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Contact to corresponding author: Roberto Daniel Ponce Oliva, robertoponce@udd.cl

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Julián Andrés Diaz Tautiva
Universidad Del Desarrollo, Chile
orcid.org/0000-0002-9808-3179

Erica Salvaj Carrera
Universidad Del Desarrollo, Chile
Universidad de San Andrés, Argentina
orcid.org/0000-0002-3374-9152

Felipe Vásquez-Lavín
Universidad Del Desarrollo, Chile
Center of Applied and Sustainability (CAPES), Chile
orcid.org/0000-0002-0767-998X

Roberto Daniel Ponce Oliva
Universidad Del Desarrollo, Chile
Center of Applied and Sustainability (CAPES), Chile
orcid.org/0000-0001-5024-7456

Understanding the role of institutions and economic context on entrepreneurial value creation choice

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Abstract

Research background: The observable discrepancies in entrepreneurship activity across countries have motivated both researchers and policymakers to comprehend the sources of these variations. Certain scholars have suggested that the answer to this empirical puzzle lies in the macrolevel processes that influence entrepreneurial endeavours.
Purpose of the article: As the understanding of macrolevel processes that shape entrepreneurial behaviour is limited, this research aims to answer how institutions and the economic context influence entrepreneurial value creation choices (i.e., for-profit, non-profit, and mixed).
Methods: Using a cross-country sample of 7,891 entrepreneurs in 58 countries, we employ a multilevel ordered probit to evaluate a novel conceptual framework. Our analysis models the direct impact of the regulative framework, the normative pillar, and the cultural pillar, alongside the moderating influence of income inequality and economic uncertainty on value creation choices.
Findings & value added: Our findings show that the regulative framework has a positive marginal effect on for-profit and mixed-value creation, but a negative effect on non-profit value creation. Meanwhile, the normative pillar has a negative marginal effect on for-profit and mixed-value creation, but a positive effect on non-profit value creation. The cultural pillar has a negative marginal effect on for-profit and mixed-value creation, but a positive effect on non-profit value creation. Furthermore, income inequality moderates positive the relationship between normative pillar and for-profit and mixed-value creation, while economic uncertainty moderates negative the relationship between normative pillar and for-profit and mixed-value creation. Our research contributes to the literature by providing a nuanced understanding of how institutional pillars can act as drivers or barriers for different entrepreneurial forms, evidence of how uncertainty interacts with institutional forces to shape value creation decisions, and insights into the distinctive attributes of different entrepreneurial forms. Our findings have implications for public policy development.

Introduction

Apparent divergences in entrepreneurship activity across countries have driven researchers and policy makers to investigate the reasons behind these variations (Frolund, 2021; Hechavarría *et al*., 2023; Ruiz *et al*., 2023; Thornton *et al*., 2011; Valdez & Richardson, 2013). Some scholars have argued that comprehending the sources of this empirical puzzle requires a joint examination of the contextual environment in which the new venture operates (Audretsch *et al*., 2021; Thornton *et al*., 2011) and the type of value (i.e., for profit-economic value, non-profit -societal and environmental impact, or a mix/hybrid) that entrepreneurs are aiming to create (Hechavarría, 2016).

A considerable body of literature has explored the contextual drivers that foster for-profit new ventures (Bennett, 2021b; Gonzalez-Uribe & Reyes, 2021; Iwasaki *et al*., 2021; Katekhaye *et al*., 2019; Kerlin, 2013). In

contrast, a nascent body of literature examines the determinants of non-profit-driven ventures (Brieger *et al*., 2021; Gupta *et al*., 2020a; Morris *et al*., 2020; Neumann, 2021; Vedula *et al*., 2022). Both streams of research underscore that, although new ventures are the product of individuals' capabilities, capital, and commitment (Boudreaux & Nikolaev, 2019; Sepúlveda & Bonilla, 2014; Urbano & Alvarez, 2014; Welter & Smallbone, 2011), macrolevel factors, such as institutions and economic conditions, significantly shape the nature and extent of entrepreneurial activities (Li, 2020; Urbano & Alvarez, 2014; Valdez & Richardson, 2013; Wu & Li, 2020).

Entrepreneurial activity is a crucial driver of economic development (Urbano *et al*., 2019b), and thus policy makers and scholars have a keen interest in determining how contextual factors influence different types of value creation (Audretsch *et al*., 2021; Bennett, 2021b; Brieger *et al*., 2021; Hechavarría *et al*., 2023; Schiavone *et al*., 2020). However, there is still a lack of understanding about how contextual factors influence the value creation decisions of several types of new ventures, as well as how those macrolevel factors interact (Boudreaux & Nikolaev, 2019; Bruton *et al*., 2010). Furthermore, there have been calls for cross-national examinations to investigate how macrolevel determinants interact to shape new venture behaviour (Bennett, 2021a). A better understanding of these determinants could facilitate the development of public policies that incentivize particular types of organisations, as new ventures can play a critical role in addressing societal challenges such as reducing poverty (Sustainable Development Goal No. 1) and alleviating income inequality (Sustainable Development Goal No. 10) (Autio & Fu, 2015; Brieger *et al*., 2021).

To contribute to the ongoing empirical debate, we draw on institutional theory (Busenitz *et al*., 2000; Scott, 2014) as a lens for understanding entrepreneurial activity patterns (Chowdhury *et al*., 2015). The institutional theory postulates three pillars that shape social and economic behaviour, and the literature suggests that these pillars can be drivers or barriers to entrepreneurial behaviour (Bennett, 2021b; Brieger *et al*., 2021; Hechavarría *et al*., 2023; Schiavone *et al*., 2020). We developed and tested a conceptual model that examines the interaction between macrolevel institutional pillars and the economic context (i.e., uncertainty and income inequality) and how it affects the individual type of value entrepreneurs aim to create. Our research question is: how institutions and the economic context influence entrepreneurial value creation choices?

To answer our research question, we conducted a multilevel ordered probit estimation using a cross-sectional cross-country sample of 7,891 entrepreneurs to model their value creation choices. Our study contributes to the entrepreneurship field by identifying the macrolevel determinants of value creation in new ventures and the contextual interaction effect that shapes different entrepreneurial endeavours. Specifically, we aim to make three contributions to the literature. First, our research provides a nuanced understanding of how institutional pillars can act as drivers or barriers for different entrepreneurial forms. Second, we offer evidence of how uncertainty interacts with institutional forces to give rise to different value creation decisions. Finally, we address the lack of empirical research on the distinctive attributes of different entrepreneurial forms (i.e., for-profits, non-profits, and hybrid).

This article is organized as follows. Sections 2 and 3 present the theoretical background and hypothesis development. Section 4 describes the research methodology. Section 5 provides the empirical results. Finally, section 6 provides the conclusions, discussion, limitations, and further study avenues.

Theoretical framework and hypothesis development

Entrepreneurship: attributes and value creation

We define entrepreneurship as the dynamic efforts to establish a venture as a result of a personal decision to work for their account (Estrin *et al*., 2013; Sternberg & Wennekers, 2005). In this process, entrepreneurs can prioritize the creation of financial value (e.g., wealth creation), nonfinancial value (e.g., addressing social and environmental issues), or a combination of both (Brieger *et al*., 2021; Hörisch *et al*., 2018; Muñoz *et al*., 2018; Vik & Mcelwee, 2011).

The literature suggests three broad types of entrepreneurial forms (Williams & Nadin, 2013): (a) for-profit, (b) non-profit, and (c) hybrid or mixed-valued. First, for-profit entrepreneurs prioritize financial value creation and aim to maximize profits through market exchange (Estrin *et al*., 2013; Williams & Nadin, 2013). Second, non-profit entrepreneurs, also known as social, environmental, and sustainable entrepreneurs, prioritize creating non-financial value by attempting to address specific needs or

problems in their context (Bacq *et al*., 2016; Morris *et al*., 2020). Finally, some scholars have theorized about the complementary effect of financial and non-financial value creation and have identified ventures that provide goods and services that meet contextual needs (Brieger *et al*., 2021; Brieger *et al*., 2020). Therefore, the distinction between for-profit and non-profit entrepreneurship is not a dichotomy, but rather a continuum where the value creation objectives are mixed (Williams & Nadin, 2013). As such, mixed-value endeavours can be conceptualized as ventures that combine wealth creation with the alleviation of social and environmental issues (Rushton, 2014).

