

RESEARCH ARTICLE

When are entrepreneurs more environmentally oriented? An analysis of stakeholders' pressures at different stages of evolution of the venture

Pilar Bernal  | Beatriz Domínguez  | Javier Montero 

Department of Business, University of Zaragoza, Zaragoza, Spain

Correspondence

Javier Montero, Department of Business, University of Zaragoza, Zaragoza, Spain.
Email: montero@unizar.es

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Abstract

Entrepreneurs are subjected to increased institutional pressures that encourage them to include environmental issues in their overall business objectives. Despite this, entrepreneurs do not always place the same importance on environmental issues in the overall objectives, but some are more environmentally oriented than others. We contend that these differences are explained by two factors: the stage of evolution of the venture and the intensity of coercive and normative environmental pressures on entrepreneurs. Using a sample of 9781 entrepreneurs from 27 countries, our research shows that entrepreneurs are more environmentally oriented (1) in early stages of evolution, (2) in countries with high coercive pressures, and (3) in countries with high normative pressures. Additionally, our results indicate that the differences in the environmental orientation in the early and late stages are reduced in countries with high normative pressures and that these differences are not influenced by the intensity of coercive pressures.

KEYWORDS

coercive and normative pressures, entrepreneurs, environmental orientation, GEM, stages of evolution, stakeholders

1 | INTRODUCTION

Environmental issues have evolved from being considered a costly exercise to being treated as the greatest challenge of the 21st century (York et al., 2018). From this perspective, it is not surprising that entrepreneurs are facing increased institutional pressures to consider environmental issues in their economic activities (Boiral, 2007; Delmas & Toffel, 2008). Entrepreneurs internalize these pressures through increased perceptions of the place of environmental issues within their overall objectives. In this regard, prior research has coined

the term “environmental orientation” to refer to entrepreneurs' perceptions of the importance that environmental issues should have in their economic activities (Banerjee, 2002). Our paper aims to extend our knowledge of entrepreneurs' environmental orientation by exploring a particular research question: When are entrepreneurs more environmentally oriented? We contend that two main factors may shed light on this question: the stage of evolution of the entrepreneurial venture and the intensity of environmental pressures exerted on entrepreneurs.

First, we add to recent research on entrepreneurship that recognizes the existence of different stages of evolution in the entrepreneurial venture (Mickiewicz et al., 2017). The importance of the

Abbreviations: GEM, global entrepreneurship monitor.

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dynamic approach of entrepreneurship lies in the great differences in the challenges and tasks between the early and late stages of evolution of the entrepreneurial venture (Baron, 2007). While entrepreneurs in the early stages are frequently unknown and, thus, they have a great need to obtain legitimacy in the market (Choi & Shepherd, 2005), entrepreneurs in the late stages have already gained approval from important stakeholders, so they do not need to gain legitimacy as much as their counterparts do (Suchman, 1995). We contend that a stronger environmental orientation facilitates entrepreneurs gaining legitimacy and argue that entrepreneurs are more environmentally oriented when they are in the early stages.

Second, we base our study on institutional theory and distinguish between two types of environmental pressures on entrepreneurs: coercive and normative (Delmas & Toffel, 2008). The former is primarily realized in the form of compulsory regulations and laws imposed by government authorities (Jennings & Zandbergen, 1995). We contend that entrepreneurs are more environmentally oriented when the coercive environmental pressures in the country are high. On the other hand, normative pressures refer to collective environmental values and standards in the country and bring together the environmental expectations of different groups of stakeholders (Hyatt & Berente, 2017; Lopez-De-Pedro & Rimbau-Gilabert, 2012). We argue that entrepreneurs are more environmentally oriented when the normative environmental pressures in the country are high.

Finally, our model proposes that a higher intensity of environmental pressures, both coercive and normative, reduces the differences in the environmental orientation between entrepreneurs in early and late stages. If these pressures are high, entrepreneurs are encouraged to be more environmentally oriented to obtain or maintain the support from crucial stakeholders, whatever the stage of evolution of the entrepreneurial venture.

Our paper contributes to prior literature on environmental orientation in three main ways. First, the paper recognizes the dynamic nature of entrepreneurship (Reynolds, 2015). Despite the important differences between the early and late stages (Hörisch et al., 2017), prior studies on this topic have treated entrepreneurship as a static concept (Hechavarría et al., 2017; Meek et al., 2010). This common approach leads to the assumption that all entrepreneurs are subjected to the same environmental pressures and that they have similar incentives to be environmentally oriented, regardless of the stage of evolution of their ventures. Nevertheless, the objectives, tasks, and challenges that entrepreneurs must confront at each stage are substantially different (Baron, 2007; Hörisch et al., 2017), which significantly defines the intensity of the environmental pressures exerted on them. Our study notes this important point and shows that the stage of evolution defines when entrepreneurs internalize environmental pressures through a stronger environmental orientation.

Second, we make a more detailed analysis of the environmental pressures imposed on entrepreneurs to better understand when entrepreneurs are more environmentally oriented. Specifically, we

differentiate between normative and coercive pressures and incorporate information about these types of environmental pressures on entrepreneurs in 27 countries that participated in the Global Entrepreneurship Monitor (GEM) project in 2009. Thus, our study also responds to a recent call for more data-based evidence on the environmental orientation of entrepreneurs (Demirel et al., 2019). The wide range of countries included in our analysis allows us to explore substantial differences in the intensity of coercive and normative pressures among countries, and it may lead to a greater generalization of our results.

Third, our paper explains when entrepreneurs internalize environmental pressures through an increased perception of the place of environmental issues in their overall objectives. To the moment, research has mainly focused on analyzing how environmental pressures encourage firms to behave in favor of environmental protection by focusing on the impact of these pressures on firms' environmental reporting (Pucheta-Martínez & Gallego-Álvarez, 2020), environmental innovation (Konadu et al., 2020), or environmental responses (Murillo-Luna et al., 2008). Thus, prior research has been concerned with the study of firms' behavior and practices. This implies that there is still room to explore when environmental pressures are internalized by entrepreneurs through an increased importance of environmental issues in the overall business objectives. Our study pays attention to this and offers interesting findings.

2 | THEORETICAL FOUNDATION AND HYPOTHESES

Entrepreneurship is multifaceted and “espouses a diverse range of theories applied to various kinds of phenomena” (Gartner, 2001, p. 34). Regardless of the theory used and the dependent variable being explained, what is certain is that creating a new business is a sequence of different activities, decisions, and actions that must be undertaken at different points in time (Baron, 2007). In accordance with this idea, recent studies have understood entrepreneurship as a process with different stages instead of a static phenomenon (Amankwah-Amoah et al., 2019). At each stage, entrepreneurs face different challenges, with those that must be confronted at the early and late stages being particularly different (Brixy et al., 2012). Specifically, the main challenge that entrepreneurial ventures must face at the early stages of evolution is to overcome the “liability of newness” (Stinchcombe, 1965). This liability refers to the immaturity of an organization, which usually creates survival difficulties such as those derived from the absence of market acceptance (Aldrich & Auster, 1986). In contrast, entrepreneurs in the late stages have already overcome this liability and have become established firms, having another particular set of challenges. Our research takes into account these important differences through the adoption of a dynamic approach to entrepreneurship.

