

Entrepreneurship Motivation: Opportunity and Necessity



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Abstract Nascent entrepreneurs have their own business for several reasons, but one can easily distinguish their motivations in two types: the willingness to be an entrepreneur and the need to be one. Finding a good opportunity in the market is not the only way to start a business; entrepreneurs also start a business because there is no better or no other choice to avoid unemployment (e.g., Evans and Leighton, *Small Business Economics* 2:319–330, 1990; Masuda, *Small Business Economics* 26:227–240, 2006). The Global Entrepreneurship Monitor divides entrepreneurs' motivations in two ways: opportunity and necessity. This research analyzes the motivations of nascent entrepreneurs; more specifically, it identifies the main motivations of entrepreneurs across different countries, presenting the characteristics that most influence the motivations of the individuals either by necessity or opportunity; and finally, it clusters countries in terms of entrepreneurship types and characterizes them. The literature suggests that entrepreneurs by opportunity are strongly associated with developed countries. Therefore presenting a set of characteristics that influences these motivations allows a greater understanding of the entrepreneurship process, where the motivation and the process that influence the business decision-making of individuals are critical. Our results show that motivations for entrepreneurship are strongly correlated with the sociodemographic characteristics of the entrepreneur, e.g., age, education, and family income. Our study also shows that entrepreneurship by opportunity does not necessarily happen in developed countries. In contrast, it should be noted that entrepreneurs by necessity do not seek to start an innovative business, nor do they perceive good opportunities in their context; nevertheless they decide to become entrepreneurs as a way to overcome the lack of employment opportunities, suggesting that they seek to avoid possible risks.

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1 Literature Review

Entrepreneurial is a term that emerged in France to define those willing to take risks to start something new. Richard Cantillon (1725) was the first author to refer to this term in an economic perspective in his work *Essai sur la Nature du Commerce en Général* in 1755, where it is referred to as self-employment with uncertain return, thus relating entrepreneurial activity to uncertainty in which the individual in his or her decisions is willing to take risks (Van Praag 1999; Adaman and Devine 2002). Entrepreneurship is not necessarily the result of a successful research or an innovation. Entrepreneurs are able to overcome the insecurity associated with business with their resistance; they are thus distinguished by having charismatic characteristics. Schumpeter (1935, p. 130) emphasizes that “the entrepreneur is the revolutionary of the economy and the involuntary Pioneer of social and political revolution,” and considers them agents of change in production processes and economic development, and by being innovative, they implement changes in the markets through new combinations, such as the introduction of a new product, the introduction of a new production method, exploring a new market, the use of a new source of supply of new materials, and the reorganization of any sector (Carton et al. 1998).

The definition presented by Schumpeter suggests that characteristics associated with individuals are central to entrepreneurship. Drucker (1985) points out that innovation is the main characteristic of entrepreneurs and that determines his behavior and how they explore the opportunities for a new business or service. Therefore, the entrepreneur is defined as not being integrally related to the creation of firms, since it is also associated with the creation of value, innovation, and the implementation of changes. Shane and Venkataraman (2000) consider that the process of discovery, evaluation, and exploitation of opportunities, as well as the way individuals discover, evaluate, and exploit them, is opportunity entrepreneurship. For Goffee and Scase (1986), entrepreneurs' behavior, ideas, and intentions are complex to determine; therefore, becoming or being entrepreneurial is something almost innate and inherited (Gibb and Ritchie 1982).

The lack of a conceptual definition of entrepreneurship is due to the fact that this issue is addressed in the social sciences (Swedberg 1993), in economics (Casson 2003; Von Hayek 1948), and in management (Ghoshal and Bartlett 1995); there are different perspectives of what entrepreneurship is. Table 1 presents some of the definitions.

Although there are different definitions, the perception and identification of market opportunities are one of the most important characteristics in the studies on entrepreneurship (Hills et al. 1997; Shane and Venkataraman 2000; Gaglio and Katz 2001; Ardichvili et al. 2003), being referred to as the one that allows entrepreneurs to succeed (Ardichvili et al. 2003). Entrepreneurship is also analyzed as a social process that is dependent on the context in which it operates and also where individuals or groups create wealth by exploiting market opportunities (Ireland et al. 2003). For Shane and Venkataraman (2000), entrepreneurship integrates two processes that are related: the discovery of opportunities and the exploration of these

Table 1 Definitions of entrepreneurship

Author	Characteristics
Cantillon	Entrepreneurs buy at certain prices in the present and sell at uncertain prices in the future. The entrepreneur is a bearer of uncertainty
Commission of the European Communities	Entrepreneurship is the mindset and process to create and develop economic activity by blending risk-taking, creativity, and/or innovation with sound management, within a new or an existing organization
Davids	Ambition, desire for independence, responsibility, self-confidence
Ireland et al. (2003)	Entrepreneurship is a context-dependent social process through which individuals and teams create wealth by bringing together unique packages of resources to exploit marketplace opportunities
Kirzner	The entrepreneur recognizes and acts upon profit opportunities, essentially a arbitrageur
Knight	Entrepreneurs attempt to predict and act upon change within markets. The entrepreneur bears the uncertainty of market dynamics
Penrose	Entrepreneurial activity involves identifying opportunities within the economic system
Weber	The entrepreneur is the person who maintains immunity from control of rational bureaucratic knowledge
Hartmann	Source of formal authority
Hornaday and Aboud	Need for achievement; autonomy; aggression; power; recognition; innovative/independent
Liles	Need for achievement
McClelland	Risk-taking, need for achievement
Palmer	Risk management
Sutton	Desire for responsibility
Timmons	Drive/self-confidence, goal-oriented moderated risk taker; internal locus of control; creativity/innovation
Welsh and White	Need to control; responsibility seeker; self-confidence/drive; challenge taker; moderate risk taker
Winter	Need for power

Source: Adapted from Carland et al. (1984), Gartner (1988), and Ahmad and Seymour (2008)

opportunities. In Stevenson and Gumpert (1985) approach, entrepreneurship consists only of looking for opportunities.

According to Reynolds and White (1997) and Reynolds et al. (2000), the entrepreneurial process can be classified in four stages (conception, gestation, childhood, and adolescence), with three transitions: (1) entrepreneurs have the time and resources to start a new firm and are considered nascent entrepreneurs when the firm is distinguished as a start-up, an independent activity, and on its own; (2) arises when the new business starts as an operating business; and (3) occurs when there is a positive change from the new company to a sustainable success.

