This research paper has been presented at the international conference RENT XXI – Research in Entrepreneurship and Small Business, Cardiff, November 22-23, 2007

Understanding the Impact of Culture on a Firm's Entrepreneurial Orientation and Behavior: a Conceptual Framework

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Understanding the Impact of Culture on a Firm's Entrepreneurial Orientation and Behavior: a Conceptual Framework[1]

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Summary

The Entrepreneurial Orientation construct is at the heart of Corporate Entrepreneurship. Built around dimensions such as innovativeness, risk-taking, pro-activeness, autonomy and competitive aggressiveness, the Entrepreneurial Orientation construct appears as a useful and powerful tool for assessing entrepreneurial behavior at firm level. Past research has focused on the impact of Entrepreneurial Orientation on the firm's performance. Little empirical research has been devoted to understanding the factors and conditions that produce Entrepreneurial Orientation. Generic explanatory variables such as environment, organization, strategy and culture have been mentioned in past research, but though a number of hypotheses have been proposed, few have been thoroughly developed and tested. In this paper, we focus on one explanatory variable - culture - that we develop along multiple axes. We propose a conceptual framework that aims to provide a better understanding of how three interdependent levels of culture - national, industry and corporate - influence Entrepreneurial Orientation.

Key words

Corporate entrepreneurship - entrepreneurial orientation – culture – national culture – corporate culture- industry culture – contingency model - environment - firm-level behaviors

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Understanding the Impact of Culture on a Firm's Entrepreneurial Orientation and Behavior: a Conceptual Framework[2]

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Introduction

For almost four decades now, both practitioners and scholars have shown a marked interest for Corporate Entrepreneurship. In a changing world, large and small companies have to innovate and react quickly just to maintain their competitiveness (Ireland et al., 2001). They have to continually identify new opportunities and turn these opportunities into revenue streams: they have to behave entrepreneurially (Stevenson and Jarillo, 1990; Shane and Venkataraman, 2000).

In the Entrepreneurship literature, Corporate Entrepreneurship is defined in a variety of ways and there is an abundance of empirical research linking Corporate Entrepreneurship to performance. In all these studies, the Entrepreneurial Orientation construct holds a particularly important place (see, for example, Lumpkin and Dess, 1996; Wiklund, 1999; Wiklund and Shepherd, 2003). Measured through dimensions such as innovativeness, risk-taking, pro-activeness, autonomy and competitive aggressiveness (Miller, 1983; Covin and Slevin, 1989; Lumpkin and Dess, 1996), the Entrepreneurial Orientation construct appears as a useful (and powerful) tool for assessing entrepreneurial behavior at firm level and its effect on firm performance. According to Lumpkin and Dess (1996:136): "firms that want to engage in successful corporate entrepreneurship need to have an entrepreneurial orientation". Entrepreneurial Orientation is often described in entrepreneurship literature as the mindset of firms engaged in the pursuit of new opportunities. Research on Entrepreneurial Orientation focuses on its definition, its measure and its relationship with the performance of firms. More precisely, the discussion of the impact of Entrepreneurial Orientation on performance, in different contexts, for different types of firms, remains an important research topic (Wiklund and Shepherd, 2005; Hughes and Morgan, 2007) whereas little research has been dedicated to the factors and/or the conditions which produce this specific mindset.

Since a long time now, researchers have recognized the impact of cultural factors on entrepreneurial behavior, but even though national culture has sometimes been included as an

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independent variable in some models, generally speaking, cultural variables have been rather neglected (see, for example, Hayton, George and Zahra, 2002). Even more neglected has been the study of the impact of different levels of culture (e.g., national or regional, industry and corporate) and, more importantly, their interaction and their impact on Corporate Entrepreneurship and specifically on Entrepreneurial Orientation, though cultural variables can probably help account for the huge variability in the entrepreneurial behavior of firms.

Based on an in-depth review of literature, we propose a conceptual framework that aims to provide a better understanding of how interdependent levels of culture (national, industry and corporate) influence the Entrepreneurial Orientation of firms and their associated behavior. We postulate that corporate and industrial culture can reinforce or weaken the effects of national culture on a firm's Entrepreneurial Orientation. In our view, national culture is mainly influenced by the history, traditions, norms, values and collective beliefs of a given country; by contrast, an industry culture is a specific sub-culture reflecting the competitive environment, the skills, resources and organization that are characteristic of a given industry, while the corporate culture remains strongly influenced by the history of the company and the main values of its founders and initial stakeholders.

In the first section of this paper, we describe the Entrepreneurial Orientation concept underlining its history, content and use in the field of entrepreneurship. In a second section, we develop the relationship between national culture and entrepreneurship. We then study, in a third section, the relation between industry culture and entrepreneurship and finally, the fourth section allows us to highlight the role and influence of corporate culture on entrepreneurial behaviors.

1. Entrepreneurial Orientation: a relevant construct to characterize entrepreneurial firm-level behaviors

There is a strong consensus within the research community that entrepreneurship as an academic field suffers from a lack of clear-cut definitions and concepts. Personality trait approaches, process-related studies, environmental factor analyses, provide the reader with various distinct, overlapping and sometime conflicting characterizations of entrepreneurship, be it at individual or firm level (e.g. Lumpkin and Dess, 1996).

One concept, however, appears to be quite robust and has been adopted by various scholars throughout the two last decades (see for recent years Wiklund and Sheperd, 2003, 2005; Covin and Green, 2006; Hean Tat Keh et al., 2007). The Entrepreneurial Orientation, in fact, "represents one of the few areas of entrepreneurship where we are beginning to see a cumulative body of knowledge developing" (Rauch et al., 2004).