Scholars argue that different entrepreneurial attributes distinguish between the decisions of for-profit and non-profit value creation (Boudreaux & Nikolaev, 2019; Brieger *et al*., 2021; Gupta *et al*., 2020a; Urbano & Alvarez, 2014). For instance, Boudreaux and Nikolaev (2019) found that under appropriate institutional conditions, both human and financial capital could increase the probability of economic opportunity entrepreneurship. Gupta *et al*. (2019) and Gupta *et al*. (2020a) explored gender differences in entrepreneurship and uncovered that for-profit entrepreneurs were perceived as masculine, while non-profit entrepreneurs were seen as both masculine and feminine. Furthermore, non-profit entrepreneurs have been described as having a greater level of empathy towards contextual needs, a strong intention to address societal challenges, and robust human capital (Gupta *et al*., 2020b). Finally, Urbano and Alvarez (2014) determined that certain entrepreneurial characteristics, such as entrepreneurial skills, fear of failure, and social ties, increase the likelihood of becoming a for-profit entrepreneur. However, there is a shortage of empirical research on the distinctive attributes of mixed-valued entrepreneurship. Thus, our research aims to provide a more explicit view of its characteristics.

Institutions and entrepreneurship

The institutional context has been a central point of consideration in understanding entrepreneurial outcomes and behaviour (Busenitz *et al*., 2000; Li, 2020). Institutions refer to the formal rules, informal interactions, and assumed norms that organizations and individuals are expected to follow in society (Meyer & Rowan, 1977; North, 1990). Institutions provide a framework of stimuli, guidelines, and resources for acceptable and unacceptable behaviour (Scott, 2014). Organisational institutional theory is cen-

tred around three pillars that promote the survival and legitimacy of ventures. The first of these is the regulatory pillar, which consists of the set of rules enforced by formal processes. The second is the normative pillar, which encompasses the symbolic and representational elements within society. The final pillar is the cultural-cognitive pillar, which relates to the meaning systems and behaviour patterns within society (Busenitz *et al*., 2000; North, 1990; Scott, 2014). Each of the institutional pillars contributes in interdependent and mutually reinforcing ways to developing the social and economic reality (Scott, 2014; Veciana & Urbano, 2008).

Entrepreneurs are influenced by their institutional context and will adapt their behaviour accordingly (Aidis *et al*., 2008). Within this context, individuals identify and exploit entrepreneurial opportunities offered by markets, and use these opportunities to create new products or services (Iversen *et al*., 2008; Shane & Venkataraman, 2000). Research suggests that this process of opportunity discovery may contribute to economic growth, productivity, and social welfare (Baumol & Strom, 2007; Kirzner, 1997). Institutions not only influence an individual's decision to become an entrepreneur, but also affect the characteristics of the new ventures they create (Fuentelsaz *et al.*, 2015). Therefore, this theoretical perspective provides a promising lens for understanding the patterns of entrepreneurial activity (Chowdhury *et al*., 2015).

The literature suggests that institutional pillars can be viewed as drivers or barriers of entrepreneurial behaviour (Bennett, 2021b; Brieger *et al*., 2021; Hechavarría *et al*., 2023; Schiavone *et al*., 2020). While previous literature has described some institutional elements that shape entrepreneurial decision-making (Fuentelsaz *et al*., 2018; Urbano *et al*., 2019b; Valdez & Richardson, 2013), the current discussion focuses on how the macro institutional context promotes or inhibits the emergence of different types of entrepreneurial forms across countries and regions (Acs *et al*., 2008; Fuentelsaz *et al*., 2015; Thornton *et al*., 2011; Urbano *et al*., 2019a). High-quality institutions have been found to encourage individuals to start ventures (Valdez & Richardson, 2013), making economic undertakings more easily predictable and stimulating productive behaviour (Autio & Acs, 2010; Baumol & Strom, 2007). Institutions can also legitimize or delegitimize business activity as socially valued or attractive (Urbano & Alvarez, 2014). In the following, we will develop our hypotheses based on the relationship between value creation choices and three types of institutional schemes (i.e., regulatory, normative, and cultural).

Regulatory institutions and value creation

The regulatory dimension consists of rational and negotiated arrangements of laws, regulations, rules, and government policies in a particular context that promote or inhibit certain behaviours (Bruton *et al*., 2010; North, 1990). It provides incentives and sanctions (Scott, 2014) that produce fear, guilt, or innocence for individuals and organizations (DiMaggio & Powell, 1983; Scott, 2014). Entrepreneurship can only have a relevant role in a nation's economic growth and development when institutional policies are formulated to favour its action (Udimal *et al*., 2020). Entrepreneurial activity is nurtured by solid laws, defined property rights, transparent and accessible procedures, and efficient economic regulations (Pinho & Thompson, 2017). Regulatory efficiency stimulates economic development, increasing individual resources (Schiavone *et al*., 2020). Therefore, regulative constraints enhance, support, or inhibit entrepreneurship as they increase or reduce the risks of starting a new firm (Veciana & Urbano, 2008).

Previous empirical research has investigated the impact of the regulative pillar on new venture formation. Bennett (2021b) and Pinho and Thompson (2017) have found that regulative processes can either promote or constrain new business formation. Iwasaki *et al*. (2021) and Urbano and Alvarez (2014) examined for-profit entrepreneurial activity and found that the regulative pillar has a positive impact on the likelihood of firm formation. Udimal *et al.* (2020) and Valdez and Richardson (2013) found that this pillar did not account for the emergence of for-profit ventures. Bosma *et al.* (2018a) have found that credit, labour, and business regulation are positively related to for-profit entrepreneurs. In contrast, Hörisch *et al.* (2017) investigated the institutional determinants of mixed-value entrepreneurs and found no statistically significant effect of regulative measures, particularly governmental support, on the entrepreneur's choice. Building on these findings, we formulate the following hypothesis:

Hypothesis 1: *A solid regulative institutional pillar would increase the probability of choosing for-profit and mixed-value creation while reducing the likelihood of non-profit value choice.*

Normative institutions and value creation

The normative dimension encompasses social obligations, norms (which dictate how things ought to be done), values (which prescribe what is considered appropriate), beliefs, assumptions, and constraints about human behaviour that are shared across society (Scott, 2014; Veciana & Urbano, 2008). Normative rules confer a prescriptive, evaluative, and obligatory dimension to social life by defining goals or objectives and specifying appropriate ways of achieving them (DiMaggio & Powell, 1983; Scott, 2014). Moreover, normative institutions regulate behaviour by determining what is deemed appropriate or expected in different social and commercial contexts, generating either shame or honour for individuals (Bruton *et al*., 2010; Scott, 2014). Some societies have developed norms that foster entrepreneurship as a revered activity, while others discourage it by creating obstacles (Auguste, 2021; Baumol & Strom, 2007; Bruton *et al*., 2010; Busenitz *et al*., 2000).