This study addresses the first transition, in order to understand the motivations of nascent entrepreneurs. As pointed out by Gicheva and Link (2016), for more than two decades, there are bases for research on nascent entrepreneurship. This research used data from GEM where a nascent entrepreneur is a person who attempts to start a new business in the last 12 months and expects to be the owner or part owner of the new firm and whose start-up does not have positive cash flow to cover the expenses and salaries of the managing owner for more than 3 months (Reynolds and Koulopoulos 1999; Acs and Varga 2005). Nascent entrepreneurs are important to the process of development of countries and regions and consequently in the economic development and growth (Llopis et al. 2015). Wagner (2002) adds that the nascent entrepreneurs are, therefore, important for the emergence of new firms while also identifying crucial aspects of the economy, justifying the relevance of this research. Consequently, motivation and intentions are evidenced to be relevant to explaining entrepreneurial behavior (Valliere 2015) and are therefore considered important both in the role of internationalization and international entrepreneurship (Dimitratos et al. 2016; Busenitz and Barney 1997; Hessels et al. 2008). Herron and Sapienza (1992, p. 49) refer that “motivation plays an important role in creating new organizations, organizational creation theories that fail to solve this notion are incomplete.”

Entrepreneurial motivation is related to the motivation of entrepreneurs seeking market opportunities to obtain resources, knowledge, experience, and access to financing and risk reduction (Autio et al. 2000; Clercq and Sapienza 2005; Kontinen and Ojala 2011; Voudouris et al. 2011). It also refers to the motivation of international entrepreneurs that can be subdivided into two dimensions: the internationalization strategy (Segaro et al. 2014) and the implementation of an internationalization strategy (Dimitratos et al. 2012).

As reported by Van der Zwan et al. (2016), the literature distinguish the pull and push motivations between entrepreneurship for opportunity and necessity, and in most of the investigations, a distinction is made between factors that are positive that “pull” and the negatives that “push” people toward entrepreneurship (Shapiro and Sokol 1982; Gilad and Levine 1986), in which, for example, pull motivations include the need for achievement and the will to be independent and the motivations of “push” involve the risk of unemployment and dissatisfaction with the current situation. GEM distinguishes between pull and push motivations; however, they classify them as entrepreneurship by opportunity and necessity (Reynolds et al. 2002) where entrepreneurs by necessity are driven by pull motivations. GEM provides data allowing to analyze the two motivations to become entrepreneurs: the opportunities, where entrepreneurs are the ones who start a business to pursue an opportunity, and by necessity, where individuals feel compelled due to unemployment.

Oxenfeldt (1943), one of the first authors to explore push motivations, states that the unemployed or individuals with low employment prospects may become independent. However, there are other factors, such as family pressure, transferring business to the new generation, or job dissatisfaction (Bowen and Hisrich 1986). Entrepreneurs by opportunity tend to engage in innovative business, explore market

niches, while entrepreneurs by necessity tend to engage in less innovative businesses (Angulo-Guerrero et al. 2017).

Recognition of opportunities is one of the most important characteristics of a successful entrepreneur (Shane and Venkataraman 2000). On the other hand, Minniti and Bygrave (2001) refer that successful experience is not always able to increase the perception of opportunities in the market, because in return, individuals who have failed are more susceptible to exploit opportunities.

Choi and Shepherd (2004) add that the exploration of opportunities is a decision to act on the perceived opportunities for which their behaviors will enable success. Withey and Cooper (1989) consider that the entrepreneur's previous experience provides a set of information useful for the creation of his business, which reduces some of the costs of exploiting opportunities and increases his capacity to reduce obstacles and uncertainties related to creation of a new business.

As mentioned above, some authors state that being risk-averse is one of the distinctive characteristics of entrepreneurs (Kihlstrom and Laffont 1979), but Ahn (2010) refers that this attribute is difficult to determine because there are no direct measures about the risk, thus limiting some empirical studies. This is due to the fact that the risk that the future entrepreneur is willing to take depends on different variables, whether intrinsic or not to the enterprise (Baron and Ensley 2006). Wenckers et al. (2005) add that there is a negative relationship between the TEA index and economic growth, implicitly indicating that there is also a relationship between the TEA index and the risk of creating a business, and consequently there is a relationship between risk and economic growth (Marcotte 2012). There is, therefore, a causal relationship between the perception of risk and the behavior of the entrepreneur; likewise the risk is related to the perception of opportunities in the market and with entrepreneurship rate (Wenhong and Liuying 2010).

Necessity motivations are present when individuals have no other employment options, so such decision is more noticeable than those who start a business for exploring opportunities (Wang and Poutziouris 2010). This may suggest that entrepreneurs by necessity are more risk-averse. Wenckers et al. (2005) refer that, in developed countries, economic growth is directly related to entrepreneurship, given that individuals are more motivated to be entrepreneurs because of the opportunities they identify (Barros and Pereira 2008).

2 Hypotheses

The motivations of individuals to become entrepreneurs may differ by intrinsic and extrinsic stimuli, and knowing that the different motivations of business decisions influence the impact a new enterprise can have on society and the economy (Baumol 1990; Estrin et al. 2013; Williams 2009), and in order to reach the objective of the present study, a set of research hypotheses was formulated that relates the motivation by opportunity and necessity.

2.1 Motivation for Opportunity Versus Motivation by Necessity

Necessity entrepreneurship predominates in less developed regions or in those where there are significant unemployment levels; in developed economies, there is more opportunity entrepreneurship due to the existence of more entrepreneurial opportunities as a result of their wealth and innovation. Based on this argument, the first research hypothesis is defined as follows:

[H1]: Opportunity entrepreneurs create business in developed economies, while entrepreneurs by necessity create business in the less developed economy.

2.2 Characteristics of Entrepreneurs

In the same way that there are different motivations that lead individuals to become entrepreneurs, there are also characteristics that can influence such motivations. According to Levine (1986), entrepreneurs' motivation is distinguished by two hypotheses between pull and push. This distinction is implicitly present in the model of the entrepreneurial event (Shapero and Sokol 1982), where mention is made to initiating a business due to major changes in the life of an individual.

Entrepreneurs by opportunity are motivated to create innovative entrepreneurship and to increase productivity in an economy (Stenholm et al. 2013), thus seeking growth, profit, innovation, and personal aspirations (Cullen et al. 2014; McMullen et al. 2008; Reynolds et al. 2005), while entrepreneurs by necessity start a business given the lack of other employment options, economic recession, and poverty (Acs and Amorós 2008; Banerjee and Duflo 2007; Block and Sandner 2009; Gries and Naudé 2011).

Studies on the comparison of entrepreneurship by opportunity and necessity tend to focus on the rates of the GEM's early-stage entrepreneurial activity (TEA) (De Clercq et al. 2013; Levie and Autio 2011). Thus, the research hypothesis is described as follows:

[H2]: There are different characteristics that motivate the entrepreneurs by opportunity and necessity.

