The Premature Mortality of Micro and Small Enterprises

Reyner Pérez-Campdesuñer [*]
Alexander Sánchez-Rodríguez [**+]
Gelmar García-Vidal [*]
Rodobaldo Martínez-Vivar [*]
Jenny Ruiz-de la Peña [***]
Margarita de Miguel-Guzmán [****]

Abstract: *The economy of Ecuador is characterized by a high predominance of micro and small enterprises. Multiple of these organizations are created each year and, as a general rule, the highest percentage die in their first year. Which is a strong reason for the abundance of research aimed at understanding the nature of their behavior. These studies assume different streams of analysis, which are developed from dissimilar areas of knowledge. This particular research seeks to evaluate how multiple variables affect the high annual mortality rate shown by micro and small enterprises. For this purpose, the descriptive statistics of the behavior of the variables are initially used to later identify, through a discriminant analysis, the variables that best explain a possible closure, which are: the attitude of entrepreneurs to face risks and failures, their perseverance, as well as the effectiveness of the feasibility studies that support the birth of the ventures.*

Keywords: Entrepreneurship; Micro and small enterprises; Administration

JEL Classification: L26, M10, M13.

Introduction

A large part of the world's economic activity is made up of micro, small and medium-sized enterprises (MSMEs), which support the majority of the economically active population, especially in developing countries. However, in these countries,

[*] Universidad UTE, Faculty of Law, Administrative and Social Sciences. Quito, Ecuador.
[**] Universidad UTE, Faculty of Engineering Sciences and Industries. Quito, Ecuador.
[+] Alexander Sánchez-Rodríguez is corresponding author. Email: alexander.sanchez@ute.edu.ec
[***] Universidad de Holguín, Faculty of Informatics and Mathematics. Holguin, Cuba.
[****] ATALANTIC Higher Technological Institute, Department of Administration. Santo Domingo, Ecuador.

most of the SMEs that origin these businesses do not usually survive for more than one year, on average.

According to the census of the National Institute of Statistics and Census (INEC), there is a total of 6,089,518 companies in Ecuador. Micro and small companies represent 90.4 percent of the total. These companies are present in various sectors of the economy: agriculture 98.5 percent; extraction 94.4 percent; industry and manufacturing 97.4 percent; construction 97.1 percent; commerce 97.8 percent and services 98.3 percent. The contribution of this type of companies to the Ecuadorian GDP exceeds 25 percent and employs 70 percent of the economically active population. It is notable that this behavior is not particular to this nation, but rather the majority of the economies of the region with only small variations.

The enormous presence of micro and small companies can be considered one of the reasons that gives rise to the proliferation of research on these types of organizations at a national and global level. They are heterogeneous in terms of the objective towards which they are oriented: social responsibility (Canales, 2016; Aastha & Shazi, 2019), innovative culture (Abdul-Halim et al., 2019; Gambardella et al., 2015), human resource management (Adla & Gallego-Roquelaure, 2019), cost estimation (Agyekum – Mensah, 2019), legislative influence (Al Anshori & Ahamat, 2019), gender focus (Arun et al., 2019), personality (Franco & Prata, 2019), among other aspects.

One of the most analyzed topics within the universe of research related to SMEs is the high mortality rate that these businesses present in their first years (Ahlstrom & Bruton, 2010). In general, the vast majority do not exceed the first year. Two main groups of causes are identified in this phenomenon: 1) related to the environment and the degree to which it favors or limits entrepreneurship through public policies and financing (Eesley, 2016) and 2) related to the own skills of entrepreneurs and founders: their ability to take risk, leadership, tolerance of ambiguity, relational capital, among other factors (Kacperczyk & Marx, 2016; Yamakawa et al., 2015).

This research aims to analyze, in the context of companies in Ecuador, how the variables associated with the environment, the competencies of the entrepreneurs and the management methods with which the enterprises operate, condition or influence the survival of the ventures.

Literature review

Analyzed variables that impact on entrepreneurship and its evolution

Sørensen & Sharkey (2014, p.81) point out that: "the most basic act of entrepreneurship is the decision of an individual to resign from a paid job and assume the responsibility and risk of operating a new company". According to De Massis et al. (2018),

an entrepreneurship is the identification, evaluation and exploitation of opportunities. Those authors explain that in this way it is possible to focus the research on the processes through which individuals can project, develop and exploit opportunities by creating new organizations or within existing ones. Similarly, they identify two groups of variables that condition the development of an enterprise: financial and social capital.

For the construction of the referential framework, scientific articles were reviewed to identify in a general way the variables analyzed in the investigations related to the subject matter under study. Eighty variables were identified on which the investigations are developed to a greater or lesser extent, and the relationship between these variables and the other variables under study was established, depending on the context in which it was used. The results are summarized in Figure 1.

