

## **Entrepreneurial leadership across countries: The role of informal institutions**

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**Abstract:** This chapter examines the influence of informal institutions on the probability of becoming an entrepreneurial leader. In this regard, institutional economics is used to frame the hypotheses that relate environmental factors and entrepreneurial leadership. These hypotheses are tested through logistic regression analysis, using a sample of 67,268 individuals from World Values Survey (WVS) for 50 countries. The main findings show that informal institutions such as independence, risk taking and networking increase the probability of becoming an entrepreneurial leader. Also, networking and religious faith moderate the relationship between independence and entrepreneurial leadership. The contributions of this chapter are both conceptual, in terms of development in the field of leadership and entrepreneurship, and practical in terms of business and education.

**Keywords:** Entrepreneurship; leadership; culture; Institutional Economics.

### **1. Introduction**

The fields of leadership and entrepreneurship have undergone similar development in many ways (Cogliser and Brigham 2004). Much of the initial research in the field of entrepreneurship has focused on identifying characteristics that differentiate entrepreneurs from non-entrepreneurs (McClelland 1961). In this sense, it is suggested that the extant literature largely analyses leadership and entrepreneurship separately (Harrison et al. 2015), though, there are few authors who specifically deal with the relationship between leadership and entrepreneurship (Ensley et al. 2003; Felix et al. 2018; Koryak et al. 2015). This scarcity of studies is surprising considering the coincidences between the traits of leaders and entrepreneurs, who are affected by the environment where they interact (van Hemmen et al. 2015). Hence, scholars suggest that informal institutions are relevant for leadership and entrepreneurship, considering that values, norms and beliefs can determine the social desirability of being a leader and entrepreneur as a career option (Gong et al. 2009).

Addressing the phenomenon of entrepreneurial leadership from an institutional perspective, existing research highlights the importance of informal institutions for leadership and

entrepreneurship (Thornton et al. 2011; Urbano et al. 2019). By using these lenses, it might be possible to direct the attention to the rules, norms, and beliefs that influence organisations and their members, which can vary widely across countries and cultures (Aparicio et al. 2018; Fang 2010). In this approach, informal institutions become relevant when daily interaction with others are considered, especially taking into consideration that these interactions depend on the codes of conduct and norms of behaviour existing in a given society (North 1990). Although prior research has indicated that leadership and entrepreneurship are influenced according to personal traits and characteristics, few empirical studies have provided concrete connections between sociocultural context and entrepreneurial leadership, and even fewer have studied this relationship from an institutional perspective (cf. Jennings et al. 2013; van Hemmen et al. 2015).

Thus, by using an institutional approach, this chapter seeks to address this gap by specifically investigating the role of informal institutions on the probability of becoming an entrepreneurial leader. Using a sample of 67,268 individuals from 50 countries, it is statistically demonstrated through logistic regression analysis that informal institutions increase the probability of becoming an entrepreneurial leadership. Particularly, our findings reveal that variables such as independence, risk taking, religious faith and networking are related to entrepreneurial leadership. This article suggests implications for the fields of business, education and public policy.

The chapter follows a conventional structure. We initially review the literature on entrepreneurial leadership under the institutional perspective and propose the hypotheses. Then we outline the methodology. In the next section we present the main results. Finally, the chapter concludes with the discussion and conclusions.

