

DIFFERENTIATING THE EFFECTS OF INSTITUTIONAL ENVIRONMENT ON  
CORPORATE ENTREPRENEURSHIP: LESSONS FROM SPAIN.

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# DIFFERENTIATING THE EFFECTS OF INSTITUTIONAL DIMENSIONS ON CORPORATE ENTREPRENEURSHIP: LESSONS FROM SPAIN.

## ABSTRACT

This paper contributes to a better understanding of how different dimensions of the institutional environment of a region may influence the level of corporate entrepreneurship of firms. In doing so, our hypotheses propose different relationship between the three most accepted dimensions of the institutional environment (normative, cognitive, and regulatory) and the entrepreneurial orientation and outputs of corporate entrepreneurship. In order to validate our work, we used a sample of 150 Spanish firms from several industries. Our results show that both the normative and cognitive dimension of the institutional environment influence an organisation's entrepreneurial orientation. We also show that regulatory dimension influences what type of corporate entrepreneurial activity is carried out. This paper complements the increasing interest in the analysis of the influence of institutional frameworks on corporate entrepreneurship and answers recent calls in the literature to complete previous analyses.

Key words: Corporate entrepreneurship, institutional environment, CIP, entrepreneurial orientation, Spain

## 1. INTRODUCTION

Entrepreneurship is a key issue nowadays because of its influence on the appearance and persistence of organisations, and being a driving force of modern economies and societal development (Bosma and Levie, 2010; Bosma *et al.*, 2009; Zahra, 1995). Entrepreneurship can manifest in the creation of a new company, or through corporate activities in existing firms. We will focus on corporate entrepreneurship, consisting of the development of specific activities and orientation to renovate and create new businesses within an existing firm (Sharma and Chrisman, 1999).

Governments (e.g. European Commission, 2003, 2004) have indicated that corporate entrepreneurship is one of the factors providing more competitive capacity to developed economies. Hence, they have also highlighted that it is particularly relevant to know better what specific factors influence the development of entrepreneurship and how different institutional dimensions matter. Specifically, we want to analyze how the three institutional dimensions –cognitive, normative and regulatory - influence both the entrepreneurial activities and entrepreneurial orientation of the firm.

Researchers have developed numerous models identifying the existence of external and internal factors that influence corporate entrepreneurship (e.g. Antoncic and Hisrich 2001; Covin and Slevin, 1991; Guth and Ginsberg, 1990; Ireland *et al.*, 2009). However, limited attention has been paid to the influence of institutional environment on corporate entrepreneurship.

The institutional environment is defined as the stable rules, the social standards and the cognitive structures in the society that guide, favour or restrict business activity (Scott, 1995). The institutional patterns have a deep influence on economic behaviour (North,

1990; Peng *et al.*, 2009) and entrepreneurship (Baumol, 1990; Busenitz *et al.*, 2000).

Research relating the institutional environment to entrepreneurship are attracting a growing attention (Amine and Staub, 2009; Lim *et al.*, 2010; Vaillant and Lafuente, 2007). However most of the previous analyses concerning the influence of the institutional environment on entrepreneurship have been either descriptive (Stephen *et al.*, 2005) or mostly focused on the influence of regulatory dimensions of the institutional environment (Capelleras *et al.*, 2008; Child and Tsai, 2005; Yiu and Makino, 2002), but other relevant aspects such as those connected to institutional values, culture and shared conceptions have received less attention.

In this context, different works have highlighted the importance of studying how specific country-level institutional dimensions contribute differently to levels and types of entrepreneurship (Bruton *et al.*, 2010; Spencer and Gómez, 2004). We want to contribute to the institutional literature on entrepreneurship answering this call and extending previous analysis to highlight the differentiated influence of the different institutional dimensions on entrepreneurial orientation and activities.

Analysing corporate entrepreneurship in Spain is especially interesting within the context of this work. Spain ranks the last positions among countries EU-25 in the index of entrepreneurial activity and climate (De la Vega *et al.*, 2010). The existing literature has described several factors that are acting as handicaps for entrepreneurial development, and stress the need to promote institutional arrangements for a competitive and sustainable entrepreneurial activity over time (De la Vega *et al.*, 2010). The empirical analysis of a sample of 150 Spanish firms can help to provide practical implications for practitioners and regulators both in Spain and in a general context. Our results show that both the cognitive and normative dimensions of the institutional

environment positively influence the entrepreneurial orientation of the sampled firms, whereas the regulatory dimension influences over type of corporate entrepreneurial activity is carried out by them.

