DO FAMILY FIRMS HAVE SPECIFIC BARRIERS TO INNOVATION? A FIRST APPROACH

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Abstract: In an increasingly competitive market, family businesses need to innovate in order to improve their strategic positioning. The family-owned nature of these businesses has a dual influence on the innovation processes, by facilitating flexibility and by adding complexity. Few studies have addressed innovation in family businesses, highlighting the need for more research to redress this knowledge gap. In particular, an analysis of the barriers to innovation specific to these organisations is rarely explored. Therefore, the purpose is to identify those characteristics of family businesses which act as sources of inertia as regards implementing innovation processes. To achieve this goal, Rumelt's five frictions model (1995) was applied in this study to the case of family businesses, together with the theory of resources and capabilities. The aim was to identify which factors derived from the family-owned nature of these businesses act as barriers to innovation and generate a stance on innovation which is different to that of other, non-family businesses. We address this research question by means of a multiple case study involving four family firms in different industries. We hope that such knowledge will help these organisations make better decisions on innovation, reducing the risks inherent in these processes.

1. INTRODUCTION

The changes that are taking place in the business environment, coupled with the rapid evolution of technology, render it necessary to implement innovation processes in order to increase productivity (McAdams, Reid and Mitchell, 2010). In an increasingly competitive market, success depends largely on the extent to which organisations are capable of innovating (Madrid-Guijarro, Garcia and Van Aucken, 2009), as this will allow them to grow, increase their productivity and survive in this complex environment.

Family businesses are no exception and need to innovate in order to improve their strategic positioning (McCann, Leon-Guerrero and Haley, 2001). The family-owned nature of these businesses has an influence on these processes, and in some cases can facilitate flexibility, a customer-oriented approach, a focus on quality and community involvement. In others, however, it may render them more complex, either because they are embroiled in processes of succession or because they lack resources, training, skills or knowledge (Ibrahim, Angelidis and Faramarz, 2008).

However, despite the importance of this issue, few studies have addressed innovation in family businesses (McAdams et al., 2008), highlighting the need for more research to redress this knowledge gap and help decipher the approach taken by family businesses in this area. One aspect that is rarely explored is an analysis of the barriers to innovation specific to these organisations. When implementing innovation processes, organisations face obstacles inherent to the processes of change and expose themselves to the danger of jeopardising their internal and external resources. Erroneous decisions in this area will have a negative impact on organisational performance (Madrid-Guijarro et al., 2009).

Therefore, the aim of this study was to identify those characteristics of family businesses which act as sources of inertia as regards implementing innovation processes. Such knowledge will help

these organisations make better decisions on innovation, reducing the risks inherent in these processes. To achieve this goal, Rumelt's five frictions model (1995) was applied in this study to the case of family businesses, together with the theory of resources and capabilities. The aim was to identify which factors derived from the family-owned nature of these businesses act as barriers to innovation and generate a stance on innovation which is different to that of other, non-family businesses. Knowledge of such barriers will create an environment conducive to innovation, enhance the positive qualities of family businesses and limit the negative factors.

The article is structured as follows: after this first introductory section, a review of the literature related to innovation in family businesses is presented together with the theoretical framework on which this study is based: the theory of resources and capabilities, dynamic capabilities and Rumelt's five frictions model (1995). In the fourth section, cases are studied to test the effectiveness of the proposed model, modifying this in accordance with the results of the analysis in order to obtain an inductive model. This is followed by the discussion, suggestions for future research and the conclusions.

2. STATE OF THE QUESTION AND THEORETICAL FRAMEWORK

2.1 Innovation and family businesses: state of the question.

Innovation consists of doing something new or different (García and Calantone, 2002) and involves the process of developing and implementing a new idea (Van de Ven, Polley, Garud and Venkataraman, 2001). According to Varis and Littunen (2010), innovation is the elixir of life for businesses, irrespective of an organisation's size or other attributes, since a company's growth, success and survival depends on its ability to innovate continuously over time, especially in unstable and uncertain markets. The concept of innovation goes beyond the idea of invention, which refers to the creation of new knowledge. Innovation can be based on new knowledge or on the novel reconfiguration of existing knowledge (Schumpeter, 1934; Drucker, 1985). From an

economic standpoint, in order for a product, service or production process to be considered innovative, it does not need to be new in the strict sense, but new to the market at which it is aimed (Koellinger, 2008).

Although the literature on innovation and family businesses is not extensive, one of the main issues that have been raised is whether family businesses take a more conservative approach to innovation than non-family businesses. Thus, Craig and Moores (2006) emphasised 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 on the part of 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).

However, these findings do not coincide with those of other studies, which have reported that over time family businesses become conservative and unwilling or unable to assume the risks associated with new activities (Autio and Mustakallio, 2003; Zahra, Hayton and Salvato, 2004). In addition, desirous of building a lasting legacy, family business founders may become more conservative in their approach due to the risk an innovation project could pose to the organisation (McAdams et al. 2009).

These discrepancies may be due to different factors. First, the degree to which a family business is innovative may be determined by its typology, of which there are several. Thus, 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.

The second aspect that can affect the approach family businesses take to innovation is the generation to which the family business management team belongs (Beck, Janssens, Debruyne and Lommelen, 2011), which conditions the company's culture of innovation. Thus, 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).

A third factor influencing innovation is family culture. Mahmoud-Jouini and Mignon (2010) studied its influence on the choice of innovation strategies, measuring the impact of variables derived from the family-owned nature of the organisation such as prudence, strategic approach, entrepreneurship of the founder, management team involvement, sustainability, responsibility and respect for future generations, involvement of family members and intuition. The authors concluded that innovation was present in the family businesses studied, identified as "prudent innovation processes" that maintained the distinct characteristics which differentiated family from non-family businesses.

Meanwhile, Huang, Ding and Kao (2009) examined the impact of the family-owned nature of these organisations on their adoption of "green innovation", concluding that they show greater involvement with this kind of innovation than non-family businesses, and Byrom and Lehman (2009) analysed innovative attitudes through a case study of the Coopers Brewery family business. In their conclusions, they highlighted that continuous investment in innovation had enabled the brewery to achieve and maintain a favourable position in its market.