## **2. Theoretical background**

### **2.1. Entrepreneurial leadership**

It is claimed that entrepreneurial leadership is an emerging field that remains theoretical, lacks definitional clarity and appropriate tools to assess its characteristics and behaviours (Harrison et al. 2015). Gupta et al. (2004, pp. 242) defined the concept as “leadership that creates visionary scenarios that are used to assemble and mobilise a ‘supporting cast’ of participants who become committed by the vision to the discovery and exploitation of strategic value creation.” By contrast, Kuratko (2007) presented entrepreneurial leadership as “a unique concept combining the identification of opportunities, risk taking beyond security and being resolute enough to follow through” (Harrison et al. 2015, pp. 695). Gupta et al. (2004) proposed that the concept of entrepreneurial leadership involves fusing the concepts of “entrepreneurship” (derived from Schumpeter (1934)), “entrepreneurial orientation” (from Covin and Slevin (1988)), and “entrepreneurial management” (analysed by Stevenson and Jarillo (1990)) with leadership. It is recognised that entrepreneurial leadership embraces three important aspects. First, entrepreneurial behaviours and attitudes (Gupta et al. 2004); second, the distinctions or similarities between leaders and entrepreneurs (Baumol 1968); and third, new business owners who adopt leadership roles in order to grow (Ensley et al. 2006; Gupta et al. 2004). Since one of the main purpose of any firm is to grow, this study adopts an approach involving the last aspect. In particular, we are

interested in analysing how informal institutions explain the decision of adopting an entrepreneurial leadership role across countries.

## **2.2. Entrepreneurial leadership from an institutional perspective**

North (1990) develops a very wide concept of institution, who defines them as those “rules of the game in a society [...] that shape human interaction” (North 1990, pp. 3). This author distinguishes between formal (political rules, economic rules, contracts, etc.) and informal institutions (codes of conduct, attitudes, values, norms of behaviour) that impact different organisations and organisational actors. Because societies are endowed by nature with different environments, members of society must adopt models of behaviour to achieve success.

Although there are scholars linking explicitly institutional economics and entrepreneurial activity (Jennings et al. 2013; Urbano et al. 2018; Thornton et al. 2011; among others), few works have linked the institutional perspective and entrepreneurial leadership (van Hemmen et al. 2015; Yousafzai et al. 2015). A typology based on both the cognitive approach and sociocultural factors has proven useful for entrepreneurial research (Liñán et al. 2016).

The role of beliefs, perceptual variables, and cultural contexts involves the set of meanings required to interpret actions such as entrepreneurial activity and leadership (Wolfgang 2008). The principles of social order (e.g. laws and traditions) do not determine organisational structure, but rather establish parameters as to which organisational forces are conceivable and which alternative forms impossible (Antonacopoulou et al. 2001). The emergence of leadership roles represents an additional stage of institutionalisation (Smircich and Morgan 1982). Most recent findings suggest small but significant relationships between informal institutions such as cognitive ability, values, attitudes, leadership emergence and effectiveness (Felfe and Schyns 2014), as well as with organisational strategies (Koryak et al. 2015). Similarly, there is an approach suggesting that informal institutions affect entrepreneurial leadership, where independence, risk taking, religious faith and networking were used as examples of these types of institutions (Felix et al. 2018; Swiercz and Lydon 2002). These variables are in line with the Schwartz Theory of Basic Values (Schwartz 2012), which have also often been associated with leadership (van Hemmen et al. 2015) and entrepreneurship (Liñán et al. 2016).

## **2.3. Independence**

Independence is defined as a preference for decision-making control, to serve one’s own objectives, to choose one’s own path, and to be confidence in one’s own abilities (Douglas and Shepherd, 1999). Independence describes an individual’s desire for freedom, control, and flexibility in the use of time (Carter et al. 2003). Some authors use independence and autonomy as similar concepts (House et al. 2004; Lumpkin et al. 2009). Here, the need for autonomy refers to the experience of having choices and of initiating action oneself (Ryan and Deci 2002). Entrepreneurs value independence, individualism and freedom (van Hemmen et al. 2015). In this regard, independence was found to be an important reason when an entrepreneur chooses to start a new business (Carter et al. 2003). Independence has also been associated with leadership. In this

