

The Entrepreneurial Orientation-Performance Relationship in Family Smes: when Descendent Ceos do it Better

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Abstract

The main purpose of this study is to investigate the entrepreneurial orientation (EO)-performance relationship in small and medium-sized family enterprises (family SMEs). Drawing on a configurational approach and insights from upper-echelon theory, this article proposes to explore the joint and simultaneous effect of EO, descendent CEOs and environmental hostility on family SME performance. While descendent CEOs are reputed to be inferior to family founders in entrepreneurial management, we argue that they are more apt to turn EO into financial gains in highly hostile environments. This assumption is confirmed on a dataset of 195 Belgian family SMEs.

Keywords: Entrepreneurial orientation, Performance, Family business, CEO, generation.

INTRODUCTION

Nowadays, companies must continually identify and exploit opportunities to remain competitive in the rapidly changing global environment. Top managers have recognized the need for their organizations to behave entrepreneurially to generate financial returns (Kuratko, Hornsby, & Covin, 2014). Unsurprisingly, a major issue in the entrepreneurship literature is the link between entrepreneurial orientation (EO)—defined as a strategic posture in which a firm exhibits innovative, proactive, and risk-taking behaviors (Covin & Slevin, 1989; Miller, 1983)—and financial performance (Wales, Gupta, & Mousa, 2013). In line with the basic assumption that highly entrepreneurial firms perform better,

numerous studies have shown that EO is positively related to financial performance (Rauch, Wiklund, Lumpkin, & Frese, 2009). However, the EO-performance relationship can be moderated by internal and external factors (Lumpkin & Dess, 1996; Moreno & Casillas, 2008). In other words, EO effectiveness can be enhanced or hampered by different types of contingency factors.

Recently, the EO-performance relationship has also become a topic of great interest in the family business field (McKelvie, McKenny, Lumpkin, & Short, 2014). Indeed, family firms represent a unique organizational context to investigate this phenomenon because of their peculiarities in terms of ownership, management and governance (Casillas & Moreno, 2010). Furthermore, the overlap between family and business objectives affects the decision-making process as well as entrepreneurial activities and outcomes (Nordqvist, Habbershon, & Melin, 2008). As a result, recent research (Casillas & Moreno, 2010; Casillas, Moreno, & Barbero, 2010; Chirico, Sirmon, Sciascia, & Mazzola, 2011; Kellermanns, Eddleston, Sarathy, & Murphy, 2012; Schepers, Voordeckers, Steijvers, & Laveren, 2014) has investigated how family firm specific variables affect the EO-performance relationship.

Although these studies deepen our understanding of the entrepreneurial phenomenon in family firms, additional insights could be gained by adopting configurational models of the EO-performance relationship (Casillas et al., 2010). Using configurations implies that a fit between EO, environmental factors and organizational characteristics is required to reach greater performance (Wiklund & Shepherd, 2005). Although configurational approaches are common and offered promising results in the entrepreneurship literature (Harms, Kraus, & Schwarz, 2009), prior studies have neglected this line of research in the family business context (Sciascia & Bettinelli, 2013). At our knowledge, only Casillas et al. (2010) suggested a configurational model of the EO-performance relationship in family firms. However, their research design focused on the distinct moderating influence of generational involvement and environmental characteristics without considering how these variables simultaneously interact with EO to engender performance gains. Thus, more research is needed to extend our knowledge about the conditions that enhance the translation of entrepreneurial efforts into performance across generations (Zahra, Hayton, & Salvato, 2004; Zellweger, Nason, & Nordqvist, 2012).

This paper aims to take a step in this direction by examining whether the alignment of an internal family-related variable—family founder vs. descendent CEO (Pérez-González, 2006)—, a contextual factor—environmental hostility (Slevin & Covin, 1997)—and EO leads to higher performance. Given that the generation at the helm of the family business is one of the principal components of the firm life cycle (Gersick, Davis, & McCollom-Hampton, 1997) and that the environmental setting can affect EO effectiveness (Casillas et al., 2010; Moreno & Casillas, 2008; Wiklund & Shepherd, 2005), the EO-performance relationship is likely to vary depending on the generational status of family CEOs and the degree of environmental hostility. Drawing on upper-echelon theory, (Hambrick & Mason, 1984), we posit that descendent CEOs are more likely to reap the fruit of their entrepreneurial efforts in highly

hostile environments as they are more inclined to develop an external cultural orientation that meet the requirements of such environmental settings.

This study contributes to the entrepreneurship literature and the family business field in several ways. First, we contribute to the scarce amount of research that considers the configuration of EO, internal and external variables as an appropriate approach to explain performance variations in family firms. Second, by distinguishing between family-founder and descendent CEOs, we add a meaningful family-related factors that bears upon the EO-performance relationship, i.e. family CEO generation. Third, we challenge the common wisdom about the bright side of family-founder CEOs in entrepreneurial family firms by showing that descendent CEOs are better at managing entrepreneurial activities in highly hostile environments.

The article is structured as follows. The first section provides a review of the most prominent literature dealing with the EO-performance relationship in the family business context, and reports our hypotheses on the effects of descendent CEOs and environmental hostility on the EO-performance relationship. Research method and results are explained in the subsequent sections. In the last section, we discuss our findings and identify their limitations and implications for theory and practice.

