HOW AND WHEN FAMILY BUSINESSES SUPPORT ENTREPRENEURSHIP?

An exploratory analysis on the relationship among alertness, entrepreneurial orientation and resources in family firms

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Abstract:

The aim of this paper is to analyse the relationship among alertness, entrepreneurial orientation (EO) and familiness in family firms. Family-specific resources can play an important role as a basis to the development of new ventures, both within the family firm as well as outside it, supporting new entrepreneurial projects launched by family members, outside of the family firm. In order to gain a deeper insight into these issues, we selected an expert panel including family managers and owners -or both- from family firms in second or upper generation. We have made an exploratory study in order to unveal the interrelations between alertness, EO and familiness. Results suggest that alertness enhances EO, and in turn EO is relevant for the family resources that are needed to create new ventures by family members.

Keywords: family business, next generations, alertness, familiness, entrepreneurial orientation

1. Introduction

The aim of this paper is to analyse the relationship among alertness, entrepreneurial orientation and family resources, in order to gain understanding about entrepreneurship by family members.

The discovery of entrepreneurial opportunities is a basic aspect in the literature on entrepreneurship (Shane and Venkataraman, 2000). Following to Aldrich and Cliff (2003): "The transformations in the institution of the family have implications for the emergence of new business opportunities, opportunity recognition, business start-up decisions, and the resource mobilization process". The possibility of sharing resources between the family and the business plays key roles in the growth and development of both (Rogoff, Kay and Heck, 2003; Steier, 2007), particularly referring to social networks and knowledge.

In many cases, the entrepreneurial activity of an individual may lead to a family firm, because it is usual to involve other family members to create the firm and to support the growth of the new venture (Chrisman, Chua and Steier, 2003; Steier, 2003). Owners of family firms are aware of the need to maintain this entrepreneurial impulse through the years, as these firms' survival depends on their ability to enter new markets and revitalise existing operations so that new business can be created (Ward, 1987). From this point of view, it can be said that family firms must have an entrepreneurial orientation. On the other hand, Zahra, Hayton and Salvato (2004) consider that some family firms become conservative over time, because of the perceived high risk of failure of business projects and in turn, the risk of destruction of family wealth. In this way, family firms can also follow

conservative strategies because of their organisational cultures, which may evolve from the initial entrepreneurial impulse to a more cautious stance (Lorenzo and Rojas, 2010).

Drawing on the need to maintain the entrepreneurial impulse of the founder of the family firm, despite the trend to preserve the family wealth along the time, it arise the question of the entrepreneurial mindset of the next generations in family firms. A way to measure the entrepreneurial nature in family firms is by means of the construct of alertness (Kirzner, 1979), operationalised by Tang, Kacmar and Busenitz (2012) in a measurable scale. McMullen and Shepherd (2006) suggest that alertness cannot be considered as "entrepreneurial" unless it involves judgment and a movement toward action. In other words, alertness without action does not lead to the continuous renewal of the family firm, thus it is necessary to analyse the influence of alertness on the entrepreneurial orientation of the firm.

Next generations' members have to face the decision about their career intention. In this regard, Zellweger, Sieger and Halter (2011) study the career choice intentions of students with family business background, distinguishing three options: to be successors in their family firms, to be employees outside the family firm, or to be founders of their own firm. Relating these ideas, we propose to analyse the relationship between alertness, entrepreneurial orientation and familiness. We refer to familiness in terms of the family resources that can be used by next generations' members either to renew the family firm by acting as an entrepreneur successor or to create their own company apart from the family firm.

In summary, family members that have developed their capabilities to identify business opportunities (alertness) can reinforce the family firm's ability to detect and/or pursue new profitable opportunities. This alertness can be used both in individual projects and family ventures, drawing upon family resources as social networks, prior knowledge or tangible resources. The new projects of the family members need a set of resources that family and the family firm could facilitate in order to support these entrepreneurial initiatives.

We want to analyse if the more ability to discover opportunities (alertness) can lead to a greater entrepreneurial orientation, and that this more entrepreneurial orientation can be realised into more resources to new projects of members of the family.

We structure the paper as follows: First, we review some issues about alertness, entrepreneurial orientation and familiness, to propose a model that relates the three constructs. Second, we conduct an exploratory analysis to test the accuracy of the model, by using an expert panel that includes second generation members of family firms. A survey was made to assess several items, using the scales by Tang, Kacmar and Busenitz (2012) for alertness, by Covin and Slevin (1989) for EO, and Aldrich and Cliff (2003) and Danes et al. (2008) for family resources. After explaining the method, we discuss the results and end with some conclusions.

2. Theoretical background

As we exposed in the previous section, the aim of this paper is to analyse the relationship between alertness, entrepreneurial orientation and family resources. In this section, we revised the literature about the three elements, in order to examine the relationships between them.