Prior studies have investigated the relationship between normative institutions and entrepreneurship. For example, Ruiz *et al*. (2023) have emphasized the role of social norms in promoting corporate entrepreneurship activities. Brieger *et al.* (2021) have highlighted the importance of a conducive normative environment in supporting non-profit entrepreneurial endeavours. Conversely, Hörisch *et al*. (2017) have found no significant impact of normative measures on hybrid entrepreneurship decisions. Pinho and Thompson (2017) also noted that cultural and social norms can have varying effects on entrepreneurship across different countries. However, Valdez and Richardson (2013) and Urbano and Alvarez (2014) have both found that the normative pillar, as measured by media attention, has a positive relationship with for-profit firm establishment. Furthermore, Urbano *et al.* (2010) has demonstrated that new societal values, such as postmaterialism, are influential in the value creation decisions of non-profit entrepreneurs. Based on these findings, we propose the following hypothesis:

Hypothesis 2: *An entrepreneurial normative pillar would increase the probability of choosing for-profit and mixed-value creation while reducing the likelihood of non-profit value choice.*

Cultural institutions and value creation

The cultural-cognitive pillar contains the taken-for-granted shared understanding of the world, scripts, and schemas as a base of compliance within a particular sociocultural context (Scott, 2014). The cultural-cognitive pillar represents individual behaviours based on subjective and constructed rules of meaning that limit appropriate beliefs and actions (Bruton *et al*., 2010; DiMaggio & Powell, 1983). Thus, an individual's internal beliefs and interpretative process are shaped by external cultural frameworks (Scott, 2014; Veciana & Urbano, 2008). This pillar relates to how societies acknowledge entrepreneurs, inculcate values, and even create a favourable cultural milieu in which this pillar is accepted and encouraged (Pinho & Thompson, 2017). In some contexts, knowledge about how to start a new business may be dispersed, but in other contexts, individuals may require specific business knowledge (Busenitz *et al*., 2000)**.** In addition, the successful image associated with entrepreneurs may also contribute to promoting and reinforcing entrepreneurship governmental programs (Pinho & Thompson, 2017)**.**

Empirical evidence suggests that national culture plays a critical role in shaping entrepreneurial value creation choices. Several scholars have identified the impact of national-level cultural-cognitive factors on new venture behaviour (Gupta *et al*., 2020a; Hechavarría *et al*., 2023; Urbano *et al*., 2019a). Specifically, Hechavarría *et al*. (2023) found that culture influences socially oriented entrepreneurial actions, while Amini Sedeh *et al*. (2020) found that cultural perception affects the establishment of non-profit organizations. Thai and Turkina (2014) and Urbano and Alvarez (2014) have highlighted the strong influence of performance-based culture in the establishment of for-profit entrepreneurship. Additionally, Kerlin (2013) has shown that cultural perception regarding societal and environmental country-level issues contributes to the establishment of non-profit-driven ventures. However, Bruton *et al*. (2010) and Simón-Moya *et al.* (2014) have found no clear relationship between an entrepreneurial-driven cultural pillar and entrepreneurship, indicating a need for further research in this area. Based on the previous results, we hypothesize the following:

Hypothesis 3: *An entrepreneurial-driven cultural pillar would increase the probability of choosing for-profit and mixed-value creation while reducing the likelihood of non-profit value choice.*

Moderating role of the economic context and the institutional pillars

The economic literature highlights two significant contextual factors that shape the entry and development of entrepreneurial forms: economic inequality and uncertainty. Economic inequality has become a major topic in the international agenda drawing attention from the public and academia (Xie *et al*., 2023; Zhou *et al*., 2020). In regions characterized by economic inequality, a few individuals control a fraction of the available resources in the economy (Ruiz *et al*., 2023; Xie *et al*., 2023; Zhou *et al*., 2020). Economic inequality may increase entrepreneurship by creating market demand and driving dissimilar resource allocation between individuals, including labor inputs, knowledge, and financial capital (Zhou *et al*., 2020).

The level of inequality in the economy may encourage different entrepreneurial value creation depending on the institutional framework of society (Xie *et al*., 2023). The interaction between inequality and the institutional pillars could act as a motivational factor for entrepreneurial activities (Ruiz *et al*., 2023). Economic inequality tends to increase the normative social comparison, which may influence the choice of entrepreneurial form (Hechavarría *et al*., 2023). Some authors have provided evidence about the role of economic inequality in facilitating or hindering the emergence of for-profit (Auguste, 2021; Xie *et al*., 2023) and non-profit entrepreneurs (Pathak & Muralidharan, 2018). Additionally, cross-country analysis has pointed out the decreasing likelihood of new venture creation under highly unequal economies (Xavier-Oliveira *et al*., 2015). Lastly, prior research has suggested that inequality levels influence cultural values to explain differences in entrepreneurial behavior (Ruiz *et al*., 2023) Based on the literature, we hypothesize that an unequal setting generates a negative perception of entrepreneurship as a desirable goal (normative pillar). because it reduces the incentives to pursue these endeavours (cultural pillar).

Hypothesis 4: *A higher level of income inequality will generate a negative moderating effect on the relation between the normative pillar and value creation choice.*

Hypothesis 5: *A higher level of income inequality will generate a negative moderating effect on the relation between the cultural pillar and value creation choice.*

Economic uncertainty has been identified as one significant factor that influences entrepreneurial decision-making (Brouwer, 2000; Knight, 1921).

Uncertainty has been conceptualized as imperfect knowledge about the future (Burns *et al*., 2021; Knight, 1921). Entrepreneurs must confront uncertainty while combining their capital endowment while making strategic decisions (Audretsch & Belitski, 2021; Bai *et al*., 2021; Burns *et al*., 2021; Eabrasu, 2021) Notably, the decision to create value is closely linked to the perceived level of uncertainty in the environment because it triggers the process of identifying opportunities (Folta, 2007; McMullen & Shepherd, 2006). Entrepreneurs must subjectively assess the relevance and impact of identified market opportunities and societal problems (Burns *et al*., 2021).

Researchers have urged exploration of how entrepreneurs in different institutional settings engage in the decision-making process when confronted with uncertainty (Burns *et al*., 2021). Institutions shape entrepreneurial judgment and alter the way entrepreneurs approach uncertainty (Brouwer, 2000; Knight, 1921). Exogenous institutional forces, such as normative and cultural values, can either bolster or weaken entrepreneurial behaviour (Audretsch & Belitski, 2021; Duong, 2022) However, the literature has yet to fully examine how economic uncertainty interacts with institutional forces to give rise to various forms of entrepreneurship (Audretsch & Belitski, 2021; Burns *et al*., 2021; Hechavarría *et al*., 2023) We postulate that economic uncertainty generates a positive societal perception of entrepreneurship (normative pillar) because it fosters innovative thinking and the exploitation of perceived market opportunities and societal problems (cultural pillar).

Hypothesis 6: *A higher level of economic uncertainty will generate a positive moderating effect on the relation between the normative pillar and value creation choice.*

Hypothesis 7: *A higher level of economic uncertainty will generate a positive moderating effect on the relation between the cultural pillar and value creation choice.*

The conceptual model and expected relationships among the constructs are illustrated in Figure 1. The model proposes a multilevel direct effect between each element of the institutional context, such as regulatory, normative, and cultural institutions, and the value creation decision. In addition, the model highlights the moderating effect of economic uncertainty

and inequality in the relationship between the institutional context and value creation decisions.

Methods

Data source

Our study sample was derived from the 2015 Adult Population Survey (APS) conducted by the Global Entrepreneurship Monitor (GEM). We selected the APS, because it provides a standardized and globally comparable dataset of information about individuals' characteristics, motivations, and aspirations related to business venturing (Poblete *et al*., 2019). GEM categorizes entrepreneurs into three types: nascent, new (or early stage with less than 42 months), and established (Fuentelsaz *et al.*, 2015; Reynolds *et al*., 2005). Our sample comprises entrepreneurs from 58 countries, including nine countries in the low-income economic stage, 27 countries in the middle-income economic stage, and 22 countries in the high-income economic stage. Table 1 presents a summary of the sample sizes included in this study.

As the APS adopts a cross-country individual-level design, it has been suggested by scholars to combine it with other data sources in a multilevel research methodology (Brieger *et al*., 2021). We have integrated a range of economic, demographic, and societal variables at the country level from reputable institutions such as the World Bank (World Bank Group, 2022), International Labour Organization (International Labour Organization, 2022), Global Entrepreneurship Monitor (Global Entrepreneurship Research Association, 2022b, 2022a), National Bureau of Economic Research (Ahir *et al*., 2022), and The Heritage Foundation (Heritage Foundation, 2022). The set of variables used in the multilevel analysis and their respective sources are summarized in Table 2.

Variables

Dependent variable

The 2015 GEM survey included questions aimed at examining the factors that determine different forms of value creation, encompassing both

for-profit and non-profit entrepreneurial forms (Bosma *et al.*, 2018b). The respondents were asked to indicate whether they were engaged in an organization that pursued a non-profit value creation objective through a five-item Likert scale question. Specifically, the question stated, "For my organization, generating value to society and the environment is more important than generating financial value for the company" (Lepoutre *et al.*, 2013).