3 Methodology

GEM is an organization focused on the study of entrepreneurship, which brings together a set of statistical data that allows analyzing the characteristics and motivations of individuals who started businesses in their various stages of enterprise development. The approach is shared by all countries and recognizes entrepreneurship

as a process, thus enabling a comprehensive set of data, which facilitates international comparisons, to be able to track business activity, which is not the case with data national official statistics. GEM provides two sets of data, the Adult Population Survey (APS) and the National Expert Survey (NES). For this study, the most adequate data to achieve the research objectives are those of the APS, because it allows to focus on attitudes, behaviors, and motivations of the entrepreneurs.

3.1 Description of Variables

Data from the GEM Adult Population Survey (APS) is overseen by GEM national teams, which conduct annual surveys (usually between April and June) on a representative national sample of at least 2000 respondents, where the age range for the target population for the GEM APS is 18–64 years old and covers all geographic regions of the country, urban and rural areas, with the primary objective of ensuring that the sample data represents a close combination of the adult population of the country, aiming to random samples representative of each economy. However, the data are only available to the public 3 years after their collection. In this sense, the APS data that served as the analysis of this study are those of the year 2013 and 2014. In the GEM global report of 2013, more than 197,000 people were surveyed and approximately 3800 national entrepreneurship experts participated in the study in 70 economies. The following year, more than 206,000 people in 70 economies participated in GEM research—accounting for 72.4% of the world’s population and 90% of GDP. These data allow to present different profiles of entrepreneurship, for each region and stage of economic development.

The GEM APS allows analyzing the different characteristics of the entrepreneur in the various stages of their business life cycle, and for this study, the variable explained was “Total Early-Stage Entrepreneurial Activity” (TEA).

Note first that the year 2013, the initial business activity rates by age group and geographic region are as follows:

Figure 1 shows that, in the year 2013, the young entrepreneurs (18–24), at an early stage of their activity, are represented mainly in Latin America and the Caribbean and in sub-Saharan Africa. As it can be seen, the least developed countries have a higher TEA rate, because they have a higher percentage of adult population (18–24).

In developing countries and with greater income inequality, entrepreneurship initiatives are important, so need-oriented entrepreneurship is very important (Reynolds et al. 2002). Entrepreneurship research is vast, but it does not offer a unanimous view of how the economic environment can influence the initial dynamics of entrepreneurship and entrepreneurial profile (Devece et al. 2016). It is known that identifying the differences between economies around the world, about social values, individual attributes, and TEA, can be better understood if the motivational aspect to start a business is included.

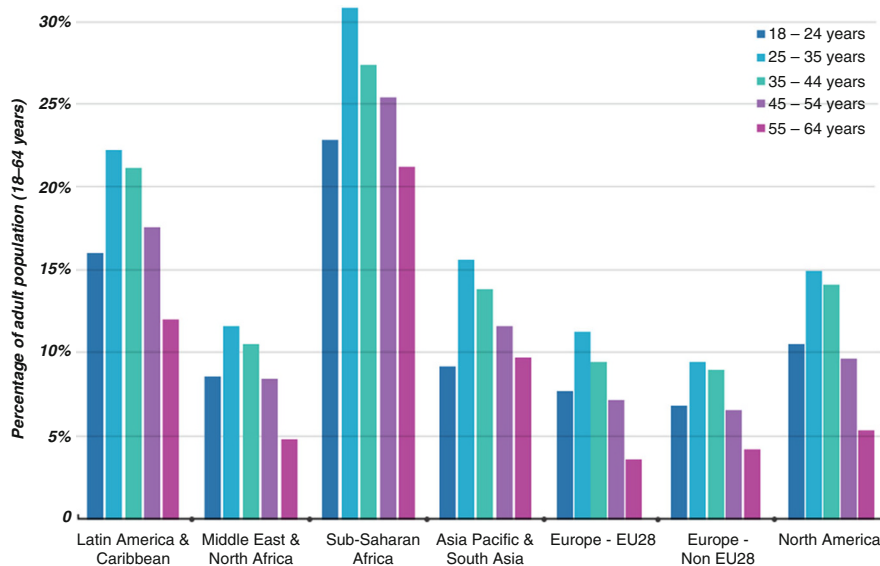


Fig. 1 Early-stage entrepreneurial activity rates within age groups by geographic regions. Source: Authors own figure

In this sense, we selected variables that would explain the motivation of individuals to want to start a business:

- Demographic data, business activity, and sectors of activity

There are several individual factors that are related to entrepreneurial self-efficacy, among them, gender, age, schooling level, and household income.

In general, young people are characterized by having more ideas and education, and because they do not have so many responsibilities, they are more risk-averse. Blanchflower et al. (2001) state that the younger the individuals, the greater the likelihood of becoming entrepreneurial. Education is one of the main factors that increases the entrepreneurial attitudes of individuals (Potter 2008). Household income can also boost entrepreneurship, being the example of some women who become entrepreneurs to support their families and be independent; however, one can read in the GEM report, the rate of entrepreneurship among women is less than the male one (Allen et al. 2007).

The following control variables were selected (Table 2):

- International entrepreneurship and growth expectation

Internationalization is part or consequence of a firm's strategy, which can be defined as an entrepreneurial action (Schumpeter 1935), and in this sense, entrepreneurship also explains the behavior of international firms. The issue of international entrepreneurship has been favoring new perspectives which, in turn, explain how firms face the new external market reality and succeed at the beginning of business activity (Ripollés-Meliá et al. 2007). There is research

Table 2 Variables of demographic data, business activity, and sectors of activity

Variables	
Tea13ac1/Tea14ac1 —% 18–64 pop age category 18–24: % involved in TEA	TEA13ed1/TEA14ed1 —% 18–64 pop some secondary degree: % involved in TEA
Tea13ac2/Tea14ac2 —% 18–64 pop age category 25–34: % involved in TEA	TEA13ed2/TEA14ed2 —% 18–64 pop secondary degree: % involved in TEA
Tea13ac3/Tea14ac3 —% 18–64 pop age category 35–44: % involved in TEA	TEA13ed3/TEA14ed3 —% 18–64 pop postsecondary degree: % involved in TEA
Tea13ac4/Tea14ac4 —% 18–64 pop age category 45–54: % involved in TEA	TEA13ed4/TEA14ed4 —% 18–64 pop graduate experience: % involved in TEA
Tea13ac5/Tea14ac5 —% 18–64 pop age category 55–64: % involved in TEA	Tea13s1p/Tea14s1p —% within TEA: Extractive sector
TEA13hi1/TEA14hi1 —% 18–64 pop lowest household 33 ptile: % involved in TEA	Tea13s2p/Tea14s2p —% within TEA: Transforming sector
TEA13hi2/TEA14hi2 —% 18–64 pop middle household 33 ptile: % involved in TEA	Tea13s3p/Tea14s3p —% within TEA: Business-oriented services
TEA13hi3/TEA14hi3 —% 18–64 pop highest household 33 ptile: % involved in TEA	Tea13s4p/Tea14s4p —% within TEA: Consumer-oriented services

