family businesses may emphasize and benefit from entrepreneurial orientation because of generational changes in the ownership of family businesses (Cruz and Nordqvist 2012) or owing to the demands of environmental dynamism (Casillas, Moreno, and Barbero 2011). These findings are, however, not comprehensive and there is a need for a more fine-tuned understanding of the mechanisms which influence the association between entrepreneurial orientation and firm growth in family and non-family businesses.

In this study entrepreneurial orientation is considered a mindset: an indication of an intention. Therefore, some activities are necessary to exploit the potential embedded in entrepreneurial orientation in order to reach the desired outcomes. Lumpkin and Dess (1996) suggested that integrating activities intervene the initial relationship between entrepreneurial orientation and performance. In this study we

assume that entrepreneurial activity, defined as a firm's behavior focusing on exploring and exploiting new opportunities, is such an activity. In assessing entrepreneurial activity we rely on discovery theory, according to which, opportunities exist independent of entrepreneurs, and their exploration is the key to their exploitation (Alvarez and Barney 2007). Working from these assumptions, we investigate the mechanism of the *entrepreneurial orientation-performance* relationship in family and non-family businesses. The comparative setting allows us to analyze whether this mechanism is different in family and non-family businesses (see Dess, Pinkham, and Yang 2011).

Our findings support earlier studies that have identified some differences between family and non-family businesses with regard to the dimensions of the entrepreneurial orientation construct and their relationship with business growth. Furthermore, our study introduces the concept of entrepreneurial activity as a mediating factor of the studied relationships and thus extends the literature by addressing the activities linking entrepreneurial orientation and firm growth. This is particularly relevant as previous studies on entrepreneurship orientation in family businesses have not tackled the mediating activities influencing firm growth (Miller and Le Breton-Miller 2011) but have instead concentrated on the "*driving force behind the organizational pursuit of entrepreneurial activities*" (Covin and Wales 2012: 1). Finally, our study contributes by offering empirical evidence on the differences in the mechanism of the *entrepreneurial orientation-performance* relationship between family and non-family businesses. We argue that the orientation toward innovation and renewal is an efficient way for family businesses to adapt to and exploit the opportunities of the external business environment in order to achieve

firm growth. In non-family businesses this association does not exist, but instead, for them the risk taking orientation seems to generate a similar mechanism.

The paper proceeds as follows. First we examine the theoretical perspectives and our hypotheses. Then we discuss the results and illustrate their theoretical and managerial implications. Finally, we conclude the study and discuss its limitations.

### ***Firm Growth and Entrepreneurial Orientation in Family Businesses***

Explaining firm growth has been one of the great challenges in entrepreneurship research. Firm growth can be assessed as an outcome of organizational development (Chan, Bhargava, and Street 2006) that is often affected by the internal and external contexts in which the firm's growth is investigated.

In this study, we focus on entrepreneurial orientation as a mindset in order to investigate firm growth. Entrepreneurial orientation comprises a firm's strategic orientation, its decision-making styles, and is a reflection of how a firm operates (Lumpkin and Dess 1996). According to Miller (1983), entrepreneurial orientation is about engaging in product innovations, proactive behavior and taking risks. Accordingly, it is characterized by intentions strongly linked to growth (Covin and Slevin 1989; Moreno and Casillas 2008; Wiklund and Shepherd 2005).

The concept of entrepreneurial orientation has been employed in studying family business growth (Casillas, Moreno, and Barbero 2010, 2012; Naldi, Nordqvist, Sjöberg, and Wiklund 2007). Previous research suggests a positive association between the entrepreneurial orientation of family businesses and the growth in businesses owned by the second or subsequent generations (Casillas, Moreno, and Barbero 2010). Although the *entrepreneurial orientation-performance* relationship is well established (Lumpkin and Dess 2001; Rausch, Wiklund, Frese, and Lumpkin

2004), this stream of research in family businesses is still rare. Therefore, there is a need to study entrepreneurial orientation in family businesses as a multidimensional construct to capture the potential independence among the dimensions of entrepreneurial orientation and how they relate to performance outcomes (Lumpkin and Dess 2001).

There are a number of reasons why the mechanism of the *entrepreneurial orientation-performance* relationship may differ in family and non-family businesses. In comparison to non-family businesses, the entrepreneurial mindset in family businesses is typically determined more by family values (Olson, Zuiker, Danes, Stafford, Heck, and Duncan 2003) or long-term financial goals (Astrachan and Jaskiewicz 2008). Furthermore, the role of entrepreneurial orientation may vary in relation to the emphasis placed on business, family, money, or lifestyle (Basu 2004). Previous research suggests that family businesses value long-term relationships (Carney 2005) and identifying their brands with the family (Craig, Dibrell, and Davis 2008) more than non-family businesses. These perspectives seem to reduce the propensity for inventing, pioneering, and creating something new by which to create wealth, even if these activities are prerequisites for securing the market share, customer relationships, the best employees, and the firm's assets (Hamel 2000). Carney (2005) emphasized that characteristics of family firm governance, such as parsimony, may lead to cost advantages and enhance entrepreneurial investments. All these suggest differences between family and non-family businesses in entrepreneurial orientation and particularly in the mechanism of the *entrepreneurial orientation-performance* relationship. Next, we consider three dimensions of entrepreneurial orientation and their impact on firm growth in family and non-family businesses.