THEORETICAL BACKGROUND

The EO-performance relationship in family firms

Over the last three decades, research on the topic of EO has flourished in the entrepreneurship literature (Covin & Lumpkin, 2011). Basically, EO provides an entrepreneurial mindset and an organizational impetus necessary to engage in innovation by carrying out risky initiatives in a proactive way (Miller, 1983; Memili, Lumpkin, & Dess, 2010). According to this view, EO is a unidimensional construct which includes three interdependent variables: innovativeness, risk-taking and proactiveness (Covin & Slevin, 1991; Miller, 1983). As most studies have converged on this conception of EO (Miller & Le Breton-Miller, 2011; Wales et al., 2013), this article defines EO as a second order construct where innovativeness, proactiveness and risk-taking are assumed to covary, thereby increasing the comparability of our results.

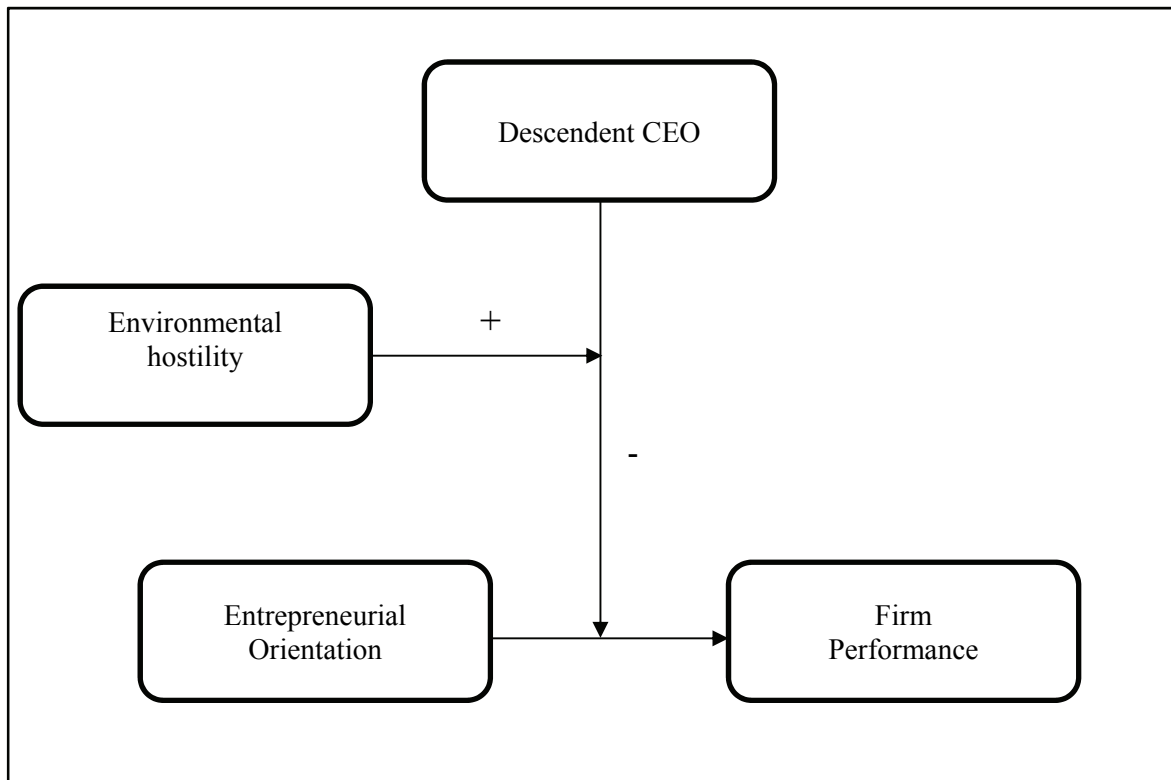
Although diverse approaches and numerous samples have been employed, it is widely accepted that EO is positively related to firm performance. In that sense, Rauch et al.'s (2009) meta-analysis of 53 samples from 51 studies revealed that the positive correlation between EO and performance is moderately large. However, the magnitude of the EO-performance relationship is likely to evolve depending on internal and external contingency factors (Lumpkin & Dess, 1996). Numerous moderators of the EO-performance relationship have been used, such as resource availability (Frank et al., 2010; Moreno & Casillas, 2008), internal social exchanges processes (De Clercq, Dimov, & Thongpapanl, 2010), senior team heterogeneity (Van Doorn, Jansen, Van den Bosch, & Volberda, 2009), human resource practices

(Grünhagen, Wollan, Dada, & Watson, 2014), industry life cycle (Lumpkin & Dess, 2001) or environmental characteristics (Moreno & Casillas, 2008; Wiklund & Shepherd, 2005). In the family business context, specific family-related moderators have been considered such as generational involvement (Chirico et al., 2011), the generation in charge (Casillas et al., 2010), family involvement (Casillas & Moreno, 2010), socioemotional wealth (Schepers et al., 2014) or generational ownership dispersion (Kellermanns et al., 2012).

Although these studies have extended our knowledge about the conditions in which EO has a greater or smaller impact on family firm performance, additional insights could be gained by using a configurational model with the aim of analyzing how family-related variables and external characteristics simultaneously interact with EO to engender performance outcomes (Sciascia & Bettinelli, 2013). Indeed, a configurational approach supposes that the firm success depends on the capacity of the business to align its specific attributes with the characteristics of the environment (Miller, 1983; Short, Payne, & Ketchen, 2008). In other words, higher performance is achieved when the firm can adapt its strategy and its organizational structure to its environment (Ward, Bickford, & Leong, 1984). According to Gartner (2008), building such configurations is particularly useful as it helps distinguish among different types of organizations and environments in order to develop a fine-grained understanding about the influence of context on EO effectiveness.

