SOME OBSTACLES TO INNOVATION IN FAMILY FIRMS

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ABSTRACT:

In an increasingly complex environment, which is characterized by uncertainty, family firms have to face the challenge of surviving in the long run while, maintaining their distinctive features. Innovation can be a way to achieve the goals of family firms. Thus it might be a main characteristic in this kind of companies. However, according to the academic literature, innovation is not one of the attributes that are most cited in reference to family firms. In order to measure the innovative condition and the obstacles to innovation regarding family firms, we use some scales from the literature, which are applied to a sample of Spanish family firms.

Keywords: family firms, innovation, barriers

1. INTRODUCTION

In order to survive in an increasingly complex and competitive environment, organizations have to innovate to achieve their goals regarding growth and performance (Hamel, 2000; Madrid-Guijarro, García and Van Aucken, 2009). The need for innovation to improve their strategic position is also extended to family firms (McCann, Leon-Guerrero and Haley, 2001).

Some researchers state that the family-owned nature of these businesses has an effect on different issues such as resource management (Sirmon and Hitt, 2003), incentives, or structures, among others (De Massis, Frattini, Pizzurno and Cassia, 2015). Therefore, the family-owned nature of the firm influences the processes of innovation (De Massis, Frattini and Lichtenthaler, 2013). This effect can be shown in both, a positive and a negative way, at the same time. On the one hand, this familial ownership can facilitate flexibility, a customer-oriented approach, a focus on quality and community involvement (Carney, 2005). On the other hand, family ownership may result in a greater complexity, which can be a result of processes of succession or a lack of resources, training, skills or knowledge (Ibrahim, Angelidis and Faramarz, 2008).

Innovation is not within the most studied issues of the family firms (De Massis et al., 2015). Some researchers point to the need for more research to redress this knowledge gap, and specially to improve the knowledge about the approach taken by family businesses in this area (Lodh, Nandy and Chen, 2014). In particular, there is a lack of research about the kind of barriers to innovation that are specific to family firms, with a few exceptions, like the studies by Zahra, Donald and Larrañeta (2007) and Konig, Kammerlander and Enders (2013).

Drawing upon the features of family firms, according to the academic literature (Sirmon and Hitt, 2003; Gedajlovic, Carney, Chrisman and Kellermanns, 2012), we realize that family firms must be innovative in order to reach this main goal, keeping the firm within the family across generations. Nevertheless, there is a long way between this “must be” and the reality of family firms, because of some obstacles to innovation that reduce or even impede the renewal of firms. We analyse the relationship between innovation and some variables that can affect the innovative character of family firms.

The paper is organized as follows: in the next section, we analyse some former work about innovation and family firms, from which we derive some hypothesis. These hypotheses are tested in the method section, by applying a factor confirmatory analysis and regression analysis to a sample of 204 Spanish family firms. Finally, we discuss the results and we offer some conclusions and limitations of the work.

2. THEORETICAL FRAMEWORK

In this section, we first introduce the idea of innovation, then we state a definition of family firm. After that, we review of some features that are common to family firms, with the aim of analyse the innovative character of family firms, and the possible constraints to innovation in this kind of companies.

According to Nueno (2004), the essence of innovation is creative destruction (Schumpeter, 1934), intended as a continuous revision of every issue in the firm, so as to keep it in a permanent update condition. This way, innovation is identified with a permanent state of renewal in the firm. Innovation can be considered as knowledge creation (Nueno, 2004), which can be based on new knowledge or on the novel reconfiguration of existing knowledge (Schumpeter, 1934; Drucker, 1985). In order to create value to firms, innovation must be transformed into new products, services or processes (De Massis et al., 2015). Varis and Littunen (2010) refer to innovation as the elixir of life for businesses, irrespective of an organisation's size or other attributes, since a company's growth, success and survival depend on its ability to innovate continuously over time, especially in unstable and uncertain markets.

Despite of the growing academic literature about family firms, there is no a universally accepted concept of what a family firm is (Astrachan, Klein and Smyrnios, 2002). The definition of family firm is still a matter of discussion among researchers (Sharma, Melin and Nordqvist, 2014). Chrisman et al (2005) argue that scholars disagree about a unique definition of family firm, although there is a growing convergence between different approaches to the concept. Chua, Chrisman and Sharma (1999; 25) referred to a family firm as "a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families".