In short, these studies suggest that family businesses present a number of attributes that result in a different approach to innovation strategies. Similarly, they are likely to have a different attitude to processes of change, since family businesses are constructed through the transmission of knowledge and values from one generation to the next, and such processes may be hampered by a number of family traits that limit or even prevent the implementation of change in the organisation (Rumelt, 1995; Klein and Sorra, 1996).

2. 2 The resources and capabilities and dynamic capabilities approaches.

The resource-based view (RBV) of companies (Wernerfelt, 1984; Grant, 1991; Barney, 1991) is increasingly being used as a theoretical framework for both family business research (Cabrera, De Saá and García, 2001; Sirmon and Hitt, 2003) and the analysis of aspects related to innovation.

The resources and capabilities of a family business provide a unique potential that, when exploited appropriately, may report competitive advantages based on its family-owned nature (Habbershon *et al.,* 2003; Habbershon and Williams, 1999). However, the mere possession of resources which are valuable, uncommon, difficult to imitate and integrated into the organisation (Barney and Griffin, 1992) does not automatically imply a competitive advantage (Sirmon and Hitt, 2003). Such resources must also be properly managed by the company management team in order to facilitate the incorporation of new resources, the renovation of existing ones, their

integration with other resources and capabilities and their leverage in the organisation (Sirmon and Hitt, 2003). Such forms of management combined with the organisation's ability to continually reconfigure resources, capabilities and skills are known as the dynamic capabilities (Teece, Pisano and Shuen, 1997) that inform the organisation's approach to change management, facilitate greater innovative and entrepreneurial impetus and allow family businesses to create value over time (Chirico and Nordqvist, 2010).

Innovation is rooted in this reconfiguration of resources and capabilities (Rumelt, 1987). A business may receive direct benefits from innovation, such as cost savings or increased market share. In addition, it may also obtain another series of indirect benefits, since by being innovative it is also rendered more perceptive, flexible and adaptable. This enables a business to accumulate specific and unique knowledge over time, enhanced by its family-owned nature (Núñez-Cacho and Grande, 2013). It is therefore to be expected that the dynamic capabilities of family businesses will enable them to improve their competitive position through efficient management of innovation.

However, in addition to these positive aspects of the family's influence on the business, there are others that imply additional costs for the organisation (Dyer, 2006), thus representing an impediment or hindrance to the implementation of innovation processes in family businesses. The analysis and identification of those factors that negatively affect innovation in family businesses will enable corrective measures to be taken to ensure that their family-owned nature is not detrimental to their capacity for innovation. This will improve the capacity to transmit knowledge within these organisations and, thanks to their dynamic capabilities, will facilitate the creation of a sustainable competitive advantage.

2.3 Sources of inertia to innovation in family businesses

In general, there are several sources of inertia which act as a brake on innovation, such as those related to the cost of these processes, various human resources issues, organisational culture, the transmission of knowledge and management policies (Madrid-Guijarro et al., 2009; Mohen and Roller, 2005; Baldwin and Lin, 2002). The inertia resulting from the interaction between business and family can represent a barrier to a family business's capacity for innovation (Webb, Ketchen and Ireland, 2010), and can arise from various sources, such as the homogeneity of thought present in these organisations which leads to a lack of discussion and a limited input of different ideas from within the family business. Thus, the emergence of new proposals is hindered. A deep-rooted sense of family identity can also be a source of inertia if it limits the renewal and breadth of perspectives that enable the business to adapt to new challenges posed by the competition.

In itself, innovation merely refers to a process of organisational change. However, developing and implementing an innovation also involves a number of modifications within the organisation that pose specific problems which must be addressed if the organisation is to achieve the benefits derived from adopting the proposed change. The decision to adopt an innovation does not by itself guarantee correct implementation whereby it becomes just another organisational routine (Lawrence, 2003), since there are a number of barriers to innovation that may delay, limit or even prevent implementation of the changes necessary in an organisation. Rumelt (1995) developed a model describing the five main sources for inertia that may hinder the implementation of a process of change in an organisation, which are: distorted perception, dulled motivation, failed creative response, political deadlocks and action disconnects. These five basic sources or frictions operate in sequence, so that each represents a level of inertia which, once overcome, gives way to the next.

The first source of inertia is perception. If the signs emitted within and outside the organisation indicating the need or opportunity to innovate are not interpreted correctly (*distorted perception*), it is evident that this innovation will not be implemented. If this first barrier of perception is overcome, change may still be resisted due to *dulled motivation* for the same. That is, the incentive for innovation is perceived to be insufficient (Lawrence, 2003), due to a lack of appreciation of the advantages entailed in the process of change.

If there are sufficient reasons to create and implement the innovation, the next source of inertia is failure on the part of the business management team to identify the correct path to take (*failed creative response*). That is, the need for innovation is accepted and the innovation is considered to present more advantages than disadvantages, but the correct direction to take in order to implement the process remains unidentified. Should the previous obstacles be overcome, the process of change may still not be implemented due to the existence of internal *political deadlocks* which condition the process, such as differences and rivalries between departments and organisational units. Finally, if this internal resistance is overcome, the lack of coherent action can jeopardise the innovation project (*action disconnects*).

3. METHODOLOGY

3.1 Study design

The methodology employed was a multiple case study, the usefulness of which in the analysis of family businesses has been highlighted by McCollom (1990), especially in the area of inertia to innovation in the early stages of development. A qualitative approach employing multiple cases is considered more accurate than the use of a single case study (Eisenhardt, 1989; Yin, 2003). Selection of the cases that comprise this study was based on theoretical rather than statistical grounds (Eisenhardt, 1989; Yin, 1989; Bonache, 1999). Four family businesses were chosen in accordance with the criteria of presence of innovation processes, size, family-owned nature,

complexity of the business and the sector to which it belongs and accessibility for research purposes.

3.2 Data collection

Various sources were used to collect the data necessary for this study. First, open-ended, semi-structured interviews were employed. These began by dealing mainly with biographical aspects of the business and the family, together with aspects considered relevant to innovation. In the second part of the interview, the conversation followed established guidelines with the aim of ascertaining respondents' perspectives of the barriers derived from the family-owned nature of their business that affected innovation.