This paper is organised as follows. First, we present the main characteristics of corporate entrepreneurship inside the Spanish business environment and the influence exerted by institutional pressures on firms. From these, we establish our hypotheses and research model. Then, we show our analysis of the data and results. Finally, we discuss the results and detail the implications of this research.

## 2. THEORETICAL FRAMEWORK AND GEOGRAPHICAL CONTEXT: CORPORATE ENTREPRENEURSHIP AND SPAIN

Entrepreneurship is a driving force for modern economies and societal development, through both economic growth and the generation of employment and promotion of innovation (Bosma and Levie, 2010; Bosma *et al.*, 2009). Corporate entrepreneurship refers the process whereby an organization creates new business units or instigates renewal within that organization (Sharma y Chrisman, 1999). To stimulate these entrepreneurial activities within organisation, it is necessary to build an adequate level of entrepreneurial orientation (Dess and Lumpkin, 2005).

Entrepreneurship orientation is related to the corporate proactivity and innovativeness as showed by corporate processes, practices and activities (Antoncic and Hisrich, 2001; Knight, 1997). Proactivity refers to aspects related to initiative, risk assumption and competitive aggressiveness, which are reflected in the actions of the members of an organisation (Lumpkin and Dess, 1996). Innovativeness is defined as the tendency of an organisation to take and to support new experimental ideas and creative processes that

may lead to new products, services or technological processes (Lumpkin and Dess, 1996).

Entrepreneurial activities in existing organisations results in two possible types of corporate activities: strategic renewal and new business venturing. Strategic renewal refers to organisational efforts that lead to significant changes for organisational business, in strategy or organisational structure; and new business venturing is related to the creation of new business units (Guth and Ginsberg, 1990; Sharma and Chrisman, 1999).

The existing literature gathers, in diverse models, the main internal, external and strategic variables involved in the entrepreneurial processes of organisations (Antoncic and Hisrich, 2001; Covin and Slevin, 1991; Guth and Ginsberg, 1990; Ireland *et al.*, 2009). Environment has been regarded as one of the most important variables, but with a limited attention to the whole influence of institutional dimensions. Although previous literature has paid a priority attention to the regulation influence on the entrepreneurship (e.g. Capelleras *et al.*, 2008; Child and Tsai, 2005; Yiu and Makino, 2002), recent research has suggested that other multiple factors more related to cognitive and normative variables (e.g. culture, tradition, history, cognitive conceptions) are also relevant affecting the level and the success of entrepreneurship (Baumol *et al.*, 2009; Lim *et al.*, 2010).

The importance of all these different factors is well illustrated by the Spanish situation. The Spanish economy has widely exceeded that suffered by other developed countries in the current financial situation. For example, the unemployment rate has reached 20.5%, whereas the average for OECD members is 8.5% (OECD Harmonised Unemployment Rates, 2010). Despite the many factors that have influenced this

situation, various experts and national institutions have highlighted some structural problems related to the shortage of the Spanish entrepreneurship (Documents of *Círculo de Empresarios*, 2009). Spain is ranked in one of the lowest places for European countries in terms of entrepreneurial climate and activity rates according to the European Commission (De la Vega *et al.*, 2008, 2009, 2010).

Throughout recent history, Spanish business sector has found restrictions limiting the entrepreneurial capacity of the firms, even when the Spanish economy is completely integrated in the European Union. First, comparing with other nearby countries, Spanish society shows more aversion to risk and less tolerance to failure (De la Vega *et al.*, 2010). Second, Spanish society also shows ambivalence in regards to entrepreneurial activity. Despite the recognition that firms generate money, working as an entrepreneur in Spain is socially less prestigious and less appreciated than in other developed countries (Valdaliso-Gago, 2005). Third, Spanish society exhibits some ignorance about issues related to entrepreneurship and business management (Valdaliso-Gago, 2005). This ignorance may enhance aversion to risk and requires changes in those social paradigms that discourage entrepreneurial activities. Four, and finally, existing regulations in certain industries discourages organisations from assuming innovative business initiatives (Capelleras *et al.*, 2008; Documents of *Círculo de Empresarios*, 2009).