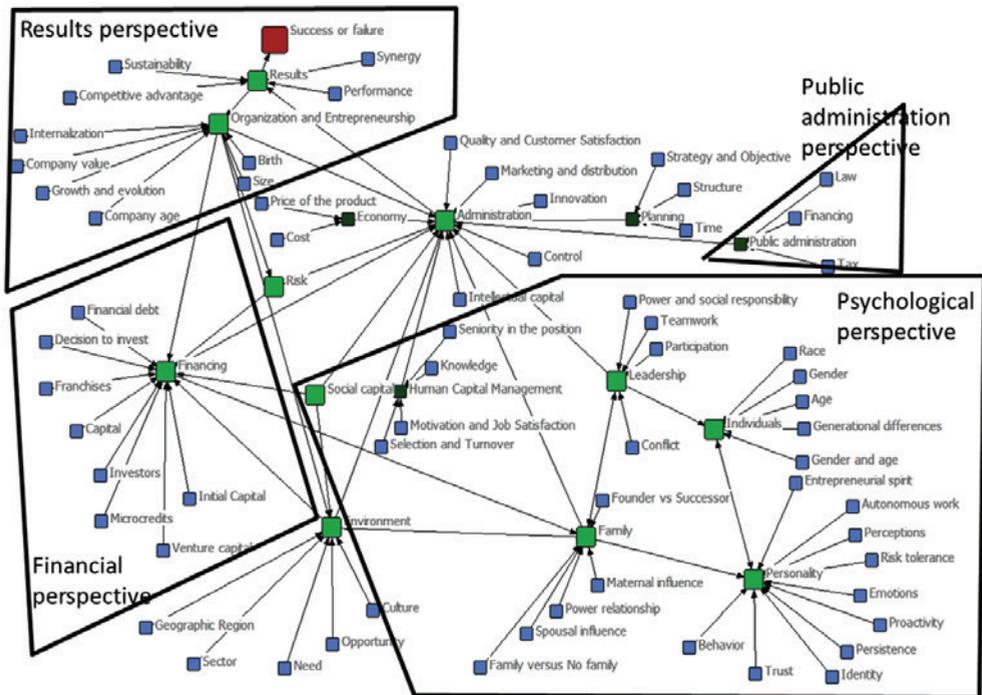Figure 1: Links between the variables analyzed in the reviewed research.

Figure 1 presents presumed perspectives that integrate a variety of variables present and extracted from the reviewed literature. Each of the identified variables is recognized by multiple authors, although some are much more recognized than others; as is the case of variables related to the family and the individual, both from the gender perspective and from the analysis of various personality traits.

The psychological perspective is, perhaps, the most addressed variable, used from different points of view. The personality of the individual is valued through risk tolerance, persistence, proactivity, confidence and self-confidence, the assumed behavior, emotions that are generated, the position when questioning if work for another or for oneself, among other aspects. Similarly, the individual and its characteristics are analyzed from other conditioning variables such as: age, race and gender, specifically the latter is one of the most treated (Jennings et al., 2016; Malmström et al., 2017). Both, the individual in general and the personality in particular, are closely related to family influence. This is another of the edges addressed with great regularity, deep into aspects such as: maternal influence, influence of the spouse, the family and power relationships that occur in the family, and its impact on entrepreneurship and its evolution (Hatak & Zhou, 2019).

The financing perspective is other variable frequently analyzed in investigations. As part of this perspective, the variables included are: investors and decision to invest, financial debt, microcredit, initial capital and risk capital (Ragozzino & Blevins, 2016). To a lesser extent, the analysis is also carried out from the perspective of the influence of the public administration, starting from the evaluation of how the measures impact the enterprise. This is related to the limitations and opportunities that the public administration generates for entrepreneurship from the regulations, sources of financing and tax policies that are dictated or applied.

The administrative perspective is located in the central position as a result of being recognized as a science where other disciplines converge. Administrative sciences are nourished by the contributions of each of the disciplines discussed above, while considering other variables of it as a discipline. Among them are: the economy, planning, commercialization, quality, innovation management and intellectual capital (Byun et al., 2019; Chirico et al., 2020).

The perspectives are not separately but interconnected as being part of the same object of study. For this reason, multiple investigations analyze the link between administration and family, the psychological characteristics of individuals (leaders or workers), financing or public administration (Hubner et al., 2019). There are other variables that influence several dimensions at once, such as those related to the environment and financial risk management or not.

All the previous variables and perspectives, mediated or not by management, influence the general characteristics of the venture, such as: value or age of the company, growth and evolution, size, among others (Grove & Cook, 2011) and also in the results expressed in their performance, synergy and sustainability (Spigel, 2017). Finally, the behavior of these variables will result in the success or failure of the venture (Baù et al., 2017; Sui et al., 2019).

Previous studies reported the existence of the groups that are analyzed in this research. Grégoire et al. (2006) highlight that research on entrepreneurship tends to be fragmented, even though gradually cores within this field are defined. In the opinion

of the authors this is caused by three different reasons: (1) the differences between the way of operating the enterprises and their environment; (2) the field of knowledge from which the study is carried out conditions the researcher's interest and may respond to the sciences of psychology (personality and associated emotions), administration, public administration, understanding and characterization of differences of gender or other demographic variables such as age; and, lastly, (3) the influence of the environment, either familiar, sectoral, economic or legislative, as well as the structure or attractiveness of the market and competitive advantages, are explored. In addition, research on the influence of social capital and financial capital on startups are identified. Based on these three great reasons, several authors performed studies that connect two or more variables addressed in these groups and the between the groups themselves.