Throughout the interviews, extensive notes were taken which were subsequently transcribed within six hours of holding the interview in order to minimise loss of information. In accordance with Bryman and Bell (2007), internal reliability of the study was ensured through the participation of at least two members of the research team in the transcription and interpretation of the interviews, striving for a consistent interpretation, combined with prior and subsequent informal meetings with other family members to obtain further details about how the business operated. Finally, several days after each of the interviews had been held and transcribed, interviewees were sent a questionnaire designed to measure aspects related to innovation in their businesses. These were subsequently used for triangulation of information and to detect errors arising from the transcription of the interviews.

3.3 Data analysis

All data obtained from secondary sources and the case interview transcripts were stored in a database to provide as much information as possible and enable data triangulation. Each of the case studies was constructed from this information, addressing each case independently in order to ensure rigour in the application of replication logic. The theoretical framework consisted of

RBV, dynamic capabilities and the Rumelt model. New considerations emerged from the case studies and some prior theoretical premises were confirmed. The information obtained from the cases was progressively integrated with the initial theoretical model, thus combining deductive and inductive methods. The use of a multiple case study facilitated the analysis, cross-referencing and comparison of similarities and differences, as indicated by Eisenhardt (1989) and Miles and Huberman (1994).

4. RESULTS OBTAINED FROM APPLICATION TO FAMILY BUSINESSES

4.1 Brief presentation of the case studies

Based on the theoretical model described by Lorenzo and Nunez-Cacho (2012), barriers to innovation in family businesses were analysed using qualitative methodology. The cases studied and a brief history of each company appears in Table 1.

4.2 Distorted perception

A distorted perception of the signs that indicate the need for change can impede innovation, and this can happen for three reasons: myopia, hubris and grooved thinking (Rumelt, 1995). Myopia refers to the company's inability to see the future clearly and can arise as the result of the dual executive and family roles fulfilled by members of the organisation, which may affect the ability to recognise and perceive opportunities. Problems in perception can also stem from the rejection of any information that is contrary to what is expected or desired, either due to hubris or fear. Family businesses may not notice the signs for the change due to communication problems or the presence of obstacles to the transmission of knowledge within the family (Zahra, Neubam and Larrañeta, 2007).

Family businesses present a complex balance between family and non-family employees. In this context, nepotism emerges when the criteria used to assess, promote and reward members of the owning family are different from those applied to non-family employees. Nepotism is linked to

the perception of justice by non-family employees; thus, uncertainty about how the results of their work will be rewarded may affect transmission of knowledge generated in the family business (Webb et al., 2010).

Table 1: Case Studies

CASE	Main characteristics and brief history
CASE 1: RKAM	Company managed and owned jointly by the first and second generations Ownership: 80% founder/20% successor (son of the founder) The company has a family business agreement, but not a family council Of the four types of strategies described by Miles and Snow, the two owners and the deputy manager (an outside professional) agreed that their approach coincided with the prospector model RKAM is a Spanish distribution company in the field of telecommunications. Founded in 1986, it became a family business in 2004 with the concentration of capital in the hands of one family and the incorporation of the second generation in management and ownership. Although retaining his post of CEO, the founder has ceded leadership of the company to his son. Thus, the board of directors consists of the founder, his son and an external manager. The second generation is seeking to professionalise the company by incorporating external employees.
CASE 2: UNO	Company managed and owned by the second generation Ownership: 40% successor (son of the founder)/60% successor's siblings (six) A family business agreement is in the process of being drawn up. The company does not have a family council In the interviews, the prospector model (Miles and Snow, 1978) was indicated as being the one that best defined the company's strategy UNO S.L. is a Spanish company in the food sector, founded in 1992 by F. and his son C. At 70, the founder, who had had a serious illness and had sold his previous company, wanted to resume business and founded the company. Acting as mentor and teacher, he therefore established his son in the sector. The son succeeded him as head of the company in 2004. Currently, the company is run by two siblings from the second generation, one working as the manager and the other as production manager, the latter having experience in a multinational company. The company is owned by the founder's seven children, although the manager of the company owns a higher percentage than his siblings.
CASE 3: HOST	Company managed and owned jointly by the second and third generations Ownership: dispersed between the second and third generations across three branches of the family The company does not have a family business agreement or a family council Of the four strategy types described by Miles and Snow (1978), the defender was indicated as being most representative of the company HOST is a third generation family business with a history that stretches back to 1916, and is active in catering and business services. Currently, a member of the second generation, J.M., continues to head the company as manager of the group. Meanwhile, besides being shareholders, the third generation has joined the company either through inheritance from their parents or through the capital increases that they have contributed. There is a board of directors consisting of the manager and the widows of his brothers, who co-founded the first company. The company does not have a family council or family business agreement, although some members of the third generation have begun to feel the need to address the creation of appropriate governing bodies to supervise company and family matters.
CASE 4: CHIL	Company managed and owned by the first generation, although one of the founders' children carries out managerial tasks Ownership: 100% founders A family business agreement is in the process of being drawn up, but there is no family council Miles and Snow's defender model (1978) was selected by the interviewee to define the company's strategy CHIL is engaged in the design and manufacture of stoppers for wines and spirits, which are customised for each client. It was founded in 1985 by a husband and wife entrepreneurial team with previous experience in family businesses. Currently, the founders still head the company, the husband being involved in design and production while the wife is responsible for administration and finance. In 2009, one of their four children joined the company and may eventually become the successor. It is a small but internationalised company, with customers in various countries.

Organisations characterised by nepotism are unattractive to external professionals, so on the one hand the possibility of integrating new ideas and points of view is lost and on the other hand, retention of existing talent is more difficult because if decisions are felt to be unfair, non-family employees will seek new opportunities in other companies. Finally, when human resources managers choose family members to fill vacancies in the organisation, there is a risk of promoting people who have few qualifications for the job simply because they are relatives (Kets de Vries, 1993).