2.1. Alertness

According to Kirzner (1979), alertness is considered as an individual's ability to identify opportunities that are overlooked by other people. This construct plays a key role in order to achieve a better understanding of the process of starting and executing new business initiatives, but it needs a more accurate definition and measure (Tang, Kacmar and Busenitz, 2012).

Venkataraman (1997) suggests that the understanding of how individuals discover and develop opportunities is a key part of entrepreneurship research. In the entrepreneurship literature, the so-called opportunity recognition process includes three differentiated steps (Ardichvili et al., 2003): (a) perception of market needs or underemployed resources; (b) discovery of a fit between particular market needs and certain specified resources (Kirzner, 1973, 1979); and (c) creation of a new fit among these separate needs and resources in

order to create a new business concept (Hills, 1995; De Koning, 1999). In connection with this, Miller (2007) states that the opportunity recognition process involves three activities: perception, discovery and creation (Ramos, Medina, Lorenzo and Ruiz, 2010).

Entrepreneurial alertness is included as a key element into the model proposed by Ardichvili, Cardozo and Ray (2003) to explain the whole process of identification of a business opportunity. This model synthesises the main factors that influence the process of recognition of a business opportunity: entrepreneurial alertness (Kirzner, 1973); asymmetric information and prior knowledge (Shane, 2000); social networks (Barringer and Ireland, 2007); personality traits and the type of opportunity itself (Ramos, Medina, Lorenzo and Ruiz, 2010). According to Ardichvili, Cardozo and Ray (2003), alertness is positively influenced by social networks, that in turn are positively influenced by personality traits –optimism, self-efficacy and creativity- and prior knowledge about specific domain of interest to launch a new venture and industry knowledge. It would be possible to adapt this model to the specific domain of the family firm, by identifying social network with family network, and prior knowledge with the background of a family member as part of a business family. A member of a business family would have some advantages derived of this belonging, accesing to specific resources and business environment background, that is, familiness (Pearson, Carr and Shaw, 2008).

Although it is not a new issue, the construct of alertness remains understudied because of the difficulties that involve its measurement. In order to improve the measurability of alertness, Tang, Kacmar and Busenitz (2012) developed a detailed study that resulted in a

tested scale to assess alertness in a formal and rigorous manner. Tang, Kacmar and Busenitz (2012) point out three distinct elements that form alertness: scanning and searching for information, connecting previously-disparate information and making evaluations on the existence of profitable business opportunities.

2.2. Entrepreneurial orientation (EO)

A number of previous research papers have focused on the overlapping field that is common to entrepreneurhsip and family business (Habbershon and Pistrui, 2002; Aldrich and Cliff, 2003; Rogoff, Kay and Heck, 2003; Anderson, Jack and Dodd, 2005; Nordqvist and Melin, 2010), in order to analyse the entrepreneurial features of family firms.

Two different perspectives can be distinguished within the literature about entrepreneurship in family firms (Casillas, Moreno and Barbero, 2011; Chirico, Sirmon, Sciascia and Mazzola, 2011). Some authors find that family firms have unique conditions to develop an entrepreneurial path (Aldrich and Cliff, 2003; Eddleston, Kellermanns and Sarathy, 2008), whereas other papers point to a more conservative and risk averse profile of family firms (Zahra, 2005; Naldi, Nordqvist, Sjöberg and Wiklund, 2007), remaining unanswered the question about the entrepreneurial or conservative nature of family firms. Chirico, Sirmon, Sciascia and Mazzola (2011) suggest that it is possible that neither of these two perspectives is fully correct. Perhaps it can be owed to the multiple differences among family firms in terms of openness to change, degree of generational involvement and participation of family members or family employees in the formulation of the strategy

(Chirico, Sirmon, Sciascia and Mazzola, 2011).

Within this research domain, entrepereneurial orientation (EO) has become a well-established construct (Nordqvist and Melin, 2010). EO is referred to "the need for organisations to develop and orientation that allows their individuals and teams to engage in entrepreneurial strategy making" (Nordqvist and Melin, 2010; p. 226), that Chirico, Sirmon, Sciascia and Mazzola (2011) explain as the tendency toward product innovation, proactiveness and risk-taking behaviors, following Miller (1983). Product innovation refers to the launching of new products to attend the needs of current or future costumers, by using creativity; proactiveness is related to with anticipation in the markets; and risk-taking behavior reflects an entrepreneurial orientation facing decisions that involve a relevant bet for the firm. These three original dimensions of EO have been extended by Lumpkin and Dess (1996), who added autonomy and competitive agresiveness.

2.3. Familiness

The concept of familiness was developed by Habbershon and Williams (1999). Familiness is defined as "the unique bundle of resources a particular firm has because of the systems interaction between the family, its individual members, and the business" (Habbershon and Williams, 1999; p.11).