Additionally, we add to prior research on entrepreneurship that acknowledges the importance of institutions (Autio & Acs, 2010). Consequently, we also apply institutional theory to answer our

research question. Institutional theory argues that regulations, norms, values, and beliefs generate a social pressure that plays a key role in defining organizational goals, values, and practices (DiMaggio & Powell, 1991; Scott, 1992). At the core of this theory lies the concept of organizational legitimacy (Suchman, 1995). Legitimacy has been defined as the perception “that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995, p. 574). Thus, legitimacy is constructed collectively by different stakeholders and reflects the shared values and beliefs of a society (Suchman, 1995). Accordingly, different stakeholders jointly define which practices and organizational goals are considered legitimate and, consequently, what entrepreneurs should do to easily gain legitimacy in that country (Scott et al., 1994). In this regard, in the last decade, stakeholders expect entrepreneurs to be environmentally friendly (Berthelot et al., 2003; Cerin, 2002), which implies that increased environmental pressures are imposed on them.

Based on institutional theory, we consider that stakeholders impose two main types of environmental pressures on entrepreneurs, namely, coercive and normative (Delmas & Toffel, 2008). Coercive pressures are in the form of rules and regulations (Jennings & Zandbergen, 1995) that are imposed by regulatory institutions such as governments or public agents authorized to legislate. These stakeholders promulgate laws and regulations that prescribe entrepreneurs' goals and practices pertaining to environmental issues (Delmas & Toffel, 2008; Hyatt & Berente, 2017). To measure the intensity of coercive environmental pressures in a given country, we use the concept of *stringency of environmental regulations*. We define this as the exigence of the government, or any agent authorized to legislate, toward environmental protection that manifests itself through certain stringency in environmental regulations in that country.

On the other hand, normative pressures are those that stem from collective expectations regarding the appropriate entrepreneurial goals, values, and practices in the country (Hyatt & Berente, 2017; Lopez-De-Pedro & Rimbau-Gilabert, 2012). Normative pressures are jointly imposed on entrepreneurs by different types of stakeholders,

such as citizens, consumers, or employees, whose tasks and objectives can be substantially different. However, since a given agent may belong to more than one group of stakeholders at the same time (for instance, a person can be simultaneously a consumer, a citizen, and an employee), a high correlation of environmental demands across stakeholders' groups has been found (Murillo-Luna et al., 2008). According to this idea, an entrepreneur that incorporates the environmental requirements of a specific group of stakeholders is expected to consider the environmental demands of another groups of stakeholders as well (Murillo-Luna et al., 2008). The concept of *environmental awareness* is used to account for the intensity of normative environmental pressures in a given country. We define environmental awareness as the societal sensitivity in the country toward environmental issues (Gadenne et al., 2009).

Figure 1 depicts our theoretical model. As shown, the stage of evolution of the venture, the stringency of environmental regulations, and the environmental awareness determine the level of entrepreneurs' environmental orientation. Additionally, the two types of environmental pressures are incorporated as moderators of the relationship between the stage of evolution of the entrepreneurial venture and environmental orientation.

2.1 | The role of the stage of evolution of the venture in explaining environmental orientation

The difficulties that are faced for new ventures to survive are mainly explained by the fact that crucial stakeholders do not yet fully understand the nature of these ventures. Consequently, the conformity of new ventures to the established norms and the accepted values in the country is still in question (Aldrich & Fiol, 1994). Gaining legitimacy enables new ventures to overcome the liability of newness and increases their chances of survival (Überbacher, 2014). As a consequence, gaining legitimacy is the most important challenge at the early stages of evolution of the ventures (Esty & Winston, 2009). To meet this challenge, new ventures devote a

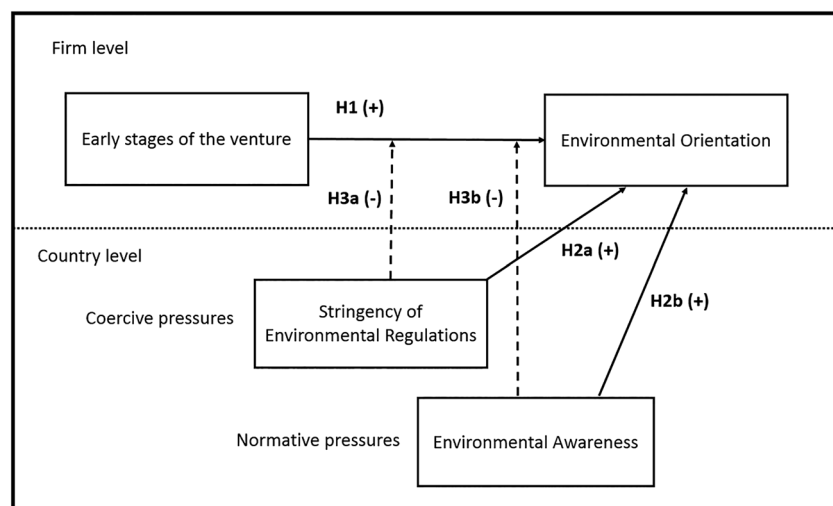


FIGURE 1 Theoretical framework

substantial amount of energy to creating a sense that they are desirable, and that they conform to social norms and values. By doing so, new ventures can convince important stakeholders to lend them support and, therefore, they can obtain the required resources to survive and grow (Garud et al., 2014). In this regard, it has been shown that stakeholders tend to perceive those initiatives that are environmentally friendly as more desirable and legitimate (Ghosh & Nanda, 2010). Consequently, entrepreneurs in the early stages who give more importance to environmental issues within the overall objectives may easily establish legitimacy for their ventures because of the greater conformity to social expectations (Ambec & Lanoie, 2008; Konadu et al., 2020).

By contrast, entrepreneurs in the late stages have overcome the liability of newness and have become established firms. Thus, these entrepreneurs are surrounded by a different set of challenges than those in the early stages. In contrast to the new ventures, established firms do not face an imminent risk of failure, and hence they focus on maximizing expected profits instead of maximizing the probability of survival (Swinney et al., 2011). This may imply that entrepreneurs in the late stages are less concerned with signaling conformity to environmental expectations to increase their chances of survival. They may devote their efforts to other tasks that are more specific to advanced entrepreneurial ventures, such as the maximization of economic benefits. These entrepreneurs have fewer incentives than those in the early stages to internalize societal environmental pressures through increased perceptions of the place of environmental issues in the overall objectives. In contrast, they are expected to give more importance to economic issues in these overall objectives. All in all, environmental orientation is expected to be stronger for entrepreneurs in the early stages. These ideas provide the basis for Hypothesis 1, which is posited as follows:

Hypothesis 1. Environmental orientation is stronger in the early stages of the venture.

2.2 | The role of coercive and normative pressures in explaining environmental orientation

The stringency of environmental regulations and the environmental awareness differ among countries. This explains the variation in the intensity of environmental pressures imposed on entrepreneurs and, therefore, the differences in the importance that they place on environmental issues within the overall objectives.

On the one hand, agents who are authorized to legislate can put a lot of effort into environmental protection when designing norms and regulations in the country. These stakeholders use their formal authority to formulate environmental regulations and provide environmental guidelines (Deephouse & Suchman, 2008). Specifically, the stringency of environmental regulations in the country defines the intensity of coercive pressures on entrepreneurs who are located there (Jennings & Zandbergen, 1995; Pucheta-Martínez & Gallego-Álvarez, 2020). In a situation of stringent environmental

regulations, entrepreneurs are forced to incorporate environmental issues to a greater extent in their economic activities if they want to operate legally. The coercive power of governmental authorities is able to discipline entrepreneurs who do not obey the environmental requirements of the country through sanctions and punishments, which encourages entrepreneurs to internalize the environmental pressures through an increased perception of the place of environmental issues in their overall objectives. Additionally, as governmental authorities are more concerned with environmental issues, more environmental requirements are expected for being able to access to public sources of funding in these countries. This means that entrepreneurs may also be encouraged to have a strong environmental orientation to easily obtain subsidies and to have access to support programs (Bürer & Wüstenhagen, 2009; Criscuolo & Menon, 2015).