Drawing on this perspective, Casillas et al. (2010) have suggested that family firm performance is the consequence of a fit between EO, the generation in charge of the firm and environmental characteristics. However, their research design only explored how these internal and external variables moderate the EO-performance relationship without considering their concurrent effect on EO effectiveness. In consequence, they offered a partial explanation of the role of contextualization in the variability of the EO-performance relation (Miller, 2011). To fill this gap, we endeavor to offer a deeper understanding of the generic relationship between EO and performance in family firms by building a configuration that considers the joint and simultaneous effect of EO, the generational status of family CEOs and environmental hostility on performance (see Figure 1).

Figure 1. The configurational approach of the EO-performance relationship in family SMEs.



The generational status of family CEOs and the EO-performance relationship

Despite the growing amount of research that investigates the EO-performance relationship (Wales et al., 2013), little is known about the effect of CEO characteristics on EO effectiveness. This lack of interest is quite surprising since upper echelon theorists have stressed the importance of CEO attributes in the implementation of strategic choices (Finkelstein, Hambrick, & Cannella, 2009; Hambrick & Mason, 1984; Nadkarni & Hermann, 2010). According to this view, the CEO's cognitive base reflected in his or her demographic characteristics affects how a CEO uses his or her power to incorporate strategic decisions (Hambrick, 2007). Prior works have revealed that top executives' demographics such as CEO tenure (Boling, Pieper, & Covin, 2015), age (Yim, 2013), or educational background (Barker III & Mueller, 2002) are related to various types of organizational outcomes. Referring to EO effectiveness, Richard, Wu and Chadwick (2009) demonstrated that CEO industry tenure positively moderates, and CEO position tenure negatively moderates, the EO-performance relationship while Mousa & Wales (2012) found that the positive impact of EO on long-term survival is enhanced in IPO firms with a founder CEO.

In the context of family SMEs, CEO positions are often occupied by family members who play a central role in the definition and the pursuit of entrepreneurial strategies (Fiegenger, Brown, Dreux, & Dennis, 2000; Huybrechts et al., 2013). In general, it is assumed that the family kinship of the CEO is a demographic feature that reduces the propensity of family firms to pursue entrepreneurial initiatives

(e.g. Kellermanns, Eddleston, Barnett, & Pearson, 2008; Miller et al., 2011; Zahra, 2005). Indeed, family CEOs are often risk-averse and conservative because they are more inclined to pursue socioemotional needs that hamper the development of a proactive innovation strategy (Block, Miller, Jaskiewicz, & Speigel, 2013). Consistent with that view, Huybrechts et al. (2013) reported that having a family member at the helm of the company is conducive to lower levels of entrepreneurial risk-taking. However, none of these studies tried to understand whether specific attributes of family CEOs have an impact on EO effectiveness.

An important consideration affecting how family CEOs implement their entrepreneurial strategy is their generational status. While family-founder CEOs are entrepreneurs with the required background to establish and grow a new business (Aldrich & Cliff 2003; Schein, 1983), this is not always true for descendent CEOs who do not necessarily share the same entrepreneurial spirit (Mousa & Wales, 2012). In comparison to descendent CEOs, family founders often display higher degree of identification with the firm because they see the organization as an extension of themselves (Davis & Harveston, 1999). As a result, they tend to be more attached and committed to the firm success (Eddleston, 2008). Family-founder CEOs are thus more likely to invest considerable time and resources into entrepreneurial projects that will lead to enhanced revenues and profits (Miller, Le Breton Miller, & Lester, 2011) while later generation CEOs may be more inclined to preserve their own interests rather than engaging in such initiatives since they are less emotionally attached to the business (Gomez-Mejia et al., 2007). Moreover, family-founder CEOs often possess tacit knowledge about the implementation of their entrepreneurial strategy (Mousa & Wales, 2012). Such knowledge is particularly difficult to transfer to later generation executives even when they are involved in the businesses since many years (Chirico & Nordqvist, 2010). Consequently, descendent CEOs can lack an important source of knowledge to effectively perpetuate the entrepreneurial legacy of the family founder (Jaskiewicz, Detienne, & Combs, 2015). For these reasons, the following hypothesis is proposed:

Hypothesis 1: The presence of a descendent CEO negatively moderates the EO-performance relationship in family SMEs, such that EO will have a weaker positive influence on performance in family SMEs led by descendent CEOs.

The configuration of EO, descendent CEOs and environmental hostility

Because the context in which the firm evolves drastically affects the EO-performance relationship (Miller, 2011; Wiklund & Shepherd, 2005), the presence of a family founder at the helm of the company cannot be considered as a universal solution to ensure EO effectiveness (Miller, Le Breton-Miller, & Lester, 2011). In that sense, Cruz and Nordqvist (2012) claim that later generation CEOs possess several assets that are likely to enhance their ability to effectively implement entrepreneurial choices in various types of competitive environments. Borrowing from this perspective, we build a configurational approach which argues that descendent CEOs are particularly useful to translate entrepreneurial efforts

into financial gains in highly hostile environments.

Environmental hostility indicates the presence of unfavorable external forces for a firm's business resulting from radical industry changes, constraining regulation placed on the industry, strong rivalries among competitors, or low customer loyalty (Covin & Slevin, 1989; Werner, Brouthers, & Brouthers, 1996). In this type of environments, the failure rate is high because of the constant threats posed on the firm's survival (Slevin & Covin, 1997). To cope with hostile environments, it is widely accepted that firms have to develop a strong entrepreneurial posture that takes into account the constraining nature of the market (Casillas et al., 2010; Covin & Slevin, 1989; Miller & Friesen, 1978; Moreno & Casillas, 2008). In other words, firms have to be sufficiently externally oriented to identify and exploit the few existing opportunities that characterized highly hostile environments to ensure entrepreneurial success (Lumpkin & Dess, 2001).