According to this, familiness represents the bundle of resources that are distinctive of a firm as a result of the involvement of the owner family. Habbershon, Williams and

MacMillan (2003) point out that familiness may be a source of competitive advantages, and it is related to the perfomance of the firm.

The concept of familiness draws upon the resource-based view of the firm (Pearson, Shaw and Carr, 2008), which considers the firm as a unique set of resources and capabilities, which are at the basis of the strategy (Wernerfelt, 1984; Barney, 1991; Grant, 1991). Because of the different endowment of resources and capabilities of every single firm, changes in the enviroment may impact each company in a different way.

Habbershon and Williams (1999) identify some family business processes as family-specific resources including family culture, which is transmitted to the organisation; firm reputation, based on the family's trajectory across generations; trust and communication among family members; consensus about goals; a greater trust between family members and managers and stakeholders; development of participation; socialisation of new employees; enhanced reputation; unification of beliefs; group structure; enhanced commitment; greater flexibility; and encouraged creativity, only to cite a few examples.

The single existence of family-specific resources in a firm, because of its condition of family firm, doesn't necesarily means an advantage. In this way, the influence of these resources may be positive or negative, thus Habbershon, Williams and MacMillan (2003) distinguish about distinctive familiness and constrictive familiness. Distinctive familiness refers to the case in which family commitment and involvement may be a source of advantages to the family business, whereas constrictive familiness is about the situations in which a family

resource can became something negative to the firm, because of a lack of an adequate management and reposition of specific-family resources (Habbershon, Williams and MacMillan, 2003).

The notion of familiness is considered as a specific construct in the domain of family business research, according to a number of academic studies that delve into familiness (Habbershon and Williams, 1999; Habbershon, Williams and MacMillan, 2003; Craig and Moores, 2005; Pearson, Carr and Shaw, 2008; Holt, Rutherford and Kuratko, 2010).

Familiness can become a key concept in an explicative theory of family business. In this way, familiness can provide an adequate framework in order to identify sources of family firms' advantages, and also to analyse the relationship between advantages and performance of family firms (Habbershon, Williams y MacMillan, 2003). Pearson, Carr and Shaw (2008) indicate that familiness may be a source of competitive advantages, as well as wealth generator and value creator to the firm. Drawing on social capital perspective theory, Pearson, Carr and Shaw (2008) suggest a familiness theory that goes beyond prior studies.

Aldrich and Cliff (2003) and Danes et al. (2008) highlight the importance of human, social and financial resources for family business and entrepreneurship: financial; human; infrastructure; knowledge; dating, relationships and social networking; and lastly, other intangible resources.

2.4. A proposal of a model

Drawing upon the previous sections, we propose a model that relates alertness, EO and family resources, to analyse the links among them.

Attending to the concepts involved in the alertness and EO concepts, it would be expected that family businesses that have developed a high degree of alertness can influence on the entrepreneurial orientation of the family firm. A relevant capability of family business regarding to scanning and searching for information, connecting previously-disparate information and making evaluations on the existence of profitable business opportunities must be reflected in a higher entrepreneurial orientation of the family firm. Conversely, family firms supported by families which are not capable of developing an adequate capacity of alertness, must have a poor entrepreneurial orientation. Thus, we formulate proposition 1 in the following terms:

Proposition 1: Alertness is associated with entrepreneurial orientation in a positive direction

Family resources are not of exclusive utilisation within the family firm. Business families used to allocate part of their resources to family members, in addition to the family firm. In particular, intangible resources, like personal contacts and social networks, information and business background, finance, infrastructures and others, can be used by family members to create their own entrepreneurial ventures, outside of the family firm (Pearson,

Carr and Shaw, 2008). In this way, Anderson, Jack and Dodd (2005) point out that business families use to take resources from their families in order to launch their entrepreneurial initiatives. Moreover, EO facilitates the development of new projects into family businesses. Therefore, an increased entrepreneurial orientation of the family business should increase the resources available to family members. In connection with this, we propose the following:

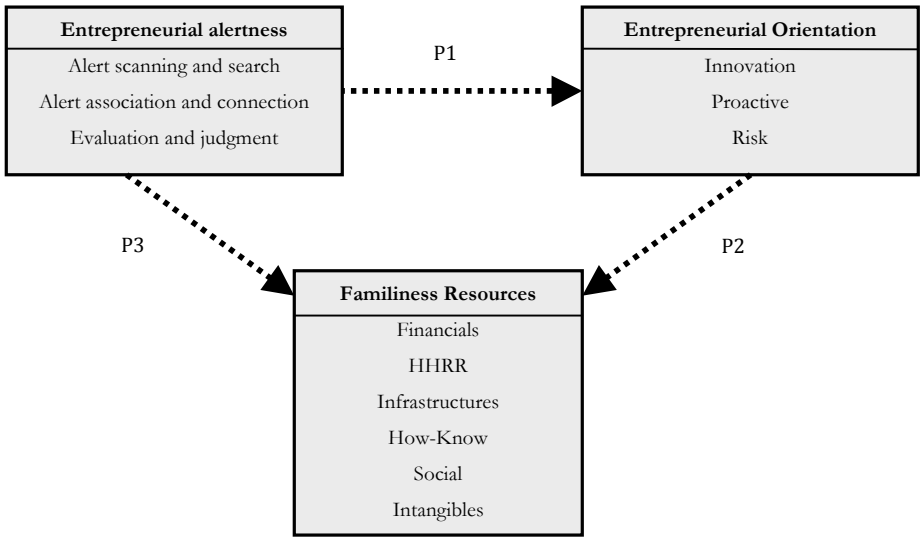
Proposition 2: Entrepreneurial orientation will enhance familiness to the next generations

Following the prior arguments, it would be expected to have a direct and positive relationship between alertness and resources. According to Ardichvili, Cardozo and Ray (2003), alertness is a necessary condition for the success of the opportunity identification triad: recognition, development, and evaluation. Once identified an opportunity, resources are needed in order to exploit it. Thus, the presence of alertness must enhance the allocation of appropriate resources within the family firm and the family members. As a consequence, we formulate a new proposition as follows:

Proposition 3: Alertness is positively related with family resources

In the next section, we realise and discuss an exploratory study in order to test the links among familiness, alertness and entrepreneurial orientation, which can be reflected in the propositions exposed above.

Figure 1. Casual relations model.



3. Method

We will begin this section by describing the target population, then the method used to obtain information and, finally, we will explain the variables used and the methods.

The study population was composed by an expert panel of members of Spanish family firms of average size who belong to various industries. Some 75% of the companies were second generation, 21.9% were third generation, and 3.1% were fourth generation or more. The panel include family managers and owners -or both- from these family firms. The information was gathered by using an online questionnaire which was sent through e-mail. This method enabled us to obtain accurate and completed questionnaires and a high response rate. We sent a total amount of 154 e-mails and achieved a response rate of 23% (we obtained 32 completed questionnaires). The questionnaire has been designed following a review of the existing literature concerning theoretical approaches to the problem. Thus, we have incorporated measures that were validated in topic literature. The questionnaire (on a five point Likert scale) was then pre-tested to assess its practical operation. No reason for any further modification was found in this pre-test and so we developed the final questionnaire. The respondent were family members of second and third generations of business families.

Measurement of variables

Entrepreneurial alertness. To measure this construct, Tang, Kacmar and Busenitz (2012) scale has been used. This scale was composed using three dimensions. First, "Alert scanning and search", which allows entrepreneurs to be persistent and unconventional in

their attempts to investigate new ideas (Busenitz, 1996). Besides the scanning and search dimension it helps lay the foundation for developing cognitive frameworks. Second, "Alert association and connection" refers to the capability of making logic extensions from information that previously has been obtained. It accounts for how information is used. Association allows an individual to consider multiple possibilities to make unique connections. Rather than minimising distractions and focusing on the relevant details of multiple pieces of information, association enables individuals to connect to the big picture so that distant and unprecedented connections can be made (Lehrer, 2008). And thirdly, "Evaluation and judgment", Tang et al. (2012) highlight that an important part of entrepreneurial alertness is the aspect of judgment and thus extend the boundaries of alertness by adding this third dimension.

Entrepreneurial Orientation. The scale of Covin and Slevin (1989) has been used in order to study the entrepreneurial orientation of the firms. This scale use three dimensions, "Innovation", "Proactive" and "Risk".

Familiness resources. We have used several items in order to measure this construct. The study by Aldrich and Cliff (2003) and Danes et al. (2008) highlights the importance of human, social and financial resources for family business. Thus we have used a scale composed by six dimensions: financial resources; human resources; infrastructure; knowledge; dating, relationships and social networking; and lastly, other intangible resources.

Method of estimation

We used causal analysis with covariance structures (specifically structural equation models) to analyse the relationships between entrepreneurial alertness, entrepreneurial orientation and familiness resources. According to Johansson and Yip (1994) as each structural sequence in the casual system is estimated separately, very small sample sizes can be accepted. We have used Partial Least Squares (PLS), a technique whose aim is to predict dependent variables. As the number of observations of our work is relatively small, with variables with an unknown distribution, the PLS technique is it the most accurate. SPSS v18 and SmartPLS 2.0 were used for the estimates.

4. Results

The mean and standard deviation and correlations of the measured items on the questionnaire are presented in Table 1. As can be seen, the results show a strong correlation within each construct.