### 3. DIMENSIONS OF THE INSTITUTIONAL ENVIRONMENT AND HYPOTHESES.

Institutional theory propounds that organisations adopt structures, processes, programmes, policies and/or procedures because of the pressure that coexisting institutions exert on them (Kostova and Roth, 2002). In doing so, firms respond to

institutions by accepting and complying with the imposed rules while, at the same time, trying to influence and control these institutions that also try to control firms (Oliver, 1991, Rao and Giorgi, 2006).

The institutional environment is defined as the stable rules, the social standards and the cognitive structures in society that guide, favour or restrict business activity (Scott, 1995). Institutions exert different types of pressure to which organisations respond, causing organisations to establish fields of action that define the activities of firms and the conditions under which firms obtain legitimacy (Meyer and Rowan, 1977; Scott, 1995).

Using the concept of the *Country Institutional Profile* (CIP), Kostova (1999) explains how regulatory, normative and cognitive dimensions of the institutional environment influence organisational management. We follow well accepted delimitation of the three dimensions for our work (e.g. Busenitz *et al.* 2000). The *regulatory* dimension includes the laws and governmental policies that support new business activities, which reduces management efforts towards entrepreneurship. The *normative* dimension refers to how the inhabitants of a country value the creative and innovative minds of people and firms. The *cognitive* dimension consists of the knowledge and abilities possessed by the inhabitants of a country for business management as certain issues and knowledge may be institutionalised and become shared knowledge (Busenitz *et al.*, 2000).

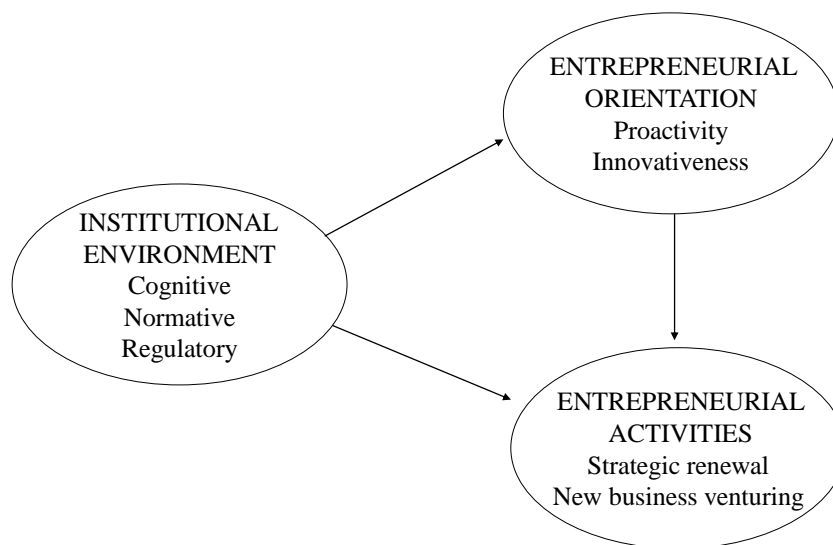
Most analyses in the institutional literature regarding corporate entrepreneurship have been descriptive (Stephen *et al.*, 2005), or mainly focused on the influence of regulatory environment (Capelleras *et al.*, 2008; Child and Tsai, 2005; Yiu and Makino, 2002). In recent years, works about the role of cultural, history, values and education context in entrepreneurship expand the typical formal institutional context, because it requires



understanding how people's attitudes, preferences and capabilities influence entrepreneurial activities (Lim *et al.*, 2010, Spencer y Gómez, 2004).

As detailed below, we propose that all of the institutional dimensions influence corporate entrepreneurship phenomena. However, the normative and cognitive dimensions of the institutional environment specially influence the entrepreneurial orientation of firms, whereas the legal aspects of the institutional environment – the regulatory dimension – influences the type of entrepreneurial activity carried out by an organisation (Figure 1).

Figure 1: Research model



### **Entrepreneurial orientation**

The cognitive dimension of institutional environment refers to the knowledge conceptions shared by society, as well as the frameworks they use to categorize and evaluate information (Busenitz et al., 2000). Within any country, particular knowledge sets become institutionalized, and certain knowledge becomes part of a shared social

understanding. The prevalence of skills, such as the ability of people to manage the risk of new activities, is difficult to be widely dispersed among individuals in one country if residents lack the knowledge necessary to understand even the most basic steps required to found and operate a new business. The existence of an adequate business educational system creates shared cognitive conceptions that generate less aversion to issues related to firms' uncertainty management and risk. These shared conceptions and values influence organisations and facilitate the establishment of more competitive stances and initiatives in the markets (Busenitz *et al.*, 2000; Spencer and Gómez, 2004).