sense, Bass and Bass (2008) point out that independence is a personal attribute of leadership approached through subjective experience (i.e. being one's own boss). An important contribution in this topic was made by House et al. (2004), who created a new dimension that refers to independent and individualistic leadership attributes. This dimension is measured by a single subscale of autonomous leadership, consisting of individualistic, independence and autonomous behaviours. In education, there is a strong consensus that autonomy or independence is related to performance and leadership (Keddie 2016). In business, autonomy moderates the relationship between the quality of leader-member exchange and service innovative behaviour, such that the relationship is stronger for persons with greater job autonomy (Dhar 2016). Leaders need autonomy to take initiative, be creative, learn from mistakes, assume responsibilities and handle difficult situations in their own way (Chiniara and Bentein 2016). In summary, we expect that the greater the preference for independence, the greater the incentive to be an entrepreneurial leader. It is therefore hypothesised:

H1. A high preference for independence increases the probability of becoming an entrepreneurial leader.

## **2.4. Risk Taking**

The debate about the role of an individual's attitude to risk in the decision to become an entrepreneur and in entrepreneurial success, is largely studied. In the definition of entrepreneurship and in everyday observation, entrepreneurs are perceived as more risk prone than other people. According to Wärneryd (1988, pp. 407), "... there seems to be general agreement that risk bearing is a necessary [...] prerequisite for being called an entrepreneur". Since most individuals are risk averse, and since the perceived fear of failure is an important component of the risk attached to starting a new business, a reduced perception of the likelihood of failure should increase the probability that a company will start a new business (Boermans 2010). What matters is not the respondent's fear of failure, but the degree to which the fear of failure affects the behaviour of individuals (Radu and Redien-Collot 2008). In this regard, risk taking is also associated with leadership behaviour (Clark and Waldron 2016) and leader performance (Frost et al. 1983). Founder managers are more likely to invest considerable time and effort in building their firms, and are therefore more willing to accept the risks (Mousa and Wales 2012). Risk-taking requires a tolerance of ambiguity and the ability to make decisions with some uncertainty (Isaksen and Lauer 2002). Being the leader of a group often involves making risky decisions. In general, entrepreneurs and leaders of organisations also, as would be expected, have higher risk-taking propensities and tolerance for ambiguity than do managers in general (van Hemmen et al. 2015). The following hypothesis is thus derived:

H2. Favourable attitudes towards taking risk increase the probability of becoming an entrepreneurial leader.

## **2.5. Religious faith**

Religion can be defined as a particular institutionalised or personal system of beliefs, values and practices relating to the divine – a level of reality or power that is regarded as the ‘source’ or ‘ultimate’, transcending yet immanent in the realm of human experience (Worden 2005). Religiosity is the acceptance of a particular set of organised beliefs, rituals, and practices having to do with God, morality, the origins of life, and an afterlife (Bass and Bass 2008). People with dissimilar cultural beliefs and religious values have looked at entrepreneurship with varying degrees of legitimacy. Woodrum (1985) found participation in religious activities to be a predictor of entrepreneurial success. Religion has also been found to have a significant effect on leadership behaviour (Hage and Posner 2015; Hofstede 1980). Religious affiliation and values associated with particular faith traditions necessarily affect the way that people think and behave, and also play a major role in shaping individual traits (McCleary and Barro 2006). Fernando and Jackson (2006) reported that religion had a significant effect on the critical thinking and decision-making processes of business leaders. In summary, religions are depositories of wisdom and of values, related at the same time to leadership positions. This leads to the following hypothesis:

H3. Religious faith increases the probability of becoming an entrepreneurial leader.