1.1 Entrepreneurial Orientation definitions

Entrepreneurial Orientation, also labeled "entrepreneurial posture" (Covin and Slevin, 1989), refers to "the processes, practices and decision-making activities" that lead to Corporate Entrepreneurship. There are various salient "behaviors" that entrepreneurial firms may exhibit (Lumpkin and Dess, 1996). The identification of these dimensions results from a cumulative process and the ongoing conversation between a group of scholars. The starting point of this "conversation" is a seminal paper by Miller (1983) which characterizes the entrepreneurial firm as "one that engages in product-market innovation, undertakes somewhat risky venture and is first to come up with proactive innovations, beating competitors to the punch".

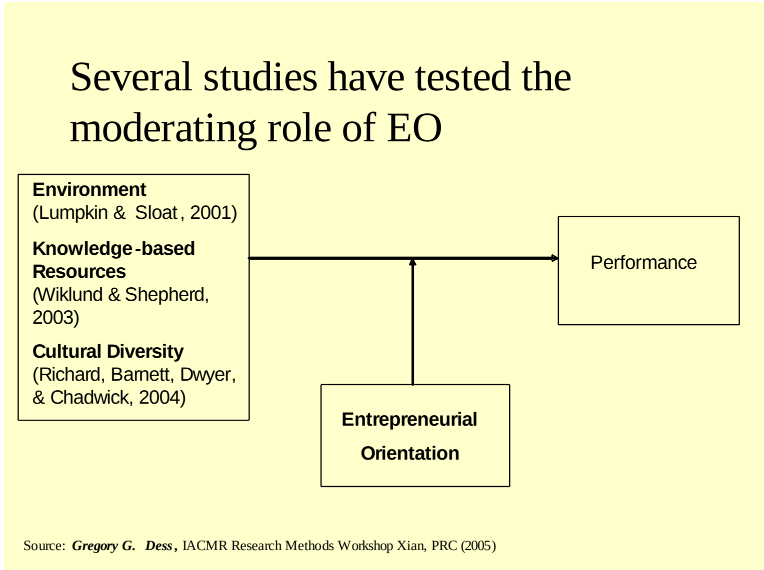
A similar definition is proposed by Covin and Slevin (1991). These authors associate "entrepreneurial posture" with three salient firm characteristics: (1) top management risk-taking with regard to investment decisions, and strategic actions in the face of uncertainty; (2) the extensiveness and frequency of product innovation and the related tendency toward technological leadership; and (3) the pioneering nature of the firm as evident in the firm's propensity to compete aggressively and proactively with industrial rivals. This approach has been praised, criticized and enriched with diverse improvement suggestions (e.g. Zahra, 1993).

In the literature, Entrepreneurial Orientation is always described as a multidimensional concept which alternatively includes two dimensions: innovation and risk taking (Miller and Friesen, 1982); three dimensions: innovation, proactiveness and risk taking (Miller, 1983; Covin and Slevin, 1991; Zahra and Covin, 1995) or five dimensions: autonomy, innovativeness, risk taking, proactiveness and competitive aggressiveness (Lumpkin and Dess, 1996; Dess, Lumpkin and Covin, 1997).

1.2 A dominant topic: Entrepreneurial Orientation-performance relationship

Most of the articles we have mentioned are interested in the relationships between Entrepreneurial Orientation and performance. They propose various contingency or configurational models that include external (environment) and internal (structure, strategy, organizational culture) variables. Contingency approaches (Dess, Lumpkin and Covin, 1997) concentrate on one variable and explore how the Entrepreneurial Orientation-performance relationships are dependant on a given factor such as a firm's competitive environment (Covin and Slevin, 1989), its structure (Covin and Slevin, 1988), or its strategy. Configuration models study firm performance as the combined effects of several variables, for instance Entrepreneurial Orientation, strategy and environment (e.g. Dess, Lumpkin and Covin, 1997). Results have been contrasted: some studies show of a positive correlation between Entrepreneurial Orientation and performance (e.g. Wiklund, 1999; Zahra, 1991; Zhara and Covin, 1995) while others conclude at the absence of any significant relationship between the two (e.g Auger, Barnir and Gallaugher, 2003; Smart and Conant, 1994, Dess, Lumpkin and Covin, 1997). Some studies even argue that, in some cases, entrepreneurial-type strategies are associated with poor performance (Hart, 1992).

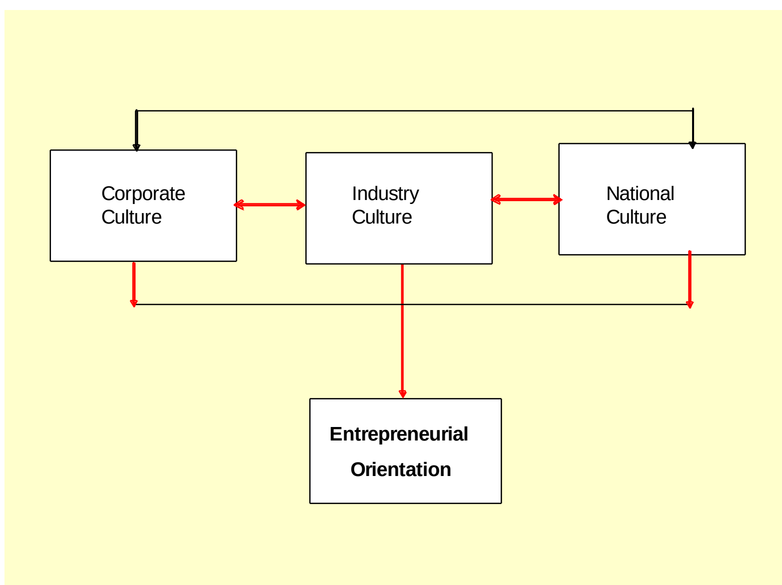
A common conclusion of these studies is that the extent to which Entrepreneurial Orientation is useful for predicting firm's performance is contingent on external factors, such as industry globalization, product / market life cycle stage, government regulations, or internal factors, such as the organization structure or the leader's personality. Most of the proposed models are therefore moderating-effects models in which Entrepreneurial Orientation-performance relationships vary as a function of one specific variable, such as "organicness" (quoted by Lumpkin and Dess, 1996): Covin and Slevin (1988; 1991) or other variables (see figure).