Table 1. Items. Correlation, Means and STDEV.

		Mean	St Dev.	1	2	3	4	5	6	7	8
	Scanning										
1	Scan1	4.10	.995								
2	Scan2	3.37	1.245	.582***	1						
3	Scan3	3.37	1.377	.652***	.502***	1					
4	Scan4	3.83	1.020	.595***	.403**	.364**	1				
	Association										
5	Asoc1	3.70	.750	.504***	.307*	.411**	.474***	1			
6	Asoc2	3.90	.759	.379**	.223	.333*	.334*	.733***	1		
	Evaluation										
7	Eval1	3.97	1.033	.574***	.385**	.615***	.485***	.387**	.391**	1	
8	Eval2	3.93	.716	.583***	.425**	.533***	.480***	.654***	.620***	.652***	1

9	Eval3	3.82	.819	.388**	.269	.442**	.128	.587***	.414**	.401**	.672***	1															
	Innovation																										
10	Inno1	4.43	.568	.226	.401**	.363**	.010	.316*	.264	.202	.400**	.474**	1														
11	Inno2	4.07	.868	.431**	.487***	.383**	-.065	.297	.220	.272	.431**	.546***	.498***	1													
12	Inno3	4.00	1.174	.502***	.472***	.363**	.144	.392**	.310*	.284	.436**	.457**	.517***	.778***	1												
	Proactive																										
13	Proac1	4.14	.803	.316	.506***	.305	.038	.315	.035	.188	.295	.405**	.586***	.673***	.773***	1											
14	Proac2	3.97	1.033	.238	.439**	.469***	.191	.298	.171	.128	.296	.342*	.554***	.464***	.654***	.824***	1										
15	Proac1	3.63	1.098	.224	.354*	.457**	.036	.155	.203	.232	.334	.202	.595***	.424**	.481***	.670***	.779***	1									
	Risk																										
16	Risk1	3.70	.988	.628***	.513***	.591***	.496***	.666***	.419**	.699***	.643***	.619***	.362**	.507***	.565***	.600***	.497***	.404**	1								
17	Risk2	4.10	.662	.141	.205	.261	.026	.619***	.364**	.106	.499***	.606**	.614***	.408**	.355*	.537***	.408**	.432**	.522***	1							
18	Risk3	3.77	1.006	.162	.346	.238	.028	.452**	.330*	.191	.278	.425**	.605**	.334*	.438	.574***	.589***	.513***	.447**	.502***	1						
	Resource																										
19	Financial	3.19	1.524	.273	.506***	.525***	.066	.090	.069	.295	.264	.436**	.257	.490**	.450**	.392	.471**	.551***	.441**	.200	.396**	1					
20	HHRR	3.19	1.497	.561***	.494**	.289	.094	.259	.177	.224	.269	.341	.261	.468**	.619***	.393	.202	.270	.423**	.204	.428**	.509***	1				
21	Know-How	3.23	1.557	.291	.549***	.217	.047	.228	.074	.145	.223	.431**	.187	.448**	.529***	.443**	.340	.292	.391*	.228	.489**	.773***	.649***	1			
22	Infrast.	3.54	1.421	.257	.252	.123	-.186	.171	.327	.058	.076	.272	.268	.377	.531	.325	.293	.381*	.236	.094	.550***	.486**	.758***	.629***	1		
23	Social	3.62	1.329	.272	.322	.223	-.062	.209	.365*	.071	.142	.189	.342	.262	.387	.257	.313	.458**	.243	.133	.514***	.512***	.702***	.567***	.877***	1	
24	Intangible	2.72	1.487	.323	.471**	.185	.048	.224	.132	-.108	.130	.243	.292	.482**	.612***	.494**	.578***	.482**	.325	.302	.522***	.560***	.735***	.735***	.716***	.716***	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	

*p < .10. **p < .05. ***p<.01.

To check the reliability of the Cronbach's alpha test measures were performed, giving values 0.72. Exceed all constructs, one having resource Cronbach's alpha of 0.924.

Since the sample was very small, we decided to reduce the variables considered by a factorial, principal components analysis with a single extraction for: Scanning, Association, Evaluation for the Alertness construct; and Innovation, Proactive and Risk for EO.

Scanning (4 Items), Cronbach's alpha: 0.800; Factorial Extraction of variance 64.05%.

Association (2 Items), Cronbach's Alpha: 0.846; Extraction of variance 86.67%

Evaluation (3 Items), Cronbach's Alpha: 0.779; Extraction of variance 71.18%.

Innovation (3 Items), Cronbach's Alpha: 0.795; Extraction of variance 73.51%.

Proactive (3 Items), Cronbach's Alpha: 0.897; Extraction of variance 81.69%.