Source: Authors own table

Table 3 Variables of international entrepreneurship and growth expectation

Variables	
TEA13HIX/TEA14HIX —% 18–64 pop: TEA exports: more than 50% customers outside country	TEA13mk2/TEA13mk2 —% 18–64 pop: TEA and some market expansion, no tech (TEA09MEM = 2)
Tea13e1p/Tea14e1p —% within TEA: No customers outside country	TEA13mk3/TEA14mk3 —% 18–64 pop: TEA and some market expansion, with tech (TEA09MEM = 3)
Tea13e2p/Tea14e2p —% within TEA: Export: 1–25% of customers outside country	TEA13mk4/TEA14mk4 —% 18–64 pop: TEA and profound market expansion (TEA09MEM = 4)
Tea13e3p/Tea14e3p —% within TEA: Export: 25–75% of customers outside country	TEA13HJG/TEA14HJG —% 18–64 pop: TEA expects more than 19 jobs in 5 years
Tea13e4p/Tea14e4p —% within TEA: Export: 75–100% of customers outside country	TEA13job/TEA14job —% 18–64 pop postsecondary degree: % involved in TEA
TEA13mk1/TEA14mk1 —% 18–64 pop: TEA and no market expansion (TEA09MEM = 1)	TEA13EMP/TEA14EMP —% 18–64 pop: TEA any jobs now or in 5 years

Source: Authors own table

that suggests that the speed at which a firm becomes internationalized can influence its internationalization process (Oviatt and McDougall 1994). When the entrepreneur’s goal is the rapid growth of business, it is referred to as high-expectancy entrepreneurship, where initiatives based on high-tech innovation play an important role (Seifert et al. 2008) (Table 3).

Table 4 Dependent variables of entrepreneurs by opportunity and necessity

Variables	
TEA13opp/TEA14opp —% 18–64 pop: TEA and Opportunity motive	TEA13nec/TEA14nec —TEA and necessity motive (entr because of no better choice for work)

Source: Authors own table

- Entrepreneurs by opportunity and necessity

In GEM, Reynolds et al. (2002), distinguish pull and push motivations, introduced the concept of opportunity and need for entrepreneurship. As discussed in Sect. 2, entrepreneurs by opportunity are more likely to engage in innovative business and exploit niche markets (Angulo-Guerrero et al. 2017), while entrepreneurs by necessity are characterized by lower levels of satisfaction (Wang and Poutziouris 2010) and because there is no better work option (Reynolds et al. 2005; Galbraith and Latham 1996; Block and Koellinger 2009; Kautonen and Palmroos 2010).

In order to identify the common characteristics of entrepreneurs by opportunity and necessity, the following dependent variables were selected (Table 4).

- Innovation

Innovation can be defined in five different ways: (1) development of a new product or change qualitatively; (2) development of the productive factor; (3) exploration of a new market; (4) implementation of supplies for raw materials; and (5) change in organization (Feeny and Rogers 2003).

Dyer et al. (2008) report that “innovative entrepreneurs have something called creative intelligence, which enables discovery.” And according to Gedik et al. (2015), an innovator is not only a person who has dreams or imagination and wants to create something new; there are still a set of factors that are related to his DNA that make it innovative.

High-tech and early-stage enterprising firms are important in encouraging the creation of emerging industry strategies but also to activate regional economic development (Pan et al. 2018).

In view of the above, we selected the following dependent variables related to innovation (Table 5).

- Attitudes, perceptions, behavior, and intentions of the entrepreneur

Entrepreneurship is referred to as a status of work (Arenius and Minniti 2005), so attitudes and perceptions about entrepreneurship relate to how the individual action is perceived by other individuals. From the GEM, a set of relevant indicators was analyzed to explore individuals’ perceptions of their competencies, knowledge, and experiences to start a business, as well as their intentions and the existence or not of opportunities to open a business.

Table 5 Innovation

Variables	
Tea13cm1/Tea14cm1 —% within TEA: Many businesses offer the same product	Tea13cs3/Tea14cs3 —% within TEA: Product new to noncustomers
Tea13cm2/Tea14cm2 —% within TEA: Few businesses offer the same product	Tea13nt1/Tea14nt1 —% within TEA: Uses very latest technology (only available since last year)
Tea13cm3/Tea14cm3 —% within TEA: None businesses offer the same product	Tea13nt2/Tea14nt2 —% within TEA: Uses new technology (1–5 years)
Tea13cs1/Tea14cs1 —% within TEA: Product new to all customers	Tea13nt3/Tea14nt3 —% within TEA: Uses no new technology
Tea13cs2/Tea14cs2 —% within TEA: Product new to some customers	TEA13tec/TEA14tec —% within TEA: Active in technology sectors (high or medium)

Source: Authors own table

Table 6 Attitudes, perceptions, behavior, and intentions of the entrepreneur

Variables	
Frfail13/Frfail14 —% 18–64 pop: YES: Fear of failure would prevent starting a business	Suskil13/Suskil14 —% 18–64 pop: YES: Has required knowledge/skills to start business
Opport13/Opport14 —% 18–64 pop: YES: Good conditions to start business next 6 months in the area I live	

Source: Authors own table

Next, we describe the variables that were selected through the GEM in the year 2013, related to the attitudes, perceptions, and attitudes of the entrepreneurs (Table 6).

3.2 Statistical Analysis

In order to answer our research questions and to evaluate the research hypotheses related to the motivation of the entrepreneur, we used chi-square tests, linear regression, and discriminant and cluster analysis techniques applied to GEM data.

The chi-square test was used to test independent groups and to analyze if they differ in relation to a given characteristic. This analysis aimed to test differences in entrepreneur’s motivation in different groups of countries, i.e., what was the motivational index of the entrepreneurs in a certain group. Based on this method, it was possible to analyze the research questions that derive from the literature review, in which some authors report that motivation for opportunity happens in economically more developed countries and motivation due to necessity arises due to the lack of better job opportunities.