### **Innovative Orientation**

Previous results show that innovative orientation, and especially action generating new product innovations, enhances the performance and growth of firms (Cho and Pucik 2005; Stenholm 2011; Subramanian and Nilakanta 1996; Swierczek and Ha 2003). Nevertheless, family businesses have been criticized for being unwilling to innovate (Daily and Dollinger 1991), and non-family businesses are seen as more innovative (Gomez-Mejia, Larraza-Kintana, and Makri 2003). However, recent results from studies of family businesses performing well suggest that family businesses do innovate (Zahra 2005) and that their innovativeness positively influences their performance (Casillas, Moreno, and Barbero 2010). Innovative orientation is one indication of organizational capability building that stimulates action in response to changes in the market (Sandvik and Sandvik 2003). Thus, a family business also needs the capability for renewal, for innovative orientation, and the capacity to adapt to changes in the market (Craig and Moores 2006). However, the role of innovation varies in relation to the strategies followed in family businesses (McCann, Leon-Guerrero, and Haley Jr. 2001). In terms of innovative orientation the potential in family businesses is embedded in their capability for rapid decision making and flexibility, both of which may boost their innovative orientation (Miller and Le Breton-Miller 2005; Naldi, Nordqvist, Sjöberg, and Wiklund 2007). Hence, we assume that innovative orientation is positively associated with firm growth in family businesses in a similar way as it is in non-family businesses. Thus, we hypothesize that:

*H1: Innovative orientation is positively associated with firm growth both in family and non-family businesses*

### **Proactive Orientation**

A firm's proactive orientation has been shown to be positively associated with that firm's performance (Lumpkin and Dess 2001; Swierczek and Ha 2003). However, previous results indicate that in family businesses this kind of posture or ownership status does not affect firm growth (Daily and Thompson 1994) and that family businesses can be expected to behave in a less proactive way than their non-family peers (Short, Payne, Brigham, Lumpkin, and Broberg 2009). Naldi, Nordqvist, Sjöberg, and Wiklund (2007) also found that proactive orientation is not associated with family business performance. Aiming to secure a continuity of business and ownership over several generations may require family business managers and owners to be proactive in influencing environmental changes to direct the future of the firm successfully (Bateman and Crant 1993). Pittino and Visintin (2009) found that the prospector strategy is less favored among family businesses led by the second or further generations. This also supports the findings of McCann, Leon-Guerrero, and Haley (2001) on the greater prevalence of prospector strategies among smaller and younger family businesses. These results suggest that longer family tenure hinders the proactive orientation of a family business. In general, however, the proactive orientation of the management of small businesses has been shown to have a positive relationship with firm performance (Becherer and Maurer 1999). More recently scholars have proposed that the long-term orientation of a family business could actually be positively associated with its proactivity (Lumpkin, Brigham, and Moss 2010). Similarly, the centralized structure of family businesses and their combined ownership and management is said to promote proactive behavior in those businesses (Salvato 2004). Such proactive orientation may even increase in second generation family businesses (Casillas, Moreno, and Barbero 2010). Consequently, we assume

that proactive orientation is positively associated with firm growth in family and non-family businesses. Thus, we hypothesize that:

*H2: Proactive orientation is positively associated with firm growth both in family and non-family businesses*

### **Risk Taking Orientation**

Being innovative and proactive raises the issue of taking risks. In addition to the time and resources involved in launching new products for new markets, an unknown level of demand increases the perception of risk (Naldi, Nordqvist, Sjöberg, and Wiklund 2007; Thompson 1999). Earlier research suggests a positive relationship between risk taking and firm performance (Rauch, Wiklund, Frese, and Lumpkin 2004; Rausch, Wiklund, Lumpkin, and Frese 2009). However, this might not be the case in family businesses, perhaps because of family governance or the high concentration of ownership (Chandler 1990). Casillas, Moreno, and Barbero (2010) found that risk taking is not associated with family business growth, while Naldi, Nordqvist, Sjöberg, and Wiklund (2007) found that risk taking is prevalent, but negatively related to performance in family businesses. According to Zahra (2005), this is a result of long periods of control by the founder/CEO, even if the relationship between family involvement and risk taking might normally be expected to be a positive one. These findings suggest that the relationship between risk taking and firm growth might differ between family and non-family businesses.