By contrast, in countries with low stringency of environmental regulations, norms and policies do not pay as much attention to environmental protection. Thus, coercive pressures on entrepreneurs in these countries are much lower. In this situation, entrepreneurs need to place less importance on environmental issues within the overall objectives to operate legally or to easily obtain public financing. This reasoning leads to the following hypothesis:

Hypothesis 2a. Environmental orientation is stronger in countries with a high stringency of environmental regulations.

On the other hand, in countries with a high environmental awareness, there is a consensus among consumers, citizens, financial intermediaries, and other groups of stakeholders about the need to prioritize environmental values in the country. This implies that different stakeholders require entrepreneurs to act in accordance with these values, and that they tend to reward entrepreneurial ventures that give more importance to environmental issues (Arocena et al., 2021; Hechavarría et al., 2017). With this situation, entrepreneurs will be more likely to gain legitimacy if their business objectives are geared toward meeting the environmental values espoused in these countries (Thompson & Cowton, 2004).

By contrast, in countries with a low environmental awareness, other types of goals and values—such as the economic ones—are prioritized, and the environmental issues tend to have less importance among different groups of stakeholders. In these countries, stakeholders are less concerned with environmental issues and, therefore, normative environmental pressures on entrepreneurs are much lower. To gain legitimacy, entrepreneurs do not need to signal conformity to social values and beliefs by giving a high priority to environmental issues in the overall objectives. Thus, a lower environmental orientation of entrepreneurs is expected when the environmental orientation in the country is low. This reasoning provides the basis for Hypothesis 2b, which is posited as follows:

Hypothesis 2b. Environmental orientation is stronger in countries with a high environmental awareness.

2.3 | The contingent effect of coercive and normative pressures

We now recognize that the stringency of environmental regulations and the environmental awareness in the country can alter the different incentives of entrepreneurs in the early and late stages to internalize environmental pressures. On the one hand, environmental norms and regulations in a country are compulsory for all entrepreneurs operating in the same country (Latif et al., 2020), whatever the stage of evolution of their ventures. This implies that entrepreneurs, both in early and late stages, are forced to comply with environmental regulations if they do not want to operate illegally and, thus, to be penalized by governmental authorities (Delmas & Toffel, 2008). This means that every entrepreneur espoused to stringent environmental regulations gives more importance to environmental issues within the overall objectives, whatever the stage of evolution of the venture.

Similarly, countries with high environmental awareness impose great environmental pressures on entrepreneurs at both early and late stages. In these countries, environmental values are prioritized and stakeholders expect all entrepreneurs to respect and internalize these values, irrespective of the stage of evolution of the venture. Obtaining and maintaining support of crucial stakeholders in these countries require that every entrepreneur place sufficient importance on environmental issues within the overall objectives. Otherwise, the conformity of entrepreneurial ventures to the societal accepted values could be questioned and, thus, entrepreneurs may no longer have the support from important stakeholders in these countries.

Overall, these ideas suggest that the initial differences between the incentives of entrepreneurs in the early and late stages to be environmentally oriented are reduced if any of the two types of environmental pressures in the country is high. Accordingly, we posit our last set of hypotheses as follows:

Hypothesis 3a. The stronger environmental orientation in the early stages of the venture (i.e., Hypothesis 1) is reduced in countries with a high stringency of environmental regulations.

Hypothesis 3b. The stronger environmental orientation in the early stages of the venture (i.e., Hypothesis 1) is reduced in countries with a high environmental awareness.

3 | DATA AND METHODOLOGY

3.1 | Sample

Our hypotheses are tested using a sample of 9781 entrepreneurs from 27 countries who participated in the GEM project in 2009. The GEM project is an international survey that carries out an annual

analysis of the entrepreneurship phenomena. Although the data from the GEM project are given annually, we only use data from 2009 because this was the only year in which the GEM included questions related to the environmental orientation of entrepreneurs. The main objective of the GEM project is to provide comparable international data on entrepreneurial activity across the countries that participate in the project (Reynolds et al., 2005). Initially, policymakers were the main target audience, but the coverage and consistency of the data have revealed their usefulness for academic purposes. As a result, there is a growing number of research papers using the GEM reports as a data source (Dau & Cuervo-Cazurra, 2014; Valdez & Richardson, 2013).

GEM data are especially valuable for our research question because they provide information about entrepreneurs at different stages. Some entrepreneurial ventures are at early stages of evolution, while other ventures are in the late stages. Moreover, the wide range of countries included in our analysis allows us to generalize our results to different contexts, and highlight important differences among them.

3.2 | Variables

Table 1 provides an overview of all the variables employed in our analysis, and it indicates how we measure each of them.

3.2.1 | Dependent variable

Our dependent variable is *environmental orientation*, which measures the degree to which entrepreneurs incorporate environmental issues within their overall objectives. Specifically, the entrepreneurs allocated a total of 100 points across three different kinds of objectives: economic, social, and environmental. Our measure takes into account the points allocated to the environmental objective. This item has been used previously in the literature to measure the environmental orientation of entrepreneurs (Hechavarría et al., 2017; Hörisch et al., 2017). As Hechavarría et al. (2017) explained, this dependent variable is ipsative, or forced choice, because the responses for the three categories must sum to 100%. The major advantage of this kind of measure is that respondents are forced to make comparisons among the categories, and the choice they make is on the same dimension with the same meaning. Ipsative measures help the intuitive sense of individuals because they simulate a practical situation in which they have to decide among alternative approaches (Baron, 1996). In this case, entrepreneurs balance their environmental objectives with two other important goals: their pursuit of benefits (which is essential for their survival) and their contribution to the society in which they operate (i.e., social objectives). Entrepreneurs do not assess their environmental orientation in absolute terms (for instance, “care for the environment is very important for my business”) but in relative terms, allocating points between their environmental, economic and social objectives.