Linear regression allowed to gauge the influence of the dependent variable and to assess a cause-and-effect relationship with independent variables, thus allowing to evaluate which variables explain early-stage entrepreneurs who started the business

led by opportunity or necessity. This analysis is important to display a number of early-stage entrepreneurs motivated by opportunity or necessity enabling governments and researchers to understand how young individuals can become entrepreneurs. As previously mentioned, Ozaralli and Rivenburgh (2016) show that the promotion of entrepreneurship is an important measure for both developed and developing countries.

Cluster analysis allows grouping a set of variables into homogeneous groups. This method is the most appropriate to analyze which countries show similarities in terms of cultural characteristics, attitudes, and entrepreneurial behaviors.

Discriminant analysis allows us to find a discriminant function that allows us to distinguish groups of samples known a priori.

The Statistical Package for the Social Sciences (SPSS Statistics) was used for analysis and presentation of results.

4 Results

4.1 *Motivational Index*

The motivational index (MI) allows to characterize entrepreneurship in terms of opportunity or necessity, between 2010 and 2016, in order to understand whether opportunity entrepreneurship prevails developed countries or if, on the other hand, motivations by necessity are predominant only in developing countries.

Based on the indicators of the behavior and attitudes of the entrepreneur, GEM, measured through the Adult Population Survey (APS), we selected the indicator motivational index, which is expressed in the following equation:

$$\text{Motivational index} = (\text{opportunity motivated})/(\text{necessity motivated})$$

in which, $MI \geq 1$ the motivation is by opportunity and $MI < 1$ motivation by necessity. By distinguishing motivation by opportunity and necessity, it is possible to analyze the motivation of entrepreneurs from 102 countries, which are grouped into 6 regional blocks: Africa, Oceania, North America, Latin America and the Caribbean, Europe, and Asia.

With crosstabs analysis for the motivation of entrepreneurs between 2010 and 2016, it is shown that, in general, motivation for opportunity prevails. However, we highlight situations in which there are significant changes in the motivation of the entrepreneurs, which are represented in the following Table 7.

As it turns out, Norway is one of the countries with the highest percentage of the individuals who most created a business motivated by opportunities, for example, the year 2014, where opportunity-motivated entrepreneurs were 19.5 times more frequent than necessity entrepreneurs.

It is interesting to note that, during this time period, in countries such as Uruguay, Ecuador, Russia, Croatia, and South Korea, the motivations of individuals vary

Table 7 Motivational index

Africa	2010	2011	2012	2013	2014	2015	2016
Algeria		1.27	1.58	2.92			
Angola	0.84		1.61	1.54	1.78		
Botswana			1.44	1.98	1.81	1.41	
Burkina Faso					2.37	1.36	1.4
Cameroon					1.21	1.26	1
Egypt	0.48		0.68			0.79	1
Ethiopia			3.4				
Ghana	0.94		1.85	1.32			
Libya				7.41			
Malawi			1.02	0.67			
Morocco						1.52	1.8
Namibia			0.99	0.98			
Nigeria		1.49	1.54	2.06			
Senegal						1.92	
South Africa	0.87	1.13	1.25	1.04	1.26	1.13	1.8
Tunisia	2.02		1.19			3.56	
Uganda	0.67		0.92	1.89	2.87		
Zambia	1.28		1.44	0.96			
<i>Oceania</i>							
Australia	3.17	4.86			3.62	5.19	3.9
New Zealand							
Tonga							
Vanuatu	0.63						
<i>North America</i>							
Canada				4.43	4.04	4.14	3.4
United States	1.81	2.78	2.78	2.7	4.96	4.82	6.4
<i>Lat Am and Caribbean</i>							
Argentina	1.19	1.35	1.35	1.59	1.55	1.7	1.6
Barbados		11.57	5.05	3.7	3.65		
Belize					3.64		6.2
Bolivia	3.36				2.26		
Brazil	1.48	1.47	1.95	2.01	2	1.11	1
Chile	1.78	1.98	3.96	2.87	3.53	2.42	2.8
Colombia	1.03	1.2	3.85	1.48	1.55	1.7	4.2
Costa Rica	1.19		2.37	3.29			
Dominican Republic							
Ecuador	1.61		0.84	0.95	1.19	1.13	1.2
El Salvador			1.11		1.71		1.3
Guatemala	1.83	1		1.41	0.96	0.89	1.1
Jamaica	0.91	1.2		0.84	1.04		0.8
Mexico	2.18	2.81	3.86	3.89	2.23	2.94	
Panama		1.5	2.91	2.14	2.29	0.86	3.9

(continued)

Table 7 (continued)

Africa	2010	2011	2012	2013	2014	2015	2016
Peru	2.24	2.32	2.27	2.41	3.59	2.12	5.4
Puerto Rico				1.99	2.49	1.65	1.3
Suriname				3.24	7.34		
Trinidad and Tobago	3.29	2.95	3.97	6.76	5.35		
Uruguay	2.06	0.89	2.17	3.07	1.71	2.95	1.4
Venezuela		1.52					
<i>Europe</i>							
Austria			3.53		3.41		3
Belgium	5.23	6.94	3.44	1.51	1.41	1.61	
Bosnia and Herzegovina	0.64	0.35	0.35	0.37	0.49		
Bulgaria					0.87		1.1
Croatia		0.87	1.04	0.8	0.62	1.02	
Cyprus							2
Czech Republic		2.07		2.65			
Denmark	6.73	9.05	8.58		11.09		
Estonia			2.7	3.38	2.72	4.17	3.3
Finland	3.01	3.25	3.5	3.68	4.04		
France	2.22	4.77	3.25	3.89	4.31		6.3
Germany	1.89	2.95	2.34	2.98	2.32	3.75	2.7
Greece	1.39	1.45	1.07	1.53	0.88	1.54	1.1
Hungary	2.18	0.94	1.13	1.38	1.09		
Iceland	10						
Ireland	1.08	1.25	1.44	2.43	1.64	1.99	3.2
Italy			1.42	0.98	2.84	1.61	
Kosovo					1.32		
Latvia	1.9	1.78	1.82	2.48		3.01	4
Lithuania		1.66	2.09	2.37	2.23		
Luxembourg				10.04	5.06	5.6	4.8
Macedonia	0.4		0.55	0.38		0.51	0.7
Montenegro	1.03						
Netherlands	7.6	6.85	7.86	8.41	4.01	4.45	3.2
Norway	4.76	16.34	9.4	15.2	19.5	6.26	
Poland		0.66	0.74	0.69	1.28	1.65	2
Portugal	2.31	3.26	2.97	2.36	1.8	1.46	2.7
Romania	1.59	0.83	1.56	1	1.72	1.21	
Russia	0.94	1.56	0.86	1.19	1.07		1.3
Serbia							
Slovakia		1.23	1.21	1			1
Slovenia	3.32	4.25	8.69	2.22	1.76	1.9	2.7
Spain	1.65	1.52	1.27	1.13	1.12	1.8	1.9
Sweden	5.36	11.1	7.11	6.03	7.1	5.71	11.8
Switzerland	4.27	5.39	3.18	8.97	4.05	6.53	5.1