1.3 Scope of our research

Our goal is different and to some extent more modest: we take a step back and explore the conditions of emergence of an Entrepreneurial Orientation.

More precisely, we investigate whether cultural variables can significantly modify or condition the three Entrepreneurial Orientation dimensions mostly commonly mentioned (innovativeness, risk-taking and proactiveness) and how these cultural variables interact. This paper is an attempt at delineating a theoretical framework that will allow us to explore the relationships between Entrepreneurial Orientation and various dimensions of culture.



2. The influence of national culture on entrepreneurial behavior

2.1 Entrepreneurship and National Culture[3]

The first works focusing on demonstrating the influence of culture on national entrepreneurial activity are anything but recent[4] (see for instance Landes, 1953). Some researchers even give this factor a central role, for instance Berger (1993: 16), who specifies that *"culture is the conductor and the entrepreneur is the catalyst"* of entrepreneurial activity. Of course, one cannot deny the influence of other institutional factors (legal, financial, political, and technological), as highlighted by North and Thomas (1973). In this regard, North distinguishes formal institutions (which correspond roughly to the factors mentioned previously) from informal institutions, which he defines as follows: *"They (the informal institutions) come from socially transmitted information and are part of the heritage that we call culture"*. In short, as far as entrepreneurial activity is concerned, formal institutions (political, financial and regulating structures) would contribute to creating opportunities, whereas informal institutions (values and cultural norms) would shape society's and individuals' perceptions of these opportunities (Welter, 2007).

Countries and societies therefore have collective perceptions and images that lead them to admire more or less entrepreneurial activities (Busenitz et al., 2000). As Hayton et al. stated: "Cultural values indicate the degree to which a society considers entrepreneurial behaviors, such as risk taking and independent thinking, to be desirable" (p.33). Moreover, Casson (1991, 1995) suggests that countries differ in their entrepreneurial culture and shows that variations in the level of confidence within cultures can affect transaction costs, and as a result global economic performance. In an empirical comparative study on European Jews who emigrated to New York or London, Godley (2001) shows that Jewish immigrants in New York chose entrepreneurial careers more often than those who had immigrated to London. From this observation, he deduced that U.S. and British cultures value entrepreneurship differently. Morris et al., relying on studies by numerous authors have underlined the link, in the United States, between a high level of entrepreneurial activity and cultural values such as freedom, independence, individualism, and achievement. The study by McGrath et al. (1992) in 10 countries, reaches the conclusion that cultural values influence entrepreneurial behavior.

Despite regular criticism of this factor (Gerschenkron, 1962, 1966), national culture remains a solid reference whenever one tries to explain variations in terms of entrepreneurial activity: *"Among the many factors that contribute to entrepreneurship, perhaps the most critical is a set of social and cultural values along with the appropriate social, economic and political institutions that legitimize and encourage the pursuit of entrepreneurial opportunity"* (Reynolds et al., 1999). This shows how important it is to develop research aimed at better understanding to what extent different attitudes and behaviors towards entrepreneurship may depend on national and cultural

[3] It does exist a lot of definitions about culture or national culture. Drawing mainly from Herbig (1994) and Hofstede (1980), Hayton et al. (2002) proposes the following general definition: "Culture is defined as a set of shared values, beliefs and expected behaviors" (p.33). They add: "Deeply embedded, unconscious, and even irrational shared values shape political institutions as well as social and technical systems, all of which simultaneously reflect and reinforce values and beliefs" (p.33).

[4] We could also mention the pioneering works of Weber (1930), on the link between religious values and entrepreneurship, which paved the way for multiple research works and debates.

factors (Venkataraman, 2004; Todorovic and McNaughton, 2007). However, surprisingly, empirical and conceptual studies in the field of entrepreneurship that have included cultural factors are rare, and rarer still are those concerned with corporate entrepreneurship.

2.2 The Effects of National Culture on Entrepreneurial behaviors[5]

In disciplines such as sociology, economic history, or even anthropology, researchers have tried to explain differences in terms of national economic performance[6]. Landes (1949), for example, links France's weak economic performance in the 19th century to the lack of boldness and the conservatism of its entrepreneurs, who based their activities on a patrimonial logic. For half a century, Landes has extended his research to many different countries, trying to explain the development of entrepreneurial activity, and thus, national economic performance, through national culture, social values and attitudes. As a result, he published what is probably regarded as his reference work: *"The Wealth and Poverty of Nations"* (Landes, 1998).