TABLE 1 Description of variables

Variable	Source	Description
Dependent variable		
Environmental orientation	GEM	Percentage of points that entrepreneurs give to environmental objectives instead of giving those points to economic or social objectives.
Explanatory variables: individual-level		
Nascent entrepreneur	GEM	Dummy variable that takes the value 1 if the individual is a nascent entrepreneur (who have paid wages for less than 3 months).
New entrepreneur	GEM	Dummy variable that takes the value 1 if the individual is a new entrepreneur (who have paid wages for more than 3 months but fewer than 42 months).
Explanatory variables: country-level		
Stringency of environmental regulations	WEF	Indicator of the Executive Opinion Survey from the Global Competitiveness Report (GCR), where business leaders answer the question: "How would you assess the stringency of your country's environmental regulations" (1 = very lax; 7 = among the world's most stringent). Mean of the responses for each country.
Environmental awareness	WVS	Percentage of population of a country that is aware of the importance of the environmental protection. This variable is construct using three items, where individuals have to tell whether they agree or disagree with the following statements: (1) I would give part of my income if I were certain that the money would be used to prevent environmental pollution (labeled income donation), (2) I would agree to an increase in taxes if the extra money were used to prevent environmental pollution (labeled tax increase), and (3) the government should reduce environmental pollution, but it should not cost me any money (labeled Government's role).
Control variables: individual-level		
Age	GEM	Age of the entrepreneur.
Gender	GEM	Gender of the entrepreneur: 0 if it is a woman and 1 if it is a man.
Educational level	GEM	Ordinal variable with five categories: (1) no educational background, (2) some secondary education, (3) secondary education, (4) postsecondary education, and (5) graduate experience.
Household incomes	GEM	Ordinal variable with three categories: (1) lowest third, (2) middle third, and (3) upper third.
Number of owners	GEM	Ordinal variable. Total number of owners of the new venture.
Opportunity-driven	GEM	Dummy that indicates if the venture has been created because the entrepreneur has identified a market opportunity

TABLE 1 (Continued)

Variable	Source	Description
Extractive	GEM	Dummy that indicates if the venture is in the extractive sector.
Transforming	GEM	Dummy that indicates if the venture is in the transforming sector.
Business services	GEM	Dummy that indicates if the venture is in the business services sector.
Control variables: country-level		
Unemployment rate	WBI	Percentage of population actively unemployed.

Abbreviations: GEM, Global Entrepreneurship Monitor; WEF, World Economic Forum; WVS, World Values Survey; WBI, World Bank Indicators.

3.2.2 | Explanatory variables

The GEM survey identifies three types of entrepreneurs: nascent, new, and established (Reynolds et al., 2005). The three categories identify different stages of evolution of entrepreneurial ventures. Specifically, the nascent category includes entrepreneurs who are involved in the process of starting a business and have paid wages for no more than 3 months. New entrepreneurs are owner-managers of ventures who have paid wages for more than 3 months but fewer than 42 months. Finally, established entrepreneurs are individuals who have paid wages for more than 42 months. Our sample includes observations for the three stages. However, in the different regressions we only include two dummies (*nascent entrepreneur* and *new entrepreneur*), leaving established entrepreneurs as the reference category.

The variable *stringency of environmental regulations* is an indicator of the World Economic Forum. Specifically, it has been obtained from the Executive Opinion Survey of the Global Competitiveness Report. This survey is the longest running and most extensive of its kind, and it provides a yearly evaluation of critical aspects of competitiveness for which statistical data are missing because these are either impossible or extremely difficult to measure on a global scale. The goal of this survey is to capture reality as well as possible and, following the words of the World Economic Forum, “business leaders are arguably the best positioned to assess the business environment in which they operate.” Managers assess the stringency of environmental regulations of their countries, comparing them with the world's most stringent country. This item has been previously used in research to measure the stringency of environmental regulations (Garrone et al., 2018). The variable *environmental awareness* comes from the World Values Survey (WVS). This survey has had five multiyear waves since the beginning of the 1980s, covering around 80 countries across the world, and it has been employed in other research papers (Hechavarría et al., 2017; Hörisch et al., 2017). We construct this variable by considering three items of the WVS that are related to environmental protection. Specifically, individuals have to say whether they strongly agree, agree, disagree, or strongly disagree with the following statements: (1) I would give part of my income

if I were certain that the money would be used to prevent environmental pollution (labeled *income donation*); (2) I would agree to an increase in taxes if the extra money were used to prevent environmental pollution (labeled *tax increase*); and (3) The government should reduce environmental pollution, but it should not cost me any money (labeled *government's role*). For the first two items, we deem individuals to be aware of the importance of environmental protection if they strongly agree or agree with the statements, and, for the third item, we deem them to be aware if they strongly disagree or disagree with the statement. We aggregate the individuals' responses to obtain the percentage of people in a given country who agree with the two first statements and disagree with the last one. The three items are highly correlated, indicating that they measure a similar construct. We perform a factorial analysis to obtain our variable of the *environmental awareness* of the country.

3.2.3 | Control variables

Our model also includes several control variables that may influence an entrepreneur's environmental orientation, some of them at an individual level and others at country level. Regarding the control variables at an individual level, we include age, gender, educational level, household incomes, number of owners, opportunity-driven, and industry.

Previous research has shown that *age* influences the decision to become an entrepreneur (Arenius & Minniti, 2005) and the individual's environmental attitude (Zelezny et al., 2000). New generations are more concerned about environmental issues, so we expect that age will have a negative influence on environmental orientation. We also include the variable *gender*—which takes the value of 0 if the entrepreneur is a woman and 1 if the entrepreneur is a man—because prior research has shown that the entrepreneur's gender affects their business goals (Estrin et al., 2013; Zelezny et al., 2000). With respect to *educational level*, the GEM project provides information about the educational attainment of the entrepreneur, classifying this into five categories. Entrepreneurship literature has explained that this variable has a

positive influence on the environmental orientation of the entrepreneur (Hörisch et al., 2017). We also think that the availability of resources may affect an entrepreneur's strategy, leading the entrepreneur to pursue different kinds of objectives. For this reason, we include the variable *household incomes*, which assesses the family income of the entrepreneur at the beginning of the venture, and the variable *number of owners*. Finally, we include the variable *opportunity-driven*, which measures if the firm has been created because the entrepreneur has identified a market opportunity or because of the lack of better employment options (i.e., necessity-driven). Entrepreneurs who pursue a business opportunity may be more environmentally oriented than “necessity” entrepreneurs. The main goal of firms created by necessity is to find a way to make a living and, therefore, this type of venture may be less concerned with environmental issues.

Finally, the GEM data provide information about the industry in which the business operates, providing four different aggregate categories: (1) *extractive*, (2) *transforming*, (3) *business services*, and (4) *consumer-oriented*. Prior research has shown that some industries may be more environmentally responsible than others (Cohen et al., 2008). We include in our regressions the first three sectors; that is, *consumer-oriented* is the reference category.

Regarding the control variables at country level, we include the variable *unemployment rate*. It measures the percentage of people who are looking for a job. A context with a higher unemployment rate has a worse economic situation, meaning that the pursuit of economic goals becomes more important. Therefore, we expect that the unemployment rate has a negative effect on environmental orientation.

3.3 | Descriptive statistics

Tables 2 and 3 present, respectively, the descriptive statistics and correlations of the variables used in the analysis. Table 2 shows that our dependent variable, *environmental orientation*, has a mean of 13.1, which means that entrepreneurs assign, on average, 13 percentage points to environmental objectives. Economic and social objectives are therefore, on average, much more important. In our sample there is an important representation of entrepreneurs at each stage of evolution of the entrepreneurial venture: 27.3% are nascent, 27.1% are new, and 45.6% are established. Regarding the individual control variables, 61% of the sample are men, and their average age is 40.6 years. The ordinal variable of *education* has a mean of 1.79, that is, around secondary education; the variable *household income* has a mean of 2.32, so the majority of entrepreneurs of the sample are in the upper third for income. The variable *number of owners* ranges from 1 to 6 with a mean of 1.57, so the majority of projects in our sample are ventures with a single owner. Moreover, 42% of the projects included in our sample were created because of the identification of a business opportunity, while the remaining 58%, for a matter of necessity. Finally, 13% of the projects are in the extractive sector, 22% in the transforming sector, 13% are ventures focused on business services, and 52% are consumer-oriented companies.