Risk (3 Items), Cronbach's Alpha; 0.720; Extraction of variance 66.07%.

Kaiser-Meyer-Olkin (KMO) varies between 0.75 and 0.6, whcih offers a medium result. Bartlett (p-value) is 0.000, which are significant and extraction maximises variance extracted.

Assessment of the measurement model

To assess the measurement model, internal consistency, convergent validity and discriminant validity were utilised. In a first step, we verify the validity of the scales and the reliability of the measurement model (inner model). We analyse whether the theoretical concepts are properly measured by the observed variables. This analysis is done regarding the validity attributes (if you really are measuring what you want to measure) and reliability (if done in a stable and consistent way). To this end we proceed to calculate the individual reliability of each item, the internal consistency or reliability of the scales, the analysis of the average variances extracted (AVE), and discriminant validity.

The strict criteria to follow means to accept a flag as part of a construct is that it possesses a greater load to 0.7. This implies that the shared variance between the construct and its indicators is greater than the error variance (Carmines and Zeller, 1979).

Internal consistency is assessed by using loading values of indicators (0.5) and construct reliability is estimated by using the composite reliability estimate where 0.7 signifies good reliability (Hair et al., 2010).

The loadings for variables measuring ALERTNESS are all above 0.84. The lowest loading is for ALERTNESS is ASSOCIATION (0.815).

The loadings for variables measuring EO are all above 0.89. The lowest loading is for EO is PROACTIVE (0886).

The loadings for variables measuring RESOURCES are all above 0.85. The lowest loading is for RESOURCES is financial (0.764).

All constructs exceed 0.7 and 0.8 composite reliability, as shown in Table 2. According to Fornell and Larcker (1981), average variance extracted (AVE) can be used to examine convergent validity and to examine discriminant validity.

By using AVE the convergent validity is assessed. AVE attempts to measure the amount of variance that a latent variable (LV) component captures from its indicators relative to the amount due to measurement error. It is recommended that the AVE should be greater than 0.50, that is 50% or more variance of the indicators should be accounted for (Chin, 1998; Fornell and Larcker, 1981). For all three constructs considered convergent validity is above 0.7.

Table 2. Construct reliability.

Overview	AVE	Composite Reliability	Cronbach's Alpha
ALERTNESS	0.7277	0.889	0.8126
EO	0.7943	0.9205	0.8717
RESOURCES	0.7167	0.9381	0.9207

In the PLS analysis, to determine that a construct has discriminant validity it should share more variance with their indicators than with other constructs in the model (Barclay et al., 1995). Here, Fornell and Lacker (1981) propose to use the average variance extracted (AVE) meaning that its value should be greater than the squared correlation between the construct and the other to form the pattern. To operationalise this idea a reverse operation is performed, the square root of AVE indicator is calculated and it is determined whether there is discriminant validity based on this result is higher or lower than the correlations with the rest having constructs respectively.

In this study, the square root of AVE for ALERTNESS is 0.8531; EO is 0.8912 and RESOURCES is 0.8466.

Table 3. Discriminant Validity (Latent Variable Correlations and the square root of AVE).

	ALERTNESS	EO	RESOURCES
ALERTNESS	0,8531	-	-
EO	0,6092	0,8912	-
RESOURCES	0,3387	0,5621	0,8466

Second criterion of discriminate validity is an indicator's loading with its associated latent construct should be higher that its loading with all the remaining constructs, table 4 this case.

Table 4. Cross loading.

	ALERTNESS	EO	RESOURCES
Scanning	**0.8473**	0.5053	0.371
Association	**0.8151**	0.4833	0.2285
Evaluation	**0.8948**	0.5674	0.2599
Innovation	0.5321	**0.8964**	0.5342
Proactive	0.3873	**0.8862**	0.4787
Risk	0.6687	**0.891**	0.4874
Financial	0.3402	0.5021	**0.7644**
HHRR	0.3802	0.4655	**0.8497**
Know-How	0.2053	0.425	**0.8665**
Infrastructures	0.3067	0.4739	**0.8659**
Intangible	0.2272	0.5522	**0.8805**
Social	0.2539	0.4015	**0.8472**

Assessment of the structural model

One of the advantages of PLS-SEM for non-normal data and small sample size is that it does not make distributional assumptions (Chin, 1998). To evaluate a PLS-SEM model, instead of evaluating a model on covariance fit, evaluation on PLS-SEM model should apply

prediction-oriented measures that are nonparametric (Chin, 1998). The explanatory power of the model is evaluated through the explained variance (value of *R*2) of the dependent variables, these are both higher than the minimum required level of 10% suggested by Falk and Miller (1992).

Table 5 and Figure 2 show the assessment of the structural model.

The R-Squared for the endogenous variables R2 (EO) = 0.371 and R2 (RESOURCES) = 0.316.