In Landes' work, the 'measure' of national culture is the nationality (national belonging) itself, and it is not really easy to always identify precisely to what extent a given level of economic performance depends on specific cultural factors. Empirical works that focus on measuring differences between countries in terms of individual or collective entrepreneurial behaviors follow the same logic (see Antoncic and Hisrisch, 2000). The research works that rely on existing conceptualizations of national cultures such as Hofstede's (1980) seem more interesting. In their study, Morris et al. (1994) only consider one of Hosftede's four characteristic dimensions of national culture: individualism vs. collectivism. They show that this dimension is important not only at the national level, but also at the level of the firms' corporate culture in the three countries they studied. Mueller and Thomas (2000) tested two of Hofstede's (1980) cultural dimensions, individualism and uncertainty avoidance, on the entrepreneurial potential of a sample of 1800 individuals from to nine different countries. They define entrepreneurial potential through two main personality traits, the locus of control and innovativeness. The results of the study give empirical evidence that on the one hand, individualistic cultures have a more internal locus of control than collectivist cultures, and on the other hand, that an internal locus of control combined with innovativeness is more often found in individualistic cultures with a low uncertainty avoidance than in collectivist cultures with a high level of uncertainty avoidance. Lee and Peterson (2000) use all Hofstede's dimensions, individualism, uncertainty avoidance, power distance, and masculinity, to which they add two extra dimensions borrowed from Trompenaars (1994): achievement and universalism. The cultural model proposed by these authors suggests that only countries with a culture that is favorable to entrepreneurship are able to generate a strong Entrepreneurial Orientation in the sense of Lumpkin and Dess (1996), leading to the development of entrepreneurial activity and the increase of global competitiveness. One last

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[5] We do not present in this section all the research which associate national culture and entrepreneurship. For a recent review, see Hayton, George and Zahra (2002). In their article, the authors present studies of national culture and corporate entrepreneurship (9 have been identified in an extensive survey).

[6] See the works of Jones and Wadhwani (2006) which offer a wide range of examples of research in these disciplines. These authors introduce their research as follows: *"In recent decades, historians have increasingly sought to ground the study of how culture and nationality affect entrepreneurship by examining how specific social structures and relationships shape the influence of entrepreneurial culture. They have examined how social group affiliation – whether ethnicity, race, gender, family or class – mediates entrepreneurial culture by constraining or providing specialized access to opportunities and resources"* (p. 14).

study (O'Brien and Nordvedt, 2006) uses Hofstede's four original dimensions as well as a fifth dimension that was later developed by the same author (Hofstede, 1991): long-term orientation. This work deals with the effects of national culture on entrepreneurial intention, drawing on the theory of planned behavior (Ajzen, 1991) and Shapero's model (Shapero and Sokol, 1982).

The research works we have briefly presented here constitute a representative sample of what can be done to study, conceptually or empirically, the influence of national culture on entrepreneurial behavior. They all refer, to a greater or lesser extent, to Hofstede's cultural dimensions[7], to tried and tested constructs such as entrepreneurial intention, entrepreneurial potential, and Entrepreneurial Orientation, and they all address the three levels of analysis: individual, organizational and national.

2.3 National Culture Dimensions and Research Propositions

Drawing from Hofstede (1985) we define in our research model four national cultural dimensions which could influence and shape Entrepreneurial Orientation of firms. For each of them we derive a possible research proposal.

Power distance. It indicates the degree of tolerance for hierarchical or unequal relationships, "that is the extent to which the members of a society accept that power in institutions and organizations is distributed unequally" (Hofstede, 1985:347). A low degree of tolerance for unequal relationships leads to a more conducive entrepreneurial culture (Lee and Peterson, 2000) and consequently influences in a positive sense the Entrepreneurial Orientation of firms (*P1*).

Uncertainty Avoidance. This dimension clearly underlines the degree of acceptance for uncertainty or the willingness to take risk, "that is the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity, which leads them to support beliefs promising certainty and to maintain institutions protecting conformity" (Hofstede, 1985: 347-348). A weak degree of uncertainty avoidance leads to a more conducive entrepreneurial culture (Lee and Peterson, 2000) and consequently influences in a positive sense the Entrepreneurial Orientation of firms (*P2*).

Individualism. It is opposed to collectivism and indicates the degree of emphasis placed by a country on individual accomplishment; "which stands for a preference for a loosely knit social framework in society in which individuals are supposed to take care of themselves and their immediate families only; as opposed to *Collectivism*, which stands for a preference for a tightly knit social framework in which individuals can expect their relatives, clan, or other in-group to look after them, in exchange for unquestioning loyalty" (Hofstede, 1985: 348). A high level of individualism in a given country leads to a more conducive entrepreneurial culture (Lee and Peterson, 2000) and consequently influences in a positive sense the Entrepreneurial Orientation of firms (*P3*).

Masculinity. This dimension gives the degree of stress placed on materialism and wealth, "which stands for a preference for achievement, heroism, assertiveness, and material success; as opposed

[7] Sans exclure la possibilité de compléter ces dimensions par d'autres, plus marginales, proposées par d'autres auteurs (les dimensions de Trompenaars, par exemple).

to *Femininity*, which stands for a preference for relationships, modesty, caring for the weak, and the quality of life. In a masculine society even the women prefer assertiveness (at least in men); in a feminine society, even the men prefer modesty. A high level of masculinity in a country leads to a more conducive entrepreneurial culture (Lee and Peterson, 2000) and consequently influences in a positive sense the Entrepreneurial Orientation of firms (*P4*).