In hostile environments, family-founder CEOs can encounter some difficulties to realize the benefits of entrepreneurship. Usually, family SMEs led by a family founder adopt a culture that reflects the founding personality (Hollander & Elmann, 1988). Indeed, evidence shows that the culture of family businesses is shaped by the personality, values, and beliefs of the family founder (Jaskiewicz et al., 2015; Kets de Vries, 1996). Such a founder-centric orientation can foster the development of an internal organizational culture (Zahra, Hayton, & Salvato, 2004) that makes the organization reluctant to change (Kelly, Athanassiou, & Crittenden, 2000) and less oriented to the external conditions of the market (Cohen & Lindberg, 1974). This is likely to inhibit the ability of family SMEs to explore the innovative methods and practices developed by their competitors and to impede the exploitation of new opportunities in rapidly changing environments, thereby compromising the realization of the value-creating potential of EO when environmental hostility is high.

This founder-centric orientation is reduced when the firm is passed onto the next generations. Although the values, vision, and behaviors of founders are often imprinted at the organizational level and can prevail beyond the founder's exit (Geroski, Mata, & Portugal, 2010), descendent CEOs can adopt an external organizational culture that help the organization move beyond the family founder's legacy (Cruz & Nordqvist, 2012). Indeed, they need to find new ways to revitalize and perpetuate the firm's long-term success (Kellermanns & Eddleston, 2006), which implies dedicating more attention to the signals from their external environment. This can take the form of market studies aimed at identifying emerging opportunities and new trends in the marketplace (Zahra et al., 2004). By so doing, descendent CEOs can adapt the firm's entrepreneurial posture to market demands, industry characteristics and regulatory norms in order to exploit the full potential of EO in highly hostile environments.

Furthermore, to counterbalance their lack of tacit knowledge (Cabrera-Suarez, Saa-Perez & Almeida, 2001), descendent CEOs can count on other sources of knowledge that are crucial to enhance EO effectiveness in highly hostile environments. Indeed, later generation executives often possess more

formal education and outside experience (Stewart & Hitt, 2012). As a result, they have a greater ability to screen markets and competitors in order to identify and exploit the few existing opportunities in hostile environments. Yet, family firms led by descendent CEOs are frequently characterized by the increased presence of external members in governance bodies (Bammens, Voordeckers, & Van Gils, 2008). These external board members provide relevant knowledge-based resources arising from their relationships with networks outside the family business (Calabro, Mussolino, & Huse, 2009). Accordingly, descendent CEOs can obtain crucial information and knowledge to engage in entrepreneurial activities that fit with the constraining nature of environmental hostility. Taken together, these arguments suggest that descendent CEOs might be more apt to translate EO into performance gains in highly hostile environments. Therefore, the following hypothesis is posed:

Hypothesis 2: In highly hostile environments, family SME performance will be highest among firms with a high degree of EO and a descendent CEO.

METHOD

Sample

The empirical data used in this study were derived from a survey run in 2012 to investigate firm characteristics, ownership structures, management and board composition, entrepreneurial strategy, environmental and performance issues among family SMEs based in Wallonia, the southern part of Belgium. Several criteria were used to define our survey population. First, companies from the financial, social, and educational sectors were excluded. Also, we selected firms with a number of full-time employees ranging from 5 to 250 to exclude micro-firms. Out of this population, a group of 2,042 SMEs was obtained. The questionnaires were sent to the company CEOs. After two rounds, 297 questionnaires were collected, corresponding to a response rate of 14.54%. However, 15 incomplete cases were deleted, resulting in a sample of 282 SMEs.

Given that a wide range of proxies have been used in the literature to determine whether a firm can be regarded a family business (Rutherford et al., 2008), it was necessary to clearly define the criteria to be used to define a family firm. In this research, a company had to meet two criteria for being considered a family business, that is, (a) the CEO identifies the company as being a family firm and (b) at least 50% of the equity is owned by a member of a single family (Schepers et al., 2014; Westhead & Howorth, 2006). Based on this definition, 204 family firms were identified, corresponding to 72.34% of our sample. As the aim of this study is to investigate the effect of the generation of family CEOs on the EO-performance relationship, 9 family firms led by non-family CEOs were deleted, resulting in a final sample of 195 family SMEs led by a family CEO.

To complete the dataset with financial information, we used the Bel-First database by Bureau Van Dijk, which collects and structures information from the annual reports of Belgian firms. The use of two

different data sources alleviated common method bias concerns (Podsakoff et al., 2012). Additionally, firm characteristics of the 195 family SMEs and the original 2,042 firms of the survey population were compared to control for nonresponse bias without finding significant differences with respect to size, age and industry affiliation (Armstrong & Overton, 1977). Lastly, this procedure was repeated by comparing earliest and latest respondents and revealed no significant differences between the two groups of respondents.

Variables

Dependent variable. *Performance* was measured by four related financial items regarding net profit, sales growth, cash-flow, and growth of net worth based on a 5-point scale (Chirico et al., 2011; Naldi et al., 2007). Using this subjective measure of financial performance allows us to capture the multidimensionality of SME performance (Wiklund & Shepherd, 2005). This multi-item scale showed acceptable reliability ($\alpha = .82$).