Education and training plans are integral components of the socioeconomic infrastructure that encourage both organisations and their members to become more entrepreneurial (Vesper, 1996). Therefore, a society with trained human resources possessing proper capabilities develops a more entrepreneurial orientation (Whitley, 1999). The existence of institutional agreements, such as the entrepreneurial education, significantly influences the degree of entrepreneurial effort (Bowen and DeClercq, 2008); therefore, a cognitive environment in which common business knowledge is institutionalised significantly influences an organisation's entrepreneurial orientation. Thus, we propose the following hypotheses:

H1a: The existence of shared cognitive conceptions about business management positively influences an organisation's proactivity.

H1b: The existence of shared cognitive conceptions about business management positively influences an organisation's innovativeness.

Societal values influence the degrees of entrepreneurship of people and organisations. Those societies that attach positive value to creativity and change create a normative environment that encourages organisations to develop strategic orientation models with

entrepreneurial stances. Therefore, institutions can stimulate their entrepreneurial profile through changes in society's values and culture (Ahlstrom and Bruton, 2002; García-Cabrera and García-Soto, 2008; Kshetri, 2009; Nguyen *et al.*, 2009).

The existence of an innovative culture puts pressure on organisations from the same field to adopt entrepreneurial stances. Those societies that attach positive value to initiative, creativity and the presence of entrepreneurial attitudes positively influence organisations to have greater initiative and better capabilities to take risks and choose more aggressive and riskier competitive stances.

H2a: A society that attaches positive value to taking initiative and creativity positively influences an organisation's proactivity.

H2b: A society that attaches positive value to taking initiative and creativity positively influences an organisation's innovativeness.

### **Corporate entrepreneurial activities**

The result of corporate entrepreneurship is reflected in two types of activities: strategic renewal and the creation of new corporate businesses (Antoncic and Hisrich, 2001; Guth and Ginsberg, 1990; Sharma and Chrisman, 1999). The regulatory dimension is focused on the development of new entrepreneurial activities. According to existing rules and laws, the content and the direction of these actions may be diverse (Kogut *et al.*, 2002). Regulatory institutions are those that influence the most complex and advanced forms of corporate entrepreneurship (Spencer and Gómez, 2004).

Changes in existing rules and laws can cause an organisation to move from a strategic position to another one (Hoffman, 2001). These movements appear according to

institutional pressures, but they also depend on a firm's own power structure and vision, which results in diverse strategies inside the business environment (Kogut *et al.*, 2002).

Furthermore, changes in leading organisations within a legal context involve later renewals by the rest of the organisations of the industry in order to adapt themselves to the new institutional context by imitating initiatives previously taken by other organisations, which are considered as legitimate (Flier *et al.*, 2003; Greenwood and Hinings, 1996). The regulatory dimension influences organisations' strategic movements, sometimes due to being in a leadership position and sometimes because of being a follower organisation.

In addition, regulation is a basic element for the establishment of obstacles to either new activities or the creation of entrepreneurial opportunities for organisations. The regulatory dimension can, therefore, directly affect managers' entrepreneurial behaviours (Busenitz *et al.* 2000). As a last resort, the diverse possibilities for the development of new businesses will depend on how regulation makes the implementation of new activities easy or difficult and will be finally delimited by the organisations' internal characteristics (Capelleras *et al.*, 2008; Dacin *et al.*, 2008).

Thus, a regulatory environment facilitating business activity influences both reorganisation activities and the creation of new corporate businesses by means of laws, rules or support programmes for firms. Our hypotheses are:

H3a: Support programmes for business activities positively influence the level of strategic renewal within an organisation.

H3b: Support programmes for business activities positively influence the creation of new businesses within an organisation.

To stimulate corporate entrepreneurship within organisations, it is necessary to build an adequate level of entrepreneurial orientation (Dess and Lumpkin, 2005). In doing so, organisations develop more proactive and innovative stances (Antoncic and Hisrich, 2001; Knight, 1997) for proper entrepreneurial development, where innovativeness is the key element during the process (Covin and Miles, 1999). Research indicates that entrepreneurial orientation cannot be treated as a unique element, but each of its dimensions can be separated from and related to the others (Antoncic and Hisrich, 2001; Dess and Lumpkin, 2005; Kreiser *et al.*, 2002).