(continued)

Table 7 (continued)

Africa	2010	2011	2012	2013	2014	2015	2016
United Kingdom	4.06	2.69	2.33	2.8	4.09	2.14	3.8
<i>Asia</i>							
Bangladesh		1.83					
China	0.82	0.71	1.07	1.06	1.37	1.12	1.5
Georgia					0.64		0.7
Hong Kong							4.4
India				0.93	1.15	1.81	1.2
Indonesia				1.72	1.85	1.92	2.3
Iran	1.04	0.6	0.86	0.94	1.28	1.68	1.5
Israel	2.24		2.41	2.83		3.29	2.6
Japan	1.29	2.55	3.21	2.38	3.63		
Jordan							1.9
Kazakhstan					1.28	0.87	0.8
Lebanon						2.09	1.1
Malaysia	3.33	7.06	4.56	3.53	3.65	4.9	3.7
Pakistan	0.96	0.53	0.45				
Palestine	1.04		0.63				
Philippines				0.87	1.14	1.62	
Qatar					2.53		6
Saudi Arabia	7.47						5.4
Singapore		3.24	3.69	8.18	6.21		
South Korea	1.28	0.87	1.32	1.4		2.55	2.7
Syria							
Taiwan	1.58	2.85	2.38	1.6	4.98	3.78	2.7
Thailand		3.53	4.04	3.63	4	4.42	3.5
Turkey	1.25	1.42	1.77	1.77			1.9
United Arab Emirates		4.67					1.4
Vietnam				2.48	1.79	1.55	
Yemen							

Source: Authors own table

between need and opportunity, i.e., 1 year the motivation was opportunity; in another motivation was necessity and vice versa. This analysis allowed us to conclude that [H1] could not be confirmed, motivation for opportunity and necessity is not directly related to economic development; there are other factors that lead individuals from different countries to become entrepreneurs, either by opportunity or necessity.

4.2 *Linear Regression Analysis*

This study sought to analyze demographic data, business activity, sectors of activity, internationalization, growth expectations, innovation, attitudes and perceptions, and behavior of individuals, in order to determine the characteristics of individuals who create business in which the motivation was due to opportunity or necessity, for which we used the linear regression statistical analysis and two dependent variables were selected: TEA and opportunity motive and TEA and necessity motive.

As we have seen, crosstabs' analysis shows that, in some of the countries, the motivation of the entrepreneurs has undergone changes in which in 1 year the motivation was for opportunity and changing in the following one—changes that may possibly be associated with the policies adopted in the countries and, with the purpose to understand which factors can influence the motivational level of the individuals, we used a linear regression analysis model for the years of 2013 and 2014. In this model of analysis, the stepwise estimation method was used. This method is hybrid as a combination of the two forward and backward methods, allowing, easily, the removal of a variable whose importance in study is reduced by the addition of new variables. This analysis allows to critically evaluate the determination of a functional relation and the recognition of its importance of the behavior of an independent variable, so that in the following table, it shows the independent variables that contribute to explain the change of the motivation of the entrepreneur (opportunity or necessity).

Table 8 presents the summarized model with the results for each model, highlighting the variables that were inserted in the stepwise analysis, which are statistically significant.

Model I

The results show that age, education level, activity sectors, internationalization, and technology and product innovation are characteristics that are associated with the motivation for opportunity in the year 2013. However, although these dimensions are significant based on the analysis of the absolute values of the standardized coefficients, it allows us to conclude that the variables % 18–64 pop age category 35–44: % involved in TEA; % within TEA: Uses no new technology; % within TEAopp opportunity type: maintain income; % within TEA: Business-oriented services; % 18–64 pop: TEA and no market expansion (TEA09MEM = 1) have a greater importance in relation to the other variables of the model, i.e., these are the ones that better explain and influence the motivation of entrepreneurs in the 70 countries under study, among them, United States, Japan, Norway, Brazil, and South Africa. In general, this analysis shows that entrepreneurs aged 35–44 years old have identified opportunities to start a business, by offering business-oriented services, as a way to maintain or increase their income. This also means that the motivation for opportunity is not necessarily a motivation that leads individuals to explore opportunities in other markets, as well as a way to maximize their income.

Table 8 Model summary

Model	Dependent variable	Method = Stepwise	R _a ²	Durbin-Watson
1	% 18–64 pop: TEA and opportunity motive—2013	(1) % 18–64 pop age category 35–44% involved in TEA (2) % 18–64 pop postsecondary degree% involved in TEA (3) % within TEAOPP opportunity type: Maintain Income (4)% within TEA: Business-oriented services (5) % 18–64 pop; TEA and no market expansion (TEA09MEM = 1); (6) % within TEA: Uses no new technology (7) % 18–64 pop graduate experience:% involved in TEA (8)% within TEA: Product new to some customers (9) % 18–64 pop: TEA and profound market expansion (TEA09MEM = 4) (10) % within TEA: Product new to noncustomers	0.976	2.076
2	% 18–64 pop: TEA and necessity motive (entr because of no better choice for work)—2013	(1) % 18–64 pop some secondary degree: % involved in TEA (2) % 18–64 pop: YES: Good conditions to start business next 6 months in the area I live (3) % 18–64 pop: TEA and profound market expansion (TEA09MEM = 4) (4) % within TEA: Extractive sector	0.730	1.584
3	% 18–64 pop: TEA and opportunity motive—2014	(1) % 18–64 pop age category 35–44: % involved in TEA (2) % 18–64 pop: TEA and some market expansion, no tech (TEA09MEM = 2) (3) % 18–64 pop age category 25–34: % involved in TEA (4) % 18–64 pop: YES: Good conditions to start business next 6 months in the area I live (5) % within TEA: Consumer-oriented services	0.949	1.937
4	% 18–64 pop: TEA and necessity motive (entr because of no better choice for work)—2014	(1) % 18–64 pop middle household 33 ptile: % involved in TEA (2) % within TEA: Many businesses offer the same product	0.752	1.787

Source: Authors own table

Model II

This analysis allowed to verify that, in 2013, entrepreneurs' motivation by necessity in 70 countries could be explained by four dimensions: schooling level, activity sector, internationalization, and individuals' perceptions of their context. It is also worth mentioning that from the analysis of the absolute values of the standardized coefficients, the variables % 18–64 pop some secondary degree: % involved in TEA and % 18–64 pop: YES: Good conditions to start business next 6 months in the area I live, are variables that are seen as having a greater influence on the motivation of entrepreneurship by necessity. Based on these results, it is verified that the individuals, who in turn have some degree of schooling, consider that the place they are located meets the necessary conditions to start a business, being the extractive sector of the business activity that had a greater impact about the motivation of these entrepreneurs. Although opportunity entrepreneurs are naturally recognized as being entrepreneurs who discover and exploit the opportunities, from these results, it is evident that entrepreneurs by necessity also seek to expand the market, as a way to take advantage of the opportunities that may exist.