The different ways to address the concept of family firm lead to point to three main features to characterize it (Gallo, 1985; Litz, 1995; Chua, Chrisman and Sharma, 1999; Astrachan, Klein and Smyrnios, 2002): ownership, in terms of a majority of decision rights about the strategic issues of the firm; family involvement on management and governance, which requires at least a member of the family as manager or director of the firm; and the aim to maintain the firm within the family over time, passing the baton to the next generations.

In the absence of a unified academic definition of family firm, there is a concept of what a family firm is, developed by European Family Businesses, an organization created in 1997. European Family Businesses is the federation of national associations representing long-term family-owned enterprises, which includes small, medium-sized and larger companies from twelve European countries. According to European Family Businesses, a firm, of any size, is a family business, if (European Family Businesses, 2015):

> 1 - The majority of decision-making rights are in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children's direct heirs.
>
> 2 - The majority of decision-making rights are indirect or direct.
>
> 3 - At least one representative of the family or kin is formally involved in the governance of the firm.
>
> 4 - Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25% of the decision making rights mandated by their

share capital.

The literature about family firms includes different ways to determine when a company can be considered as a family firm (Astrachan, Klein and Smyrnios, 2002), including a family firm identifying as such (Casillas et al. 2010; Davis and Harveston 1999; Westhead and Howorth 2006), so it is necessary to explain our criteria to consider a firm as a family firm. For the purpose of this paper, we consider that a firm is a family firm if it matches the following conditions:

- the firm is owned by a family which has more than 50% of the capital
- there are members of the family in charge of management duties or as directors, or both
- the firm considers itself a family firm

Once established the notion of family firm for the purpose of this paper, we review the literature in order to develop the features that made a family firm a different kind of firm (Sirmon and Hitt, 2003; De Massis et al., 2015), and how these distinctive characteristics can influence their innovative orientation. Gedajlovic, Carney, Chrisman and Kellermanns (2012) summarize some of these features of family firms, which include, among others:

- frugality in the use of resources and control of the general costs of the firm (McConaughy, Walker, Henderson and Mishra, 1998; De Massis et al., 2015)

- long-run orientation in terms of investments in order to fulfill the purpose of continuity of the firm under the family ownership along generations (Miller and Le Breton-Miller, 2005)
- organizational culture oriented towards long-term results (Dyer, 1988) that may reinforce innovation, entrepreneurial risk taking, and business opportunity recognition (Zahra, Hayton and Salvato, 2004)
- careful and effective management of financial resources that are mostly derived from self-financing, due to the refusing of other capital sources like sharing equity with external partners or debt market (Anderson and Reeb, 2003; Sirmon and Hitt, 2003; De Massis et al., 2015)
- reputation and social accountability orientation (Berrone, Cruz, Gómez-Mejía and Larraza-Kintana, 2010)

All these distinctive features lead to relevant differences with non-family firms in terms of leadership and expectations of the shareholders. According to Carney (2005), in the case of family firms, the concentration of ownership and control in the same people (founder or successors) leads to parsimony, personalism and particularism. As a consequence, the power and the authority are exerted in family firms in a more individual way, that fosters the pursuit of non-economic goals besides of economic goals (De Massis et al., 2015). This individual exercise of power is based on ownership, in case of founders, or family agreement and trust, in case of successors (Schoorman, Mayer and Davis 2007).

In a family firm, the person in charge is the founder, in the first generation, and the successor(s) in the next generations. The founder will rule the firm until he/she decides his/her retirement. The founder is also the main shareholder, so he/she can concentrate all the power regarding strategic decision making (Neubauer and Lank, 1999). Because of this, his/her tenure is expected to be longer than it would be in non-family firms, in many cases up to the end of his/her professional life. Thus, it is usual to meet founders that spent thirty or more years as CEO of their firms (Gallo, 1985).