The third form of incorrect or distorted perception can be called grooved thinking and can be generated in family businesses by paternalism, i.e. excessive protection of people to the extent of interfering in their decisions and autonomy (Chirico and Nordqvist, 2010). Sometimes, owners tend to protect family employees whilst at the same time denying them responsibility and the freedom to express their ideas and make decisions autonomously, thus promoting this family-based source of inertia (Dyer, 1986). Generally, paternalism is more common in the first generation (Schein, 1983). Davis and Harveston (1988) introduced the term *generational shadow* to refer to the persistence of earlier business models throughout the company's evolution, caused by the excessive influence of the founder.

Paternalism can also be related to homogeneity of thought (Webb et al., 2010), which occurs when the influence of the founder on other members of the family induces everyone to hold a similar attitude to changes in the environment and to perceive the same signals (Miller and Le Breton-Miller, 2006). In other words, there may be a degree of *endogamy* due to lack of training or experience outside the family business, since as Koellinger (2008) observed, a low level of training acts as a brake on innovation. Therefore, the following premises are proposed:

P.1.1. The dual family and executive roles of family employees are conducive to distorted perception and therefore restrict the capacity for innovation of family businesses.

P.1.2. Nepotism in the management of family businesses adversely affects their capacity for innovation.

P.1.3. Paternalism in family businesses adversely affects their capacity for innovation.

Table 2: Distorted perception in family businesses

CASE	Distorted perception
CASE 1: RKAM	A difference of opinion between a conservative partner and a partner with a more innovative spirit led to the establishment of the family business. This innovative vision remains a hallmark of the company, shared by the father who founded the business and the son who manages it. Distorted perception was not observed in this case
CASE 2: UNO	The second generation has expanded the company's range of products, maintaining traditional lines whilst introducing innovation in the form of new products. Similarly, activities have expanded from producing solely for their own brand to meeting large orders for important store brands. Distorted perception was not observed in this case
CASE 3: HOST	The entrepreneurial spirit of the first and second generations has led the company to constitute itself as a group of companies with related activities. The third generation is still waiting for the second to step down, which for reasons of age will soon occur. Uncertainty about the future may be a deterrent to new activities. There may be some distorted perception, derived from dual roles and a certain degree of nepotism, since most of the functions are in the hands of family members, who do not always have appropriate training.
CASE 4: CHIL	The arrival of the second generation has provided an impetus to business endeavours, with an active search for new markets. The intention is to maintain and extend current activities through new investment to replace machinery. Distorted perception was not observed in this case

4.3 Dulled motivation

Even when perceptions of the need or opportunity for change are correct, innovation may be impeded by dulled motivation. This aspect is related to the financing of innovation. The condition of being a family company often limits the ability to access capital markets, due to the desire to retain control of company ownership. In addition, under certain circumstances, financial priority may be given to the family rather than the business, which would lead to the rejection of innovation-related investments. The admittance of external partners to ownership provides financial stability and direction for innovation strategies, and enables resources to be allocated to these projects (Tylecote and Visintin, 2007; Pittino and Visintin, 2009).

Dulled motivation can be caused by succession processes in the company, which add complexity and uncertainty to the situation and can decrease the management team's motivation to innovate. The absence of a definite successor and doubts about continuity lead to the adoption of these conservative attitudes. On the other hand, when members of two different generations occupy managerial posts, the influence of the senior generation can lead to less innovative strategies (Ensley and Pearson, 2005), decreasing the younger generation's motivation.

Other factors that can create lack of motivation for innovation are related to the desire to maintain harmony within the family. For example, implementing innovation may not compensate for the loss of time spent with the family or of the unity and quality of relationships among family members. Thus, family businesses have lower expectations of financial benefit, paying greater attention to social and emotional variables (Gomez-Mejia et al., 2007) and finding less incentive to undertake innovation activities or make entrepreneurial decisions (Meek, 2010).

Another source of inertia related to dulled motivation may be dispersed ownership of the family business. When capital is divided among numerous family members, classic problems of agency (values, goals and vision) may emerge, giving rise to conflicts and losing the alignment of the interests of executives, relatives and shareholders. Thus, the organisation enters into a strategic stalemate more easily than other businesses in which ownership is more concentrated (Schulze et al., 2001). Finally, the fear that change could affect other family members or the company's reputation can serve as a brake on innovative initiatives, fuelled by dulled motivation (Craig and Dibrell, 2006).

Consequently, the following premises are proposed:

> P.2.1. The largely self-financing nature of family businesses adversely affects their ability to innovate.
>
> P.2.2. Businesses embroiled in succession processes do not undertake innovation projects.

P.2.3. The fear that change may affect the status of family members decreases motivation to undertake innovation activities.

P.2.4. The fear that change may affect the reputation of the family business decreases motivation to undertake innovation activities.

P.2.5. Dispersed ownership adversely affects motivation to undertake innovative activities.

Table 3: Dulled motivation in family businesses.

CASE	Dulled motivation
CASE 1: RKAM	The company is undergoing a process of renovation, expanding its activities and "attracting talent" to consolidate its expansion. Funding is not an issue, succession is clearly under way, ownership is concentrated, and there are no family problems. Dulled motivation was not observed in this case
CASE 2: UNO	There are no financial problems, the company is healthy and has good future prospects. The main partner's decision-making capacity favours a clear, firm direction which is endorsed by the siblings, co-owners of the company. The company is not embroiled in the process of succession. Dulled motivation was not observed in this case
CASE 3: HOST	The company is not currently undergoing a process of succession, although the laws of life clearly indicate that the second generation's leadership role should not continue much longer. However, when the second generation steps down, the present balance between branches of the family may be perturbed. Dispersed ownership may be a factor that slows innovation in this case. There may be a lack of motivation due to the uncertainty of the succession process, which must be resolved in the medium term and which will have an unknown impact on the various family branches and owners.
CASE 4: CHIL	Ownership is concentrated, a succession process has emerged spontaneously rather than been planned for, but it is not urgent. While there are no apparent risks to the family relationship or reputation, certain communication problems were observed between family members comprising lack of information on business matters given to family together with confusion of family and executive roles. There may be a certain lack of motivation in this case, since a change in the current status could lead to family conflict.