Model III

Through the adjusted coefficient of determination, it was possible to determine a set of dimensions: age, the sectors of activity, the internationalization, and the good conditions to start business in the place where they live that are directly related to the motivation of the entrepreneurs by opportunity in the year 2014 in 70 countries. Although the variables previously indicated in Table 8 are considered significant, with the analysis of the absolute values of the standardized coefficients, it is verified that some of these variables have a greater importance in the model, such as % 18–64 pop age category 35–44: % involved in TEA; % 18–64 pop age category 25–34: % involved in TEA; % 18–64 pop: YES: Good conditions to start business next 6 months in I live area, that is, show a greater influence on the dependent variable TEA14opp. The results show that individuals aged 25–34 also had a greater impact on motivation for opportunity; it is relevant evidence, since it may be related to entrepreneurship incentives in different countries or simply a reflection of importance that entrepreneurship has for young people.

Model IV

In order to determine possible changes in the variables that influence the decisions of individuals who start businesses by necessity in the year 2014, in 70 countries, we have also used the linear regression model, in which the dependent variable is TEA14nec % 18–64 pop: TEA and necessity motive because of the fact that there are two variables % 18–64 pop middle household 33%: % involved in TEA and % within TEA; Many businesses offer the same product which are the variables that influence the dependent variable TEA14nec. The analysis of the absolute values of the standardized coefficients shows that the independent variable % 18–64 pop middle household 33%: % involved in TEA is the variable that significantly contributes to explain and which has a greater influence on the dependent variable TEA14opp.

4.3 Cluster Analysis

Cluster analysis is an exploratory technique of multivariate analysis that allows grouping a set of common characteristics based on similarity or dissimilar measures. Note that, for 2014, 7 of the 41 independent variables were those that had a greater influence on the motivation of the entrepreneurs (opportunity or need), so it was considered equally important to group the different countries, into homogeneous groups in relation to one or more common characteristics. In its more abstract form, this analysis allows to distinguish the entrepreneurial characteristics that have a greater influence on a group of countries. Therefore, we selected the independent variables that better explain the behavior of individuals in motivational terms, in particular in 2014. Table 9 “cluster membership” allows to evaluate how similar (or dissimilar) each observation is to each of the clusters, while Table 10 presents the average of each variable in each of the three clusters, reflecting the characteristics of the typical case of each cluster:

Cluster I—Innovative entrepreneurs. Entrepreneurs try to offer products different from their competitors.

Cluster II—Entrepreneurs oriented to consumers. Businesses focus on consumer-oriented services.

Cluster III—Unfavorable entrepreneurship. The country offers mediocre conditions to start a business.

The analysis of ANOVA allows to observe which variables allow a better of clustering. Thus, the variables that mostly contribute to the definition of clusters are those that have a larger mean square cluster (QMC) and lower mean square error (QME), i.e., those with a higher F value ($F = QMC/QME$). Thus, as variables contributing to a greater discrimination between clusters are “% 18–64 pop: yes: good conditions to start the business next 6 months in the area I live,” followed by “% 18–64 pop average home 33 ptil: % involved in the TEA”; the variable “% inside the TEA: Many companies offer the same product” displays a lower discriminating power between clusters (Table 11).

4.4 Discriminant Analysis

This multivariate technique is used to determine the statistically significant differences and which of the independent variables contain a greater capacity for differentiation. The results of tests of equality of group means show that the independent variables that were studied in the cluster analysis should contribute to this model, since the difference between the three groups is statistically significant.

The assumptions of the multicollinearity and homogeneity of the variance-covariance matrices of each group were tested; given the sample size, the rejection of the normality assumption does not undermine the quality of the model because the

Table 9 Cluster membership

Cluster I		Cluster II		Cluster III	
Country	Distance	Country	Distance	Country	Distance
United States	939	Peru	101	Russia	129
Netherlands	8779	Mexico	17,206	South Africa	19,434
Switzerland	12,306	Brazil	15,653	Greece	13,666
Austria	8056	Chile	24,118	Belgium	12,957
United Kingdom	13,351	Colombia	21,117	France	21,734
Denmark	16,534	Philippines	26,392	Spain	11,804
Sweden	25,573	Thailand	12,996	Hungary	1494
Norway	1957	Vietnam	3594	Italy	16,806
Australia	12,066	Burkina Faso	21,552	Romania	28,982
India	32,319	Cameroon	42,825	Poland	17,306
Canada	1159	Angola	24,822	Germany	13,693
Luxembourg	12,877	Uganda	32,201	Argentina	11,325
Estonia	13,604	Botswana	29,298	Malaysia	24,344
Kosovo	22,631	Guatemala	1541	Indonesia	24,062
Belize	25,095	El Salvador	31,195	Singapore	19,295
Panama	27,349	Bolivia	9673	Japan	25,553
Suriname	21,059	Ecuador	16,639	China	35,791
Uruguay	20,045	Jamaica	13,033	Iran	19,601
Trinidad and Tobago	19,615			Barbados	24,989
Qatar	18,497			Portugal	10,505
				Ireland	22,514
				Finland	20,753
				Lithuania	982
				Croatia	22,929
				Slovenia	2288
				Bosnia and Herzegovina	2779
				Slovakia	14,883
				Costa Rica	17,059
				Kazakhstan	22,419
				Puerto Rico	2957
				Taiwan	11,819
				Georgia	14,551

Source: Authors own table

multivariate normality test is particularly sensitive large samples (Tables 12, 13, and 14).