## **2.6. Networking**

In general terms, social networks are defined by a set of actors (individuals and organisations) and a set of connections between those actors (Brass 1992). Granovetter's (1985) account of the role of personal relationships includes strong ties and weak ties (Shaw 1997). People connected by strong ties trust each other and are likely to share contacts and information, so reliance on strong ties militates against the generation of new information and fresh perspectives to create and exploit business opportunities for growth and development (Chell and Baines 2000). Networks are increasingly perceived as a key element of entrepreneurship (Stuart and Sorenson 2007). Davidsson and Honig (2003) found that networking was a very strong and consistent predictor of nascent entrepreneurs. Entrepreneurs are often those with a wide range of casual contacts, suggesting that a variety of trusted social connections is an important prerequisite for discovering an entrepreneurial idea (Shane 2000), and for garnering the resources to start a new business (Shane and Cable 2002). Scholars recognise leadership as a property of the collective, implying that networks matter for those who want to become leaders (Cullen-Lester and Yammarino 2016). The empirical support for this idea is strong, since previous findings have shown how social networks contribute to the strategic influence of managers, helping them to leverage organisational resources for innovation (Kelley et al. 2009), increasing or decreasing new venture performance (though this depends on the context they are embedded) (Stam and Elfring 2008), and strengthen the effects of entrepreneurial orientation on creative performance (Chen et al. 2015). The following hypothesis is thus formulated:

H4. Networking increases the probability of becoming an entrepreneurial leader.

### **3. Method**

#### **3.1. Data and variables**

We rely on World Values Survey (WVS), which is database that has been widely used by researchers to analyse different topics such as values and cultural change (Inglehart and Baker 2000) and social capital and innovation (Dakhli and De Clercq 2004), among others. We used data from the 2005–2008 wave because this database contains the most suitable proxy for our dependent variable. The final sample was composed of 67,268 individuals from 50 countries<sup>1</sup>.

#### **3.2. Dependent variable**

From these possible explanations of professional/occupational status, we created our dependent variable: entrepreneurial leadership, taking a value of 1 if the individual is the employer/management of an establishment with employees, and 0 in other cases. This variable was seen as a proxy for entrepreneurial leadership, and it allows us to empirically understand the concept of entrepreneurial leadership in order to represent those who are entrepreneurs and, at the same time, become leaders by having subordinates. This proxy uses the definition of entrepreneurial leadership as the leadership role performed in entrepreneurial ventures (Renko et al. 2015). In the same approach, Swiercz and Lydon (2002), define “career entrepreneurial leaders” as individuals who not only create new organisations but go on to lead these organisations to sustainable success. This is also in line with Cogliser and Brigham (2004), who suggests that in practice, successful entrepreneurs are often managers coincidentally combining these two functions in one person.

#### **3.3. Independent variables**

In this chapter, we present informal institutions as a set of perceptual, cognitive and social variables. The mental models created by individuals represent the cumulative experience, learning, feelings, and meanings about how the physical and social worlds work (Gaglio 1997). These are also a distinctive set of perceptual and cognitive processing skills related to entrepreneurship (Gaglio and Katz 2001). A Likert scale was used to indicate the extent to which informal institutions matter for entrepreneurial leadership. To test our proposed hypotheses, we have used a set of variables contained within the WVS. Thus, Independence takes into account those respondents that were asked how much independence they have in performing tasks at work (1 = no independence at all to 10 = complete independence). With regards to Risk taking, we look at those respondents asked about the importance of adventure, taking risks and having an exciting life (1 = not at all important to 6 = very important). Religious faith considers the respondents that were asked the following question: "do you consider it is especially important that religious faith is a quality that children can be encouraged to learn at home?" (1 = not at all important to 6 = very important). Finally, to capture Networking we have taken respondents that were asked whether they were active members of a voluntary professional organisation (1 = yes, 0 = no).

### 3.4. Control variables

We controlled for gender (at individual level) and for gross domestic product (GDP) based on purchasing power parity (PPP) per capita (at country level). Previous research has indicated that, independent of culture, there are differences in the profiles of male and female entrepreneurs (Fernald and Solomon, 1987). The decision to start a business is far more complex for women than it is for men (Bird and Brush, 2002). In fact, women participation rates in entrepreneurship are significantly lower than rates for men (Langowitz and Minniti 2007). Hence, a dummy for gender was included (0 = female, 1 = male). Additionally, we included the GDP PPP per capita as a control variable given that the level of development of countries is a key factor in explaining entrepreneurial activity (Urbano et al. 2016). The data source used for the GDP-PPP variable is the International Monetary Fund World Economic Outlook database and the average of the years 2005-2007 was used.