3. The influence of industry culture on Entrepreneurial Orientation

The influence of national culture on individual entrepreneurial behavior has been well ascertained. Because a firm's behavior is to some extent the product of its individual members' behavior and orientations, we can legitimately assume that national culture will also have an impact on the Entrepreneurial Orientations of firms. However, such a line of reasoning can easily turn into a massive oversimplification. If we push it to its natural conclusion, American companies should all be characterized by a strong Entrepreneurial Orientation, while French or Scandinavian firms should be characterized by a weak Entrepreneurial Orientation, since American culture values entrepreneurship more than French or Scandinavian culture and since Americans create proportionally more new businesses than Europeans. We know that this is not the case: high tech companies in Europe are more entrepreneurially oriented than utilities and insurance companies in the United States and, in fact, probably as entrepreneurially oriented as their American counterparts. Industry, therefore, appears to be as significant a variable as nationality when it comes to identifying the cultural factors at the origin of Entrepreneurial Orientation.

3.1 Industry culture as a substitute for the environment

Most Entrepreneurial Orientation models (Miller, 1983; Covin and Slevin, 1991; Zahra, 1993; Lumpkin and Dess, 1996; Dess, Lumpkin and Covin, 1997) attribute a significant role to the firm's external environment, together with internal variables such as the firm's strategy, its organization and culture. The external dimensions most commonly cited are the *dynamism*, the *hostility* and the *heterogeneity* of the firm's environment. Also proposed are the environment's *munificence* (the existence of development opportunities), its level of *technological sophistication*, the *life cycle stage of the industry* and finally its overall *level of uncertainty*.
No student of the organization would deny the impact of the external environment on organizational structure, culture and behavior. Environment/Organization relationships are complex, however, and have been described as loosely coupled (Pfeffer and Salancik, 1978; Weick, 1978). The impact of the external environment on an organization, and more specifically on its Entrepreneurial Orientation, is mediated by the prevailing basic assumptions and values, cultural norms and rules (Gordon, 1991). On the other hand, the culture of the organization is not wholly idiosyncratic but reflects its adaptation to environmental and technological conditions. In our model, therefore, the Entrepreneurial Orientation of a firm greatly depends on the attitude and the beliefs of its employees, which depends on the organizational culture which, in turn, is influenced by environmental and technological conditions.

3.2 Industry Culture

An industry is a set of firms that use similar technologies, have similar clients and suppliers (Porter, 1985). As a result, the firms that belong to the same industry tend to compete in similar environments i.e., environments characterized by similar levels of dynamism, hostility, technological sophistication, etc. One will observe some differences across countries and industry segments but, overall, one can expect significant resemblance.

To the extent that the culture of an organization reflects not only its founders' values but also its history, which is largely a process of adaptation to environment and technology changes, the firms that belong to the same industry share organizational and cultural traits (Huff, 1982; Spender, 1989; Gordon, 1991; Abrahamson and Fombrun, 1994; Chatman and Jehn, 1994). The resemblance that results from similar external and internal conditions is further reinforced by the exchanges and interactions that take place among members of these firms via trade fairs, trade magazines, shared suppliers, managers transfers, further consolidating what can be rightly called an "industry culture" (Hambrick, 1982; Abrahamson and Fombrun, 1994). By integrating the industry culture dimension in our model, we are able to take into account the external environment's impact on the Entrepreneurial Orientation of a firm, while acknowledging the mediated nature of this impact.

For Huff (1982), an industry "is defined by shared or interlocking metaphors or world views." Hambrick (1982) observes that "a common body of knowledge appears to exist within an industry… which is disseminated through media equally available to and used by executives within the industry." Spender (1989) who has studied different British industries finds "an altogether surprising degree of homogeneity amongst the constructs being applied by managers… in each industry." Gordon (1991) sustains that "although culture is unique to each organization, industries exert influences that cause this unique culture to develop within defined parameters". Thus, "within industries, certain cultural characteristics will be widespread among organizations, and these most likely will be quite different from the characteristics found in other industries."

Abrahamson and Fombrun (1994) defend the existence of "macrocultures" shared by all participants of a given industry. Macrocultures result from the exposure of value added network members (suppliers, producers and clients of an industry) to similar conditions and are reinforced by the socialization that takes place in the network. A process of closure can often be observed: by fixing the network members' attention on certain aspects of their environment, the shared "macroculture" can hinder the questioning of basic assumptions and lead to collective inertia.
In an empirical study that includes 15 firms belonging to four different industries, Chatman and Jehn (1994) demonstrated the existence of stable organizational culture dimensions which varied more across industries than within them. A later empirical study by Christensen and Gordon (1999) reached similar conclusions.

3.3 Culture and Industry Descriptors

Chatman and Jehn (1994) qualify industry culture by measuring the degree of identification of employees belonging to different industries to seven basic orientations (Innovative, Stable, Respecting of people, Outcome oriented, Detail oriented, Team oriented and Aggressive). The dimensions used by Christensen and Gordon (1999) to qualify industry culture are very similar

(Aggressiveness, Innovation, Confrontation, Planning Orientation, Results Orientation, People Orientation, Team Orientation, Communication).

According to Gordon (1991), dynamic environments – as opposed to stable ones – elicit specific organizational responses and give rise to specific values and patterns of behavior. One can expect firms competing in dynamic environments to value innovation, risk taking and flexibility while firms competing in stable environments tend to value institutionalization and specialization. The same logic applies to firms competing in high growth vs. low growth markets (Chatman and Jehn, 1994). Customer requirements are also important (Gordon, 1991). When customers demand reliability above all as in the banking, insurance, and utilities industry, stability, detail orientation, become central values, while innovation and risk taking tend to be rejected. On the contrary, when customers demand novelty as in the fashion industry, risk taking, innovation and flexibility constitute central corporate values.