This study presents the discriminant functions, by canonical correlation, for which it can be concluded that $\lambda = 3785$ corresponds to 76.49% of the variance explained in terms of differences between groups. In contrast, the second

Table 10 Final cluster centers

	Cluster		
	1	2	3
% 18–64 pop: YES: Good conditions to start business next 6 months in the area I live	5089	5754	2918
% within TEA: Consumer-oriented services	4486	6646	4816
% within TEA: Many businesses offer the same product	4396	5593	568
% 18–64 pop age category 25–34: % involved in TEA	1214	2926	1232
% 18–64 pop age category 35–44: % involved in TEA	1097	2683	1054
% 18–64 pop: TEA and some market expansion, no tech (TEA09MEM = 2)	314	658	238
% 18–64 pop middle household 33 ptile: % involved in TEA	96	2546	852

Source: Authors own table

Table 11 ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
% 18–64 pop: YES: Good conditions to start business next 6 months in the area I live	5,577,267	2	88,830	67	62,786	000
% within TEA: Consumer-oriented services	2,627,194	2	186,284	67	14,103	000
% within TEA: Many businesses offer the same product	1,125,468	2	84,200	67	13,367	000
% 18–64 pop age category 25–34: % involved in TEA	1,934,881	2	31,634	67	61,164	000
% 18–64 pop age category 35–44: % involved in TEA	1,738,784	2	31,145	67	55,829	000
% 18–64 pop: TEA and some market expansion, no tech (TEA09MEM = 2)	105,297	2	4804	67	21,918	000
% 18–64 pop middle household 33 ptile: % involved in TEA	1,831,942	2	29,232	67	62,668	000

Source: Authors own table

discriminant function only explains 23.50% of the variance. When analyzing Wilk’s lambda, it is verified that $p = 0.0002$; therefore, we can conclude that the discriminant functions are highly significant. Results show that 95.70% of cases are correctly grouped and confirmed by cross validation. Through standardized analysis, canonical discriminant function coefficients show that the variables, % 18–64 pop: YES: Good conditions to start business next 6 months in the area I live; % within TEA: Consumer-oriented services; % within TEA: Many businesses offer the same product; % 18–64 pop age category 35–44: % involved in TEA; % 18–64 pop age category 45–54: % involved in TEA; % 18–64 pop: TEA and some market expansion, no tech (TEA09MEM = 2); and % 18–64 pop middle household 33% involved in TEA, discriminate between groups. These are the characteristics that most contribute to explain the motivations of the entrepreneurs.

Table 12 Tests of equality of group means

	Wilks' lambda	F	df1	df2	Sig.
% 18–64 pop: YES: Good conditions to start business next 6 months in the area I live	0.348	62,786	2	67	0
% within TEA: Consumer-oriented services	0.704	14,103	2	67	0
% within TEA: Many businesses offer the same product	0.715	13,367	2	67	0
% 18–64 pop age category 35–44: % involved in TEA	0.375	55,829	2	67	0
% 18–64 pop age category 45–54: % involved in TEA	0.36	59,433	2	67	0
% 18–64 pop: TEA and some market expansion, no tech (TEA09MEM = 2)	0.604	21,918	2	67	0
% 18–64 pop middle household 33 ptile: % involved in TEA	0.348	62,668	2	67	0

Source: Authors own table

Table 13 Wilks' lambda

Test of function(s)	Wilks' lambda	Chi-square	df	Sig.
1 through 2	0.097	149,567	14	0
2	0.462	49,376	6	0

Source: Authors own table

Table 14 Classification results

		Cluster	Predicted group membership			Total
			1	2	3	
Original	Count	1	19	0	1	20
		2	0	18	0	18
		3	2	0	30	32
	%	1	95	0	5	100
		2	0	100	0	100
		3	6,3	0	93,8	100

Source: Authors own table

^a95,7% of original grouped cases correctly classified

5 Discussion and Main Conclusions

The study concluded that, between 2010 and 2016, motivation for opportunity is the main motivation that led individuals to become entrepreneurs, regardless of the economic development level of different countries. This conclusion supported the results of the other studies, which indicate that when there is a crisis, individuals see it as an opportunity to start a business, since the period under study is characterized by the international economic and financial crisis that is still recovering; therefore, the results confirm that the existence of a crisis does not, necessarily, mean that there is a necessity motivation to start a business.

This research reveals to what extent a set of characteristics related to the attitudes, behaviors, and perceptions of individuals can positively or negatively influence the motivation of individuals, either by opportunity or necessity. Results show that individuals' willingness to become entrepreneurs depends on age, schooling level, activity sector, and family income. In 2014, the family income was one of the main motivations of the entrepreneurs by necessity willingness to start a business; as confirmed by Oxenfeldt (1943), the unemployed or individuals with reduced employment prospects can become independent through entrepreneurship. Motivation of individuals is also influenced by how individuals perceive the world (external stimuli—which are provided by the environment) which are factors that lead individuals to start a business, an example is the variable “% 18–64 pop: YES: Good conditions to start business next 6 months in the area I live” that, in 2013, had a positive impact on motivation by necessity and in 2014 on motivation for opportunity.

Norway was one of the most distinguished countries due to the increase in percentage terms of entrepreneurs by opportunity between 2013 and 2014, which may be due to the fact that individuals between the ages of 25 and 34 also began to have a greater interest in being entrepreneurs. For Croatia, there has been an increase in motivation by necessity from 2013 to 2014, which may be related to the fact that individuals with an average family income are more motivated to become entrepreneurs due to the eventual needs. It is known that Croatia became a member of the European Union in 2013, and Croatia and Norway have enjoyed bilateral relations since February 20, 1992, where Norway has cooperated closely with Croatia in political terms and the European economy. This may explain the increase in the motivation of individuals for opportunity, rather than an increase in entrepreneurship by necessity, thus being an example of how not always the cultural or political level explains the motivation of entrepreneurs.

In the cluster analysis, one can verify that the independent variables “% 18–64 pop: YES: Good conditions to start business next 6 months in the area I live” and “% 18–64 pop middle household 33%” (Cluster I), Angola and Brazil (cluster II), and Russia and China (cluster III) are different in terms of the perception of opportunities and family income. It is, thus, important to develop policies that allow an increase in entrepreneurial opportunities for entrepreneurs, as well as an increase in family income. Through the discriminant analysis, it is verified that the following variables: “% 18–64 pop: YES: Good conditions to start business next 6 months in the area I live”; “% within TEA: Consumer-oriented services”; “% within TEA: Many businesses offer same product”; “% 18–64 pop age category 35–44: % involved in TEA”; “% 18–64 pop age category 45–54: % involved in TEA”; “% 18–64 pop: TEA and some market expansion, no tech (TEA09MEM = 2)”; and “% 18–64 pop middle household 33%”, are involved in explaining the motivations of entrepreneurs.

The different motivational characteristics that lead the individuals to start their own businesses is a promising approach for further research, as it enables the development of governmental strategies that aim to increase the rate of entrepreneurship.

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