The path coefficient for ALERTNESS -> EO is 0.6092***, the relationship is significant (p < 0.001). Thus, Proposition 1 is accepted.

The path coefficient for EO -> RESOURCES is 0.567***, the relationship is significant (p < 0.005). In consequence, Proposition 2 is accepted.

The path coefficient for ALERTNESS -> RESOURCES is -0.0059, the relationship is not significant. This means that Proposition 3 is rejected.

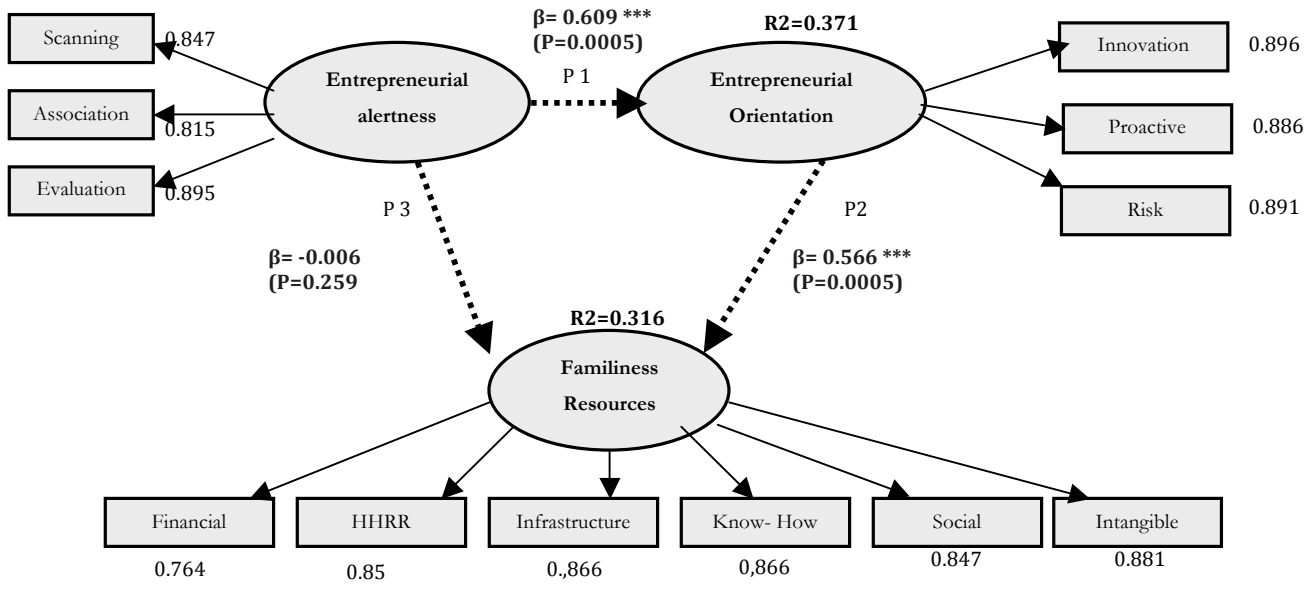
Table 5. Path Coefficients (β, T-Values, p).

	β	**T Statistics**	**p**
EO -> RESOURCES (R2=0.316)	0.5657***	3.8756	0.0005
ALERTNESS -> EO (R2=0.371)	0.6092***	8.6884	0.0005

ALERTNESS -> RESOURCES	-0.0059	0.0343	

* p < 0.10; ** p < 0.05; *** p < 0.01.

Figure 2. Assessment of the structural model.



5. Discussion

In this paper, we tried to shed light about the relationships among alertness, entrepreneurial orientation and family resources. Instead of the limitations of the reduced number of cases analysed in the expert panel, the proposed model tested for structural equations modelling explains the links between these three elements.

The model shows how alertness, through its three dimensions –scanning and searching for information, connecting seemingly-divergent information and making evaluations on the existence of profitable business opportunities- influences entrepreneurial orientation (Proposition 1). This favourable impact of alertness on entrepreneurial orientation is also reflected on the three dimensions analysed: innovation, proactivity and risk-taking, with similar and high scores.

As expected when Proposition 2 was formulated, there is a positive link between entrepreneurial orientation and family resources, according to the results. The impact of OE on family resources is high in all type of resources considered, which includes financial, human, infrastructure, know-how, social and intangible resources. The survey to the members of the expert panel shows that business families support new entrepreneurial ventures of family members, in a significant number of cases. Thus, the entrepreneurial orientation of the firm has an impact on family resources that can be used for family members ventures.

Finally, results are no significant for Proposition 3, so it is not possible to support any kind of relationship between alertness and family resources in a direct way. Nevertheless, the

model reflects a vicarious connection between alertness and family resources, by way of entrepreneurial orientation.