4.4 Failed creative response

Even when perception is accurate and there is motivation to change, this may still be blocked by lack of direction. Excessive endogamy, combined with a lack of training or experience outside the family business may adversely affect entrepreneurial direction in family businesses (Koellinger 2008; Chirico and Norqvist, 2010), leaving the company without the creative capacity to respond to the demands of environment (Miller and Le Breton-Miller, 2006).

Furthermore, family conflicts, jealousies and rivalries may lead senior members of the organisation to transmit less information to the next generation (Lansberg, 1999; Zahra et al., 2009), and some members of family might have no interest in the business or in acquiring new knowledge (Grote, 2003; Le Breton-Miller et al., 2006). All the above will lead to the inability to respond creatively to the need for change demanded by the environment.

Finally, a failed creative response may be favoured by inadequate strategic vision due to organisational barriers, the inexperience of the generation in power or to a lack of aptitude and knowledge (Bigliardi and Dormio, 2009). Thus, inadequate leadership may emerge as a result of errors in succession. Lastly, excessive importance may be given to one individual, leading to a widespread belief within the organisation that if the founder cannot find a solution, then it does not exist (Davis and Harveston, 1988; Webb, Ketchen and Ireland, 2010), and thus creative responses to demands do not emerge.

Consequently, the following premises related to this source of inertia are proposed:

P.3.1. Lack of sufficient training and experience outside the family business adversely affects the capacity to innovate in family businesses.

P.3.2. Lack of communication in the family environment influences the entrepreneurial capacity of family businesses.

P.3.3. Generational shadow adversely affects the capacity to innovate in family businesses.

Table 4: Failed creative response.

CASE	Failed creative response.
CASE 1: RKAM	A clear direction has been marked by the founder, and this is maintained with the successor's full support. The founder's entrepreneurial spirit is still present in the company, encouraged by his successor, who has a more managerial profile. There is some indication of a generational shadow, but in a positive sense. Inertia as regards creative response was not observed
CASE 2: UNO	The company has recently expanded its facilities to meet larger orders from its main customers. Sufficient investment must be made to ensure the company's activities in the coming years. While the company depends on some very important clients, this dependence is mutual and an atmosphere of close cooperation exists between supplier and customer; there do not appear to be any significant risks in the chosen direction.
CASE 3: HOST	The response to company continuity will need to come more from third than second generation members, who are nearing the end of their working lives. There is therefore a danger of paralysis due to lack of initiative on the part of the third generation through excessive prudence, and a risk of conflict among the various branches of the family when deciding on the company's future direction and the individuals who will be responsible for leading the process of renewal. The lack of training and experience outside the family business represents an additional weakness.
CASE 4: CHIL	Generational shadow may be an important factor in this case. The direction taken by the company seems to depend more on the vision of the founders than on that of the second generation, although their good family relationship suggests that they will eventually arrive at a shared vision. There are signs of communication problems in the family, which may affect the company's business.

4.5 Political deadlocks

The main sources of disagreement between people are differences in personal interests, beliefs and core values, and these form the basis of the three types of political deadlock: departmental politics, referring to managerial opposition to change, which implies a fight for power and the emergence of winners and losers; incommensurable beliefs held by different groups, which can lead to the adoption of a compromise solution based on an artificial consensus, thus invalidating the proposed innovation; and vested values, which Rumelt (1995) described as the organisational equivalent of patriotism (Lawrence, 2003).

According to the three-circle model developed by Tagiuri and Davis (1996), there are three different groups of stakeholders in family businesses, each with its own particular vision. These groups are represented by ownership, the family and the business. The perspectives of each, which in principle are different, can be a barrier to innovation. Thus, the different priorities of the

three groups can create a political deadlock in the decision-making process. Furthermore, the family's emotional commitment to the company can promote a lack of objectivity in communication between groups, and resentment and hostility in relationships (Tagiuri and Davis, 1996). In this way, incommensurable beliefs among groups may be generated which would act as a brake on innovative initiatives.

Barriers can also arise from conflicts between family and non-family employees generated by nepotism in decision-making (Webb et al., 2010), hindering implementation of innovation processes in the family business and leading to compromise solutions that undermine the essence of the desired change.

Another source of political deadlocks in family businesses stems from lack of structural clarity and overlapping family and executive roles, characteristic of the early stages of a family business (Gersick, Davis, McCollom, Hampton and Lansberg, 1999). Thus, ideas may persist in the family business that were appropriate in their day but have become obsolete or cannot be applied to the present, and yet remain as vested values. Sometimes, the main defenders of these vested values are not family members working in the business, but non-family employees with a long history in the family business who mistake this attitude for loyalty to the founder or previous generations, representing an important source of inertia. This situation usually arises when a new generation takes over the company, and retains the team that had been working under the direction of the previous generation.

Consequently, the following premises are proposed:

P.4.1. Interactions between the various groups of stakeholders in the family business affect the latter's capacity to innovate.

P.4.2. Emotional conflicts adversely affect the capacity of family businesses to innovate.

P.4.3. The presence of nepotism increases political deadlocks and hinders the process of innovation.

P.4.4. The retention of non-family employees who had worked for the previous generation can generate inertia related to political deadlocks.

Table 5: Political deadlocks in the family business.

CASE	Political deadlocks
CASE 1: RKAM	The company is owned and managed jointly by a father and son, whose roles are clearly defined and business-oriented; other family members are not involved and fully accept this situation The management team has been renewed with people from the successor's generation, thus excluding potential problems with older employees
CASE 2: UNO	The small company structure is offset by external collaborators who are called in when needed, such as engineering services when the new facilities were installed. There is a latent risk of conflict between the siblings, as "sensitive issues will not be addressed while the mother is alive"
CASE 3: HOST	There is latent conflict between the various branches of the family, which will inevitably surface when the second generation steps down. Each branch is responsible for one part of the business, thus there is some risk that the company will be broken up when the generation currently in control leaves. Organisational barriers between the group's various activities may be an important source of inertia as regards finding a common way forward for this group of companies.
CASE 4: CHIL	The company structure is very small, with all executive functions in the hands of the husband and wife founders. The challenge is to transfer these functions, currently shared between two people, to the future successor, who may need an external management team that does not exist at present.