As our research focuses on entrepreneurial value creation decisions, we used the ordered Likert scale developed by the GEM. We used a 5-item Likert variable (i.e., 1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree, 5: Strongly Agree) that accounts for the entrepreneurial value creation decision (**VC**). We categorized individuals who responded "strongly disagree" as for-profit entrepreneurs ($\mathbf{VC}_{\mathbf{forprofit}}$), those who answered "strongly agree" as non-profit entrepreneurs ($\mathbf{VC}_{\mathbf{non\text{-}profit}}$), and those who provided any other response as mixed value entrepreneurs ($\mathbf{VC}_{\mathbf{mixed}}$).

Independent variables

First, we have defined and measured each pillar using established theoretical definitions and prior empirical studies (Pinho & Thompson, 2017; Scott, 2014; Simón-Moya *et al.*, 2014; Urbano & Alvarez, 2014; Valdez & Richardson, 2013). For the regulative pillar (**RP**), we have utilized the economic freedom index developed by the Heritage Foundation/Wall Street Journal (Heritage Foundation, 2022). The index is closely linked to the concept of regulative institutions (Busenitz *et al.*, 2000; Valdez & Richardson, 2013). This index produces an average score for each country based on four macrofactors: (a) rule of law, (b) government size, (c) regulatory efficiency, and (d) market openness. The index ranges from 0 (the lowest) to 100 (the highest).

Second, we operationalized the normative pillar (**NP**) by examining the extent to which each country encourages entrepreneurial risk-taking behaviour, creativity, and innovation (Pinho & Thompson, 2017). Using the GEM entrepreneurial framework condition (**EFC**), we generated an annual index that evaluates entrepreneurship as a significant societal topic. Following Scott's (2014) conceptualization (Valdez & Richardson, 2013), the index measures the degree to which social and cultural norms promote the formation of new ventures. It includes views of entrepreneurship as a desirable career choice, as well as the visibility and status of entrepreneurial

actions within society. The index averages the scores obtained for each country on eight parameters within the EFC (i.e., NES15_S01, NES15_S02, NES15_S03, NES15_S04, NES15_S05, NES15_S06, NES15_S07, NES15_S08). The index has a value from 0 (the lowest) to 7 (the highest).

Last, we operationalized the cultural pillar (**CP**) by examining the extent to which each country encourages entrepreneurship as a relevant topic in its culture (Urbano & Alvarez, 2014; Valdez & Richardson, 2013). The EFC generates a yearly measure that assesses the population's abilities, experience, skills, and fears that may prevent them from establishing a venture. The index averages the scores obtained for each country on five parameters within the EFC (i.e., NES15_I01, NES15_I02, NES15_I03, NES15_I04, NES15_I05). The index ranges from 0 (the lowest) to 7 (the highest).

Moderating variables

We have employed a validated measure of income inequality (**INEQ**) (i.e., Gini Index) and economic uncertainty (**UNC**) (i.e., Uncertainty Index). The former, the Gini index, provides the percentage of the maximum area between the Lorenz curve and a hypothetical line of absolute equality. A Gini index between 0 and 30 represents relative equality, a Gini index between 30 and 40 represents a relatively reasonable income gap, and a Gini index higher than 50 implies a severe income disparity. Standardized data from the INEQ variable was obtained from the World Bank Database (World Bank Group, 2022).The latter, Uncertainty Index, reflects the frequency of the term "uncertainty" per thousand words on country reports. Data from the UNC variable was obtained from the National Bureau of Economic Research (Ahir *et al*., 2022).

Control variables

At the individual level, we have considered variables available on the APS (as shown in Table 3). Firs, we considered a set of demographic control variables (Brieger *et al*., 2021). We used the exact respondent age (**AGE**) as an indicator of willingness towards entrepreneurship. Additionally, age squared (**AGESQ**) was included in the model as we expected a U-shaped relationship with entrepreneurial activity (Brieger & De Clercq, 2019). Lastly, we included a dummy variable for the respondent's gender (**GEND**) as researchers suggest its relevance in entrepreneurial value creation deci-

sions (Carreón-Gutiérrez & Saiz-álvarez, 2019; Gupta *et al*., 2019). The dummy variable takes a value of 0 if the individual is male and 1 if the individual is female.

Second, entrepreneurial capital is conceptualized as a central element of entrepreneurial activities (Dutta & Sobel, 2018). Initially, we operationalized human capital (**HCAP**) using an indicator of whether an individual has received tertiary education (Boudreaux & Nikolaev, 2019). Moreover, we have created a dummy variable with a value of 1 if the respondent has tertiary education and 0 otherwise. Financial capital (**FCAP**) is proxied by household income, as it is strongly and positively correlated with entrepreneurial entry (Aghion *et al*., 2007). We created a dummy variable with a value of 1 if an individual's household income is in the highest third of the respective national-level income and 0 if it is in the middle or lower third. In addition, social capital (**SCAP**) has been found to play a crucial role in the entrepreneurial decision-making process (Estrin *et al*., 2013). To measure social capital, we employed the GEM measure of entrepreneurial ties, which shows whether the respondent knows someone who has created a business in the past two years (Boudreaux & Nikolaev, 2019). We assigned a dummy variable a value of 1 if the respondent knew an entrepreneur in that period and 0 otherwise.

Additionally, we have included control variables that capture individual characteristics identified in research on both for-profit and non-profit entrepreneurs (Amini Sedeh *et al*., 2020; Boudreaux & Nikolaev, 2019; Fuentelsaz *et al*., 2015). First, we include opportunity alertness (**OAL**) which refers to an individual's ability to identify market opportunities (Kirzner, 1997). We use a dummy variable from the GEM survey to indicate whether respondents perceived opportunities in their area in the months before the interview. The dummy variable takes a value of 1 if the individual perceived opportunities and 0 otherwise. Additionally, we consider the respondent's self-efficacy perception regarding their skills, experience, and knowledge (**SELF**) required for starting a new venture (Boudreaux & Nikolaev, 2019). The dummy variable takes a value of 1 if the individual perceived themselves to possess the necessary skills and knowledge and 0 if not. Furthermore, we account for the individual's risk aversion attitude (willingness to bear the risk) (**RISK**) toward developing a new venture (Sepúlveda & Bonilla, 2014). We assign a dummy variable with a value of 1 if the respondent was apprehensive about venture failure and 0 if not. Finally, we consider whether the venture has been established for more than

42 months (**ESTAB**). The dummy variable takes a value of 1 if the entrepreneurial endeavour has been established for over 42 months and 0 otherwise.

Ultimately, we considered a group of economic variables to enrich our analysis. Initially, we employed Gross Domestic Product per capita (**GDPL**) in logarithmic form as a proxy for a nation's level of economic activity and growth aspirations. Moreover, prior studies have established unemployment (**UNEM**) and employment in the agricultural sector (**EAGR**) as drivers of entrepreneurship (Simón-Moya *et al*., 2014; Thai & Turkina, 2014). Thus, we incorporated the overall percentage of individuals who are either unemployed or employed in the agricultural sector in each nation as a control variable. Finally, we also included the population in logarithmic form (**POPL**) as a demographic measure that correlates with opportunities resulting from the expansion of new markets (Fuentelsaz *et al*., 2015)

Model setting

We opted to use a multilevel modelling approach for our cross-country, cross-individual analysis because it possesses a hierarchical structure where individuals constitute level one (1), which are nested within countries representing level two (2) (Lee *et al*., 2020). As previous research suggested (Mohamad *et al*., 2014), individuals are not randomly distributed across countries; rather, they vary from inhabitants in other countries primarily due to institutional differences. As a result, individuals from the same country are more likely to demonstrate similar behavioural patterns (Welter & Smallbone, 2011).

Subsequently, we utilised a multilevel ordered probit model to assess the marginal impacts of institutional and economic factors on the choice of value creation. The selection of the model was primarily based on statistical considerations due to the ordinal nature of the dependent variable (StataCorp, 2013). Ordered probit methodology allows us to exploit the distributional assumption pertaining to the latent dependent variable. The econometric model was estimated using the *Meoprobit* Stata Package (Cornelissen, 2006), which employed a mean–variance adaptive Gauss–Hermite quadrature.