One of the most salient similarities among firms belonging to the same industry is technology. Technology, in its turn, determines how things are done and can have a strong impact on organizational culture (Chatman and Jehn, 1994). Industries relying on standardized and automated production processes value precision, discipline and predictability. Industries relying on customized production processes value innovation, team spirit and personal responsibility.

Selecting relevant industry descriptors will be an important and challenging task. At this stage, we plan to take into consideration the most often cited and, according to us, most significant ones i.e.:

- Industry dynamism (technology, competition and demand changes);
- Industry heterogeneity (customer, products, channels, business models variety);
- Importance of reliability as a Customer requirement.

3.4 Implications

By integrating the industry culture dimension in our model, we are able to take into account the external environment's impact on Entrepreneurial Orientation while acknowledging the mediated nature of this impact. Two options are possible from thereon: 1) we either can emphasize this dimension by studying firms belonging to two or three different industries, 2) we can neutralize it by studying firms all belonging to the same industry. In the second case, the industry selected should not belong to "extremes" (very favorable or very unfavorable to Entrepreneurial Orientation) but have intermediate characteristics so as to maximize the salience of organizational and national culture variables.

3.5 Propositions concerning the industry culture variable

The most often cited and, according to us, most significant industry descriptors are:

- Industry dynamism (of technology, competition, demand);
- Industry heterogeneity (customer, products, channels, business models, variety);
- Importance of reliability as a Customer requirement.

If our model is correct, these descriptors of the industry should have a significant impact on the major dimensions of the Entrepreneurial Orientation.

Industry dynamism. Industry dynamism puts pressure on firms, forcing them to innovate, to continuously adapt and thus to take risk. It is also a source of new opportunities which can be turned into first mover advantages by pro-active firms. Industry dynamism (measured by the rate of change observable at the level of technology, demand and competition) should be positively correlated with the Entrepreneurial Orientation of firms (*P5*).

Industry heterogeneity. Industry heterogeneity implies that there exist many niches, several sources of competitive differentiation and consequently many ways to succeed. As a result, pro-active firms, able to preempt a niche and innovative ones, able to conceive new client and product segmentations, to create new distribution channels and business models, should thrive in such industries. Industry heterogeneity (measured by the variety of customer profiles, products, channels and business model) should be positively correlated with the Entrepreneurial Orientation of firms (*P6*).

Customers' requirements. Gordon (1991) underlines the impact of customers' requirements on a firm's culture and in particular the impact of their demand for reliability. In industries where this requirement is high (banking, insurance, utilities, but also aeronautics) we would expect risk taking to be shunned upon and slow, well tested decision and operational processes to prevail. Innovation would not be absent but it would be a highly controlled activity. As a result, Customers requirement for reliability should be negatively correlated with the Entrepreneurial Orientation of firms (*P7*).

Geographical vs. multidomestic industry. High tech industries are, for their most part, global industries. In global industries, operations are integrated on a global scale, management practices and offer are very homogeneous, whatever the countries and regions (Porter, 1986). On the contrary, in multi-domestic industries (e.g. retail, packaged goods, commercial banking), local needs are taken into account, decisions are made locally and national cultures play an important role. In global industries, we could therefore expect industry determinants of corporate culture to have a greater impact than national determinants, and the reverse to be true in multi-domestic industries. In global industries, industry culture plays a dominant role and has a major impact on firms' Entrepreneurial Orientation (*P8*), while in multi-domestic industries, national culture plays a dominant role and has a major impact on firms' Entrepreneurial Orientation (*P9*).

4. The influence of corporate culture on Entrepreneurial Orientation

National and industry cultures are doubtlessly significant explaining factors when it comes to understanding entrepreneurial behavior at firm level. These macro variables are driving forces that contribute to shape the firm's environment and, as a result, its strategy making process.

Interestingly enough, culture appears in some Entrepreneurial Orientation models as one of the internal variables susceptible to impact entrepreneurial behaviors (e.g. Zahra, 1991). As any social community, firms exhibit tangible and intangible traits that contribute to form their unique organizational identity; it has been contended that an effective corporate culture as a hard-toimitate asset can lead to superior performance (Barney, 1986). Because corporate culture is an important determinant of a firm's strategic behavior, we believe that it has to be taken into account in our model, together with national and industry culture.

4.1 Definitional elements

As mentioned before, research devoted to Entrepreneurial Orientation does not focus on corporate culture. Moreover, there is some conceptual overlapping between corporate culture (sometimes labeled "organizational values") and other internal variables like management philosophy, managerial structure or even strategy (Lumpkin and Dess, 1996, p. 139). We therefore believe the concept calls for some clarification.

Corporate culture can be characterized through several dimensions and according to different lenses (Smircich, 1983).