Proactive organisations are those that attempt to change the competitive conditions instead of adapting to these conditions. Proactive organisations tend to innovate more than those that have defensive strategies. These proactive organisations seek market opportunities and are able to adapt and give a quick creative answer to a change in their environment by developing more innovation through new ideas, patents, new products and technological processes. Organisations whose strategies are more aggressive, competitive and risky are also more innovative (Aragón-Correa, 1998; Laforet, 2008; Öszomer *et al.*, 1997).

According to literature, the key element to joining entrepreneurial orientation and entrepreneurial activity is innovation. From classic works (Schumpeter, 1934) to recent ones, innovation has been recognised as a key element for this process (Ireland *et al.*, 2006a, b; McFadzean *et al.*, 2005; Sharma and Chrisman, 1999; Zahra, 1993). Covin and Miles (1999) argued that innovation, broadly defined, is the single common theme underlying all forms of corporate entrepreneurship (Covin and Miles, 1999). Innovativeness, more than any other aspect, is always present in any entrepreneurial process, given that without innovativeness there is no corporate entrepreneurship regardless of the presence of other dimensions (Covin and Miles, 1999). Therefore, the

link between an organisation's entrepreneurial orientation and the start of its entrepreneurial activities is the existence of innovativeness throughout the whole process (Sharma and Chrisman, 1999). Thus, our hypotheses are:

H4a: Proactivity positively influences an organisation's innovativeness.

H4b: Innovativeness positively influences an organisation's strategic renewal activities.

H4c: Innovativeness positively influences the creation of new corporate business activities by an organisation.

#### 4. METHODOLOGY

Analysing the influence of institutional dimensions suggest the importance of selecting a sample of firms situated in a space with relatively homogeneous geographical, cultural, legal and political characteristics (Busenitz *et al.*, 2000). Our sample was composed of firms located inside the Spanish territory. As discussed above in our paper, the Spanish context is appropriate to analyze the influence of the institutional dimensions on corporate entrepreneurship, because it is widely accepted that the specific environmental situation may be affecting the specific features of the entrepreneurship in Spain. Data were obtained through a structured questionnaire filled in by the general manager of each of the sampled firms from March to May 2009.

We decided to use general managers as our key reporters because they receive information from a wide range of firm units and are a highly valuable source in order to evaluate each of the variables of the firm (Baer and Frese, 2003). Firms' general data were obtained from the Duns and Bradstreet database. This database offers one of the most detailed directories of industrial firms in the country, including some specific details regarding sample and size. The random sample relied on 1,455 firms chosen to

complete the questionnaire. A phone survey was selected to contact the managers and we finally obtained answers from 150 firms, a response rate of 10.30 %. Comparing with previous literature, the response rate is moderately high, especially considering that we are contacting with a big number of firms and the very different size of our firms. Phone interview was especially useful to be sure of the identity of the people answering the questionnaire and to get more chance of participation from medium and small firms.

As for the industry, our sample well reflects the importance of some working activities in Spain. Sectors more represented include trade, metallurgy and machinery, and transportation with 13%, 10% and 9% respectively. In terms of size, the results show that 5% of the survey has less than 50 employees, 16% between 50 and 250 employees, and the rest (79%) more than 250 employees. Finally, regarding the sales volume last year, 15% of the survey invoiced less than 250 thousand of Euros, 7% between 250 and 500 thousand, 4% between 500 and 1 million, and 74% invoiced over 1 million Euros of sales in 2009. After finishing the fieldwork, we checked that there were not significant differences between firms that answered the questionnaire and those that rejected it according to their size or to their industry.

Despite that using the responses of a unique reporter is an effective approach in many research contexts (Liao, 2007; Ling *et al.*, 2008), the existence of likely prejudices that must be avoided is acknowledged in the literature. In order to reduce biased responses as much as possible, we followed the recommendations of Podsakoff *et al.*, (2003). First, it was promised that the interviewed people would remain anonymous and explained that there were no wrong answers to the questionnaire so they should respond in the most honest way possible. These details reduce any fear of interviewed people concerning not giving the expected answers. Second, the use of ambiguous levels was avoided, and questions were written in a clear, precise and concise way. Some

clarifications were given in cases of terms that could have been less well known for interviewed people. Third, there were varying scales in the questionnaire. In doing so, we minimised the risk of tendentious responses. Finally, we applied the Harman test, which indicated the absence of a common pattern in the answers.