Results

Descriptive and correlation statistics

The initial statistical analysis consists of two parts: a descriptive analysis of the variables and an examination of their correlation. Table 4 presents the descriptive statistics for the country-level and individual-level variables. In Table 5, we report the correlation coefficients, categorising the tests based on the nature of the variables. Specifically, Kendall rank tests are used to assess the correlation between ordinal and continuous variables, while Rank biserial tests evaluate the relationship between ordinal and nominal (dichotomous) variables. Our results indicate significant correlations between the dependent and independent variables. To validate this finding, we conducted a variance inflation factor (VIF) analysis, which yielded a mean VIF of 1.52, suggesting that multicollinearity is not a concern in the model.

Regression analysis and hypothesis testing

The second part of the analysis considers the econometric modelling of the data. At this stage, we compared several model specifications to assess the validity of our conceptual model (see table 6). Model 1, which considers only the control variables, indicates a statistically significant multilevel variance ($P < 0.01$). Model 2, which considers the country-level main predictors and control variables, indicates a negative statistically significant log odd scale on the regulatory pillar (coefficient = -0.40, $P = 0.08$), plus a positive statistically significant log odd scale on the cultural pillars (coefficient = 1.08, $P = 0.01$).

Model 3 and Model 4 include the interaction effect of the economic context variables (i.e., economic uncertainty and income inequality). Model 3 suggests a positive, statistically significant log odd scale on INEQ plus a negative statistically significant log odd scale on INEQ*NP (coefficient = -0.14, $P = 0.03$) and INEQ*CP (coefficient = -0.05, $P = 0.06$). Model 4 suggests a negative statistically significant log odd scale on UNC (coefficient= -21.50, $P = 0.01$) plus a positive, statistically significant log odd scale on UNC*CP (coefficient = 3.65, $P < 0.00$). Model 5 provides the results of the full model. Under the Model 5 specifications, the average log odd scale on CP is no longer statistically significant (coefficient = 0.42, $P < 0.35$). We conclude that

Model 5 specification is the best alternative to proceed with the marginal effect analysis and test our hypothesis because it has the lowest Akaike's information criterion (14,077.01).

The third part of the analysis considers the marginal effect assessment on Model 5 specifications (see Table 7). First, we obtain a positive, statistically significant marginal effect of RP on $VC_{forprofit}$ ($P = 0.02$) and VC_{mixed} ($P < 0.05$), along with a negative statistically significant marginal effect on $VC_{non\text{-}profit}$ ($P = 0.01$). Marginal effects show that a one-unit change in RP increases in average 0.3 and 0.2 percentage points for for-profit and mixed value decisions respectively, while decreasing by 0.8 percentage points the pure non-profit decision. Thus, hypothesis 1 is supported.

Second, we observe a negative statistically significant marginal effect of the NP on $VC_{forprofit}$ ($P = 0.02$) and VC_{mixed} ($P < 0.10$), along with a positive statistically significant marginal effect on $VC_{non\text{-}profit}$ ($P = 0.01$). Marginal effects show that a one-unit change in NP reduces the for-profit and the mixed-value decision by an average of 34.8 and 15 percentage points, respectively, while increasing the pure non-profit decision by 82.9 percentage points. Therefore, hypothesis 2 is not supported.

Third, we observe a negative non statistically significant marginal effect of the CP on $VC_{forprofit}$ ($P = 0.40$) and VC_{mixed} ($P > 0.10$), along with a positive non statistically marginal effect on $VC_{non\text{-}profit}$ ($P = 0.39$). Marginal effects show that a one-unit change in the cultural pillar reduces an average 5.8 and 2.5 percentage points for the for-profit and mixed-value decisions respectively, while increasing the pure non-profit decision by 13.9 percentage points. Thus, hypothesis 3 is not supported.

Fourth, we observe a positive, statistically significant moderating effect of INEQ on the relation between NP and $VC_{forprofit}$ ($P < 0.00$) and VC_{mixed} ($P < 0.05$), along with a negative statistically marginal effect on $VC_{non\text{-}profit}$ ($P < 0.00$). Therefore, Hypothesis 4 is partially supported for $VC_{non\text{-}profit}$. Moreover, we find a positive, non-statistically-significant moderating effect of INEQ on the relation between CP and $VC_{forprofit}$ ($P < 0.13$) as well as VC_{mixed} ($P > 0.10$), along with a negative non statistically marginal effect on $VC_{non\text{-}profit}$ ($P < 0.12$). Thus, hypothesis 5 is partially supported for $VC_{non\text{-}profit}$.

Fifth, we observe a negative statistically significant moderating effect of UNC on the relationship between the NP and $VC_{forprofit}$ ($P = 0.05$) and VC_{mixed} ($P < 0.05$), along with a positive statistically marginal effect on $VC_{non\text{-}profit}$ ($P = 0.04$). Therefore, Hypothesis 6 is partially supported for non-profit value. Moreover, we find a negative statistically significant moderat-

ing effect of UNC on the relation between CP and $VC_{forprofit}$ ($P < 0.00$) as well as VC_{mixed} ($P < 0.05$), along with a positive statistically marginal effect on $VC_{non\text{-}profit}$ ($P < 0.00$). Thus, Hypothesis 7 is partially supported for non-profit value.

Moreover, we observe that country-level control variables, such as UNEM and EAGR, have a statistically significant effect. Marginal effects show that a one-unit change in the UNEM reduces by 0.50 ($P < 0.01$) and 0.20 ($P < 0.10$) percentage points $VC_{forprofit}$ and VC_{mixed} respectively, while increasing by 0.12 ($P < 0.01$) percentage points $VC_{non\text{-}profit}$. Additionally, a one-unit change in EAGR increases both $VC_{forprofit}$ and the VC_{mixed} by an average of 0.30 ($P = 0.01$) and 0.10 ($P < 0.10$) percentage points, respectively, while reducing $VC_{non\text{-}profit}$ by 0.60 ($P < 0.01$) percentage points.

Last, we observe that individual-level control variables, such as HCAP, SELF, RISK, GEND, and ESTAB, have a statistically significant effect. Marginal effects show that a one-unit change in HCAP reduces $VC_{forprofit}$ and VC_{mixed} by 1.00 ($P = 0.04$) and 0.43 ($P < 0.05$) percentage points, respectively, while adding 2.40 ($P = 0.04$) percentage points to $VC_{non\text{-}profit}$. Likewise, a one-unit change in SELF, RISK, and ESTAB increases $VC_{forprofit}$ by an average of 1.10 ($P = 0.04$), 0.90 ($P = 0.06$), and 1.20 ($P = 0.06$) percentage points, respectively, while increasing VC_{mixed} by 0.46 ($P < 0.05$), 0.43 ($P < 0.10$), and 0.53 ($P < 0.10$) percentage points; this change also reduces $VC_{non\text{-}profit}$ by 2.60 ($P = 0.04$), 2.20 ($P = 0.05$), and 2.80 ($P = 0.06$) percentage points.

Discussion

Key findings

Motivated by the apparent differences in entrepreneurship activity across countries, this paper examines how institutions and the economic context affect the value creation choice in entrepreneurial ventures. Drawing on organizational institutional theory, we have postulated the primary influence of regulatory, normative, and cultural cognitive pillars, as well as the moderating influence of economic uncertainty and income inequality on value creation choices.

Our analysis has revealed that a robust regulative institutional pillar increases the likelihood of selecting for-profit and mixed-value creation while decreasing the likelihood of non-profit value choices. This result

reinforces the contextual influence of the regulatory pillar on for-profit entrepreneurs, as noted by Iwasaki *et al.* (2021), Urbano and Alvarez (2014) and Bosma *et al.* (2018a). It aligns with Scott's (2014) institutional framework, whereby a strong regulative pillar establishes an environment that facilitates the creation of economic value. From this perspective, a financially driven context reduces the incentives to engage in non-profit ventures, as they may find market-based solutions to be more rewarding and impactful.