Independent variables. *EO* is measured using Covin and Slevin's (1989) nine-item scale. This measure captures firm's innovation, proactiveness, and risk taking shown in the previous 5 years by the semantic differential method in which CEOs are offered two contrary sentences and rate their orientation on a Likert-type scale ranging from 1 to 7. This is the most frequently used EO measure and it has been validated and found reliable in many studies (Wales et al., 2013). In this research, the underlying EO dimensions were highly correlated and Cronbach's α for EO was relatively high ($\alpha = 0.86$). *Descendent CEO* was measured by a single-item question that asked respondents to indicate the generation of the family CEO. Accordingly, *Descendent CEO* is a dummy variable coded with a value of 1 if the CEO pertains to the second-and-beyond generations, 0 otherwise. *Environmental hostility* was measured with a 6-item, 7-point scale developed by Slevin and Covin (1997) ($\alpha = 0.78$).

Control variables. Given that performance may be affected by the age of the firm (Leonard-Barton, 1992), we controlled for *age* by using the number of years the firm has been in business. Since larger firms have a better access to external resources and this access can have an influence on performance (Miller, Minichilli & Corbetta, 2013), we controlled for *size* by using the number of employees. Two individual characteristics of the CEO that are likely to have an impact on firm performance were also included as control variables: *CEO age* (Hambrick & Mason, 1984) and *CEO tenure* (Henderson et al., 2006). *CEO age* was measured as the natural logarithm of the CEO age. *CEO tenure* was measured as the CEO's number of years in current position. In addition, this study also controls for the influence of the firm's governance by including two board characteristics that are likely to affect performance: *board size* and *CEO duality* (Eisenberg, Sundgren, & Wells, 1998; Krause et al., 2014). *Board size* is measured as the actual number of board members. *CEO duality* is a dummy variable that equals 1 if the CEO and the chairperson of the board is the same person. Finally, we also controlled for industry by including the dummy variables of manufacturing, services, construction, wholesale and retail.

A confirmatory factor analysis was conducted with all the multi-items constructs included in the analysis. The results indicated good convergent and discriminant validities, with a comparative fit index (CFI) of .917, a goodness-of-fit index (GFI) of .957, a Tucker-Lewis Index (TLI) of .897 and a $\chi^2(64) = 501.81$, $p < .01$. Moreover, the root mean square error of approximation (RMSEA) for the model was calculated. A RMSEA of .074 indicated a good fit of the model to the data as it was lower than the recommended value of .08 (Kline, 2011).

Besides, all the independent variables were mean-centered to avoid multicollinearity concerns (Cohen, Cohen, West, & Aiken, 2003).

RESULTS

Descriptive statistics

The correlations and descriptive statistics are presented in table 1, and supplementary statistics are reported in table 2. The Pearson's correlation coefficients indicate that descendent CEOs are older ($p < .05$), longer tenured ($p < .05$) and more likely to act as the chairman of the board ($p < .05$). However, they do not seem to exert a direct influence on EO and performance. In line with prior studies (Rauch et al., 2009), EO has a strongly consistent relationship with performance ($p < .01$). Conversely, the relationship between environmental hostility and performance is significantly negative ($p < .01$).

Table 1. Means, Standard Deviations, and Correlations

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10
1. Performance	12.040	3.484	1									
2. EO	35.137	11.077	0.278***	1								
3. Second-and-later generation family CEO	.736	.442	-0.046	0.067	1							
4. Environmental hostility	28.761	7.574	-0.223***	-0.155**	0.047	1						
5. Firm age	41.162	26.122	-0.059	0.017	-0.477	-0.036	1					
6. Firm size	39.508	36.404	0.107	0.109	-0.208***	-0.005	0.148**	1				
7. CEO age	53.462	8.830	0.0047	0.080	0.195***	-0.096	-0.020	0.153**	1			
8. CEO tenure	18.822	11.045	0.0023	0.167**	0.197***	-0.021	0.144**	0.039	0.527***	1		
9. CEO duality	.777	.418	-0.018	-0.050	0.204***	0.114	-0.106	-0.133*	0.155**	0.252***	1	
10. Board size	3.771	1.700	0.158**	0.127*	-0.176**	-0.244***	0.183***	0.205***	0.033	0.002	-0.360***	1

* $p \leq .10$. ** $p \leq .05$. *** $p \leq .01$.

Table 2. Supplementary descriptive statistics

Variable	Minimum	Maximum	Mean	Standard deviation
Performance	4	20	12.040	3.484
EO	9	59	35.137	11.077
Environmental hostility	7	42	28.761	7.574
Number of employees	8	225	39.508	36.404
Firm age	2	154	41.162	26.122
CEO age	30	76	53.462	8.830
CEO tenure	1	45	18.822	11.045
Board size	2	10	3.771	1.700
Descriptive				Percentage of observations
Firm industry				
Manufacturing				23.35
Construction				25.38
Wholesale				22.34
Retail				15.23
Services				13.70
CEO Generation				
First generation				43.24
Second generation				34.57
Third-and-later generation				22.19

Regression analysis

Hierarchical linear regression is used to test our hypotheses. Variance inflation factors (VIFs) have been calculated to check for multicollinearity problems in our regression models. All VIF coefficients were lower than 5, thereby confirming that multicollinearity was not a concern (Hamilton, 2013). Furthermore, to check for heteroskedasticity, the data was screened with the help of the Breusch–Pagan/Cook–Weisberg test and the White test. While the former determines whether the estimated variance of the residuals from a regression is dependent on the values of the independent variables, the latter tests whether the residual variance of a variable in a regression model is constant. Both the Breusch–Pagan/Cook–Weisberg test, $\chi^2(1) = 1.27$; $p(\chi^2) = .26$, and the White test, $\chi^2(141) = 140.37$; $p = .49$, revealed that heteroskedasticity was not a concern (Hamilton, 2013).