Given that the creation of levels of measurement is a complex task, we followed the advice of Prajogo and Sohal (2004), who suggested using constructs already-tested in previous empirical studies in order to ensure their content validity. To analyse institutional pressures, the CIP instrument from Busenitz *et al.* (2000), which measures pressures exerted by regulatory institutions (5 items), cognitive institutions (4 items) and normative institutions (4 items), was adapted. With regard to entrepreneurial orientation questions, the Knight (1997) and Zahra (1993) scales for proactivity (5 items) and innovativeness (8 items) were adapted. Lastly, Zahra's (1993) scales for strategic renewal (7 items) and new corporate businesses (5 items) variables were adapted.

We performed a comprehensive analysis of the validity of each scale used by confirmation factor analysis. The results (Table 1) show that the rates exceeded the minimum values suggested in the literature.

Table 1: Validity and reliability of the scales used

<b>LATENT VARIABLE</b>	<b>Items in</b>		<b>Cronbach's alpha (&gt;0.7)</b>	<b>Composite reliability (&gt; 0.7)</b>	<b>Shared variance (&gt;0.5)</b>
	<b>Number of items</b>	<b>final model</b>			
Cognitive	4	3	0.848	0.819	0.603
Normative	4	4	0.907	0.911	0.674
Regulative	5	5	0.891	0.922	0.704
Proactivity	5	5	0.890	0.922	0.704



Innovativeness	8	6	0.926	0.912	0.640
Strategic renewal	7	7	0.898	0.905	0.591
New business venturing	5	5	0.844	0.922	0.704

## 5. RESULTS

This section presents the main results of our research. In order to estimate the crossed and multiple dependency relationships established in our hypotheses, we designed a model of linear structural equations and empirically verified it with the LISREL 8.30 programme. First, it was performed a multivariate normality test for all of the variables. The results showed significant differences related to asymmetry and kurtosis (values  $p < 0.05$ ). Since the normality requirements were not met, we estimated the model by using the method of unweighted least squares (ULS).

We verified the presence of adequate structural coefficients and individual reliabilities inside the diverse constructs of the model, as well as adequate values of composite reliability and variance extracted from the latent variables, which confirmed the model's convergent validity. As well, we checked that the model goodness of fit was adequate ( $\chi^2_{d.f.: 548} = 536.74$ ; GFI = 0.97; AGFI = 0.96; NFI = 0.96; PNFI = 0.90), and remained inside recommended values (Hair *et al.*, 2009, Kelloway, 1998). Table 2 shows the matrix of covariances of the model latent variables, which allows for estimations using the whole model because of the moderate values.

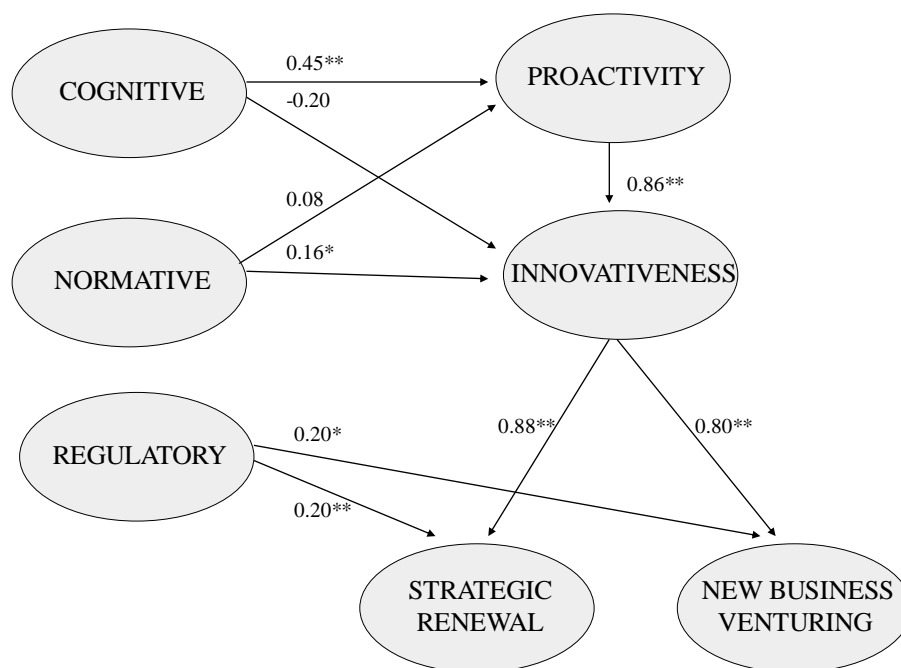
Table 2: Matrix of covariance of latent constructs