In addition, we found that an entrepreneurial normative pillar would decrease the probability of choosing for-profit and mixed-value creation while increasing the likelihood of non-profit value choice. This finding conflicts with the results of Ruiz *et al.* (2023) and Valdez and Richardson (2013) regarding for-profit ventures, while providing support to Brieger *et al.* (2021) and Urbano and Alvarez (2014) regarding non-profit entrepreneurs. An alternative explanation points to how organizations perceive the nature of value creation beyond an economic sphere. We noted that some societies could enforce an alternative obligatory dimension wherein organizations must create a higher proportion of noneconomic value to be perceived as well-behaved actors or to obtain some economic incentives of the society (e.g., lower taxes).

Moreover, we observed that an entrepreneurial-driven cultural pillar would decrease the probability of choosing for-profit and mixed-value creation while increasing the likelihood of non-profit value choice. The findings provide support for the findings of Amini Sedeh *et al.* (2020), Hechavarría *et al.* (2023), and Kerlin (2013) about the cultural-cognitive pillar influence on non-profit value creation. The results imply that if individuals interact in an entrepreneurial-driven society, their internal interpretative processes will perceive the creation of noneconomic value as the desired societal outcome. Nonetheless, as Gupta *et al.* (2020a), Bruton *et al.* (2010) and Simón-Moya *et al.* (2014) emphasized, further research is encouraged to understand the influence of this pillar on entrepreneurial behaviour.

In addition, we identified that economic inequality has a moderating effect on the association between the normative and cultural pillars. Our results indicated a positive impact on for-profit and mixed-value entrepreneurs, consistent with previous research (Ruiz *et al*., 2023). However, we discovered contrasting evidence to the findings of Pathak & Muralidharan (2018) as we noticed a negative impact on non-profit entrepreneurs. Our

findings suggest that organisations might have the motivation to capture a higher share of economic value. It appears that unequal economies could impede the incentives to address societal challenges since organisations would encounter additional obstacles given the nature of the market.

Finally, we found that economic uncertainty produces a moderating effect on the relationship between the normative and cultural pillars. The results pointed out a negative effect on the relationship with for-profit and mixed-value entrepreneurs, plus a positive effect on non-profit entrepreneurs. Our finding emphasizes the role of uncertainty on entrepreneurial behaviour as theorized by (Burns *et al*., 2021). A higher level of uncertainty could affect the societal obligations imposed on organizations because society expects organizations to drive the economy to an equilibrium with certain outcomes. To do so, organizations would need to adapt their economic opportunity recognition process to also consider societal needs.

In sum, our results highlight that the economic context must be considered a shaping force of entrepreneurial activity in line with extant research (Auguste, 2021; Folta, 2007; McMullen & Shepherd, 2006). Based on this research, policymakers can elaborate strategies to achieve economic growth programs driving entrepreneurial activities through institutional changes based on each type of value creation. Additionally, entrepreneurs can employ these outcomes to explore and identify new opportunities considering the institutional nature of each country. Finally, our results increase the understanding of what drives entrepreneurial activity to lead to economic development.

Theoretical contribution

We present three theoretical implications stemming from our findings. First, our research offers a nuanced understanding of how institutional pillars can act as drivers or barriers for different entrepreneurial forms. We extend the theoretical framework developed by Scott (2014) and its application in the entrepreneurial literature (Busenitz *et al*., 2000) by conceptualising a model that integrates the institutional pillars with significant elements of the economic context. Scholars could use the conceptual model (Figure 1) to further test how institutional force shapes different entrepreneurial endeavours. Second, we provide evidence of how uncertainty interacts with institutional forces to give rise to different value creation decisions. While uncertainty is inherent to the entrepreneurial process (Burns *et*

al., 2021; Knight, 1921), we find that environmental economic uncertainty reduces the likelihood of for-profit and mixed-value creation while increasing the emergence of non-profit ventures. Further exploration of how economic uncertainty shapes each type of value creation is needed. Finally, we address the shortage of empirical research on the distinctive attributes of mixed-value creation. Our empirical examination provides evidence on the contextual elements that influence the emergence of mixed-valued entrepreneurs. Specifically, we describe how each institutional pillar influences the decision to pursue this endeavour and offer a more explicit view of the characteristics associated with mixed-valued new ventures.

Practical implications

Our research has significant implications for the development of public policies aimed at addressing pressing societal challenges, such as poverty reduction (Sustainable Development Goal No. 1) and the alleviation of income inequality (Sustainable Development Goal No. 10). Governments can promote the creation of for-profit and mixed-value ventures by strengthening the regulatory framework (i.e., enhancing laws, regulations, rules, and policies) while also striving to reduce income inequality (i.e., establishing mechanisms to redistribute resources). These types of ventures have the potential to create new industries by leveraging market opportunities in innovative ways. Additionally, the establishment of non-profit ventures can be facilitated through enhancements to the normative framework (i.e., increasing societal awareness of the entrepreneurial role in the economy) and by mitigating economic uncertainty.

Conclusions

We framed a conceptual model to elucidate the mechanisms by which institutions and economic conditions impact the entrepreneurial decisions related to value creation. Subsequently, we evaluated the direct influence of the regulative, normative, and cultural pillars, along with the moderating impact of income inequality and uncertainty, by testing seven hypotheses using a sample of 7,891 entrepreneurs across 58 countries.

The results show that the regulative pillar has a positive marginal effect on for-profit and mixed-value creation plus and a negative effect on the

emergence of non-profit ventures. In addition, the normative pillar has a negative marginal effect on for-profit and mixed-value creation plus a positive effect on the emergence of non-profit ventures. Moreover, the cultural pillar has a negative marginal effect on for-profit and mixed-value creation plus a positive marginal effect on non-profit. Moreover, we observe a positive moderating effect of income inequality on the relation between the normative pillar and for-profit and mxed-value creation plus a negative marginal effect on the emergence of non-profit ventures. Last, we observe a negative moderating effect of economic inequality on the relationship between the normative pillar and for-profit and mixed-value creation plus a positive effect on the emergence of non-profit ventures.

The research is not without limitations. While our framework builds on existing research to generate hypotheses, we have encountered some contradictory findings in the literature. Further research is required to shed more light on this phenomenon, preferably using longitudinal data. Furthermore, our study models entrepreneurial characteristics based on the information available in the APS survey. Future research could investigate these phenomena using additional data at the individual level. Additionally, while our sample contains a diverse selection of countries, we are limited by the available databases. Moreover, given the complexity of the entrepreneurial phenomenon, our research does not attempt to claim causality. Finally, a promising avenue for future research would be to identify the mechanisms used by individuals and organizations to cope with changes in institutional pillars.

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Annex

Table 1. Cross-country sample

Economic Stage	Sample Countries	Respondents	%
Low Income Economy	Botswana, Burkina Faso, Cameroon, India, Iran, Kazakhstan, Philippines, Senegal, Vietnam	1,563	19.81%
Middle Income Economy	Argentina, Barbados, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Ecuador, Egypt, Guatemala, Hungary, Indonesia, Latvia, Lebanon, Macedonia, Malaysia, Morocco, Panama, Peru, Poland, Romania, South Africa, Thailand, Tunisia, Uruguay	3,067	38.87%
High Income Economy	Australia, Belgium, Estonia, Finland, Germany, Greece, Ireland, Israel, Italy, Republic of Korea, Luxembourg, Netherlands, Norway, Portugal, Puerto Rico, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, United States of America	3,261	41.33%
Total		7,891	100.00%

Table 2. Country level variables

Variable	Source	Description	References
Regulative Pillar	HF	Right of everyone to control his or her own labour and property.	(Valdez & Richardson, 2013; Wu & Li, 2020)
Normative Pillar	GEM	Society perception on entrepreneurship as a relevant societal topic.	(Pinho & Thompson, 2017; Valdez & Richardson, 2013)
Cultural-Cognitive Pillar	GEM	Societal perceived knowledge, skills, experience, and fear in starting a venture.	(Li, 2020; Urbano & Alvarez, 2014; Valdez & Richardson, 2013)
Gini Index	WB	Measure the extent to which income distribution within an economy deviates from a perfectly equal distribution	(Bruton et al., 2021; Packard & Bylund, 2018)
Uncertainty Index	NBER	Reflects uncertainty about future events in each country.	(Ahir et al., 2022)
GDP per capita	WB	Gross domestic product divided by midyear population in logarithmic scale.	(Boudreaux & Nikolaev, 2019)
Employment in Agriculture (%)	WB	Share of the labour force that is employed in the agricultural sector.	
Unemployment Total %	ILO	Share of the labour force that is without work but available for and seeking employment.	(Hörisch et al., 2017; Simón-Moya et al., 2014)
Population	WB	Total country population in logarithmic scale.	(Autio & Fu, 2015; Sternberg & Wennekers, 2005)

Note: Table 2 synthetizes the country level variables. WB= World Bank Data, ILO= International Labour Organization, GEM= Global Entrepreneurship Monitor, HF= Heritage Foundation, and NBER= National Bureau of Economic Research.