### 3.5. Model and statistical technique

Given the binary nature of the dependent variable, we analysed the effect of informal dimensions on entrepreneurial activity through a binomial logistic model, as follows:

$$P(EL_i) = f(II_i, CV_i) \quad (1)$$

where  $EL_i$  is entrepreneurial leadership,  $II_i$  represents the set of informal institutions, and  $CV_i$  the control variables for each individual  $i$  in our sample.

## 4. Results

Descriptive statistics and the correlation matrix of the variables used in this analysis are reported in Table 1. As can be seen, all variables considered are significantly correlated with entrepreneurial leadership, as expected. Given the correlations among independent and control variables, a test for the problem of multicollinearity was employed, showing that multicollinearity is not a major problem in the models. The variance inflation-factors (VIF) are lower than 3 which is far from 5.

**Table 1** Descriptive statistics and the correlation matrix

Variable	Mean	Std. Dev.	1	2	3	4	5	6
1. Entrepreneurial leadership	0.0511	0.2202	1					
2. Independence	6.5787	2.8316	0.1417***	1				
3. Risk taking	3.1372	1.5889	0.018***	0.0076	1			
4. Religious faith	0.4055	0.4910	-0.0387***	-0.0523***	0.0281***	1		
5. Networking	0.0683	0.2523	0.0453***	0.0752***	0.0591***	-0.01***	1	
6. Gender	0.4786	0.4995	0.0836***	0.0296***	0.1299***	-0.0466***	0.0468***	1
7. GDPPPP	14732	13653	0.0945***	0.1075***	-0.0954***	-0.2952***	0.0358***	-0.0119***

\*\*\*  $p < 0.01$ .

Table 2 presents five logit models testing the informal factors that determine entrepreneurial leadership. Model 1 presents the logistic regression results with only control variables, Model 2 introduces only informal factors. Model 3 presents all informal dimensions and control variables. Finally, we include an interaction term in Models 4 and 5. Consistent with existing literature, the results suggest that socio-demographic characteristics are quite important for understanding the likelihood of becoming an entrepreneurial leader (Davidsson and Honig 2003). In Model 1, the overall model is significant, all coefficients are significant with a p-value  $\leq 0.001$  and they have the expected sign. According to the gender coefficient, being male increases the probability of becoming an entrepreneurial leader by 3.6%, which is a result consistent with the extant literature (cf. Carter et al. (2003)). On the other hand, the coefficient of GDP PPP indicates that higher income increases the probability of entrepreneurial leadership.

Regarding Model 2, we found that the overall model is highly significant. In this sense, and despite Religious faith was not significant, Independence, risk taking and networking coefficients are significant, with a p-value  $\leq 0.001$ , showing the expected sign. Similarly, Model 3 was found significant. All coefficients of variables were statistically significant ( $p \leq 0.001$ ). In this case, Pseudo R-squared increases with respect to Model 1 and Model 2, and the Akaike information criterion (AIC) is lower (and preferable) than previous model.

Contrasting these results with the hypotheses proposed, hypothesis 1 predicts a positive relationship between independence and the likelihood of becoming an entrepreneurial leadership. In Model 3, the results show that hypothesis 1 is supported and in line with the previous literature we have found (Carter et al. 2003). Hypothesis 2 predicts a positive relationship between risk taking and the likelihood of becoming an entrepreneurial leader. The results supported also hypothesis 2. As Douglas and Sheperd (1999) predicted, these entrepreneurial characteristics is found on those individuals that are considered leaders. Hypothesis 3 predicts a positive relationship between religious faith and the likelihood of becoming an entrepreneurial leader, which is similar to Hage and Posner (2015). On the other hand, Hypothesis 4 predicts a positive relationship between networking and the likelihood of becoming an entrepreneurial leader. Our data supported this hypothesis. Some studies tend to support this positive statistical relationship between networking and new business activity (Urbano et al. 2016).