Still, risk taking may well be a prerequisite for the creation and securing of family wealth (Rogoff and Heck 2003). Gudmundson, Hartman, and Tower (1999) also found that family businesses have less orientation to pursue market leadership than non-family businesses. Following traditional routes may not offer appropriate solutions to challenges arising from the ongoing changes and varying levels of



uncertainty in the market (Habbershon and Pistrui 2002; Thompson 1999). Even worse, failure to update strategies and opposing their renewal may harm the continuity of family businesses. Thus, despite some conflicting findings in relation to risk taking in family businesses, we assume that risk taking is negatively associated with growth among family businesses. Additionally, we assume that in non-family businesses, risk taking is positively associated with firm growth. Therefore, we hypothesize that:

*H3: Risk taking orientation is positively associated with firm growth in non-family businesses and negatively associated in family businesses*

### **Entrepreneurial Activity as a Mediator**

Entrepreneurial orientation is an indication of a strategic intention only (Covin and Wales 2012; Wiklund 1999), and some behavior bridging the gap between initial intentions and their outcomes is required to achieve the intended outcomes (Lumpkin and Dess 1996). In this study, we suggest that the entrepreneurial activity at firm level is a potential mediator in the *entrepreneurial orientation-performance* relationship. Entrepreneurial activity as used in the current research refers to a firm's behavior that is focused on exploring and exploiting new business opportunities (Ardichvili, Cardozo, and Ray 2003; Shane and Venkataram 2000; Venkataram 1997).

Under volatile circumstances exploring and exploiting opportunities will help businesses to gain competitive advantage and maintain wealth (Ireland, Hitt, and Sirmon 2003; Sirmon and Hitt 2003). Firm-level entrepreneurial activity has been found to play an important role in firm performance, including firm growth. As noted by Baum, Locke, and Smith (2001) recognizing new opportunities and generating competitive strategies to exploit them are decisive for firm growth. Results from new ventures show that even the discovery of new opportunities relates positively to firm

growth and performance (Puhakka 2007). Further, Levinthal and March (1993) emphasized that opportunity exploration is an important antecedent to pursuing persistent success and so to ensuring the future viability of any firm. This highlights the importance of entrepreneurial activity in the family business too, since family businesses often emphasize their longevity over generations. Interestingly, family businesses are acknowledged to underscore traditions and customs (Craig and Lindsay 2002; Zahra 2005), which may inhibit their engagement in entrepreneurial activity (Zahra, Hayton, and Salvato 2004). These contradictory conjectures suggest that it is necessary to investigate the role of entrepreneurial activity in the *entrepreneurial orientation-performance* relationship further. Kollmann and Stockman's (2012) findings support this: different dimensions of entrepreneurial orientation are associated with a firm's explorative activities.

We believe that there are important reasons why entrepreneurial activity may support firm growth. Among them, two seem particularly compelling. First, firms behaving entrepreneurially are likely to survive relatively longer. Owner-managers are aware that their businesses' survival is dependent on their ability to utilize new opportunities and improve on their current behavior (Ward 1987). Second, entrepreneurial activity may enable businesses to "*change the rules of the game*" (Luksha 2008) through exploiting new opportunities. These imply that entrepreneurial activity would mediate the relationship between each of the three dimensions of entrepreneurial orientation and firm growth in both family and non-family businesses. On the basis of this reasoning, we offer the following hypotheses:

*H4: The association between innovative orientation and firm growth is mediated by entrepreneurial activity both in family and non-family businesses*

*H5: The association between proactive orientation and firm growth is mediated by entrepreneurial activity both in family and non-family businesses*

*H6: The association between risk taking orientation and firm growth is mediated by entrepreneurial activity both in family and non-family businesses*

Our hypothesized conceptual model is presented in Figure 1.

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## ***Methods***

### **Sample and Data**

We use survey data to test our hypotheses. The data was collected from Finnish firms operating in the food industry (NACE 10–11), the media (NACE 18, 58–61), and the shipbuilding cluster, including ship building (NACE 301) and any subcontracting sectors (furnishing, maintenance etc.). By using stratified sampling on the official Business Register of *Statistics Finland*, a sample of 2,227 firms was selected for the data collection. The data was collected through computer-aided telephone interviews in late spring, 2009. The survey was answered by the CEO or owner-manager of the firm. Contacting 2,227 firms resulted in a total of 532 responses and a response rate of 24 percent. Chi-square tests were used to assess the non-response bias. The analysis covered the size of the 532 firms that responded and the firms that did not participate in the survey. The size distribution of participating firms was slightly, but non-linearly, skewed toward larger firms, which is a relatively typical outcome in such surveys.

*Defining the Family Business.* We acknowledge that there is no established definition of a family business, but accept the idea of varying degrees of family involvement (Astrachan, Klein, and Smyrniotis 2002). In our study we define a family business as a business at least 50 percent owned by a single family (or person), and where the respondent perceives the business to be a family business. If a firm fulfilled

both of those two conditions, it was defined as a family business, and firms that did not were considered non-family businesses. Based on this the number of family businesses in the data set was 224 and non-family businesses 308.

## Measures

*Firm Growth.* In measuring firm growth we follow the view that organizational growth is a multidimensional phenomenon (Delmar, Davidsson, and Gartner 2003). Furthermore, we assume that assessing a firm's performance against its competitors provides more insights into performance than an assessment based solely within a firm (Birley and Westhead 1990). Firm growth was analyzed by means of four self-reported measures. In choosing the measures, our starting point was Wiklund and Shepherd (2003), who combined sales and employment growth into the same scale, and Venkatraman (1989) who examined sales growth and market share at the same time. Additionally, we followed Madsen (2007) who added market share together with sales and employment growth onto the same scale. Finally, in order to capture the firm's overall growth performance, we added an item from Zou, Taylor, and Osland (1998) to our scale. As a result, the respondents were asked four statements about the overall growth as well as the growth of their sales, personnel, and market share against that of their competitors (see Appendix). The scale allows comparisons across industries, since it is not based on absolute results but on how well the firm is performing among its peers in the same industry (Allen and Helms 2006). All the statements were measured on a seven-point Likert scale ranging from 1=*totally disagree* to 7=*totally agree*. Construct reliability for this variable is 0.88.