The variable *stringency of environmental regulations* ranges from 2.3 to 6.4 with an average of 4.40 while the variable *environmental awareness* has an average of 0.52 (which means that around half of the countries of our sample are aware of the importance of environmental protection), but it ranges from 0.30

TABLE 2 Descriptive statistics

Variable	Mean	Std. dev.	Min.	Max.
Individual-level variables				
1. Environmental orientation	13.11	15.09	0	100
2. Nascent entrepreneurs	0.273	0.45	0	1
3. New entrepreneurs	0.271	0.44	0	1
4. Age	40.64	11.68	18	64
5. Gender	0.61	0.49	0	1
6. Educational level	1.79	1.10	0	4
7. Household incomes	2.32	0.80	1	3
8. Number of owners	1.57	1.06	1	6
9. Opportunity-driven	0.42	0.49	0	1
10. Extractive	0.13	0.34	0	1
11. Transforming	0.22	0.42	0	1
12. Business services	0.13	0.33	0	1
Country-level variables				
13. String. env. regulations	4.40	1.05	2.3	6.4
14. Environmental awareness	0.52	0.11	0.30	0.73
15. Unemployment rate	9.26	5.78	3.2	24.1

Note: $N = 9781$ (individual-level); $N = 27$ (country-level).

TABLE 3 Correlation matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Environmental orientation	1.00														
2. Nascent entrepreneurs	0.07	1.00													
3. New entrepreneurs	-0.02	-0.31	1.00												
4. Age	0.03	-0.18	-0.19	1.00											
5. Gender	0.03	-0.01	-0.04	0.04	1.00										
6. Educational level	0.12	0.05	-0.04	0.03	0.08	1.00									
7. Household incomes	0.01	0.00	-0.03	0.03	0.13	0.31	1.00								
8. Number of owners	0.07	0.11	-0.01	-0.05	0.03	0.12	0.06	1.00							
9. Opportunity driven	-0.01	0.03	0.01	-0.03	0.06	0.14	0.14	0.05	1.00						
10. Extractive	0.04	-0.07	-0.05	0.03	0.01	-0.22	-0.19	-0.01	-0.07	1.00					
11. Transforming	0.01	-0.03	0.01	0.04	0.10	0.05	0.06	0.02	0.01	-0.21	1.00				
12. Business services	-0.02	0.00	-0.02	0.05	0.06	0.24	0.10	0.05	0.08	-0.15	-0.20	1.00			
13. String. envir. regulations	0.13	-0.06	-0.10	0.24	0.05	0.43	0.18	0.07	0.12	-0.19	0.03	0.23	1.00		
14. Environmental awareness	0.13	0.00	0.01	-0.01	-0.06	0.01	0.01	-0.02	-0.09	0.04	-0.01	-0.12	0.06	1.00	
15. Unemployment rate	0.06	-0.02	-0.06	0.09	0.08	0.18	0.12	0.06	-0.01	-0.06	0.06	0.05	-0.42	0.15	1.00

Note: N = 9781 (individual-level); N = 27 (country-level).

to 0.73, so there is a reasonable degree of variation in the level of environmental awareness in the countries of our sample. Finally, the *unemployment rate* averages 9% (ranging from 3.2% to 24.1%).

The correlation matrix is shown in Table 3. As we can see, *environmental orientation* is positively correlated with *nascent entrepreneur* (0.07), *stringency of environmental regulations* (0.13) and *environmental awareness* (0.13), but negatively correlated with *new entrepreneur* (−0.02). We calculated the variance inflation factors (VIF), and found that our models do not suffer from multicollinearity problems.

3.4 | Data analysis

To test our hypotheses, we conduct a hierarchical logistic regression analysis. Our individual-level data are nested within country-level data, so it is convenient to use a multilevel model (Estrin et al., 2016; Fuentelsaz et al., 2018; Guo & Zhao, 2000). This estimation technique has several advantages over conventional models. First, it does not ignore interdependency between individual- and country-level data, which could lead to biased results in coefficients and standard errors (since observations within the same countries are correlated and thus not independently distributed). The use of a multilevel model allows

TABLE 4 Multilevel results for environmental orientation

Environmental orientation	Model 1		Model 2		Model 3	
Constant	12.83***	(1.33)	−6.31	(5.26)	−8.55	(5.37)
Control variables: individual-level						
Age	−0.02	(0.01)	0.003	(0.01)	0.003	(0.01)
Gender	0.72*	(0.30)	0.74*	(0.30)	0.75*	(0.30)
Educational level	0.74***	(0.17)	0.68***	(0.17)	0.69***	(0.17)
Household incomes	−0.56**	(0.20)	−0.49**	(0.20)	−0.46*	(0.20)
Number of owners	0.75***	(0.14)	0.67***	(0.14)	0.66***	(0.14)
Opportunity-driven	−0.22	(0.30)	−0.26	(0.30)	−0.24	(0.30)
Extractive	4.09***	(0.47)	4.36***	(0.47)	4.37***	(0.48)
Transforming	0.07	(0.37)	0.15	(0.37)	0.15	(0.37)
Business services	−2.25***	(0.48)	−2.20***	(0.48)	−2.19***	(0.48)
Control variables: country-level						
Unemployment rate	0.49	(0.99)	1.26	(0.87)	1.24	(0.87)
Explanatory variables: individual-level						
Nascent entrepreneurs			2.37***	(0.37)	5.01*	(2.20)
New entrepreneurs			1.39***	(0.36)	6.00**	(2.04)
Explanatory variables: country-level						
Stringency of environmental regulations (SER)			1.64*	(0.78)	1.62*	(0.78)
Environmental awareness (EA)			20.23*	(8.25)	22.86**	(8.40)
Cross-level interaction terms						
Nascent entrepreneurs * SER					0.22	(0.34)
New entrepreneurs * SER					−0.15	(0.33)
Nascent entrepreneurs * EA					−7.12*	(3.29)
New entrepreneurs * EA					−7.67**	(3.01)
Random parameter (country)	5.10***	(0.73)	4.25***	(0.62)	4.26***	(0.63)
Number of observations	9781		9781		9781	
Number of countries	27		27		27	
Intra-class correlation (ICC)	0.114		0.083		0.083	
Wald chi-square	170.80***		227.33***		236.89***	
Log-likelihood	−39,881		−39,854		−39,849	
LR test vs. non-multilevel (Chi ²)	807***		485***		488***	

Note: Standard errors in parentheses.

[†]*p* < .10.

p* < .05. *p* < .01. ****p* < .001.

us to control for this unobserved heterogeneity related to macro factors that are not directly included in the model. Second, multilevel models can provide a more detailed analysis of the effects of variables that operate at multiple levels. In our case, we have explanatory variables at individual level (*nascent* and *new entrepreneur*) and at country level (*environmental awareness* and *stringency of environmental regulations*), and four interaction effects that involve two different levels of analysis. This approach is consistent with recent multilevel studies (Estrin et al., 2016; Hörisch et al., 2017; Wennberg et al., 2013).