Finally, models 4 and 5 explored the effect of informal institutions, showing changes depending on the presence of other informal institutions. In Model 4 the interaction between independence and religious faith was included. Overall Model 4 was significant. The interaction term is negative and statistically significant. In Model 5 the interaction term between independence and networking were included. The results show that the relationship between the level of independence and entrepreneurial leadership is stronger for lower rather than higher levels of networking. This model is negative and significant and all coefficients are statistically significant ( $p \leq 0.001$ ). The negative interaction term between independence and networking indicates that the relationship between independence and entrepreneurial leadership is weaker for those people with networks versus those who do not.

**Table 2** Logit results predicting entrepreneurial leadership

	Model 1		Model 2		Model 3		Model 4		Model 5	
	dF/dx	Std. Err	dF/dx	Std. Err	dF/dx	Std. Err	dF/dx	Std. Err	dF/dx	Std. Err
Informal Institutions										
Independence			0.0141***	0.0004	0.0132***	0.0004	0.0151***	0.0006	0.0132***	0.0004
Risk taking			0.0034***	0.0007	0.0028***	0.0007				
Religious faith			-0.0034	0.0024	0.0059**	0.0026	0.0573***	0.0103		
Networking			0.0156***	0.0042	0.0119***	0.0039			0.0611***	0.0222
Independence X Religious Faith							-0.0055***	0.0009		
Independence X Networking									-0.0041***	0.0015
Control variables										
Gender	0.0353***	0.0016			0.0296***	0.0022	0.0310***	0.0022	0.0309	0.0022
GDPPPP	0.0000***	0.0000			0.0000***	0.0000	0.0000***	0.0000	0.0000***	0.0000
Number of observations	67222		42484		42463		43488		43488	
LR Chi-Square statistic	1041.63		1012.7		1339.42		1371.34		1350.28	
Pseudo R-squared	0.0384		0.0438		0.0579		0.0582		0.0573	
Log pseudolikelihood	-13043.444		-11064.49		-10896.961		-11097.299		-11107.829	
Percent correctly predicted	94.89%		92.26%		92.26%		92.32%		92.32%	
AIC	26092.89		22138.98		21807.92		22206.61		22227.66	

\*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.10.

## 5. Discussion and Conclusions

The aim of this article was to investigate the role of informal institutions on the probability of becoming an entrepreneurial leader. Studies of entrepreneurship and leadership are receiving increasing attention because leaders as core element of the entrepreneurial process (Gupta et al. 2004). The study of entrepreneurs as leaders is a gap in both bodies of knowledge (Cogliser and Brigham, 2004), and even more so from an institutional perspective.

As mentioned above, entrepreneurial leadership exists at the nexus of entrepreneurship and leadership (Harrison et al. 2015). This research has explored informal institutions, such as cognitive abilities, attitudes and values. These factors prove important for the development of entrepreneurial leadership (Renko et al. 2015). This article provided evidence that informal institutions increase the probability of being an entrepreneurial leader. Specifically, informal institutions such as independence, risk taking, and networking facilitate the emergence of new entrepreneurial leaders, who might be related to new processes, products or services (Jia et al. 2018). The results also show that religious faith is significantly related to entrepreneurial leaders, and this might be associated with a transcendent purpose in life. We also found that interaction between the informal institutions may relevant for entrepreneurial leadership. In this case, the

relationship between independence and entrepreneurial leadership is moderated by social, cognitive and normative dimensions as networking and religious faith.