*Entrepreneurial Orientation (EO).* The measurement of EO was based on a modification of Covin and Slevin's (1989) scale, which is a combination of original

and adopted items from Miller and Friesen (1982) and Khandwalla (1977). On the scale, EO is measured in terms of a firm's tendency toward innovation, being proactive, and risk taking. This approach has been used in several studies (Covin and Slevin 1991; Lumpkin and Dess 2001; Moreno and Casillas 2008; Wiklund and Shepherd 2005). Instead of using original pairs of opposite statements, we asked each respondent to answer statements using a seven-point Likert scale. Furthermore, to measure how proactive the firm was, we adopted Lumpkin and Dess's (2001) approach, but replaced one item related to the firm's dealings with its competitors with an item on top managers' competitive tendencies. The EO scale utilized in the study is presented in the Appendix. The construct reliability for innovation orientation was 0.77, for proactive orientation 0.77, and for risk taking 0.74.

*Entrepreneurial Activity (EA).* In studying the activities firms undertake in order to discover new opportunities, we selected a relatively broad approach. This was chosen in order to examine how active firms are in exploring and exploiting opportunities existing in the market (Baum, Locke, and Smith 2001) and how this behavior influences the *EO-performance* relationship. The EA was assessed by means of three subjective items comprising the activities related to opportunity exploration and exploitation in the firm (see Appendix). These items were measured on a Likert scale ranging from 1=*totally disagree* to 7=*totally agree*. The construct reliability for this variable was 0.86.

*Control Variables.* We controlled the analyses for the firm's size, age, environmental dynamism, and ownership structure (see Appendix). Previous research shows that the size and age of the firm may have an effect on firm growth (Almus and Nerlinger 1999; Dobbs and Hamilton 2007). Hence, the analysis was adjusted with self-reported items measuring the size and age of the firm. Moreover, environmental

dynamism has been shown to influence the relationship between EO and firm growth (Casillas, Moreno, and Barbero 2010; Wiklund and Shepherd 2003). Thus, it was controlled for in this study in terms of the industry-level rate of unpredicted change. This was measured by utilizing the techniques used by Hmieleski and Baron (2008) where time was regressed against industry value added, industry turnover, number of industry establishments, number of industry employees, and the market concentration (Herfindahl-Hirschman Index) in the industry 1995–2006. Further, ownership structure was controlled for in the analyses because family control has been found to have an effect on firm growth (Anderson and Reeb 2003; Maury 2006). This was controlled by a ratio of the number of family member owners over the total number of owners.

The Table 1 provides descriptive statistics for the main variables for family- and non-family businesses and for the full dataset used in our analysis.

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## ***Results***

### **Analysis of Common Method Variance**

In the case of a cross-sectional self-reported survey with a single respondent, common method variance may hinder interpretation of the relationships between measures (Podsakoff, MacKenzie, Lee, and Podsakoff 2003). In this study, common method variance was assessed with Harman's single-factor test. Accordingly, the analyzed items were subjected to exploratory factor analysis which generated a factor solution comprising four factors (independent latent variables). While one general factor did not account for the majority (40.5 percent) of the variance in the data, the results suggest that common method variance should not substantially affect our

results. Next, all the items were loaded on the confirmatory factor analysis (CFA) and we tested different models. The single latent variable model had a poor overall fit ( $\chi^2(64)=1171.12$ ,  $\chi^2/df=18.02$ ,  $p<0.001$ ) and also the fit indices ( $CFI=.648$ ;  $RMSEA=.179$ ;  $SRMR=.110$ ) were below the recommended cut-off values (Hair, Black, Babin, and Andresson 2010). Thus, the CFA estimates supported the results of the exploratory factor analysis that common method variance does not affect our results.

### **Assessing the Validity and Reliability**

The overall fit and construct validity of our hypothesized model as well as the measurement invariance across the multiple groups (that is family and non-family businesses) were tested with AMOS 19.0. Our analysis identified three problematic items with low loadings or strong cross-loadings, which were omitted from the final model (see Appendix). More specifically, we examined item-to-construct correlations within and across constructs, modification indices and standardized residuals, and as a result we excluded one item from risk taking orientation and one from EA to improve convergent validity, and also one item from innovation orientation to increase discriminant validity.

