

OPEN INNOVATION WITH UNIVERSITIES IN FAMILY FIRMS: CAN IT HELP TO OVERCOME AN ECONOMIC CRISIS?

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Introduction

In this paper, after conducting a review of the literature on innovation in family firms, it has been detected that there is a research gap in relation to the development and results of Open Innovation (OI). In particular, there is a paucity of publications explaining the intersection between OI involving Higher Education Institutions (HEIs) and the overcoming economic crisis.

This work proposes a framework to analyse the differences between Family and no family business in the overcoming of an economic crisis, in the context of OI involving HEIs.

Theoretical Framework / Hypothesis Development

Open Innovation

A high degree of consensus can be found in the scientific literature regarding the importance of innovation in developing organizations (Davidsson, 2016; Lumpkin & Dess, 1996; Schumpeter, 1982) being key to understand how firms survive and address the need to adapt to the changing environment in which they perform their activities.

As known, firms innovate in the development of new activities, products, technologies, and forms of production or by searching for new markets for extending their activities (Schumpeter, 1982). Additionally, it can be considered also consider as an innovation adapting of a product, activity, or form of production to contexts that are different from those for which it was initially designed (Koellinger, 2008).

The way in which firms develop innovations will be, in many cases, through external sources, which are called strategies of search for OI (Laursen & Salter, 2006). Undoubtedly, the innovative behaviour of a company is strongly linked with its external aspects and the innovation must integrate external and internal knowledge to create value for customers (Van der Ploeg, 2011).

In this regard, OI is a new paradigm for innovation management (Chesbrough, 2006; Gassmann, 2006) that can be defined as the acquisition of knowledge from abroad to make or expand the company's internal innovation (Chesbrough & Crowther, 2006), including the transfer of ideas and technology between the company and the surrounding environment (Lichtenthaler, 2008).

In addition, it is noted in the literature that the results of innovation will depend on the characteristics of the companies and the type of cooperation and partner with which the cooperation is carried out (Jaklič, Damijan, Rojec, & Kunčič, 2014). In this vein, small to medium-sized enterprises (SMEs) have been found to be more likely to monetize their internal knowledge and initiate an exchange of ideas and knowledge with their environment (van de Vrande, de Jong, Vanhaverbeke & de Rochemont, 2009).

Cooperation

Cooperation with external agents plays a fundamental role in OI. Among the benefits of innovation through cooperation, broadening the perspectives and knowledge of the company itself (Cohen & Levinthal, 1990; Dewar & Dutton, 1986; Fichman & Kemerer, 1997) has become one of the primary sources of creation of new products (Rindfleisch & Moorman, 2001; Sivadas & Dwyer, 2000).

However, if cooperation is also carried out with the same partner with a long-term perspective it can lead to the creation of new opportunities (Gulati, 1999). This is because innovations and discoveries have an unwritten component – a knowledge beyond what cannot be described and that is formed through shared and unwritten mental schemes and the assimilation of more complex knowledge. This knowledge beyond leads to the creation of a more fruitful collaboration (Hansen, 1999; Iansiti & West, 1997; Madhavan & Grover, 1998; Polanyi, 1966; Uzzi, 1997; Zucker, Darby, & Armstrong, 2002).

As for the partner with whom the innovation will be carried out, it can be highlighted that according to the literature review, cooperation with suppliers and customers is more beneficial than cooperation with competitors (Arranz & Arroyabe, 2008; Fitjar & Rodríguez-Pose, 2011; Janz, Lööf, & Peters, 2003; Miotti & Sachwald, 2003). Furthermore, cooperation with research institutions such as universities is found to be more beneficial than cooperation with other companies (Arvanitis & Bolli, 2009; Ayari, 2010; Belderbos, Carree, Diesderen, Lokshin, & Veugelers, 2004; Bercovitz &

Feldman, 2007; Blanco, 2014; Fabrizio, 2009; Fitjar & Rodriguez-Pose, 2011; Hernández, 2014).

The universities and research institutions will be the focus of this research. The relationship between companies and these organizations has been widely studied in the literature from several different aspects (Agrawal, 2001; Hall, 2004; McMillan & Hamilton, 2003; Mowery & Nelson, 2004; Poyago-Theotoky, Beath & Siegel, 2002).