In this study, the negative interaction term between independence and religious may indicate that the relationship between independence and entrepreneurial leadership is stronger when there is less religious faith rather than higher. The institutional profiles of some religions restrict self-employment, but others encourage self-employment activities. These findings underline the obvious fact that religious traditions differ in their beliefs about human behaviour and, therefore, in their effect on the decision to be a leader or entrepreneur (Hage and Posner 2015). Along the same lines, the negative interaction term between independence and networking can be understood through the influence of social identity and personal identity (Day and Harrison 2007).

Also, the findings indicate that the informal factors seem to have a direct and moderate effect on leadership and entrepreneurship. In this sense, informal institutions such as independence, networking and religious faith appear to exert complementary, rather than substitutive, influence on entrepreneurial leadership. Support was found for the beneficial effect of informal dimensions on entrepreneurial leadership, as well as the substitution effect between cultural-cognitive dimensions such as independence and normative burdens such as networking.

There are several implications arising from this study. In terms of business, managers can benefit from this chapter by adopting and developing informal institutions to revitalise organisations and energise followers especially encouraging the development of cognitive and normative dimensions. This study also responds to the call of economic and societal challenges for more entrepreneurial attitudes and behaviours (Urbano et al., 2019), even in areas previously thought of as anti-entrepreneurial, such as government, the military and education (Renko et al. 2015). This study adds elements and suggests that policy makers, managers and teachers should deliberately work in training programmes that encourage the skills of leaders such as degree of independence, ability to make decisions, capacity to pursue major purposes by faith or beliefs, skill to relational capital and risk taking.

Clearly, there is much more to learn in the area of entrepreneurship and leadership. The present chapter provides insights into the understanding of entrepreneurship and leadership, linking these two concepts by providing an institutional approach. In doing so, we contribute to the dialogue around the need for alignment. The future looks more challenging, and future leaders will need to be more complex and able to flexibly move from one mental schema to another (Zhang et al. 2015). Leadership perceptions, social perceptions, and social context in general, are part of this process (Stam et al. 2014). Athanasopoulou and Selsky (2015) point out that they will need to understand how their environment (external, organizational, or interpersonal) and the perspective by which it is analysed (institutional, cultural, cognitive, or other) shapes their decisions and actions. For this reason, the identification of informal factors might strengthen leadership and entrepreneurial profiles. This study has made a preliminary step in initiating further research to contribute to ongoing efforts to integrate the fields of social behaviours, strategy, leadership and entrepreneurship. In doing so, this study contributes to the dialogue around the need to create individual and collective factors that fortify entrepreneurial leadership.

We acknowledge that our findings are subject to various limitations that suggest avenues for additional research. Our entrepreneurial leadership variable may not capture the broader concept of leadership and entrepreneurship (Gupta et al. 2004). On the other hand, the moderating effect presented in this study raises challenges for future research. We also encourage future studies to examine leadership as a multilevel process where the first level is the leader; the second takes into account relationships with followers, peers, and superiors; and the third constitutes the organisational climate and culture (Day and Harrison, 2007). There is an increasing need to understand how leadership might be constructed more collectively and integratedly (Day and Harrison, 2007). Additional research could explore which dimensions can most effectively substitute for (or complement) unfavourable institutional conditions. Entrepreneurial leadership is becoming a global requirement and the more we can understand the elements that reinforce this concept, the more we can advance the concept itself.

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## Endnotes

<sup>1</sup> Andorra, Argentina, Australia, Brazil, Bulgaria, Burkina Faso, Canada, Chile, China, Cyprus, Egypt, Ethiopia, Finland, France, Georgia, Germany, Ghana, Guatemala, India, Indonesia, Japan, Jordan, Korea, Malaysia, Mali, Mexico, Moldova, Morocco, Netherlands, Norway, Peru, Poland, Romania, Rwanda, Serbia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan Province of China, Thailand, Trinidad and Tobago, Turkey, Ukraine, United Kingdom, United States, Uruguay, Vietnam, Zambia.