Our final model's overall fit, convergent validity and discriminant validity indicate that the model fits the data and our latent variables are reliable constructs (Table 2). The goodness-of-fit indices ( $\chi^2(55)=122.07$ ,  $\chi^2/df=2.22$ ,  $p<.001$ ;  $CFI=.979$ ;  $RMSEA=.048$ ,  $SRMR=.032$ ) exceed the recommended threshold values. As a first step to estimating convergent validity, all item loadings were examined and found to be significant at the  $p<.001$  level and to exceed the threshold value of 0.5 (see Hair, Black, Babin, and Andresson 2010). Similarly, all the average variance estimates

(*AVE*) and the construct reliability (*CR*) estimates were above the respective cut-off values of .50 and .70 (Hair, Black, Babin, and Andresson 2010). The reliability of the two-item scales was estimated further with the Spearman-Brown statistic as suggested by Eisinga, Grotenhuis and Pelzer (2013). The split-half coefficient was over 0.70 for all the constructs indicating good reliability. In addition, the Spearman-Brown formula was utilized for a “what-if” analysis to determine what the reliability of the two-item scale would be if another similar quality item was added to the scale to create a three-item ( $k=3$ ) scale (see Hirai 1999). The estimates indicated good reliability for all the constructs. To assess discriminant validity we conducted a first likelihood ratio test (chi-square difference test) by specifying separate latent constructs to the same construct and comparing the fit of that model to the fit of the original unconstrained model (Hair, Black, Babin, and Andresson 2010). We proceeded stepwise by first specifying the mediating and the dependent variables to the same construct, then the independent and the dependent variables, then the independent and mediating variables and finally the independent, mediating and dependent variables. The fit of the unconstrained model was significantly different ( $p<.001$ ) from those of all the other models, supporting discriminant validity. We continued the assessment of the discriminant validity by comparing the *AVE* values for the constructs with the squared correlation estimate between the constructs, which is considered as a more rigorous test (Hair, Black, Babin, and Andresson 2010). In all instances *AVE* estimates were greater than the square of the correlation estimate, which shows that each latent construct explains more of the variance in its items than it shares a common variance with other constructs. This indicates a good discriminant validity of latent variables and that they are independent constructs.



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The measurement models were compared across family and non-family firms by utilizing a multi-sample confirmatory factor analysis (see Hair, Black, Babin and Anderson 2010). The comparison of the measurement invariance between the two groups of firms (family and non-family businesses) indicates full configural invariance between the two groups. This shows that a similar basic factorial structure exists in both groups of firms with the same number of constructs and items loaded on each construct. The goodness-of-fit statistics show that both models fit the data well (family business:  $\chi^2(55)=64.87$ ,  $p=.170$ ;  $CFI=.993$ ;  $RMSEA=.028$ ,  $SRMR=.031$ ; non-family businesses:  $\chi^2(55)=130.24$ ,  $p<.001$ ;  $CFI=.957$ ;  $RMSEA=.067$ ,  $SRMR=.043$ ). Finally, the convergent validity is adequate in both groups ( $AVE$  estimates ranged from .51 to .81;  $CR$  estimates ranged from .73 to .88). Both models have good discriminant validity, since the  $AVE$  of each construct was higher than its squared correlations with any other construct.

Metric invariance was assessed by testing the equivalence of factor loadings between the two group models. This was conducted by constraining the factor loadings so that they were equal across the groups. The  $\chi^2$  difference between the unconstrained baseline model and the constrained model is not statistically significant ( $\Delta\chi^2=4.77$ ,  $df=7$ ,  $p=.688$ ), indicating full metric invariance. Scalar invariance was tested by *constraining both item intercepts and factor loadings to make them equal* across the groups at the same time (Hair, Black, Babin, and Andresson 2010). The results show that there is no statistical difference between the unconstrained and constrained model ( $\Delta\chi^2=17.40$ ,  $df=20$ ,  $p=.627$ ), which supports the requirement for scalar invariance between the two groups. In summary, the metrics analyses show that

the tested five factor structure is sufficiently similar in family and non-family businesses to enable model comparisons between the groups.

### Testing the Hypotheses

The hypotheses were tested using structural equation modeling (SEM). To do so we estimated the structural models for both family and non-family businesses. Finally, the effects were adjusted for control variables in the both models. The results of the SEM analysis are shown in the Table 3.

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Our results show that innovation orientation is positively associated with firm growth ( $p < .001$ ) in family businesses, but not in non-family businesses. This result does not support our hypothesis H1. Regarding the hypothesized relationship between a firm's proactive orientation and its growth, the results illustrate that the relationship is positive among family ( $p < .01$ ) and non-family businesses ( $p < .01$ ). This supports our hypothesis H2.

Our results show that the third dimension of EO, risk taking, is not associated with firm growth among family businesses. In non-family businesses a risk taking orientation is positively associated with firm growth. The results do not support our hypothesis H3, although a positive association was found in non-family businesses.

The mediation hypotheses were tested in both family and non-family businesses by following at two steps. First, we assessed whether the individual relationships between dependent, independent and mediator variables were statistically significant. Secondly, we examined whether the effect of the independent variable on the dependent variable was reduced after the mediator was included in the model (Baron

and Kenny 1986; Hair, Black, Babin, and Andresson 2010). A full mediation is supported if the path estimate between the independent and the dependent variable is reduced and if it is not statistically significant after including the mediator in the model. Similarly, a partial mediation is supported if the initial path estimate is reduced but is still significant (Hair, Black, Babin, and Andresson 2010) after the mediator is inserted in the model.