First, corporate culture acts as a pervasive context for everything individuals do and think in an organization. As such, it can be expressed through different media, both tangible and intangible (Schein, 1984, 1996). A company's culture is manifested in the values, business principles, and ethical standards preached and practiced by management, in the approaches to personnel management and problem solving adopted, in official policies and procedures, in the spirit and character permeating the work environment, in the interactions and relationships that exist among managers and employees, in the peer pressure that reveals core values, in revered traditions and oft-repeated stories, in relationships with external stakeholders…

Secondly, corporate culture defines what is expected by others, what behaviors are rewarded by the community, how and what things are valued, be they a dress code, the office space, work habits, or anything else**...** The majority of definitions emphasize the constraining effect of culture on *individual* behaviors: organizational norms, guidelines or expectations prescribe appropriate kinds of employee behavior in particular situations and regulate the behavior of organizational members towards one another. Culture acts as a coordinating principle and plays an active role in the way organizations are governed (Meek, 1986). Researchers abundantly use the metaphor of social or normative "glue" that holds the organization together and guides and shapes the attitudes and behaviors of employees. Its benefits are clear: it facilitates delegation, reduces monitoring, and improves communication…

Thirdly the genesis of such normative dimensions has been related to collective history, past successes and lessons drawn from experiences. Schein's (1984) often referred-to definition of corporate culture stresses this aspect and explicitly connects it with organizational knowledge. Corporate culture consists of "the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems". With regard to this historical process, the founder's role in establishing norms and culture has been studied and characterized as the embedding of cultural elements into the organization. It occurs when the founder/leader gets the group to try out certain responses (Schein, 1983). As the founders and their successors manage by their principles, their experiences lead them to modify the system through the process of incremental change. A newcomer "may be chosen, and may choose to join the company, because his personality is compatible with the beliefs of those doing the hiring."

This last feature refers to the equivocal relations between culture and performance: as previously said, corporate culture enhances social system stability and serves as a "sense-making" and control mechanism. First, it differentiates the organization from others and provides a sense of identity for its members. Second, it can be seen as a mechanism enabling the community to deal in a specific way with unforeseen contingencies. Shared beliefs and values lead to homogenized perspectives and behaviors. However homogeneity of belief can have different effects on the firm performance: shared beliefs imply less variety or diversity amongst different individuals' visions and actions; less creativity and less responsiveness to change will ensue (Sorensen, 2002).

The homogenizing effect becomes a key issue when it comes to envisioning how a corporate culture could be an *entrepreneurial* culture, that by definition is supposed to foster entrepreneurial behaviors.

4.2 Paradoxical nature of an entrepreneurial culture: its status and function in Entrepreneurial Orientation models

If culture works as a kind of normative frame, it is difficult to figure out how it could promote behaviors that, by definition, escape from homogeneity and standardized conducts... If deviation is considered a serious threat to any social organization and is accordingly sanctioned, then innovativeness and the taking of bold initiatives will be discouraged. In other words, if Corporate Entrepreneurship has to do with taking risk, innovating and acting proactively (Miller, 1983), how could challenging the *status quo* be part of culture itself? Is this not self-contradictory?

There are at least four potential ways for solving this apparent paradox. First of all, one can contend that innovation, even as a diverging process, can be managed with *specific* policies and rules (Drucker, 1985). A second option is to refer to the anthropological root of the notion of culture (Smircich, 1983) and argue that an entrepreneurial culture can be viewed as one which allows from time to time a hero or a champion to emerge and take charge of an entrepreneurial or innovative project (Dougherty and Heller, 1994): the intrapreneur appears as a transgressor of taboos and a founder of a new reality. A third option is to consider the existence of sub-cultures and, more specifically, of "nonconforming enclaves" (Martin and Siehl, 1983). "If the enclave functions innovatively within the institution's latitude of tolerance, the institution benefits. If not, the institution has isolated the deviance." Finally, one can also argue that "weak cultures", as opposed to strong ones, will allow autonomous behaviors: the existence of many subcultures, few strong traditions, few values and beliefs widely shared by all employees and no strong sense of company identity should favor the emergence of divergent and creative behaviors.

Strangely enough, there are no papers appearing in first-rank, peer-reviewed publications specifically devoted to entrepreneurial culture even though corporate culture is repeatedly identified as a component of intrapreneurial phenomena and integrated as such in numerous frameworks. For instance, in the opportunity based approach (Stevenson and Jarillo, 1986, 1990; Brown, Davidsson and Wiklund, 2001), entrepreneurial culture is defined as a climate that encourages idea generation, experimentation and creativity. These are also key ingredients in opportunity recognition dynamics (Drucker, 1985).

Entrepreneurial culture is also identified as an internal variable of entrepreneurial firm behavior by researchers under different denominations: for instance under the label of "core values/beliefs" (Guth and Ginsberg, 1990) or "organizational culture" (Covin and Slevin, 1991). In the latter, organizational culture is considered as an internal variable, together with top management values and philosophies, organizational resources and competencies and organizational structure. It can be more implicitly defined throughout different factors (management support, work discretion, reward/reinforcements) that can be considered as parts or results of corporate culture (Hornsby et al., 1993; 2002; Sathe, 1989). This boils down to characterizing innovative environments as specific cultural settings (Detert, Schroeder and Mauriel, 2000) where there prevails an institutionalized belief that there is room for constant, continuous improvement.

Several researchers (Kanter, 1985; Sykes and Block, 1989) have pinpointed various components specific to entrepreneurial cultures: organizational tolerance for experimentation and risk taking, employees' involvement in the firm's development, reject of turf defense behavior, ability to form autonomous project teams, official recognition of successes…

Entrepreneurial leaders are often identified as sources and shapers of corporate culture (Schein, 1983), but middle managers in large organizations (Noble and Birkinshaw, 1998) have also been identified as potential generators of an entrepreneurial climate: informally encouraging employees to innovate and take risks, promoting autonomous or informal corporate entrepreneurship activities, championing strategic alternatives…

4.3 Corporate culture descriptors

Given its intangible quality it proves to be difficult to describe, assess and possibly measure a firm's culture. Scholars have tried to measure a firm's cultural strength in assessing the consistency of responses to survey items across managers in a firm (e. g. Gordon and DiTomaso, 1992) or across the rival firms' managers in the same industry (Kotter and Heskett, 1992). A very interesting contribution (Hofstede et al., 1990), based on extensive research performed in the 1980s, measures organizational cultures in twenty organizational units in Denmark and the Netherlands. Quantitative measures of the cultures of the twenty units, aggregated at the unit level, showed that a large part of the differences among these twenty units could be explained by six factors, related to established concepts from organizational sociology, which measured the organizational cultures on six independent dimensions. Hofstede's transferable and operationalized definitions are defined as such:

1. "Process-Oriented vs. Results-Oriented" opposes a concern with means (process-oriented) to a concern with goals (results-oriented).