4 | RESULTS

4.1 | Main results

Table 4 presents the results of estimating three nested models. Model 1 incorporates only the control variables. Model 2 adds the direct effect of the explanatory variables of our theoretical framework (i.e., *nascent entrepreneur*, *new entrepreneur*, *stringency of environmental regulations*, and *environmental awareness*) to test Hypotheses 1, 2a, and 2b. Finally, Model 3 introduces the interaction terms between *nascent/new entrepreneur* and *stringency of environmental regulations/environmental awareness*, with the aim of estimating the moderating hypotheses (i.e., Hypotheses 3a and 3b). According to the Wald chi-squared test, the explanatory power of all the models is satisfactory ($p < .001$) and the likelihood-ratio test shows that it is necessary to employ a multilevel technique ($p < .001$). Our regressions have an intraclass correlation (ICC) of 8%–11%, which also supports the use of multilevel modeling. The Wald chi-squared test shows that Model 3 has the highest explanatory power, suggesting that the interaction term between the stage of evolution of the entrepreneurial venture and the intensity of the institutional pressures imposed on entrepreneurs helps to explain their environmental orientation. We focus on this model to comment on the results of our estimations.

Regarding the individual control variables, *age* has a positive but not statistically significant effect, suggesting that the environmental orientation of entrepreneurs does not vary according to their age. *Gender* has a positive and significant effect ($\beta = 0.75$; $p < .05$), indicating that men have, on average, a stronger environmental orientation than women. Contrary to our expectations, *household income* has a negative effect on the environmental concern of entrepreneurs ($\beta = -.46$; $p < .05$). *Number of owners* has a positive and significant effect ($\beta = 0.66$; $p < .001$), suggesting that the environmental orientation is stronger if there are more owners. *Opportunity-driven* is not statistically significant, suggesting that the environmental orientation does not depend on the motivation of the entrepreneur. Concerning the industry, entrepreneurs in the *extractive* sector place a higher importance on environmental issues within the overall objectives in comparison to entrepreneurs in the consumer-oriented sector ($\beta = 4.37$; $p < .001$). In contrast, ventures in the *business services* sector have a lower environmental orientation than ventures in the consumer-oriented sector ($\beta = -2.19$; $p < .001$). We do not observe significant differences in the level of environmental orientation of

entrepreneurs in the *transforming* sector and entrepreneurs in the consumer-oriented sector ($\beta = 0.15$; $p > .10$). Similarly, the coefficient of *unemployment rate* is positive but not statistically significant ($\beta = 1.24$; $p > .10$).

Regarding our theoretical model, we observe that *nascent entrepreneur* and *new entrepreneur* have a positive and significant effect on environmental orientation ($\beta = 5.01$; $p < .05$, $\beta = 6.00$; $p < .01$, respectively). Thus, we find support for Hypothesis 1: entrepreneurs in the early stages have a stronger environmental orientation than those in the late stages. Similarly, the coefficient of the variable *stringency of environmental regulations* is positive and statistically significant ($\beta = 1.62$; $p < .05$), showing that entrepreneurs who are located in countries with more stringent environmental regulations place more importance on environmental issues within the overall objectives, as stated in Hypothesis 2a. Therefore, we find support for this hypothesis. Similarly, the variable *environmental awareness* has a positive and significant effect on environmental orientation ($\beta = 22.86$; $p < .01$), giving support to Hypothesis 2b. As predicted, the environmental orientation of entrepreneurs is stronger in countries with a higher environmental awareness.

Model 3 also includes the interaction terms between the two variables that account for the stage of evolution of the venture (i.e., *nascent entrepreneur* and *new entrepreneur*) and the two variables that account for the intensity of coercive and normative pressures in the country (i.e., *stringency of environmental regulations* and *environmental awareness*). We observe that the interaction terms between the stages of evolution of the ventures and the stringency of environmental regulations are not statistically significant. Thus, Hypothesis 3a is not supported. This result suggests that the differences in the environmental orientation among the stages of evolution are not contingent on the intensity of coercive pressures in the country. However, the interaction terms between the two stages considered and the environmental awareness of the country are negative and statistically significant ($\beta = -7.12$; $p < .05$, $\beta = -7.67$; $p < .01$), which gives support to Hypothesis 3b. This indicates that the differences in the environmental orientation among entrepreneurs in the early and late stages are reduced if the environmental awareness in the country is high.

We use Figure 2 to obtain a better understanding of the moderating effect of environmental awareness. In this figure, two lines are depicted. The blue one refers to entrepreneurs who are located in countries with a low environmental awareness, and the grey one to entrepreneurs in countries with a high environmental awareness. First, we observe that the two lines have a negative slope, which is consistent with Hypothesis 1. Entrepreneurs in the early stages (*nascent entrepreneurs*) have a stronger environmental orientation than those in the late stages (*established entrepreneurs*). Second, we observe that the grey line is above the blue one, meaning that entrepreneurs in countries with a high environmental awareness have a stronger environmental orientation (Hypothesis 2b). Additionally, we observe that the negative slope of the grey line is less pronounced than the slope of the blue line. This means that the difference in the level of environmental orientation between nascent and established

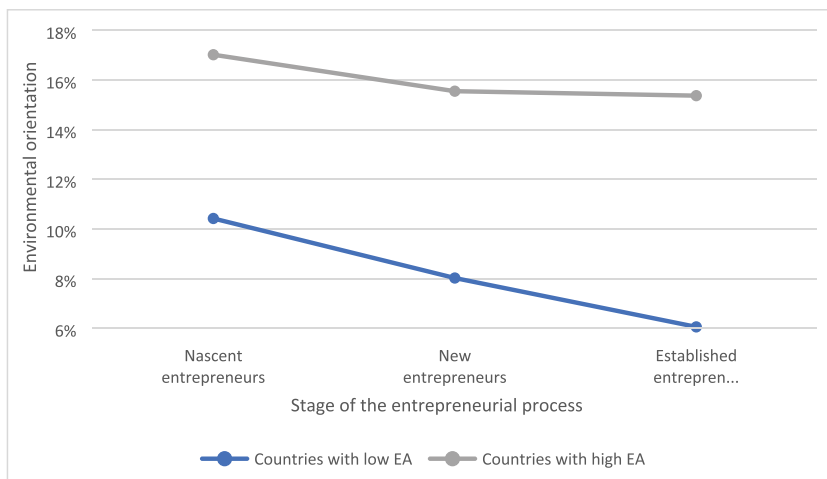


FIGURE 2 Moderating effect of environmental awareness [Colour figure can be viewed at wileyonlinelibrary.com]

entrepreneurs in countries with a high environmental awareness is less than the difference between these types of entrepreneurs in countries with a low environmental awareness. In accordance with our rationale in Hypothesis 3b, if the environmental awareness in the country is high, entrepreneurs give more importance to environmental issues in their overall objectives in every stage of evolution of the entrepreneurial venture. The logic behind this is that stakeholders in these countries incentivize all entrepreneurs to be environmentally responsible, whatever the stage of evolution of their ventures.

4.2 | Robustness checks

We perform different robustness checks to strengthen our results. First, we employ a different measure for the stages of evolution of the entrepreneurial venture. In particular, we incorporate the variable *established entrepreneur* instead of the variable *new entrepreneur* (which is now the reference category) and rerun Models 2 and 3. This way the environmental orientation of nascent and new entrepreneurs is now compared. This result reveals that the coefficient of *nascent entrepreneur* is positive and significant, confirming that nascent entrepreneurs have a stronger environmental orientation than new entrepreneurs. This result finishes the overall picture of the environmental orientation throughout the different stages of evolution of the entrepreneurial venture, and it gives more consistency to our results for Hypothesis 1.¹

Second, we use alternative measures for environmental awareness. Specifically, we separately employ the three items of the World Values Survey to build the new measures of environmental awareness. We label these items “income donation”, “tax increase” and “government’s role” (these items can be seen in Table 1). Again, we rerun Models 2 and 3 of Table 4 with these alternative measures of environmental awareness. The results of this re-estimation are qualitatively similar to those obtained in our main results.