The results suggest that there is a potential mediating role of EA since it has a positive relationship with firm growth. Hence, the results on the mediating effects of EA in family businesses show that the EA partially mediates an innovative orientation ( $p < .01$ ). Since there was no similar mediating effect found in non-family businesses, the results do not support hypothesis H4. Moreover, the results suggest that EA does not mediate the association of a proactive orientation with firm growth in either group of firms, thus, they do not support our hypothesis H5.

Finally, our results show that the relationship between risk taking and firm growth is not mediated by EA among family businesses. This mechanism is, however, valid in non-family businesses. Thus, our hypothesis H6 is not supported.

The robustness of the results was assessed by adding a set of control variables to the model. Following that step, the overall fit of the model was slightly lower than that of the uncontrolled model, but the model still fits the data adequately ( $\chi^2(218)=467.08, p < 0.001, \chi^2/df=2.14; CFI=0.925, RMSEA=0.046$ ). The results on the hypothesis remain unchanged after the models were adjusted for control variables.

## ***Discussion***

Our results show that the concept of EO is highly applicable in studying family business growth and performance as some studies have suggested (Casillas, Moreno,

and Barbero 2010; Naldi, Nordqvist, Sjöberg, and Wiklund 2007). Previous studies (Lumpkin and Dess 2001; Wiklund 1999; Wiklund and Shepherd 2005), even in the family business context (Casillas, Moreno, and Barbero 2010; Naldi, Nordqvist, Sjöberg, and Wiklund 2007), have found that EO is positively associated with firm growth. Our study further emphasizes that the family business context plays a role in the mechanism of the *entrepreneurial orientation-performance* relationship, as our results show how this mechanism differs between family and non-family businesses.

Our study provides strong evidence that the dimensions of EO affect firm performance differently in family and non-family businesses. The findings therefore support previous research on the differences between family and non-family businesses, with regard to how the dimensions of EO affect firm growth. Our results show that only proactive orientation is positively associated with firm growth both in family and non-family businesses as hypothesized. We found no association between risk taking and firm growth among family businesses, although the association was established among non-family businesses. On the other hand, we found a positive association between innovation orientation and firm growth in family business, but not in non-family businesses. These differences were further elaborated on by investigating the mediating role of EA in family and non-family businesses.

Our findings clearly demonstrate the different mechanisms between EO and firm growth among family and non-family businesses as well as the complex nature of the *EO-performance* relationship. In family businesses, EA mediates the association between innovation orientation and firm growth whereas in non-family businesses EA mediates the association between risk taking orientation and firm growth. The results underscore that innovation orientation may enhance the EA of family businesses, both of which benefit their growth. Since this association is absent

among non-family businesses, it suggests that family involvement may actually promote an orientation toward innovation (Zahra 2005) and toward EA. A different kind of mechanism was found in non-family businesses that seem to benefit from EA when being oriented toward risk taking. Our results suggest that EA undertaken by family businesses to achieve firm growth is likely to be productive when the firm is geared toward innovation and renewal rather than risk taking per se. We interpret the application of an innovation-oriented, but less risky, strategy to imply that family businesses might be more interested in securing continuity and wealth creation in the long run (see Sharma, Chua, and Chrisman 1997; Zahra, Hayton, and Salvato 2004) than in achieving rapid growth through a risky strategy. On the other hand, non-family businesses without restrictive family traditions, customs or heritage (see Craig and Lindsay 2002; Short, Payne, Brigham, Lumpkin, and Broberg 2009; Zahra 2005) might be geared toward a more risk-oriented strategy in pursuing growth.

Our findings generate several contributions. First, the research extends the EO literature by introducing the concept of EA bridging EO and firm growth. This is particularly relevant as previous studies on entrepreneurship orientation in family businesses have not tackled those mediating activities influencing firm growth (Miller and Le Breton-Miller 2011) but rather concentrated on the antecedents of entrepreneurship in family businesses (Covin and Wales 2012; Cruz and Nordqvist 2010). Our results support the idea of needing a mediating activity to benefit from the strategic mindset of EO and to improve firm performance (Lumpkin and Dess 1996). EA is an example of an intervening firm-level behavior that translates an entrepreneurial mindset into improved firm performance.

Second, previous research does not extensively cover comparisons between family and non-family businesses in terms of using a multidimensional EO construct.

Our study supports the previous varying findings on differences between family and non-family with regard to the dimensions of the EO construct and their relationship with firm performance (Casillas, Moreno, and Barbero 2010; Naldi, Nordqvist, Sjöberg, and Wiklund 2007). Therefore, our findings confirm the importance of studying the dimensions of EO separately, not as a composite measure, and in different organizational contexts (Rausch, Wiklund, Frese, and Lumpkin 2004).