	<i>COG</i>	<i>NOR</i>	<i>REG</i>	<i>PRO</i>	<i>INN</i>	<i>SR</i>	<i>NBV</i>
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<i>COG</i>	0.76						
<i>NOR</i>	0.32	0.73					
<i>REG</i>	0.31	0.25	0.71				
<i>PRO</i>	0.36	0.20	0.16	0.69			
<i>INN</i>	0.19	0.20	0.10	0.51	0.58		
<i>SR</i>	0.22	0.22	0.21	0.47	0.52	0.55	
<i>NBV</i>	0.24	0.24	0.24	0.50	0.55	0.51	0.76

The empirical results clearly show the influence of the institutional environment on corporate entrepreneurship (figure 2). Each of the dimensions influences multiple elements of corporate entrepreneurship. This empirical analysis complies with the initial objective of analysing the influence of the institutional environment and examining how this influence can encourage entrepreneurship in organisations.

Figure 2: Standardised structural parameters in the model



Level of significance: \*p < 0.05; \*\*p < 0.01

The empirical evidence demonstrates that the cognitive and normative dimensions influence organisations' entrepreneurial orientations, although not all of the hypotheses were confirmed. The results illustrate that the cognitive dimension of the institutional environment influences proactivity (H1a;  $\beta = 0.45$ ;  $p < 0.01$ ), whereas the normative dimension influences organisations' innovation levels (H2b;  $\beta = 0.16$ ;  $p < 0.05$ ).

Hypotheses H1b and H2a could not be verified by this study. In fact, the result for the relationship between the cognitive dimension and innovation was opposite of that hypothesised (H1b;  $\beta = -0.20$ ). The cognitive dimension can exert pressure on an organisation to become more innovative, but it is also necessary that creative ideas are generated and shared inside the organisation (Roper *et al.*, 2008). If the body of knowledge for managing entrepreneurial activity is not situated inside an organisation, this organisation will not be able to innovate and be entrepreneurial.

With regard to H2a, the results show a positive relationship, but not a significant one (H1b;  $\beta = 0.08$ ). The literature concerning corporate entrepreneurial activities relates proactivity to an organisation's values, motivation and reliability (Guth and Ginsberg, 1990) and indicates that a society's culture influences entrepreneurship levels (Shane, 1993, Davidson, 1995). Thus, it would be fitting to keep analysing these relationships with larger sample sizes in order to achieve conclusive data and results.

In regards to H3, the results show a positive and significant relationship between the regulatory dimension of the institutional environment and entrepreneurial corporate activities, i.e., strategic renewals and the creation of new corporate businesses (H3a;  $\beta = 0.20$ ;  $p < 0.01$ ; H3b;  $\beta = 0.20$ ;  $p < 0.05$ ). Last of all, the relationship between proactivity and innovation is positive and significant (H4a;  $\beta = 0.86$ ;  $p < 0.01$ ), as well as the relationships between innovation and strategic renewal (H4b;  $\beta = 0.88$ ;  $p < 0.01$ ) and

the creation of new corporate businesses (H4c;  $\beta = 0.45$ ;  $p < 0.01$ ), validating the theoretical statement arguing that an adequate entrepreneurial orientation encourages effective corporate entrepreneurship.

Our empirical results show that the institutional environment, through the pressure exerted by the regulatory, cognitive and normative dimensions, influences organisations to adopt entrepreneurial stances. First, we highlighted the influence of the cognitive and normative factors on organisations' entrepreneurial orientations (in terms of innovation and proactivity). Both the institutionalisation of knowledge about business management within a society and the existence of a society that values innovative and creative behaviours exert pressure on organisations to take more initiative and assume more risk, as well as promote higher levels of innovation. The existence of policies supporting business management and facilitating organisational efforts have a positive influence on the implementation of activities related to both strategic renewals and the creation of new corporate businesses.

## 6. CONCLUSIONS AND IMPLICATIONS

Nowadays, corporate entrepreneurship is essential to obtain a long-term competitive advantage. Institutional theory has been one of the theoretical frameworks whose advances have paid more attention to corporate entrepreneurship and its likely influence on organisations' actions, justifying recent works calling for the detailed analysis of the possible relationships between both concepts.