2. "Employee-Oriented vs. Job-Oriented" opposes a concern for people (employee-oriented) to a concern for getting the job done (job-oriented).

3. “Parochial vs. Professional”: opposes units whose employees derive their identity largely from the organization, which we called "parochial," to units in which people identify with their type of job, which we called "professional."

4. “Open System vs. Closed System” opposes open systems to closed systems. This dimension describes the communication climate, a focus of attention for both human resources and public relations experts.

5. “Loose Control vs. Tight Control” refers to the amount of internal structuring in the organization.

6. “Normative vs. Pragmatic” deals with the popular notion of "customer orientation." Pragmatic units are market-driven; normative units perceive their task toward the outside world as the implementation of inviolable rules.

These descriptors can be used as relevant descriptors of the corporate culture in our planned research.

4.4 Implications

By fully integrating the corporate culture dimension in our model, we are able to take into account its impact on Entrepreneurial Orientation in a more precise way than previous studies have done. So doing we aim to bring a more detailed analysis of what has been so far considered as a minor variable (often reduced to a vague labeling) whereas corporate culture, whatever its definition, has always been considered in the managerial and research literature as a key driver of entrepreneurial behaviors within the corporate setting.

Several options are possible from thereon: 1) we can emphasize this dimension by studying firms belonging to the same industries and countries (or at least very close in Hofstede’s terms such as North-West-European countries), 2) we can partially (because of possible sub-cultures) neutralize it by studying MNCs units all belonging to the same industry.

4.5 Propositions concerning the corporate culture variable

If our model is correct, descriptors of corporate culture should have a significant impact on the major dimensions of the Entrepreneurial Orientation.

Focus. Being result oriented is recognized as being part of entrepreneurial behaviors, at an individual level and firm-level. It distinguishes between entrepreneurs and dreamers; in order not to be stuck at the idea phase, entrepreneurs must be doers too and transform opportunities into reality. Thus Result Orientation should be positively correlated with the Entrepreneurial Orientation of firms (*P10*). However this orientation does not lead to neglect team-spirited approaches: emphasizing an “Employee-Oriented” approach seems to be consonant with the collective spirit often associated with intrapreneurial initiatives; people as sources of resources, talents, competencies... are commonly recognized as key assets in the success of any venture (internal or external). Hence Employee Orientation should be positively correlated with the Entrepreneurial Orientation of firms (*P11*).

Identification. Whether employees derive their identity largely from the organization, or identify with their type of job should be neutral as regard Entrepreneurial Orientation. Entrepreneurial initiatives can stem from different contexts and individuals can rely upon their organizational identity or their job meaning. Consequently one can assume that Parochialism vs. Professionalism should be neutral as to the Entrepreneurial Orientation of firms (*P12*).

Control. Regarding organizational systems and procedures, loose control oriented environments or organically structured organizations are more likely to foster entrepreneurial behaviors (e.g. Miller, 1983; Covin and Slevin, 1990). For this reason Tight Control dimension should be negatively correlated with the Entrepreneurial Orientation of firms (*P13*).

Permeability. Finally, permeable and porous organizations are more likely to be open to innovation and welcome novelties from the outside. In the same perspective market driven companies are expected to be more entrepreneurial than others, the customers being a strong driver for innovation. From this, Normativeness should be negatively correlated with the Entrepreneurial Orientation of firms (*P14*) while Open system features should be positively correlated with the Entrepreneurial Orientation of firms (*P15*).

Conclusion

Although we still find ourselves at an early stage of our enquiry process, we believe that the multi-level cultural model of Entrepreneurial Orientation we propose can give rise to interesting research questions and results. In effect, our model relies on well tested concepts which it combines in new, original ways. The strong emphasis given to culture versus other variables – such as external environment or internal structure – in explaining Entrepreneurial Orientation is partly compensated by the multiple levels of culture the model takes into consideration and is compatible with the general consensus concerning the importance of soft, internal variables when it comes to foster Corporate Entrepreneurship.

We are aware that the three cultural levels we have identified interact with each other in complex ways that we still don't fully understand. In certain settings, the national culture variable could be of major significance while it could have only a marginal impact in other settings, and the same holds true for industry and corporate culture.

While all of the 15 industry and culture descriptors we have included in our model have been previously described and used, these descriptors will need to be adapted to our particular research context and design. An effort to harmonize and to avoid overlaps among descriptors will also be required. The descriptors of the Entrepreneurial Orientation (innovativeness, risk taking and proactiveness) will have to be turned into operational variables, easy to measure and meaningful, whatever the characteristics of the firms we decide to study. Finally, the scope and focus of our enquiry will have to be properly circumscribed. We will need to select more precise research questions, on the basis of their significance for professional managers as well as pragmatic research considerations.

At this early stage of our enquiry, it is still difficult to foresee all the implications of our model or to identify its shortcomings. Because our model is quite original, we lack points of comparison and sources of inspiration when it comes to imagine all the directions our enquiry could take and select appropriate research design and methodology. This will be our next step.

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