Finally, by using a comparative approach we were able to tease out the differences in the mechanism of the *EO-performance* relationship between family and non-family businesses. Our study demonstrates that in family businesses, the combination of innovation orientation and EA promotes firm growth, whereas in non-family businesses it is the combination of an orientation toward risk taking with EA that has a positive impact on firm growth. The previous research focusing on EO in family businesses has emphasized the role of risk taking in the performance of family businesses (Naldi, Nordqvist, Sjöberg, and Wiklund 2007; Zahra 2005). Our findings on the positive role of innovation orientation in the growth of family businesses, and how such growth differs from that of non-family businesses complements the previous literature (see Casillas, Moreno, and Barbero 2010). It may be that ‘*familiness*’ and the family dimension have an effect on the studied mechanism and the ways in which family businesses attempt to pursue continuity and wealth creation. The family dimension—the influence of founder, family culture and other family-related factors (Zahra 2005) or that of a high concentration of ownership (Chandler 1990; Naldi, Nordqvist, Sjöberg, and Wiklund 2007)—might result in less risky strategies, that might in turn affect the way family businesses adapt to the external environment (Zahra, Hayton, and Salvato 2004) and, therefore, their EA (Carland,

Hoy, Boulton, and Carland 1984). Theoretically, this suggests that theorizing the role of EA when studying strategic decision making in family businesses is essential.

Our study also has managerial implications, particularly for family businesses. Any successful business needs to adapt to its business environment and to exploit the external changes and opportunities, and family businesses are no exception. Family businesses in particular are reluctant to jeopardize their ownership or wealth but are concerned with securing continuity for future generations. The emphasis on entrepreneurship in family businesses seems to enhance their market orientation (Zahra, Hayton, and Salvato 2004). Our findings underscore that the orientation toward innovation and renewal seems to be a relevant way for family businesses to orient themselves toward the external environment. If family businesses are able to adapt their innovative orientation to EA in their strategies, they may be able to minimize the suggested unfavorable effects of conservatism and traditional values on their performance. This highlights the need to continuously innovate and renew the business dimension of family businesses to adapt to the changes in the business environment even though at the same time there is a desire to maintain and cherish family ownership, traditions, and values (see Aronoff 2004; Habbershon and Pistrui 2002).

### **Limitations and Future Research**

Despite the promising results in terms of the mechanism of the *EO-performance* relationship in business growth, our study has its limitations, which also offer interesting opportunities for future work. First, some of the items we used to measure EO reflect actual behavior more than intention. However, drawing from previous literature and established constructs, we assume that EO largely mirrors a firm's

inclination toward entrepreneurship and a mindset to suit (Covin and Wales 2012; Wiklund 1999). Further, the scale we used has been criticized for mixing past behavior and attitudes (Brown, Davidsson, and Wiklund 2001), but it enabled us to ensure comparability with previous research.

Second, we introduced the concept of EA as a behavior bridging EO and firm performance. The measurement of EA could be improved, and furthermore, it is only one type of activity linking EO and firm growth. It is important to investigate and capture other activities such as exploration of new business opportunities (see Kollmann and Stockmann 2012) that are needed to translate an entrepreneurial mindset into improved performance. In a similar vein, a longitudinal research setting would be of value in studying any mediating activities between EO and the selected performance outcomes. After all, the positive relationship between EO and performance increases over time (Wiklund 1999), and a longer time-span may therefore influence the way the mechanism works. Moreover, in a longitudinal setting the determinants of EO could also be assessed more precisely.

In this study, family businesses were treated as a context; meaning that even though we controlled for the concentration of family ownership in our analysis, there was no opportunity to investigate the uniqueness of family businesses in terms of family involvement and '*familiness*' (Zahra and Sharma 2004). Our results highlight that context plays a role in the mechanism of the *EO-performance* relationship. The differences found in family and non-family businesses suggest that '*familiness*' merits further investigation in order to understand how the presence of family might influence the mechanism and its components. In addition, it would be useful to investigate the role of '*familiness*' in other phases of a firm's lifecycle too, such as its



foundation, its innovative activity, its corporate entrepreneurship movements and its succession phase.

### **Conclusions**

Our study on the mechanism of the EO-performance relationship with intervening EA in family and non-family businesses provides a novel insight into studying business growth and EO in more general terms. Our findings contribute to the literature on EO by underscoring the essential role of mediating activities and also the differences in the proposed mechanism. By separating the three dimensions of EO and focusing on the mediating role of EA the study was able to expose interesting differences between family and non-family businesses with regard to the mechanism of the *EO-performance* relationship. Since family businesses are subject to the same continuous pressures of uncertainty, environmental change, and competitive forces that determine the actions of any business, an entrepreneurial mindset and activities are of crucial importance for firm growth. We argue that while growth in non-family businesses benefits from risk taking, in family businesses, the orientation toward innovation and renewal is an efficient way for them to adapt to and exploit the opportunities of the external business environment in order to achieve growth.