The results of our regressions are presented in table 3. Model 1 is the baseline model that only takes into account control variables. It explains 5.86% of the variance of the dependent variable. In model 2, EO, descendent CEO and environmental hostility are regressed on perceived financial performance. This model explains 15.80% of the variance in subjective performance. It also indicates that EO ($p < .01$) is positively related to performance while a reversed relationship is found between environmental hostility and performance ($p < .05$).

Model 3 measures the moderating effect of descendent CEO and environmental hostility on the EO-performance relationship. This model explains 18.41% of the variance of the dependent variable. We do not find strong support for hypothesis 1 as descendent CEOs are not shown to negatively moderate the EO-performance relationship. The results also indicate that environmental hostility has a slightly positive moderating effect on the EO-performance relationship ($p < .10$). In model 4, the joint and simultaneous effect of EO, descendent CEO and environmental hostility is considered. About 20.34% of the variance in performance is explained by this model. The three-way interaction between EO, descendent CEO and environmental hostility is found to positively influence performance ($p < .05$), thereby supporting hypothesis 2.

Table 3. EO-performance regressions in Family firms (dependent variable = Perceived financial performance)

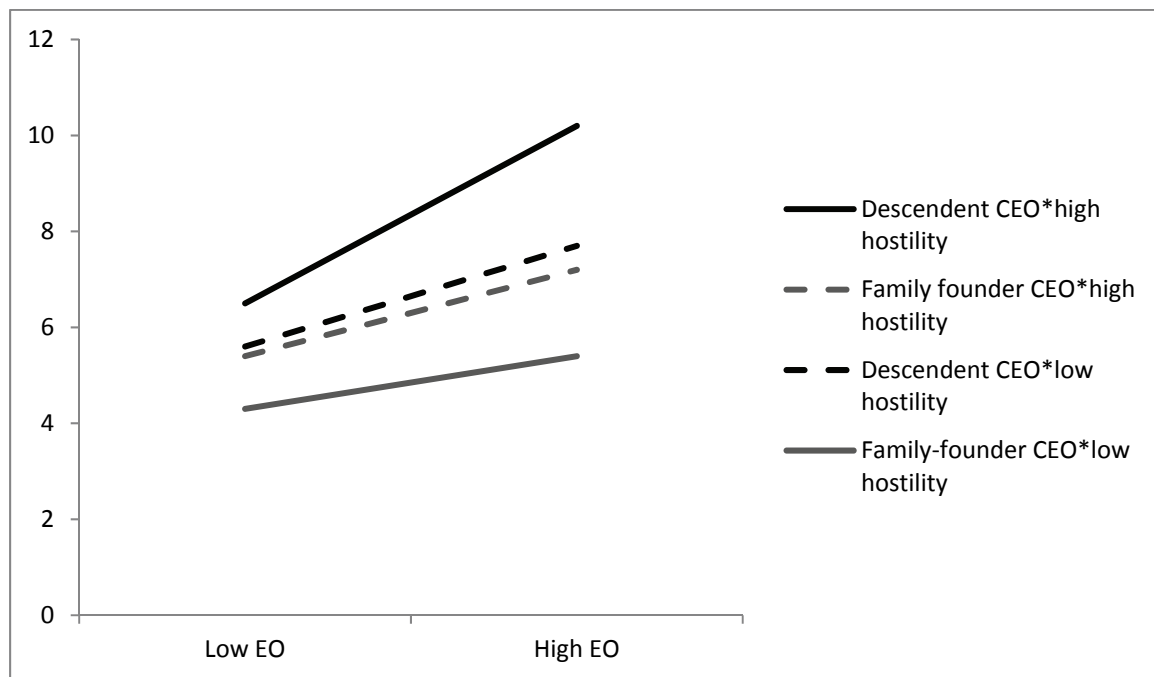
	Model 1	Model 2	Model 3	Model 4
Constant	10.55*** (1.98)	11.39*** (1.90)	11.51*** (1.89)	11.27*** (1.88)
Firm age	-.015 (.01)	-.018* (.01)	-.02 (.01)	-.02 (.01)
Firm size	.01 (.01)	.01 (.01)	.01 (.01)	.01 (.01)
CEO age	-.01 (.03)	-.01 (.03)	-.01 (.03)	-.01 (.01)
CEO tenure	.01 (.02)	-.01 (.01)	-.01 (.01)	-.01 (.02)
CEO duality	.42 (.68)	.55 (.65)	.50 (.64)	.45 (.64)
Board size	.37 (.16)	.23 (.16)	.24 (.16)	.24 (.16)
EO		.08*** (.02)	.08*** (.02)	.08*** (.02)
Descendent CEO		-.67 (.66)	-.68 (.66)	-.40 (.67)
Environmental hostility		-.08** (.02)	-.08** (.03)	-.08** (.03)
EO * Descendent CEO			-.01 (.05)	-.02 (.05)
EO * Environmental hostility			.01* (.002)	.004 (.003)
Descendent CEO *Environmental hostility			.09 (.07)	.10 (.07)
EO* Environmental hostility * Descendent CEO				.01** (.006)
Industry	Yes	Yes	Yes	Yes

R^2	.0586	.1580**	.1841	.2034
ΔR^2	.0586	.0994	.0261	.0193
F-test	1.15	2.61***	2.57***	2.66***
N	195	195	195	195
VIF	2.28	2.32	2.33	2.35

* $p \leq .10$. ** $p \leq .05$. *** $p \leq .01$. Standard errors are reported within brackets. Suppressed category for the firm industry is “services”.