4.6 Action disconnects

Change may also be blocked by a further series of barriers, including: leadership inaction due to reluctance on the part of the managers responsible for implementing change to alter the status quo within the organisation; embedded routines, which generate significant inertia as regards abandoning established practices in order to adopt new and unknown processes; collective action problems, i.e. difficulties in mobilising the entire organisation to move together in a given direction; and a capabilities gap, whereby the company lacks the skills necessary to manage the change with any guarantee of success.

In family businesses, nepotism may arise in recruitment and promotion processes (Padget and Morris, 2005). Often, new projects are slowed down or even halted so as not to upset the status within the organisation of family members who may aspire to promotion in the new project, over

the heads of better qualified non-family employees, who may consequently hold a poorer opinion of justice in the company (Barnett and Kellermanns, 2006).

The generation currently in charge of the business can also have an effect on leadership inaction. Thus, Pittino and Visintin (2009) observed that founders are more innovative and adopt more prospective and analytical strategies then second and subsequent generations. In addition, founders hold formal and informal power to allocate resources for exploring innovative ideas (Zahra, 2005), whereas the second and subsequent generations adopt less entrepreneurial strategies since they are more interested in preserving and maximising profits than in carrying out innovative activities (Ellington et al., 1996; Eddleston, 2008). In contrast however, Craig and Moores (2006) argued that family businesses can be more innovative in second and subsequent generations.

Lastly, companies undergoing succession processes can present more conservative attitudes due to the presence of members from two different generations in executive positions. The influence of the older generation may steer the company towards more conservative strategies (Ensley and Pearson, 2005), leading to continued inaction on the part of the new leader. Consequently, the following premises are proposed:

P.5.1. Prioritising family interests over business interests adversely affects the capacity of family businesses to innovate.

P.5.2. Family businesses run by the second or subsequent generations present higher inertia due to action disconnects than first generation companies.

P.5.3. Succession processes foment the emergence of inertia due to action disconnects.

Table 6: Action disconnects in family businesses.

CASE	Action disconnects
CASE 1: RKAM	None of the problems associated with this type of inertia were observed in this case
CASE 2: UNO	Although this is a second generation company, the fact that the principle shareholder is the co-founder, an elder brother who has held an executive role since the business was founded and has headed the company since the death of the founder, renders the situation more like that of a first generation company.
CASE 3: HOST	The company founders have significant influence and there is confusion of executive and family roles, which sometimes means that decisions are not taken in order to avoid perturbing the current family status. Furthermore, those in charge indicated the existence of a lack of communication, more within the business than in the family, as a matter which would need to be addressed in order for the company to be able to face the future.
CASE 4: CHIL	The confusion of family and executive roles and the ascendency of family interests over business interests could represent a hindrance to the implementation of change processes in CHIL.

Despite this, action disconnects generally seem to be the least prevalent type of inertia in this case. The facility to implement decisions typical of family businesses limits the presence of these kinds of barrier to innovation.

5. DISCUSSION

The results obtained from the interviews and questionnaires administered to each company have enabled us to assess the proposed premises, maintaining some of them as possible explanations for inertia to innovation in family businesses and discarding others since no signs of their veracity were observed in the multiple case study.

Distorted perception

P.1.1. The dual family and executive roles of family employees are conducive to distorted perception and therefore restrict the capacity for innovation of family businesses.

In cases 1 and 2, no problems of dual family and executive roles were observed among family employees, indicating that this kind of confusion did not exist. Cases 3 and 4, however, did exhibit this confusion of roles. Since cases 1 and 2 presented a more innovative nature, it seems that this premise may be correct.

P.1.2. Nepotism in the management of family businesses adversely affects their capacity for innovation.

Based on the interviewees' reports, some evidence of nepotism was only observed in case 3. However, where it exists, nepotism is a difficult factor for family businesses themselves to identify, and above all, to acknowledge.

P.1.3. Paternalism in family businesses adversely affects their capacity for innovation.

While the influence of the previous generation was certainly considerable in some cases, overly paternalistic behaviour was not observed in any of the companies analysed, and thus this premise can be rejected.

Dulled motivation

P.2.1. The largely self-financing nature of family businesses adversely affects their ability to innovate.

Interviewees from companies 1 and 2 highlighted their self-financing capacity as one of the key factors that enabled them to take actions which facilitated the growth and expansion of their business. By contrast, in cases 3 and 4, interviewees indicated that difficulties in accessing external financing (and in case 3, self-financing as well) were obstacles to innovation. Thus, the problem resides more in the lack of self-financing capacity than in the tendency characteristic of family businesses towards self-financing, since the companies that presented a more innovative nature financed their innovations with their own funds. Company 4 was mainly self-financed, although the lack of external financing was indicated as a possible barrier to innovation.

P.2.2. Businesses embroiled in succession processes do not undertake innovation projects.

This premise is not supported by the case studies analysed since company 1 was undergoing a process of succession, albeit in a relatively advanced stage. Company 3 was about to face a succession process, although formal plans had not been made for this process, and as indicated by family managers of HOST, no new projects were pending implementation subject to resolution of the succession of the second generation.

P.2.3. The fear that change may affect the status of family members decreases motivation to undertake innovation activities.

According to information provided by the companies, this premise was confirmed in cases 3 and 4, where interviewees responded "strongly agree" to the statement "Sometimes decisions are not taken for fear of loss of status of family members". By contrast, companies 1 and 2 responded "strongly disagree" to the same statement. Since these latter companies presented a stronger innovative nature in this multiple case study, this premise would appear to be reasonable.

P.2.4. The fear that change may affect the reputation of the family business decreases motivation to undertake innovation activities.

The responses given by the companies were all similar in this case, although company 2 did not comment. Consequently, this premise may be valid.

P.2.5. Dispersed ownership adversely affects motivation to undertake innovative activities.

Of the four cases analysed, dispersed ownership was only observed in case 3, with ownership being concentrated in the other three cases. The concentration of ownership seems to favour innovation, as decisions are made and carried out more quickly. Therefore, it seems that this premise may help explain inertia to innovation in family businesses.