It can be concluded that cooperation with research institutions, such as universities, may be more beneficial than cooperation with other companies (Arvanitis & Bolli, 2009; Ayari, 2010; Belderbos, Carree, Diesderen, Lokshin, & Veugelers, 2004; Bercovitz & Feldman, 2007; Blanco, 2014; Fabrizio, 2009; Fitjar & Rodriguez-Pose, 2011; Hernández, 2014).

Family businesses

This research is focused on Family Businesses (FBs). FBs exceed 80% of the companies in most countries and forms approximately 50% of the employment generated. Therefore, understanding the behaviour of FBs regarding innovation will imply understanding a high proportion of the innovation in the markets.

FBs possess some distinct characteristics that can help them achieve better results in innovation through cooperation with the agents that surround them (Cassia, De Massis, & Pizzurno, 2012). Some of them are summarised next.

First, FBs have a longer-term vision compared to other businesses; therefore, achieving short-term results is less important (Dunn, 1996; Hayward, 1992; 1993; Stein, 1989; 1988). They will be more patient with returns on investment with a positive impact on cooperation since the consideration of the results requires a long-term vision.

Second, FBs are less risk-prone (Donckels & Frolich, 1991). This could imply that they are less prone to innovation; however, innovation with cooperation, with the hand of an external agent, could help them find ways to dispel doubts and dampen the sense of risk.

Third, FB workers are usually less professional and exhibit clear risks of inefficiency in the tasks assigned; however, at the same time, they are usually more

satisfied and better paid and coordinate their objectives with those of the company (Donckels & Frolich, 1991; Dunn, 1996; Fukuyama, 1995; Hayward, 1989; Lyman, 1991). The cooperation to conduct innovation processes would be an appropriate way to develop innovations to replace the lack of professionalism from the outside.

There exists a gap in the literature regarding FBs, in particular, how they make management decisions that needs to be addressed (Ghoshal, 2005; Hambrick, 1994; Rynes, Bartunek, & Daft, 2001; Sharma, 2010; Vermeulen, 2007). This paucity also includes the decision to carry out innovation strategies.

A specific literature review of studies about how OI in FBs develops with cooperation with universities yields only one result from the Web of Science database with more than 2,000 referenced articles on open innovation.

Moreover, there is a lack on research about the impact of the OI in FBs in the overcoming of an Economic Crisis; and even more when we specifically want to know is impact when the collaboration is made with Higher Education Institutions.

Method

We will conduct a statistical research based on the Survey on Business Strategies (ESEE). This survey is composed of firms with 10 or more employees within the manufacturing industry in Spanish and is conducted yearly in the same companies, being the companies selected to keep representativeness the population of reference. The survey asks about the decisions firms take regarding their competition variables.

From this survey we will extract details for a longitudinal investigation from 2006 to 2010 about the innovation or no of the companies; if it is the case, the type of innovation; if it is an OI, with whom, the result in growth per year, and finally the difference between FBs and non-FBs.

For data analysis we have selected the years 2006 to 2010 due to, in the last economic crisis, year 2006 is with a high economic growth and the lower unemployment rate in Spain; year 2009 is the a lower economic growth and the higher unemployment rate and then, year 2010 is the starting of overcoming the economic crisis.

Our principal hypothesis is “OI with Universities helps to have better returns in FBs in an Economic Crisis”. But we also want to review some intermediate hypothesis that would help to understand our statement, like “Innovation helps companies to perform better after an economic crisis”; “OI helps to perform better than other types of innovation after an economic crisis”; “OI with Universities helps to have better returns than other types of OI”; and “FBs firms have a better performance than non-FBs in all the hypothesis”.

Conclusion

In the current situation of economic crisis caused by COVID-19, this project will conduct a valuable research where it can be discovered how can FBs overcome this crisis with better tools than other kind of companies.

We know that there are some limitations in our work in progress that we need to deepen. First, we need to go deeper in the variables that influence in the decision of innovation with universities versus other options for the FBs. Second, the longitudinal study have to be modelled to aggregate the variables and measure the reliability of our study. Third, to make our research replicable in tother countries, we want to find similar surveys implemented in other countries.

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