When CEOs and top managers are close to retirement age, firms tend to renew their executive teams replacing them by other managers that are generally ten o fifteen years younger than their predecessors. Family firms usually renew their CEOs looking for next generation members, which are twenty-five of thirty years younger than their predecessors. The successor can be a person, relative or not, or a team composed by two or more brothers or cousins, whom will lead the company to the future. This tenure in office will last until the replacement of the management and governance by the next generation (Cabrera, De Saá and García, 2001).

In doing so, family firms use to renew their leaders passing the baton to a younger CEO. Therefore, family firms in second and next generations can be ruled by a successor who could access the main executive responsibility at an earlier age than in non-family firms. In this way, the person in charge of the family firm can stay at the top of the company during a long tenure (Moores, 2009).

Once the family agrees who will be the successor, he/she/they can be in a situation that is very different from that of the leaders in non-family firms. Apart from the length of the mandate, there is another significant difference regarding the patient capital of family firms (Sirmon and Hitt, 2003). Patient capital refers to a more careful management of financial resources and longer time horizons concerning the investments, so as to perpetuate the firm for the next generations of the family (Gallo and Vilaseca, 1996; McConaughy and Phillips, 1999). Payback requirements tend to be less demanding as well (Arregle, Hitt, Sirmon and Very, 2007). Family shareholders are more committed with the firm, because they agree with the maintenance of the firm within the family, hence they are not driven by short-term results, but the long-term growth of the firm. According to Sirmon and Hitt (2003), firms with patient capital are capable of pursuing more creative and innovative strategies. As a consequence, family firm CEOs can focus on the long run, because they will not suffer a great pressure from shareholders in order to achieve significant short-term results.

Because of the length of the tenure and the patient capital that are common in family firms, it would be expected that family firms will be oriented to innovation as a way to accomplish their ultimate goal: to keep the ownership of the firm across generations. There is a need to reinvent the company to hold a place in the future. Business families must be aware of the need for renew the firm to maintain the competitive impulse across generations. To achieve this goal, innovation is needed.

Innovation is a process that requires time to reach the expected results. Innovation means a renewal of the processes, products or services, in order to develop new ones that replace the current ones, which need some time to give effective results.

Therefore, we can infer that family firms present adequate conditions to develop innovation processes, because of the strong position of the CEO, both in case of founder or next generation in charge of the firm. As we noted above, this strength stems from the quality of main shareholder of the CEO, in first generation firms, or the strong support of the CEO by familial shareholders in the second or next generations. Long-term orientation in family firms facilitates the availability of time to the proposal and implementation of innovation processes. The particular features of a family firm must lead to a more innovative kind of company, in order to achieve its ultimate goals, and it is also needed that this innovative orientation will be transferred to the next generations (Casillas, Moreno and Barbero, 2010).

Nevertheless, this reasoning is not supported by research about innovation in family firms, which offers mixed results. Craig and Moores (2006) emphasized that family businesses attach great importance to innovation as a key component in their strategy, even likening their willingness to innovate to that of companies operating in advanced technology sectors. In this regard, Niehm, Tyner, Shelley and Fitzgerald (2010) suggested that prior knowledge of technology by the family business management team is conducive to innovation. In both of these studies, the authors concluded by indicating the importance of innovation to the success of family businesses, even for those operating in more traditional sectors. They also stated that family businesses are not necessarily more averse to risk or less innovative than non-family businesses, and over time may even become more innovative and aggressive in their markets than non-family businesses (Aronoff, 1998). Furthermore, Lodh et al. (2014) highlighted that the impact of family ownership on innovation productivity is positive, providing empirical evidence for their arguments. The authors argue that Indian firms, which are mainly family ownership, may perform well with respect to innovation. In this context, Kraus et al. (2012) add several aspects and state that organisational innovation in family firms seemed to be less important than managerial innovation.

On the other hand, other studies show that some family firms became more conservative along time, since they do not want or cannot face the risks that are associated to entrepreneurial activities (Autio and Mustakallio, 2003; Zahra, Hayton and Salvato, 2004). Family firm founders, who desire to built a lasting legacy, can became more conservative about decision making because of the important risk of failure of a new entrepreneurial venture, as well as the risk of destruction of familial wealth (Sharma, Chrisman and Chua, 1997; Zahra, Hayton and Salvato, 2004).