To better illustrate our results, the three-way interactions are plotted in Figure 2 after performing a t-test for single slope (Aiken & West, 1991). Both components of environmental hostility took the value of one standard deviation below (“Low”) and above (“High”) the mean. Figure 2 refers to the moderating effect of different levels of environmental hostility on the EO-performance relationship in family SMEs led by descendent and family-founder CEOs. In accordance with our assumption, the EO-performance relationship is more positive when the firm is led by descendent CEOs in highly hostile environments. The slope of the line is steeper when a descendent CEO is at the helm of the company. At low levels of environmental hostility, both family-founder and descendent CEOs exert a positive effect on the translation of EO into performance. However, the slope is slightly more positive for family firms managed by a family founder.

Figure 2. The moderating effect of family CEO generation on the EO-performance relationship at different levels of environmental hostility.



As robustness check, sales growth over a 3-year period is used as an alternative measure of performance in models 5, 6, 7 and 8. This objective measure of financial performance was selected to support the results obtained with the perceptual measure of performance which might not be independently verified (Lumpkin & Dess, 2001). Moreover, this indicator is frequently used to investigate the relationship between EO and performance (Rauch et al., 2009). Also, in comparison with other growth indicators

such as growth in fixed assets or employees, sales growth represents a more suitable measure of an increase in business activity because it is a reflection of the firm outputs (Casillas et al., 2010). The positive effect of the three-way interaction between EO, second-and-later generation CEO and environmental hostility on performance is confirmed in model 8 of table 4 ($p < .05$), thereby validating the robustness of our results.

Furthermore, we also ran our regressions by differentiating between family founder, second generation and third-and-beyond generation CEOs. Indeed, prior research has pointed out that such an approach better captures the generational effect on the entrepreneurial phenomenon in family firms (Cruz & Nordqvist, 2012). Even though we observed that second and third-and-beyond generation CEOs significantly facilitate the translation of EO into performance in hostile environments, we did not find significant differences between the interaction, parameters related to these two types of family CEOs. It therefore appears that the distinction between family founder and descendent CEOs represents a good dichotomization to explain variations in EO effectiveness.

Table 4. EO-performance regressions in Family firms (dependent variable = sales growth)

	Model 5	Model 6	Model 7	Model 8
Constant	.36 (.24)	.38 (.24)	.40* (.24)	.37 (.23)
Firm age	.00 (.00)	.01 (.01)	.01 (.01)	.01 (.01)
Firm size	-.01 (.02)	-.01 (.01)	-.01 (.01)	-.01 (.01)
CEO age	.01 (.01)	.01 (.02)	.01 (.02)	.01 (.02)
CEO tenure	-.01 (.01)	-.01 (.01)	-.01 (.01)	-.02 (.01)
CEO duality	-.14* (.08)	-.13 (.08)	-.13* (.08)	-.14* (.08)
Board size	-.02 (.02)	-.02 (.02)	-.02 (.02)	-.02 (.02)
EO		.01** (.002)	.01** (.002)	.01** (.01)
Descendent CEO		.01 (.01)	.02 (.08)	.06 (.08)
Environmental hostility		.01 (.01)	.01 (.01)	.01 (.02)
EO * Descendent CEO			.01 (.02)	.01 (.01)
EO * Environmental hostility			-.02 (.01)	-.01 (.01)
Descendent CEO * Environmental hostility			.01 (.01)	.012 (.08)
EO* Environmental hostility * Descendent CEO				.002** (.001)
Industry	Yes	Yes	Yes	Yes
R^2	.0332	.0633	.0729	.2680***
ΔR^2	.0332	.0301	.0096	.1951
F-test	0.63	1.74*	1.89*	2.21**
N	195	195	195	195

VIF	2.28	2.32	2.33	2.35
* $p \leq .10$. ** $p \leq .05$. *** $p \leq .01$. Standard errors are reported within brackets. Suppressed category for the firm industry is “services”.				

DISCUSSION AND CONCLUSION

Findings and contributions

Prior studies have shown that EO is positively related to objective and subjective measures of firm performance (Rauch et al., 2009). Going a step further, several scholars have argued and reported that the EO-performance relationship is contingent on various types of internal and external parameters (e.g. Covin & Slevin, 1989; Grünhagen et al., 2014; Richard et al., 2009; Frank et al., 2010; Wiklund & Shepherd, 2005), especially in the context of family firms (Casillas et al., 2010; Chirico et al., 2011; Schepers et al., 2014). In this article, we ascribed to this view and proposed a configurational approach which supposed that the EO-performance link is affected by the joint and simultaneous influence of both internal and external features (Moreno & Casillas, 2008; Miller, 2011), as well as the family nature of the firm (Casillas et al., 2010). The results obtained confirm the assumption of the configurational approach since they show that the alignment of certain internal and external factors leads to higher levels of EO effectiveness (Wiklund & Shepherd, 2005). In particular, our study reveals that the combination of internal parameters such as the presence of a family-founder or descendent CEO and external characteristics such as the degree of environmental hostility with an entrepreneurial strategic orientation enhance family SME performance.