Third, we perform a more detailed analysis of entrepreneurs’ environmental orientation by industry sector, which is shown in Table 5. In this table, we present the average environmental orientation by

TABLE 5 Environmental orientation by industry

Industry (4 categories)	EO	N		
Extractive	14.77%	1268		
Transforming	13.54%	2171		
Business services	12.13%	1232		
Consumer-oriented	12.77%	5110		
Average	13.11%	9781		
ANOVA (F)	12.02***			
Industry (10 categories)	EO	N		
Agriculture, hunting and fishing	14.74%	1236		
Mining and construction	15.65%	33		
Manufactures	13.75%	845		
Transport and storage	13.27%	753		
Wholesale	13.62%	1135		
Retail commerce and restoration	12.70%	3354		
Finance and insurance	9.73%	204		
Business services	12.60%	1028		
Government, health and education	12.01%	402		
Consumer services	12.81%	791		
Average	13.11%	9781		
ANOVA (F)	7.51***			
Industry and stage of the process	Nascent	New	Established	Average
Extractive	17.01%	12.10%	14.88%	14.77%
Transforming	15.20%	13.23%	13.17%	13.54%
Business services	13.84%	13.54%	10.65%	12.13%
Consumer-oriented	14.66%	12.41%	11.62%	12.77%
Average	14.88%	12.69%	12.38%	13.11%

*** $p < .001$.

industry sector and we specify the number of entrepreneurs included in each sector. We employ two types of industry sector classification: one more general and the other more specific. In the general

classification, we resort to the same distinction as in the main analysis (i.e., extractive, transforming, business services, and consumer-oriented sectors). In the detailed classification, we differentiate among 10 different categories. The analysis of variance (ANOVA) shows that the average environmental orientation is highly influenced by the industry sector in which entrepreneurs operate, suggesting that environmental pressures from stakeholders can be very different depending on the type of activity of the entrepreneurial venture. Furthermore, we present the average environmental orientation by industry sector and stage of evolution of the environmental venture. As shown, the environmental orientation in the early stages is higher than that observed in the late stages for every industry with the exception of the extractive sector. In this sector, established entrepreneurs have a higher environmental orientation than new ventures, which suggests that the extractive sector may have a particular pattern that differs from the rest of the industry sectors. This interesting finding could be explained by the nature of this sector and its consequences on the environment. In this sector, entrepreneurial ventures tend to have greater negative effects on the environment than other types of activities. Additionally, these negative effects on the environment are expected to increase as the venture grows and becomes an established firm (that is, as it evolves into the late stages). Thus, extractive ventures that are in the late stages may be subjected to more stringent environmental regulations, which leads to a stronger environmental orientation.

Fourth, prior research has highlighted the fact that entrepreneurs' priorities are quite different depending on the level of development of the country in which they are located (Acs et al., 2008). As a society evolves, its environmental awareness may increase because other needs may already be met. GDP per capita may be a good indicator of the degree of development of a given country. We have not included the variable of GDP per capita in the main analysis because it was highly correlated with the variable of *stringency of environmental regulations* (0.83); if both variables were incorporated together, our models might suffer from multicollinearity problems. We now draw our attention to the impact of the GDP per capita on entrepreneurs' environmental orientation. Table 6 shows this

TABLE 6 Environmental orientation by degree of development of the country

Countries divided by income level	EO
Richest countries of the sample	14.15%
Intermediate wealth countries	13.94%
Poorest countries of the sample	10.46%
ANOVA (F)	53.43***
Countries divided by stage of development	EO
Factor-driven economies	4.49%
Efficiency-driven economies	13.40%
Innovation driven economies	14.80%
ANOVA (F)	459.22***

*** $p < .001$.

additional analysis. In this table, we have divided the sample into three groups according to the level of GDP per capita (richest, intermediate, and poorest countries), and we have calculated the average environmental orientation for each group. The ANOVA analysis suggests that there are significant differences in entrepreneurs' environmental orientation depending on the level of GDP per capita in the country in which they are located. In particular, we observe that entrepreneurs are more environmentally oriented if they are located in wealthier countries. This is consistent with the idea that, in these countries, other primary requirements have already been met and environmental concerns are becoming a priority issue. Thus, environmental pressures could be more intense here (as suggested by the high correlation between the variables GDP per capita and *stringency of environmental regulations*). We have also employed the classification of the Global Competitiveness Report that uses three categories of classification: factor-driven, efficiency-driven, and innovation-driven economies. The results are similar, showing that entrepreneurs' environmental orientation is stronger as the degree of economic development increases.

5 | DISCUSSION AND CONCLUSIONS

5.1 | Discussion of results

Our article seeks to respond to a specific research question: when are entrepreneurs more environmentally oriented? We first advocate the necessity of adopting a dynamic approach of entrepreneurship to answer this question and show that the stage of evolution of the venture significantly defines entrepreneurs' environmental orientation. In accordance with our reasoning, entrepreneurs in the early stages are more environmentally oriented than those in the late stages. This finding is consistent with the strategic conception of legitimacy, which understands that legitimacy is a manipulable resource (Suchman, 1995). Entrepreneurs in early stages expedite legitimation processes through increased perceptions of the place of environmental issues in their overall objectives. In other words, in the early stages, entrepreneurs define the business objectives in favor of environmental issues to foster legitimacy, which is vital for them to overcome the liability of newness and, thus, to increase their chances of survival (Überbacher, 2014). In contrast, entrepreneurs in the late stages have overcome the difficulties derived from the liability of newness and, indeed, they have become established firms. These entrepreneurs tend to devote more efforts to other business imperatives, such as profit maximization (Swinney et al., 2011).

Second, our study analyzes the impact of two types of environmental pressures, namely, coercive and normative, to obtain a better understanding of entrepreneurs' environmental orientation. We obtain interesting findings by making this distinction. First, we confirm that the effect of coercive and normative pressures on entrepreneurs' environmental orientation is different. Although both stringent environmental regulations and high environmental awareness lead to a stronger environmental orientation, we find that each

type of pressure acts independently in defining the importance of social, environmental, and economic issues in the overall business objectives. On the one hand, coercive environmental pressures are imposed by compulsory norms and regulations in the country. Thus, internalizing these pressures is a must for those entrepreneurs who want to operate legally. In fact, it is really difficult for an entrepreneurial venture that acts outside the law to have the support of crucial stakeholders because they do not conceive a way of doing business different from being in compliance with legal environmental requirements (Latif et al., 2020). This idea may be in line with the notion of cognitive and taken-for-granted legitimacy (Suchman, 1995). As any alternative to operating within the law is unthinkable, entrepreneurial ventures that respect the environmental requirements imposed by norms and regulations become unassailable by construction (Suchman, 1995).

On the other hand, normative environmental pressures refer to the consensus of different stakeholders about the environmental values and beliefs that should be prioritized in the country. Unlike the first type of environmental pressures considered, internalizing normative pressures is not mandatory but helps entrepreneurial ventures to be seen as desirable and legitimate by crucial stakeholders. This idea may be consistent with the third variant of pragmatic legitimacy proposed by Suchman (1995), known as dispositional legitimacy. In accordance with this type of legitimacy, stakeholders in a given country are likely to accord legitimacy to those entrepreneurs that share the environmental values commonly accepted in that country.