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*Figures and Tables*

**Table 1**  
**Descriptive statistics**

Variable	Non-family businesses		Family businesses		All	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
1. Growth	3.51	1.35	3.36	1.45	3.45	1.39
2. EOinno	3.43	1.59	3.49	1.64	3.45	1.61
3. EOpro	4.50	1.24	4.38	1.33	4.45	1.28
4. EOrisk	3.59	1.40	3.52	1.41	3.56	1.40
5. Ent. activity	4.78	1.14	4.73	1.24	4.76	1.18
6. Size_log	1.33	0.74	1.21	0.68	1.28	0.72
7. Age_log	1.25	0.50	1.35	0.36	1.29	0.45
8. Env. dynamism	-1.29	0.76	-1.28	1.22	-1.29	0.97
9. Owners	0.16	0.37	0.75	0.43	0.44	0.50

Variables 1–5: Seven-point Likert scale ranging from 1=*totally disagree* to 7=*totally agree*

**Table 2**  
**Measurement Model Summary**

Construct	Item	Stand. Factor Loading	Composite Reliability (CR)	Spearman-Brown (split-half test)	Spearman-Brown (k=3)	Discriminant Validity
EOinno	EOinno2	.826***	.770	.769	.834	1. EOinno .63
	EOinno3	.756***				2. EOpro .35 .53
EOpro	EOpro1	.769***	.766	.800	.766	3. EOrisk .22 .23 .58
	EOpro2	.561***				4. EA .22 .34 .13 .75
	EOpro3	.822***				5. GROWTH .21 .24 .15 .31 .65
EOrisk	EOrisk1	.780***	.737	.737	.808	Off-diagonal: squared construct correlation;
	EOrisk2	.748***				Along-diagonal (italic): average variance extracted (AVE).
EA	EA2	.887***	.859	.859	.901	
	EA3	.848***				
GROWTH	GROWTH1	.711***	.879	.873	.845	
	GROWTH2	.857***				
	GROWTH3	.738***				
	GROWTH4	.896***				

EOinno=Innovation Orientation, EOpro=Proactive Orientation, EOrisk=Risk Taking Orientation, EA=Entrepreneurial Activity, GROWTH=Firm Growth; see the listing of items in APPENDIX. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$   
GOF Statistics:  $\chi^2=122.065$   $df=55$   $p < 0.001$   $\chi^2/df=2.219$   $CFI=0.979$   $RMSEA=0.048$   $SRMR=0.032$

**Table 3**  
**Entrepreneurial Orientation, Entrepreneurial Activity and Firm Growth in Family and Non-Family Businesses**

	Family Businesses	Non-Family Businesses	
<b>Direct effects</b>	$\beta$	$\beta$	
EO <sub>inno</sub> →Firm growth	0.34***	0.15 <sup>†</sup>	H1: not supported
EO <sub>pro</sub> →Firm growth	0.29**	0.22**	H2: supported
EO <sub>risk</sub> →Firm growth	-0.03	0.31***	H3: not supported
<b>Mediated indirect effects</b>			
EO <sub>inno</sub> →EA→Firm growth	0.25*	0.10	H4: not supported
EO <sub>pro</sub> →EA→Firm growth	0.10	0.08	H5: not supported
EO <sub>risk</sub> →EA→Firm growth	-0.09	0.27**	H6: not supported

EOinno=Innovation Orientation, EOpro=Proactive Orientation, EOrisk=Risk Taking Orientation, EA=Entrepreneurial Activity

<sup>†</sup> $p < .1$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



## Appendix

Latent Variables and Items Used	
<b>Growth<sup>a)</sup></b>	
GROWTH1	The firm has achieved rapid growth
GROWTH2	Our sales grow faster than our competitors
GROWTH3	Employment growth in our company is faster than among our competitors
GROWTH4	Our market share grows faster than that of our competitors
<b>Entrepreneurial Orientation<sup>a)</sup></b>	
EOinno1 <sup>b)</sup>	In general, the top managers of my firm favor a strong emphasis on R&D, technological leadership, and innovations
EOinno2	Our firm has introduced very many new lines of products or services
EOinno3	Changes in our product or service lines have usually been quite dramatic
EOpro1	In dealing with its competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.
EOpro2	In dealing with its competitors, my firm typically initiates actions which competitors then respond to.
EOpro3	In general, the top managers of my firm have a strong tendency to be ahead of other competitors in introducing novel ideas or products.
EOrisk1	In general, the top managers of my firm have a strong proclivity for high-risk projects with chances of very high returns compared to projects with normal and certain rates of return
EOrisk2	In general, the top managers of my firm believe that owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives
EOrisk3 <sup>b)</sup>	When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, 'wait-and-see' posture in order to minimize probability of making costly decisions as compared with a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities [REVERSED]
<b>Entrepreneurial Activity<sup>a)</sup></b>	
EA1 <sup>b)</sup>	We systematically search for new business concepts through observation of processes in the environment
EA2	Compared to our competitors, we recognize efficiently new growth opportunities
EA3	Compared to our competitors, we are able to exploit efficiently new growth opportunities
<b>Control Variables</b>	
SIZE	Firm size in number of employees (logarithmic)
AGE	Firm age (logarithmic)
ENVDYN	Herfindahl-Hirschman Index: industry-level rate of unpredicted change
OWNERS	Ownership structure: the number of owners from one family in relation to the total number of owners.

<sup>a)</sup> All the statements were measured on a seven-point Likert scale ranging from 1=*totally disagree* to 7=*totally agree*.

<sup>b)</sup> Item was omitted during the respecification of the measurement model