Failed creative response.

P.3.1. Lack of sufficient training and experience outside the family business adversely affects the capacity to innovate in family businesses.

Company 3 expressly stated that the lack of training and external experience acted as a brake on innovation, while some indications of the same were observed in case 4 as regards experience rather than training. Company 2 expressed total disagreement with this statement.

P.3.2. Lack of communication in the family environment influences the entrepreneurial capacity of family businesses.

Once again it was observed that there was a greater propensity among companies which had adopted a defender strategy (cases 3 and 4) to indicate lack of communication in the family as an obstacle to innovation, especially in case 3.

P.3.3. Generational shadow adversely affects the capacity to innovate in family businesses.

The founders' influence in cases 1 and 4 may be considered an example of generational shadow, but in a positive sense, as they have been and continue to be the driving force behind innovation in their companies. A certain degree of generational shadow existed in case 3, due to still fresh memories of the now deceased members of the second generation, but it did not seem to be the most influential factor hindering innovation.

Political deadlocks

P.4.1. Interactions between the various groups of stakeholders in the family business affect the latter's capacity to innovate.

Insufficient information was obtained to be able to assess the veracity of this premise.

P.4.2. Emotional conflicts adversely affect the capacity of family businesses to innovate.

Once again, insufficient information was obtained to be able to assess this premise, although signs of latent conflict were observed in cases 2 and 3.

P.4.3. The presence of nepotism increases political deadlocks and hinders the process of innovation.

This may have been the case for company 3, where those in charge acknowledged shortcomings in the training of family member managers, who in some cases were appointed to their posts more for family-related than business reasons.

P.4.4. The retention of non-family employees who had worked for the previous generation can generate inertia related to political deadlocks.

While this is a factor in other cases of family businesses, it was not observed in the cases analysed in this study. Case 4 showed some signs of difficulty in restructuring the workforce, although not as regards the management team, which was limited to family members.

Action disconnects

P.5.1. Prioritising family interests over business interests adversely affects the capacity of family businesses to innovate.

Companies that had adopted a defender strategy (Miles and Snow, 1978) and were therefore less innovative, explicitly stated that family interests took precedence over business interests. Such was the case for companies 3 and 4. In contrast, cases 1 and 2, which expressed their total opposition to prioritising family interests over business interests, presented a stronger innovative nature. Accordingly, this premise would appear to be valid.

P.5.2. Family businesses run by the second or subsequent generations present higher inertia due to action disconnects than first generation companies.

The multiple case study presented here included two first generation companies in which the second generation also participated (cases 1 and 4), a second generation company (case 2) and one run by members of both the second and third generations (case 3). In accordance with the information obtained for cases 2 and 3, which are the only ones for which this premise could be analysed, it would only appear to be valid in case 3, since the profile of case 2 presented features closer to those of a first generation business.

P.5.3. Succession processes foment the emergence of inertia due to action disconnects.

As noted for premise P.2.2, it would appear that it is the lack of a planned succession process which can cause inertia, rather than an ongoing but properly planned succession process.

Factors hindering innovation

In interviews with executives from the companies analysed, these were asked to use Table 7 to indicate the main obstacles preventing their companies from developing and implementing innovations. The factors that were considered to hinder innovation, according to the responses to the questionnaire used in each interview, are shown in Table 7, where each of the four cases is

represented by the corresponding number used throughout this paper. Where consensus existed on any of the proposed factors, responses from each company have been aggregated. Where no such consensus existed regarding a particular factor, that obstacle was not considered to affect the company concerned.

Table 7. Main barriers to innovation

BARRIERS	Strongly agree	Agree	Neither agree/ disagree	Disagree	Strongly disagree
Difficulties accessing external financial resources		3 4			
Lack of own funds to finance innovation		3	2 4		
No appropriate infrastructure	4	3	1		
Difficulties finding suitable staff	4	1	3		
Excessive risks	3	1	4		
Prospects of recovering the necessary investment in the long-term	3	1 4		2	
Lack of information about technology			3 4	1	
Lack of information about the market	3	4		1	
Uncertainty about industrial or intellectual innovation property			4	2 3	
Complexity of administrative procedures related to innovation	4	2		3	
Lack of consumer interest in new products and/or processes			3 4		
Difficulties in restructuring the workforce	4	1	3	2	

Source: the authors.

Note: 1: Case 1 RKAM; 2: Case 2 UNO; 3: Case 3 HOST; 4: Case 4 CHIL

In accordance with the information shown in Table 7, none of the factors suggested as potential barriers to innovation were completely ruled out by the respondents, since none of the people interviewed for this research gave the response "strongly disagree" for any of the factors proposed. In none of the cases were the responses "agree" or "strongly agree" given for *uncertainty about industrial or intellectual innovation property* or *lack of consumer interest in new products or processes*. Meanwhile, none of the companies responded "disagree" or "strongly

disagree" for the following factors: *difficulties accessing external financial resources, lack of own funds to finance innovation, no appropriate infrastructure, difficulties in finding suitable staff* or *excessive risks*.

An initial analysis of the Table shows that the two companies (cases 3 and 4) which reported using a defender strategy (Miles and Snow, 1978) indicated a greater number of barriers to innovation than prospector companies (cases 1 and 2).

Although in case 4, those involved chose the defender strategy from among those described by Miles and Snow (1978) to define the company's approach, its trajectory would seem rather to indicate a stance midway between defender and prospector, since this was the first company in its national market to launch the products it offers, and once the domestic market (comparatively small due to the characteristics of the product and potential customers) had been conquered, activities were expanded to other countries.

6. CONCLUSIONS

In this paper, we have analysed four cases of family businesses, which has enabled us to conduct an initial assessment of the appositeness of several premises explaining inertia to innovation in family businesses.

Two of the four companies analysed (cases 1 and 2) defined themselves as prospectors, to use the terminology of Miles and Snow (1978), and presented a stronger innovative nature, whereas cases 3 and 4 defined themselves as defenders, although case 4 could be considered to fall midway between the two types since an analysis of its trajectory since being founded in 1985 to the present day revealed that it presented features of a prospector company. Case 3 in particular, and to a lesser extent case 4, found it more difficult to undertake innovation activities, whereas cases 1 and 2 seemed to find it easier to overcome inertia to innovation.