Table 3. Individual level variables

Variable	Source	Description	References
Financial Capital	GEM	Household Income: Recoded into Thirds. 1 if respondent is in the highest third, 0 otherwise.	(Boudreaux & Nikolaev, 2019; Urbano & Alvarez, 2014)
Human Capital	GEM	Education based on UN categories. 1 if respondent had tertiary education, 0 otherwise.	(Urbano & Alvarez, 2014)
Social Capital	GEM	Respondent were asked if they know an entrepreneur. 1 if yes, 0 otherwise.	(Aidis et al., 2008; Urbano & Alvarez, 2014)
Opportunity Alertness	GEM	Respondents were asked if opportunities for starting a business will exist during the six months following the survey in the area where they live. 1 if yes, 0 otherwise.	(Fuentelsaz et al., 2015a, 2018)
Self-Efficacy	GEM	Respondents were asked if they have the knowledge, skill, and experience required to start a new business. 1 if yes, 0 otherwise.	(Amini Sedeh et al., 2020)
Risk Tolerance	GEM	Respondents were asked if fear of failure will prevent them from starting a business.	(Sepúlveda & Bonilla, 2014)
Gender	GEM	Respondent gender. 1 if male, 0 otherwise.	(Carreón-Gutiérrez & Saiz-álvarez, 2019)
Age	GEM	Respondent exact age	(Brieger et al., 2021; Hörisch et al., 2017)
Age square	GEM	Square of respondent age	(Brieger et al., 2021; Hörisch et al., 2017)
Established > 42 months	GEM	1 if the entrepreneurial endeavour has more than 42 months of establishment, 0 otherwise.	(Urbano & Alvarez, 2014)

Note: Table 3 synthetizes the individual level variables. GEM= Global Entrepreneurship Monitor.

Table 4. Descriptive Statistics

Nominal and Ordinal Variables		**N**	**Median**	**IR**	**Min**	**Max**	**VIF**
Value Creation	VC	7,891	4.00	2.00	1.00	5.00	
Financial Capital	FCAP	7,012	0.00	2.00	0.00	1.00	1.12
Human Capital	HCAP	7,838	4.00	1.00	0.00	1.00	1.26
Social Capital	SCAP	7,891	1.00	1.00	0.00	1.00	1.12
Opportunity Alertness	OAL	6,797	1.00	1.00	0.00	1.00	1.09
Self-Efficacy	SELF	7,623	1.00	1.00	0.00	1.00	1.14
Risk Tolerance	RISK	7,633	0.00	1.00	0.00	1.00	1.06
Gender	GEND	7,891	0.00	1.00	0.00	1.00	1.02
Establish > 42 Months	ESTAB	7,891	0.00	0.00	0.00	1.00	1.08

Continuous Variables		**N**	**Mean**	**SD**	**Min**	**Max**	**VIF**
Regulative Pillar	RP	7,891	67.51	9.05	41.8	81.40	2.45
Cultural Pillar	CP	7,891	3.83	0.84	1.92	6.16	2.06
Normative Pillar	NP	7,891	3.70	0.47	2.05	4.65	2.56
Gini Index	INEQ	7,359	37.50	6.94	25.40	63.00	1.84
Uncertainty Index	UNC	7,837	0.27	0.16	0.00	0.73	1.15
GDP Per Capita (Log)	GDPL	7,891	12.22	2.33	7.80	18.17	1.35
Population (Log)	POPL	7,891	16.88	1.63	12.56	21.05	1.72
Unemployment (%)	UNEM	7,891	7.40	4.21	0.60	26.07	1.54
Employment Agriculture (%)	EAGR	7,891	13.69	13.14	0.26	46.58	2.80
Age	AGE	7,703	40.60	14.15	18.00	89.00	1.09

Note: N=Number of records, IR=Interquartile range, Min= Minimum value, Max= Maximum value, VIF= Variance inflation faction, SD= Standard deviation.

Table 5. Correlation coefficients

Kendall's Rank correlation (Tau b)	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**
(1) Value Creation	1,00										
p-values											
(2) GDP Per Capita (Log)	0,01	1,00									
p-values	0,43										
(3) Population (Log)	0,00	0,04	1,00								
p-values	0,67	0,00									
(4) Unemployment (%)	0,07	-0,08	-0,29	1,00							
p-values	0,00	0,00	0,00								
(5) Employment Agric. (%)	-0,06	0,19	0,20	-0,14	1,00						
p-values	0,00	0,00	0,00	0,00							
(6) Gini Index	0,03	0,21	0,21	-0,19	0,29	1,00					
p-values	0,00	0,00	0,00	0,00	0,00						
(7) Uncertainty Index	0,03	0,00	0,03	-0,01	0,03	0,08	1,00				
p-values	0,00	0,96	0,00	0,54	0,00	0,00					
(8) Regulatory Pillar	0,10	0,10	-0,13	-0,01	-0,35	-0,02	0,09	1,00			
p-values	0,00	0,00	0,00	0,18	0,00	0,02	0,00				
(9) Normative Pillar	0,03	0,08	0,27	-0,35	-0,02	0,04	-0,11	0,12	1,00		
p-values	0,00	0,00	0,00	0,00	0,02	0,00	0,00	0,00			
(10) Cultural Pillar	0,10	0,17	0,22	-0,25	0,03	0,24	-0,05	0,17	0,45	1,00	
p-values	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00		
(11) Age	0,06	0,00	-0,02	0,03	-0,12	-0,06	0,03	0,10	0,01	0,01	1,00
p-values	0,00	0,55	0,01	0,00	0,00	0,00	0,00	0,00	0,30	0,31	

Table 5. Continued

	First variable as column								
Somers' D correlation	**(1)**	**(12)**	**(13)**	**(14)**	**(15)**	**(16)**	**(17)**	**(18)**	**(19)**
(1) Value Creation		0.04	0.12	-0.08	-0.03	-0.06	0.01	0.03	-0.14
p-values		0.01	0.00	0.00	0.03	0.00	0.38	0.08	0.00
(12) Financial Capital	0.03		0.25	0.07	0.02	0.05	0.01	-0.05	0.02
p-values	0.01		0.00	0.00	0.15	0.00	0.47	0.00	0.38
(13) Human Capital	0.07	0.23		0.00	-0.03	-0.01	0.05	0.03	-0.06
p-values	0.00	0.00		0.97	0.01	0.43	0.00	0.04	0.00
(14) Social Capital	-0.05	0.06	0.00		0.20	0.23	-0.08	-0.05	0.15
p-values	0.00	0.00	0.97		0.00	0.00	0.00	0.00	0.00
(15) Opportunity Alertness	-0.02	0.02	-0.03	0.21		0.17	-0.13	-0.03	0.09
p-values	0.03	0.15	0.01	0.00		0.00	0.00	0.01	0.00
(16) Self-Efficacy	-0.03	0.03	-0.01	0.19	0.13		-0.17	-0.09	0.19
p-values	0.00	0.00	0.43	0.00	0.00		0.00	0.00	0.00
(17) Risk Tolerance	0.01	0.01	0.05	-0.07	-0.11	-0.20		0.07	-0.12
p-values	0.38	0.47	0.00	0.00	0.00	0.00		0.00	0.00
(18) Gender	0.02	-0.05	0.03	-0.05	-0.03	-0.11	0.08		-0.05
p-values	0.01	0.00	0.04	0.00	0.01	0.00	0.00		0.00
(19) Establish > 42 M	-0.06	0.01	-0.04	0.09	0.05	0.14	-0.08	-0.03	
p-values	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	