Memili, Eddleston, Zellweger, Kellermanns and Barnett (2010) point that family firms are often viewed as reluctant to face risks (Hall, Melin and Nordqvist, 2001; McAdams et al. 2009), as well as unwilling to invest in new ventures (Cabrera et al. 2001) or induce change (Levinson, 1987). This way, Ward (1997) and Hall et al. (2001) state that the innovative orientation of family firms tends to be reduced in the later stages of the business life cycle because of established traditions and resistance to changes (Kellermanns, Eddleston, Barnett and Pearson, 2008). Muñoz-Bullón and Sánchez-Bueno (2011) found a lower technological innovativeness of family firms that is caused by their lower research and development (R&D) intensity.

Nevertheless, Memili, Eddleston, Zellweger, Kellermanns and Barnett (2010) consider that entrepreneurial spirit –that will lead to innovation- in family firms will enhance the odds for a successful transgenerational sustainability. In a similar line of argumentation, Casillas, Moreno and Barbero (2010) indicate that second or multi generation companies show a more innovative behavior than first generation firms. Generational changes can increase the innovation level in family firms (Zellweger and Sieger, 2010). Nordqvist, Habbershon and Melin (2008) point that innovation is regarded as a relevant dimension of entrepreneurial orientation to long term performance, as well as autonomy and proactivity. Beck, Janssens, Debruyne and Lommelen (2011) argue that generation in charge conditions the company's culture of innovation. Zahra (2005) stated that the younger the generation to which the management team belonged, the more dynamic the company's culture of innovation would be, since new generations are characterised by being the driving force behind innovation (Lizt and Kleysen, 2001) due to their ability to identify new business opportunities (Salvato, 2004) and their tendency to create new ways of doing things (Kepner, 1991).

The above mentioned arguments arise some questions in order to shed light on the existence of obstacles that can constrain innovation in family firms.

Ownership and generation in charge. There are mixed results about the influence of the generation in charge of the firm on innovation. Would differences between generations regarding innovation be expected? An important difference between generations in family firms refers to ownership. Ownership in family firms runs from the only shareholder which is the most common case in the first generation to a growing number of shareholders as the successive generations access the capital of the firm. May ownership differences influence the innovative orientation of a family firm?

Succession process. Family firms have to face the challenge of generational transition, to address the replacement of CEOs by a successor. The succession process consists of the transmission of power from the predecessor to a successor. During this process, the successor assumes the role and the responsibilities of the predecessor in a progressive way, whereas the firm continues (Cabrera, De Saá and García, 2001). Some authors argue that succession processes involve a relevant risk to family firms (Miller, Steier and LeBreton-Miller, 2003). Family firms engaged in succession processes must focus on to complete the generational renewal, as their main goal. Therefore, it would be expected that, during succession processes, family firms are not involved in innovation processes at the same time.

Expertise and external employees. As innovation is based on knowledge, it requires professional expertise, which may be within or out of the family. Thus it is required to attract external managers and experts that can provide the needed expertise so as to innovate in family firms (De Massis et al., 2015). The hiring of professional experts, who need to develop their work with an adequate margin of freedom, would arise reticence within the family members. Family managers would see external employees as a threat for their authority and familial control of the firm. As a consequence, it would be possible that the reluctance to hire external managers result in a lower innovative orientation.

As we argued above, innovation is based on knowledge, so it would be expected that the more training and expertise in the firm, the more innovative can be the firm.

Strategic orientation. Pittino and Visintin (2009) and McCann et al., (2001) analysed the degree of innovation by applying the model described by Miles and Snow (1978). They obtained four typologies of family businesses distinguished by their different innovation strategies: the *defenders*, who place an emphasis on innovation in processes in order to strengthen a dominant position in their sector of activity; the *prospectors,* oriented towards innovation in products and the exploration of new areas of business; the *analysers,* with an intermediate profile between innovation in products and processes, balanced between exploitation of the current business model and exploration of future business methods; and the *reactors,* who do not have a clear orientation towards innovation, possibly due to lack of a clear strategy, which may result in poor innovation outcomes. These different strategies must lead to different approaches to innovation.