Several factors have emerged from this multiple case study which appear to have a stronger negative impact on the processes of change and innovation. The most influential of these are the dual family and executive roles of the companies' family member managers, fear of upsetting family status and the balance of power between different branches of the family, prioritisation of family interests over business interests and lack of communication between family members.

Other aspects, such as the tendency to self-financing, the existence of processes of succession and generational shadow, which a priori seemed to have a certain explanatory power as regards inertia to innovation, are not supported by this multiple case study. Rather than being a problem, self-financing was a key factor promoting innovation in cases 1 and 2, and in case 4, which was largely self-financing although certain difficulties in accessing external funding were reported. The existence of processes of succession does not seem to be a barrier to innovation, provided that these processes are properly channelled, as in case 1. Rather, the absence of these processes when the previous generation is reaching its final stages at the head of the company may be a clear source of inertia. We observed a significant but positive influence of the founder, or generational shadow, in cases 1 and 4.

Another feature shared by prospector businesses (cases 1 and 2) was that they had a family business agreement or were in the process of developing one, whereas no family business agreement existed in case 3 and company 4 was in the initial stages of drafting an agreement. None of the four cases analysed had a formalised family council, although the small size of some families (e.g., case 1, two parents and two children, and case 4, two parents and four children) rendered this less necessary.

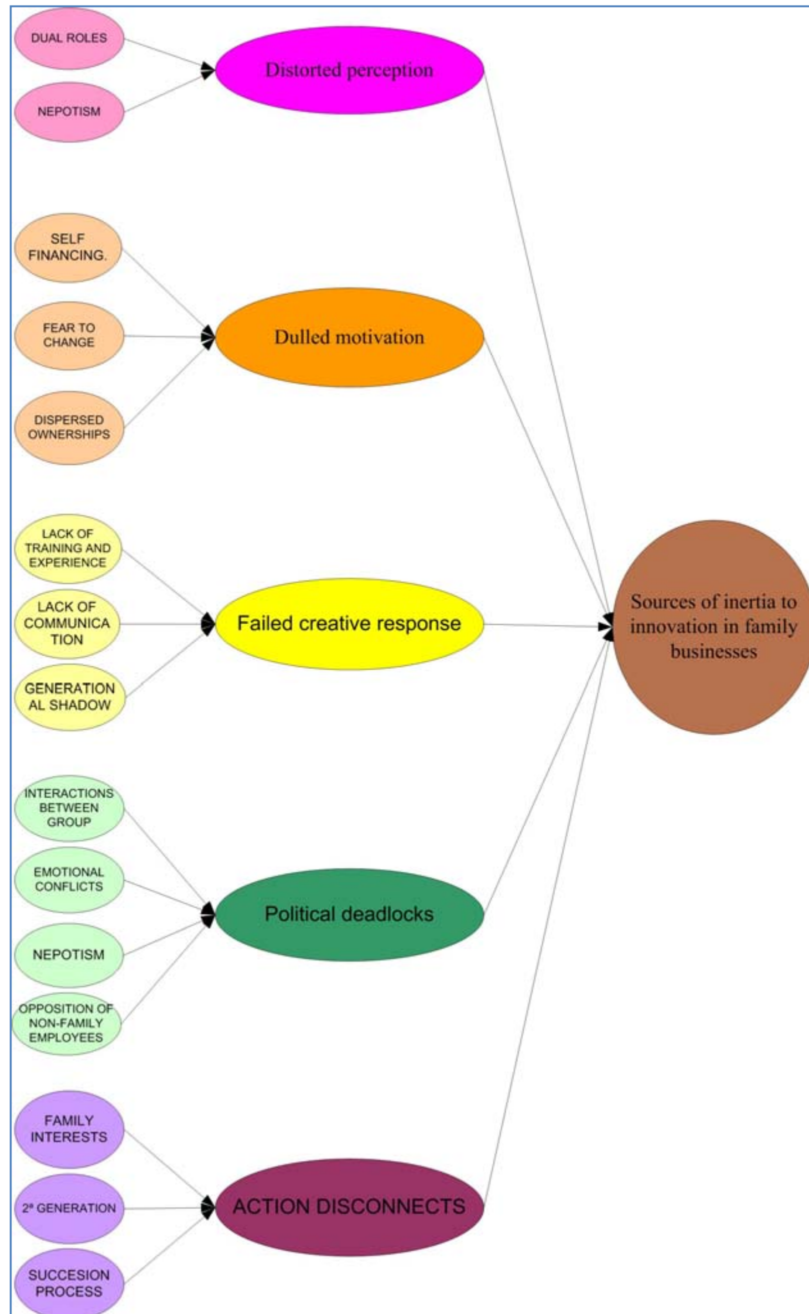
Concentration of ownership may be a factor supporting innovation in cases 1 and 4, whereas there were more shareholders in cases 2 and 3. The dispersion of ownership in case 3 could be interpreted as a brake on innovation, but it should be noted that the third generation had two

routes to ownership; some branches inherited ownership from the previous generation, while other family branches set up new businesses within the family group, enabling expansion of the original company's activities. Thus, the family's entrepreneurial spirit has facilitated the development of these activities within the family group of companies. From the information obtained, the deductive model proposed is presented in Figure 1.

Future lines of research

This study has made it possible to reduce the extensive list of a priori premises formulated with the intention of identifying those factors which explain the barriers to innovation in family businesses. Based on the factors indicated as most likely to explain the phenomenon analysed, this research could be extended by conducting a more comprehensive study that incorporates new cases of family businesses, with the aim of refining and fine-tuning those premises which appear most accurate. Hypotheses could be formulated on the basis of these premises for analysis in a more far-reaching empirical study. Irrespective of the above, further research is required into the factors that hinder or prevent innovation in family businesses, as a prior step to their identification and inactivation, so that family businesses can grow and increase their capacity for innovation.

Figure 1: Deductive model



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