Table 6. Multilevel Ordered Probit: Baseline Regressions

Variable		Model 1 Controls	Model 2 Predictors	Model 3 Interaction	Model 4	Model 5 Full
		Value Creation	Value Creation	Value Creation	Value Creation	Value Creation
Constant						
Cut 1 From Strongly Disagree to Disagree		-0.40	1.41	25.96**	-4.05*	8.99**
		(0.55)	(2.35)	(11.91)	(2.15)	(4.12)
Cut 2 From Disagree to Neutral		-0.01	1.81	26.37**	-3.65*	9.39**
		(0.55)	(2.36)	(11.92)	(2.15)	(4.12)
Cut 3 From Neutral to Agree		0.57	2.40	26.98**	-3.03	10.01**
		(0.54)	(2.37)	(11.93)	(2.14)	(4.12)
Cut 4 From Agree to Strongly Agree		1.16**	3.01	27.59**	-2.42	10.62***
		(0.54)	(2.38)	(11.95)	(2.12)	(4.12)
Country Predictors						
Regulatory Pillar	RP		-0.04*	-0.05**	-0.02**	-0.02**
			(0.02)	(0.02)	(0.01)	(0.01)
Normative Pillar	NP		0.78	6.07**	-0.30	2.52**
			(0.72)	(2.96)	(0.42)	(1.10)
Cultural Pillar	CP		1.08***	2.48**	-0.44**	0.42
			(0.41)	(1.09)	(0.21)	(0.45)
Interaction Analysis						
Gini Index	INEQ			0.67**	0.02	0.37***
				(0.29)	(0.01)	(0.13)
Uncertainty Index	UNC			0.15	-21.49***	-20.32***
				(0.70)	(8.03)	(7.58)
Gini Index X Normative Pillar	INEQ*NP			-0.14**		-0.07**
				(0.07)		(0.03)

Table 6. Continued

Variable		Model 1 Controls	Model 2 Predictors	Model 3 Interaction	Model 4	Model 5 Full
		Value Creation	Value Creation	Value Creation	Value Creation	Value Creation
Gini Index X Cultural Pillar	INEQ*CP			-0.05*		-0.02**
				(0.03)		(0.01)
Uncertainty X Normative Pillar	UNC*NP				2.45	2.68
					(1.84)	(1.89)
Uncertainty X Cultural Pillar	UNC*CP				3.65***	2.94***
					(0.92)	(0.53)
Country Controls						
GDP Per Capita (Log)	GDPL	0.01	-0.00	0.03	0.03	0.02
		(0.02)	(0.06)	(0.05)	(0.03)	(0.02)
Population (Log)	POPL	0.04	-0.13	-0.06	-0.01	0.02
		(0.03)	(0.12)	(0.08)	(0.06)	(0.05)
Unemployment (%)	UNEM	0.01	0.09**	0.06**	0.05*	0.03
		(0.01)	(0.04)	(0.03)	(0.02)	(0.02)
Employment Agriculture (%)	EAGR	-0.00	-0.01	-0.02*	-0.02*	-0.02**
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Individual Controls						
Financial Capital	FCAP	0.02	0.03	0.01	0.01	0.01
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Human Capital	HCAP	0.09***	0.08**	0.07**	0.07**	0.07**
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Social Capital	SCAP	-0.03	-0.03	-0.03	-0.03	-0.03
		(0.03)	(0.04)	(0.04)	(0.04)	(0.04)
Opportunity Alertness	OAL	0.03	0.02	0.03	0.03	0.03
		(0.04)	(0.04)	(0.04)	(0.04)	(0.04)

Table 6. Continued

Variable		Model 1 Controls	Model 2 Predictors	Model 3 Interaction	Model 4	Model 5 Full
		Value Creation	Value Creation	Value Creation	Value Creation	Value Creation
Self-Efficacy	SELF	-0.10*	-0.09*	-0.08	-0.08	-0.08
		(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Risk Tolerance	RISK	-0.05	-0.06*	-0.07**	-0.07*	-0.07*
		(0.03)	(0.03)	(0.03)	(0.04)	(0.04)
Gender	GEND	0.06*	0.06	0.08**	0.08**	0.08**
		(0.03)	(0.04)	(0.03)	(0.03)	(0.03)
Age	AGE	0.01	0.01	0.01	0.01	0.01
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age Square	AGESQ	-0.00	-0.00	-0.00	-0.00	-0.00
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Establish > 42 M	ESTAB	-0.11***	-0.11***	-0.10**	-0.09**	-0.09**
		(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Variance						
Country Level		0.09***	0.82	0.55	0.24**	0.18**
		(0.02)	(0.79)	(0.40)	(0.12)	(0.08)
Observations		5,649	5,649	5,264	5,264	5,264
Number of Groups		58	58	53	53	53
Wald Test Chi sq		68.98	89.70	104.44	143.40	262.53
Prob Chi sq		0.00	0.00	0.00	0.00	0.00
Information Criteria (IC)		15515.36	15305.98	14136.01	14086.51	14077.01

Note. The table reports the fixed effect, the estimated cut points, and the estimated variance component. Cluster robust standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1. Model 1 considers the individual and country level controls. Model 2 considers the main effect predictors. Model 3 and Model 4 include an isolated analysis of the moderation effect. Model 5 considers the control-level main, the moderation, and the control

Table 7. Multilevel ordered probit: Marginal Effects

Variable		For-profit Strongly Disagree	Disagree	Mixed Value Neutral	Agree	Non-profit Strongly Agree
Regulatory Pillar	RP	0.003**	0.002**	0.002***	0.001**	-0.008**
Normative Pillar	NP	-0.348**	-0.169***	-0.222***	-0.059*	0.829***
Cultural Pillar	CP	-0.058	-0.028	-0.037	-0.010	0.139
Gini Index	INEQ	-0.051***	-0.025***	-0.032***	-0.009**	0.120***
Uncertainty Index	UNC	2.814***	1.369***	1.791***	0.475**	-6.694***
Uncertainty X Normative Pillar	UNC*NP	-0.371**	-0.181**	-0.236**	-0.063	0.883**
Uncertainty X Cultural Pillar	UNC*CP	-0.407***	-0.198***	-0.259***	-0.069**	0.969***
Gini Index X Normative Pillar	INEQ*NP	0.010***	0.005***	0.007***	0.002*	-0.024***
Gini Index X Cultural Pillar	INEQ*CP	0.003	0.001	0.002	0.001	-0.007
GDP Per Capita (Log)	GDPL	-0.003	-0.001	-0.002	-0.001	0.007
Population (Log)	POPL	-0.002	-0.001	-0.001	-0.000	0.006
Unemployment (%)	UNEM	-0.005**	-0.002***	-0.003***	-0.001*	0.012***
Employment Agriculture (%)	EAGR	0.003***	0.001***	0.002***	0.000*	-0.006***
Financial Capital	FCAP	-0.002	-0.001	-0.001	-0.000	0.004
Human Capital	HCAP	-0.010**	-0.005**	-0.006**	-0.002	0.024**
Social Capital	SCAP	0.004	0.002	0.002	0.001	-0.009
Opportunity Alertness	OAL	-0.005	-0.002	-0.003	-0.001	0.011

Table 7. Continued

Variable		For-profit Strongly Disagree	Disagree	Mixed Value Neutral	Agree	Non-profit Strongly Agree
Self-Efficacy	SELF	0.011**	0.005**	0.007**	0.002	-0.026**
Risk Tolerance	RISK	0.009*	0.005*	0.006*	0.002	-0.022*
Gender	GEND	-0.011**	-0.005**	-0.007**	-0.002*	0.025**
Age	AGE	-0.001	-0.001	-0.001	-0.000	0.003
Age Square	AGESQ	0.000	0.000	0.000	0.000	-0.000
Establish > 42 Months	ESTAB	0.012*	0.006*	0.008*	0.002	-0.028*

Note. The table reports the marginal effects based on each alternative in the ordered dependent variable. Financial value (i.e., pure commercial) corresponds to those respondents that answered strongly disagree; Mixed value corresponds to those that answered disagree, neutral, or agree; lastly, non-financial value (i.e., pure non-commercial) corresponds to those that answered strongly agree. *** p<0.01, ** p<0.05, * p<0.1

Figure 1. Conceptual model