As a consequence of this reasoning, we suggest the following hypotheses:

H1: Ownership spread acts as an obstacle to innovation in family firms

H2: Lack of training and experience is an obstacle to innovation in family firms

H3: Failure in keeping talented non-family employees is an obstacle to innovation in family firms

H4: Family firms ruled by second or next generations are more innovative

H5: Innovation processes are constrained by generational replacement processes in family firms

H6: Innovation in family firms depends on the type of strategy pursued

In the next section, we explain the method to test these hypotheses, by applying a regression analysis into a sample of 204 family firms.

3. METHOD

Sample and Procedure

The data for this study were collected through online surveys questionnaires. The survey was send to the manager of each company, who were contacted by phone. The sample was composed by 1,509 firms. During the period of phone calling were collected 204 responses, thereby was obtained a rate of response of 14%. All of them were family firms from the region of Andalucía (Spain). The firms of the sample were taken from the database S.A.B.I. In other to select family businesses, we utilize the criteria mentioned in the theoretical framework section, about family ownership and presence of family members in management or government (or both) of the firm. We also ask the sample's firm about their self consideration of family firm. Besides, it was included several questions about the family character in the questionnaire. The firms were segmented by economic activities. Table 1 shows this information.

Table 1. Sectorial distribution of firms

Activity	Number	Percent
Administrative services	3	1,47%
Agriculture	2	0,98%
Trade	77	37,75%
Construction	29	14,22%
Education	1	0,49%
Industry	29	14,22%
Services	10	4,90%
Leisure & entertainment	4	1,96%
Real estate services	7	3,43%
Professional services	10	4,90%
Transport	18	8,82%
Tourism	3	1,47%
Others	11	5,39%
Total	**204**	**100,00%**

Measures

Dependent variable

Innovation. This variable has been assessed using the scale of Beck et al. (2011), which has been also used in the work of Cooper et al. (1994). The scale was composed by 5 items about the topic, ranged from 1 “totally disagree” to 5 “totally agree”. Research has supported its construct validity, and Cronbach alpha coefficient were 0.893.

Independent variables

Generation in control. To determine the generation in control we relied on data obtained from questionnaire. The CEO of the company indicated the number of the generation which is managing the firm (Bammens et al., 2008). This variable had 5 possible values, from 1 for first generation, to 5 for fifth and later generations.

Strategy. To measure the type of strategy we have used a four items scale, which allows us to classify the strategy according to Miles and Snow (1978) typologies.

Worker Retention. In the present study we use the scale from Núñez-Cacho (2010) composed by 4 items, which were marked from 1 to 5, where 1 means "totally disagree" and 5 "totally agree". The Cronbach alpha coefficient obtained was 0.822.

Training and experience. Training was measured using a 4 items scale from Salinero and Muñoz (2007), which was modified to include the experience measure. These items have values from 1 to 5, where 1 means "totally disagree" and 5 "totally agree". Cronbach alpha coefficient for this scale was 0.787.

Ownership dispersion. This variable was measured according to the indication of the CEO of company, who was asked about the number of owners of the company.

Control variables. We have included the age and the size of the business as control variables. The age is calculated as the difference between the year of the foundation of the firm and 2014.

In order to assess the validity of the scales we used factor confirmatory analysis (CFA) and Cronbach Alpha to assess the validity of our scales. The results of CFA are showed on Table 2.