Another interesting finding of the distinction between coercive and normative pressures is observed in their moderating role. We have proposed that a high intensity of both coercive and normative pressures reduce the initial differences observed in the level of entrepreneurs' environmental orientation in the early and late stages. Contrary to our expectations, we find that only a high intensity of normative pressures reduces these differences. A possible explanation can be found in the different nature of coercive and normative pressures, which differently affect entrepreneurs when defining their environmental orientation. Coercive pressures are mandatory for all the ventures in the country, representing the basis from which entrepreneurs are considered to operate legally or illegally. In this case, the incentives for being environmentally oriented are artificially created by imposed obligations derived from environmental regulations, and they are not related to seeking legitimacy. For this reason, the initial differences observed between entrepreneurs in the early and late stages, which are explained by the different need for gaining legitimacy in each stage, are not affected by the intensity of coercive pressures. In contrast to our expectations, these differences seem to remain in a context of a high stringency of environmental regulations. On the other hand, normative pressures go beyond existing environmental regulations and are based on society's beliefs and values. Contrary to the prior type, normative pressures are not mandatory, but they are closely related to the mechanism of legitimacy. There is a consensus among consumers, citizens, and other groups of stakeholders about the need to prioritize environmental values when running a business. Thus, having a stronger environmental orientation is

not mandatory—as in the case of coercive pressures—but a good way to foster legitimacy in the marketplace. If the intensity of normative pressures is high, all the ventures need to interiorize these environmental values to obtain or maintain the support of crucial stakeholders, regardless of their stage of evolution. Thus, the initial differences observed in the environmental orientation of entrepreneurs in the early and late stages are now reduced.

5.2 | Contributions

We make several contributions to the previous research and extend our knowledge of entrepreneurs' environmental orientation. First, contrary to prior studies on entrepreneurs' environmental orientation (see, for instance, Hörisch et al., 2017), we adopt the dynamic approach of entrepreneurship. Our study challenges the static perception of entrepreneurship and recognizes that building a new business is a sequence of different stages of evolution and, more importantly, that each of these stages is characterized by different challenges. Our findings give support to our rationale, and they confirm the importance of considering the different stages of evolution of entrepreneurial ventures to obtain a full understanding of environmental orientation.

Second, our study takes into account cross-country differences, which are very important to understand when entrepreneurs are more environmentally oriented correctly. We contend that the differences in the level of environmental orientation between two entrepreneurs can be explained by (1) the different stage of evolution of their entrepreneurial ventures, and (2) by differences in the institutional context in which they are embedded. In doing so, we add to prior research that claims that it is not possible to analyze certain characteristics of entrepreneurs, such as their environmental orientation, without considering the context in which they are operating (see, for instance, Shane & Venkataraman, 2000). Thus, we apply institutional theory to the dynamic approach of entrepreneurship to respond fully to our research question. Previous research has considered the interplay between individual and contextual factors to explain entrepreneurial entry (Arenius & Minniti, 2005), the innovative behavior of new ventures (Fuentelsaz et al., 2018), and the growth aspirations of new ventures (Autio & Acs, 2010). Our research applies a multilevel framework to explain when entrepreneurs are more environmentally oriented, providing new evidence about the importance of considering individual-level and country-level factors simultaneously.

Third, we shed light on when entrepreneurs internalize stakeholders' pressures by giving more relevance to environmental issues within their overall objectives. To the moment, previous studies have studied how stakeholders' pressures can have impacts on entrepreneurs' actions and practices, but they have not studied when these pressures lead to an internalization by entrepreneurs. Focusing on the internalization of environmental pressures through increased perceptions of environmental issues within the overall objectives is important because it may be a prelude to entrepreneurs' behaviors and

environmental strategies. In this regard, the prioritization of environmental values within the overall objectives is related to environmental responsibility, which has been found to be associated with organizations that apply pro-active environmental strategies (Aragón-Correa et al., 2004).

5.3 | Implications for policy makers and managerial relevance

Our findings have several implications for policy-makers, environmental authorities, and managers. In contrast to the common assumption that entrepreneurs in the same location receive the same environmental pressure, authorities must be aware that some entrepreneurs internalize environmental pressures to a greater extent, giving a higher relevance to environmental issues within the overall objectives. We find that the importance placed on environmental issues significantly depends on the stage of evolution of the entrepreneurial venture: entrepreneurs in the early stages of evolution are more environmentally oriented. At first sight, this result can be counterintuitive, since one would expect that entrepreneurs with a greater resource endowment, such as those in the late stages, would be more able to complement their economic activities with environmental practices. The differences in the necessity to gain legitimacy between entrepreneurs in the early and late stages explain this. Entrepreneurs in the early stages have strong incentives to internalize the environmental pressures to foster legitimacy, so that they do not consider having an environmental orientation as a costly exercise in the future but as an effective way to be seen as legitimate now. Hence, local governments and environmental authorities should put more effort into raising the environmental orientation of entrepreneurs in the later stages. Our research also confirms the importance of the two main types of institutions—formal (environmental regulations) and informal (environmental awareness)—in giving entrepreneurs the incentive to be environmentally oriented. This finding has important implications for environmental authorities because it reveals that it is not only norms and laws that may be effective mechanisms to promote more environmentally friendly behavior; cultural values and beliefs in society can also be highly effective. Thus, greater efforts in environmental awareness campaigns may lead, in the long term, to highly fruitful results in the protection of the environment.

Our paper also has implications and recommendations for business strategy. In the strategic management process, managers must first define the business objectives (Alkhafaji & Nelson, 2013). These are, therefore, a prelude to the strategy and the ones that will set the direction of the actions carried out by the company. Managers should be careful in defining these objectives and be aware of the importance of environmental issues nowadays. In relation to new ventures, our study points to the importance that environmental orientation may have in overcoming the difficulties of surviving. Regarding established firms, our study shows that important differences exist in the intensity of environmental pressures among countries. Thus, those companies that are

considering expansion toward new countries should pay attention to these differences if they want to be successful abroad.

5.4 | Limitations and future research

In spite of the contributions of our research, a number of limitations can also be identified that may, in turn, constitute promising areas for future analysis. As said, we focus on entrepreneurs' environmental orientation by paying attention to their perceptions of the place of environmental issues in the overall objectives. We do not study, thus, the environmental actions and practices implemented by them. This implies that there is a need for caution when extrapolating these conclusions to activities actually undertaken. Second, our analysis focuses on three types of entrepreneurs: nascent, new, and established entrepreneurs. The group of new entrepreneurs includes entrepreneurs who have paid wages for more than 3 months but less than 42 months. Because of the length of this period of time, it may be expected that entrepreneurs included in this group will also show differences in terms of their motivations and behaviors. Therefore, disentangling this second group into different subgroups may give us a better understanding of the differences among entrepreneurs in terms of their environmental orientation. Third, our analysis is restricted to the year 2009. Future studies may address this issue by expanding the sample scope to check the applicability of our findings to other years and to give greater consistency to our findings.

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ORCID

Pilar Bernal  <https://orcid.org/0000-0003-1449-2248>

Beatriz Domínguez  <https://orcid.org/0000-0002-0712-2364>

Javier Montero  <https://orcid.org/0000-0001-9493-1583>

ENDNOTE

¹ The estimations of the robustness test are available from the authors under request.

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