This research gives insights into the importance of considering the generation of family CEOs as a distinctive demographic characteristic affecting EO effectiveness. In line with upper-echelon theorists who argue that CEO attributes can explain variance in organizational outcomes (Hambrick & Mason, 1984), our results showed that, in comparison to family-founder CEOs, descendent CEOs are more able to turn entrepreneurial initiatives into performance gains in highly hostile environments. An explanation for these findings is that descendent CEOs generally adopt an external cultural orientation that reinforces the proximity of family SMEs with the market needs and constraints (Cruz & Nordqvist, 2012) whereas family-founder CEOs develop an inward orientation that impedes the detection of signals from the external environments (Kelly et al., 2000; Zahra et al., 2004). Moreover, family SMEs led by descendent CEOs can rely on multiple sources of knowledge arising from their higher levels of outside experience and formal education (Stewart & Hitt, 2012) and the increased presence of external board members (Bammens et al., 2008). The combination of these advantages are particularly useful to help descendent CEOs capture and manage the complexity as well as the constraining and changing nature of highly hostile environments.

Surprising enough, it is also interesting to note that EO effectiveness is not influenced by the generational status of family CEOs when environmental hostility is not simultaneously considered in the model. A justification for this could be that the greater attention descendent CEOs pay to the

evolution of the marketplace in order to expand and revitalize the organization is less decisive when the environment is less constraining. In that sense, Figure 2 confirms that the EO-performance relationship is quite similar for family-founder and descendent CEOs operating in environments characterized by a lower degree of environmental hostility.

This study offers several contributions to the entrepreneurship literature and the family business field. First, by focusing on family SMEs, this article contributes to the entrepreneurship literature which asks for more contextualized research on EO effectiveness (Miller, 2011). Second, by analyzing the performance implications of the joint and simultaneous effect of EO, descendent CEOs and environmental hostility, this study answers to a recent call for a deeper analysis of configurations in family firms (Sciascia & Bettinelli, 2013). More precisely, it offer additional insights about the concept of fit between an entrepreneurial strategic orientation, organizational characteristics and environmental variables in the context of family businesses (Casillas et al., 2010).

Third, this research brings new evidence for the application of upper-echelon theory in family firms (Kraicsy, Hack, & Kellermanns, 2014). Particularly, it shows the importance to consider the generational status of family CEO as a specific demographic feature that explains variability in EO effectiveness, an issue that has been overlooked by academicians so far. Moreover, while prior studies have mainly emphasized the role of CEO attributes on strategic formulation (Hambrick, 2007), this article demonstrates that upper-echelon arguments can also be used to clarify the impact of senior executives' demographics on the implementation of strategic choices (Finkelstein et al., 2009).

Fourth, this study adds to the debate on the performance implications of having a family founder at the helm of the company. While it is widely accepted that family firms led by their founder outperform other types of family businesses (e.g. Anderson & Reeb, 2003; Andres, 2008; Sraer & Thesmar, 2007), our findings question this observation by showing that descendent CEOs are more able than family-founder CEOs to derive financial profits from their entrepreneurial initiatives in highly hostile environments. As such, this study stresses the importance to contextualize research on family-founders in order to understand if they represent an asset or a liability (Miller, Le Breton-Miller, & Lester, 2013).

Implications, limitations and future research directions

This article has also practical implications for family owners and CEOs. By challenging the common wisdom about the universal bright side of family-founder CEOs, we suggest family owners to avoid being reluctant to pass the baton onto later generation family CEOs, particularly in environments that require constant renewal and adaptation. The results of this study should also make family-founder CEOs more sensitive to the importance to take into account the evolution of their economic environment in pursuing entrepreneurial initiatives. Indeed, adopting a founder-centric orientation has been shown to reduce the potential benefits that family SMEs are able to derive from EO when environmental hostility

is high. Therefore, family-founder CEOs have to be conscious that successful entrepreneurship require a greater emphasis on the specificities of the marketplace in rapidly changing and constraining environments.

Despite the above-mentioned contributions, this study has some limitations that should be acknowledged in order to stimulate future research. First, cross-sectional data were used in the regression analysis. Consequently, it might be relevant to replicate the models with longitudinal data that takes into account potential variances in dependent and independent variables over time. Second, Covin and Slevin's (1989) scale was used to capture the firm's EO. Although this scale is the most commonly employed in the entrepreneurship literature (Wales, Gupta, & Mousa, 2013), other measurements of EO exist and might be used to deepen our understanding of entrepreneurial intentions in the context of family businesses. Third, data are limited to the Belgian context and are thus liable to national law and culture. Accordingly, future research should be led in other geographic areas in order to take into account the influence of the cultural context on the EO-performance relationship. Engaging in such cross-cultural studies might be an interesting answer to the recent call for more research assessing the impact of cultural attributes on this relationship (Kreiser, Marino, Kuratko, & Weaver, 2013). Fourth, this article only considered the role of environmental hostility on EO effectiveness. Therefore, future research could replicate our configuration by introducing other types of environment. For instance, we can imagine that it would be easier for family founder CEOs to realize the benefits of EO in stable environments in which an external cultural orientation is less necessary (Zahra et al., 2004).

Another area for future research consists in analyzing how specific attributes of family-founder and later generation CEOs such as their backgrounds, experiences and gender affect the EO-performance relationship. For instance, scholars could investigate the impact of CEO tenure on EO effectiveness in family firms led by family founders. In that case, we could imagine that family-founder CEOs with a shorter tenure are beneficial to turn EO into performance gains since they possess specific knowledge about the market and the business they just launched. However, when they tenure increases, they can meet some difficulties to efficiently lead entrepreneurial projects because they are more inclined to adopt an inward orientation that impedes the prospection of emerging opportunities with higher value-creating potential (Kelly et al., 2000).

To conclude, while the present research marks only the emergence of configurational approaches linking EO, family CEO status, and environmental characteristics to family SME performance, it nonetheless represents an important foundation on which future research may build. We therefore hope that this study will encourage scholars to draw on various types of configurations in order to contextualize family firm performance.

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