Table 2. Results of Factor Confirmatory Analysis of scales

INDEX	VALUES
NFI	.959
NNFI	.978
CFI	.985
IFI	.985
MFI	.948
RMSEA	.052

4. RESULTS

Table 3. Correlation Matrix, Means, and Standard Deviation

	Variables	Mean	s.d.	1	2	3	4	5	6	7	8	9	10
1	Employees	23,92	141,32	1									
2	Age	25,43	12,31	.188	1								
3	No.of family owners	2,54	4,55	.828	.144	1							
4	Successor development	1,68	4,67	.102	.04	.062	1						
5	Sucession process	1,54	7,83	.017	.021	.136	0.045	1					
6	Family Ownership	1,05	0,226	.009	.069	.028	.163	.028	1				
7	Generation	1,68	4,67	.029	.052	.01	.305	.04	.079	1			
8	Retention	3,7	1,76	.113	.014	.114	.085	.184	.054	-.188	1		
9	Strategy	1,83	0,98	.039	.233	.034	.084	.154	.025	.092	.044	1	
10	Training and Experience	1,8	1,19	.177	.899	.167	.011	.02	.039	.043	.0233	.144	1
11	Innovation	3,43	1,5	.028	.146	-.64	.105	.101	-.141	-.15	.188	.400	.178

Table 3 presents the means, standard deviation, and correlation between the variables. To test the hypotheses and the proposed model we have conducted a linear multiple regression analysis. For the six hypotheses formulated, the dependent variable was Innovation. The results of the regression are shown in Table 4.

Table 4. Regression results for Innovation

	Innovation		
	β	t	p
(Constant)		-2.779	.006
Employees	.116	1.025	.307
Age	-.336	-2.315	.022
Number of family owners	-.144	-1.261	.209
Sucessor development	.253	2.817	.005
Sucession process	-.195	-2.237	.026
Family Ownership	-.11	-1.767	.079
Generation	.108	1.614	.108
Retention	.161	2.498	.013
Strategy	.432	6.63	.000
Training and Experience	.336	2.37	.019

Note: Reported standardized coefficients. N=204.

The first hypothesis proposed that ownerships dispersion could affect the innovation. The results are not significant ($p>0.05$), thereby this hypothesis was discarded. Hypothesis 2 established a relationship between training and experience and innovation. This hypothesis is supported by the results ($\beta=.336$, $p=.019$). The third hypothesis exposed that the ability of the firms in order to retain talent was related with the innovation. The results provide support for this hypothesis, being $\beta=.161$ and $p=.013$.

We found no evidence for hypothesis 4, which established that the number of generation in charge that was managing the firms had effects on innovation, because of the relationships was not significant ($p>.05$). Concerning hypothesis 5, we found support for this interaction between innovation and succession process, being less innovative the firms that had been started this process ($\beta= -.195$, $p=.0126$). Finally, the sixth hypothesis proposed that the innovation could be affected for the strategy of the firms. In this case we have obtained empirical support to this relationship ($\beta= .432$, $p=.000$).

5. CONCLUSIONS

In this paper, we first review the notion and attributes of family firms, to arrive to the conclusion that family firms “must be” innovative firms. Due to the intention to keep the company under family ownership across generations, family firms are oriented to the long run. Stability and strong support that family ownership provide to CEOs in family firms must facilitate innovation. Family firm CEOs can rule the company without significant pressures by shareholders in order to reach short-term results. They have the power to manage the firm, as founders or as successors, usually for a long time period. All of these conditions allow to CEOs focus on how to drive the firm to the future, in the best way to be transferred to the next generation. To maintain the competitiveness of a firm during a generation leads to the need for a renewal along time. Therefore, family firms must innovate to achieve their main goal of continuity across generations. However, the results of research do not match this reasoning.

Because of the mixed results of the innovative character of family firms, we analyse possible barriers to innovation, which may stem from the number of shareholders, generation in charge of the firm, strategy, succession processes, external employees retention and training and expertise.

Drawing on a sample of 204 family firms in Andalusia (Spain), the analysis show that there is no significant relationship between ownership spreading and innovation. Additionally, we found no evidence of influence of generation in charge on innovation.

The results show that innovation in family firms can be enhanced where firms are able to retain external employees that provides knowledge, and generally speaking, in family firms with higher levels of training and experience in their staff. As could be expected, innovation degree depends on the kind of strategy that a firm pursues. Finally, the results confirm that during succession processes, family firm are less willing to innovate.

In conclusion, we contribute to the identification of some barriers to innovation in family firms, regarding to knowledge availability in the firm and type of strategy. The possible effect of the different generation on the innovative character of the firm has no support. Finally, we are aware of the limitations of our study, which stem from the limitations of a survey as a way to collect information.

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