6. Conclusion

It is known that families support entrepreneurial initiatives of the members of the family, playing a role as business angels or providing human resources from the family. In addition to this, established businesses can support entrepreneurial ventures created through spin-offs. In the case of family businesses, it is possible to observe both dimensions. But not all family businesses behave in the same way.

The discovery and exploitation of entrepreneurial opportunities is a central theme for entrepreneurship and family business research. This study explored these relationships from the alertness and entrepreneurial nature of the family business, through its entrepreneurial orientation. A conclusion is that the more entrepreneurial orientation in the family business, the more supporting resources can be allocated to new entrepreneurial projects by family members.

New generations of businesses families can take the decision to join the family business, starting their own businesses, or take other paths.

In business families, the credibility to start a new business, the desirability to own a business, the knowledge and financial resources can pass across generations. However, the

real legacy to the next generations may be something more important than these, which is the ability to discover and exploit business opportunities. This legacy may be transmitted through the entrepreneurial orientation, but in order to happen, EO must be present in the family business.

In this study, we used an expert panel to analyse the relationships among alertness, entrepreneurial orientation and family resources, in an exploratory analysis. Instead of the reduced number of cases, the proposed model shows strong links between alertness and EO, EO and family resources, but there are no significant results regarding alterness and family resources in a direct link.

We are aware of the limitations of the expert panel in order to approach the interrelations between these elements, but the results of the study can be a starting point in order to interpret how alertness, EO and family resources are related among them.

Beyond this exploratory analysis, the study would go ahead by using the F-PEC scale in order to measure familiness in the family firms that participate in the panel. In addition to this, a more accurate assessment of entrepreneurial orientation would be realised to confirm the results of this study. Besides, this study can be extended study to a significant sample of family businesses.

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Appendix. Measures and 5-point Likert scales

Entrepreneurial alertness (Adapted from Tang et al., 2012)
In my family business. Was found that (1) indicates totally disagree and (5) strongly agree. No reply to any of the statements, please tick DK / NA (Do not know, no answer)

	(1) totally disagree			strongly agree (5)		
Alert scanning and search	1	2	3	4	5	DK / NA
We are always looking for new information	☐	☐	☐	☐	☐	☐
We actively participate in industry associations	☐	☐	☐	☐	☐	☐
Usually attended fairs and congresses	☐	☐	☐	☐	☐	☐
We receive information from magazines and other specialized sources	☐	☐	☐	☐	☐	☐
Alert association and connection						
We connect seemingly unrelated information	☐	☐	☐	☐	☐	☐
We connect various information from various sources	☐	☐	☐	☐	☐	☐
Evaluation and judgment						
We are able to develop more ambitious projects, although there we take greater risk	☐	☐	☐	☐	☐	☐
We evaluate business opportunities that detect	☐	☐	☐	☐	☐	☐
We take advantage of business opportunities	☐	☐	☐	☐	☐	☐

Entrepreneurial Orientation (Adapted from Covin and Slevin, 1989)

Since I am in the family business, I have supported and / or promoted the family business was found that (1) indicates totally disagree and (5) strongly agree

	(1) totally disagree			strongly agree (5)		
	1	2	3	4	5	DK / NA
Innovation						
More innovative and technologically advanced	☐	☐	☐	☐	☐	☐
Develop new product lines and services similar to existing	☐	☐	☐	☐	☐	☐
Develop new product lines and services different from previous	☐	☐	☐	☐	☐	☐
Proactive						
Be more proactive than reactive to the initiatives of competitors	☐	☐	☐	☐	☐	☐
Take the lead over competitors by introducing new products, services and technologies	☐	☐	☐	☐	☐	☐
Compete more aggressively	☐	☐	☐	☐	☐	☐
Risk						
Develop more ambitious projects, although it has to take more risk	☐	☐	☐	☐	☐	☐
Analyze your environment more actively to achieve their goals	☐	☐	☐	☐	☐	☐
Be more aggressive in actively seeking potential business opportunities	☐	☐	☐	☐	☐	☐

Familiness Resources (Adapted from Aldrich and Cliff (2003) and Danes et al. (2008))

In recent years, from family and / or family business we have supported other family members to develop their own business projects, providing the following resources:

It is considered that (1) indicates that there has been no contribution, and (5) very important contribution

	1	2	3	4	5	DK / NA
Financial Resources	☐	☐	☐	☐	☐	☐
Human resources	☐	☐	☐	☐	☐	☐
Infrastructure (physical, local, computer systems, etc.)	☐	☐	☐	☐	☐	☐
Knowledge	☐	☐	☐	☐	☐	☐
Dating, relationships, social networking	☐	☐	☐	☐	☐	☐
Other resources (patents, intangible ...)	☐	☐	☐	☐	☐	☐