We have used a particularly relevant context for our analysis. Fear and the lack of an entrepreneurial spirit have been obstacles to the development of entrepreneurship within the Spanish business sector (De la Vega et al., 2009). The appearance of institutions that facilitate entrepreneurial initiatives is one of the possible paths for increasing

entrepreneurship within the Spanish business sector. Our work extend the institutional theory analyzing corporate entrepreneurship (Spencer y Gómez, 2004; Bruton et al., 2010) and tries to offer practical implications regarding how specific dimensions of the institutional environment matter.

The existing literature recognises that the appearance of institutions that facilitate entrepreneurial initiatives is one of the best ways to increase entrepreneurship within a certain country or territory, but more detailed analysis and empirical contributions was necessary in this area. The paper contributes to this analyzing empirically how the institutional environment influences on the development of the corporate entrepreneurial process.

Previous research stressed the influence of legal aspects of institutions on the development of corporate entrepreneurship (Capelleras *et al.*, 2008; Child and Tsai, 2005). We are confirming this importance but, at the same time, our work discovers some relevant details. Specially, we highlighted that the influence of the regulatory dimensions is particularly relevant when analysing its influence on the development of new business activities in the firm. Our finding is particularly relevant because we are controlling the influence of other institutional aspects such as the values, culture and education.

In this context, our results show that an improvement of the organisations' entrepreneurial orientation need, from an institutional perspective, to encourage an appropriate level of business education for the whole society. Business education may introduce cognitive schemas and scripts in society that provoke less aversion to matters of business, risk and uncertainty and establish innovation as a cornerstone of the culture. It is important to highlight that, when we are analyzing the importance of the cognitive

dimension, we are not meaning a top management education for a minority (which is probably also appropriate to run the firms and it is well ranked in Spain including several top business schools, such as IESE or IE), but a collective knowledge of the importance and interests of entrepreneurship and the firm.

Finally, our results also show the importance of normative values. Society must positively value creativity and the implementation of new ideas. When managers perceive in the institutional environment the existence of a good tolerance to risks and mistakes emerging from innovation, they will be more open to change organisational strategic orientation models towards entrepreneurial stances. Offering an appropriate normative environment is more difficult than generating an appropriate context in the regulatory and cognitive spheres. Multiple factors influence how the inhabitants of a country value the creativity and innovation, and also how managers perceive this. It is interesting that regulation and education will probably also influence the cognitive dimension, but other softer aspects may be relevant (such as dominant news and approach in the media, the profile of domestic and local heroes, or formal prizes and recognition).

In the Spanish case (country with one of the weakest levels of entrepreneurship in EU); the presence of an appropriate institutional environment can help to develop entrepreneurship in society and business sector as the driving force of economic improvement. When mass media, society and official institutions are calling for multiple reforms in the financial regulation and public budget, it might not be enough to reinforce the innovative orientation of the country in the future (and generating new jobs, which is the main problem in Spain comparing with other Western countries). It is time to generate specific steps in which innovation and creativity is cornerstones not only for businesses and the economy, but also for in society in general. This innovative

behaviour is the main value that encourages entrepreneurial initiatives and innovative economic, social and territorial projects. Broad declaration of interest might be complemented with specific actions guided by the findings in our paper regarding an educational basis generating shared conceptions and institutions facilitating the value of innovation. The existence of legal norms and regulations that facilitate it may be the last help to allow the generation of new activities in the firms after the generation of an entrepreneurial orientation

This article has some limitations, such as: there is only one reporter per firm, the work is cross-sectional in nature and the results come just from a sample of Spanish firms. Nonetheless, the institutional literature warns that using several countries aggregate samples involves a great deal of complexity because of the diverse institutional environments and the difficulty in establishing a common institutional environment that serves to generalise the results (Busenitz *et al.*, 2000).

Future empirical works must overcome previous limitations by studying corporate entrepreneurship in depth and expanding on the data obtained here. It would be especially interesting to analyse the same relationships in organisations from different countries to compare them and, if possible, establish a general model for the literature about entrepreneurial issues. The possibility of extending this empirical study to a European scope would provide the opportunity to verify the results obtained here by examining a larger spatial and economic scale and to obtain explanatory models of corporate entrepreneurship that include institutional influence, an aspect that has been neglected by researchers.

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