On the other hand, Blackburn & Smallbone (2008) point out that research on entrepreneurship is oriented to the following groups of variables: the family as owner of the business, individual factors of the leader or owner (age, gender, race, knowledge), public administration, financial factors (financial risk), administration (leader, transfer of power), human resources, intellectual capital, marketing strategy, ethics, work methods), relational capital, organization (technology, form of business), results (contribution to the economy), environmental factors (globalization, rural environment, deprivatization). Busenitz et al. (2014) summarize these variables at four levels: the individual or work group; the organization model; the opportunities generated by the environment and the other variables that condition the environment.

Cornelius et al. (2006) carry out a similar study where the following variables are identified as groups of analysis of entrepreneurship: environment (innovation and regional development), administration (resource management), public administration (political aspects), ethnic aspects, financial elements (risk capital) and individual conditioning variables of self-employment. Furthermore, these authors analyze the evolution of these concepts over three periods between 1986 and 2004.

Burton et al. (2016) value the variables that condition the impulse to be an entrepreneur; among those who value: salary, the search for independence and the development of an innovation process. Block et al. (2013) identify two levels of variables that condition the start of the venture. On the one hand, there is the individual level with the variables: human capital, attitude towards risk, the initiative of the individual. They also consider other variables typical of the environment or the country, such as: the level of risk tolerance inherent in the culture, the level of innovation production in the country and the administrative difficulty of starting a new business in correspondence with the context of the nation.

Lampe et al. (2019) conducted a study on the results of research carried out and published from 1936 to 2017 related to entrepreneurship. As a result, they identified four groups of variables towards which the research is oriented, these are: the micro and macro business environment, market orientation, risk capital management and

knowledge management of the organization. In addition, they identify disciplines related to administration such as: strategic management, innovation management, human resources and their psychology, business management, finance and accounting, and organizational design.

Mueller & Shepherd (2016) establish a group of variables to be analyzed in entrepreneurial investigations: people, the environment, the organization, its processes and, in interaction with all of them, risk management. Likewise, they propose a logic for the evolutionary development of enterprises based on the questions: "who am I", "what and who do I know". According to the answers of these questions, the next phase is assumed with the question "what can I do", which leads to interaction with other people and the establishment of an organizational commitment. This can lead to a rethinking of the cycle of questions or the establishment of new goals that, if achieved, they could allow the expansion of the market and the expansion of entrepreneurship. The union of the personality traits and the characteristics of the environment determine the discovery and exploration of opportunities to undertake, that may or may not lead to the development of an entrepreneurship.

The different groups of variables referenced by the authors are summarized in Table 1. Previous table shows the identification of the groups analyzed by different authors. However, it is necessary to point out that sometimes the edges between the identified groups and the belonging of the variables to one or the other group is only the result of the criteria adopted by the authors to the classification.

Table 1: Summary of the groups of variables analyzed in the entrepreneurship investigation.

Variable groups	Authors						
	Grégoire et al. (2006)	Blackburn & Smallbone (2008)	Busenitz et al. (2014)	Cornelius et al. (2006)	Block et al. (2013)	Lampe et al. (2019)	Mueller & Shepherd (2016)
Individual	x	x	x	x	x		x
Family	x	x	x	x			
Demographic variables (age, sex, race)	x	x		x			
Social capital	x	x					
Financial capital	x	x		x		x	
Risk management	x	x		x		x	x
Administration	x	x	x	x	x	x	x
Public administration	x	x		x			
Environment	x	x	x	x	x	x	x
Results		x					

Source: own elaboration.

Lanivich (2015) develops an investigation to test a group of hypotheses related to the idea that the knowledge acquired through lived experiences is key for the selection of an alternative of action for the future, and, consequently, they affect the performance of the enterprises in the same measure. Marvel et al. (2016) focus their research on evaluating how human capital and contingency factors, such as the strategies, alliances and social networks influence the ability of organizations to recognize opportunities and manage risks and results.

Attributes or conditions that favor or limit the abandonment strategy or the mortality of SMEs

Failure can be a double-edged sword. On the one hand, failure can discourage entrepreneurs from starting another business because business failure represents a personal loss (emotional and financial). On the other hand, it is a source of learning from mistakes that should be avoid in new businesses. As a consequence, failure can be seen as an encouragement to overcome barriers for those who perseverate. Those who persist after failure (Coad et al., 2013; Frankish et al., 2013) generally increase their human capital, as they have increased their abilities to judge the relevance of the information, identify business opportunities and manage overconfidence. In addition to the ability to recover from the pain caused by business, failure is important in building resilience. According to Baù et al. (2017), the previous alternatives will be correlated with the age and gender of the entrepreneurs during and after failure. Other authors (Behrens & Patzelt, 2016) value that the decision to close a project in the event of failure is related to the impact on the product portfolio and the growth of the company. Davidsson and Gordon (2016) argue that a major macroeconomic crisis triggers four alternative responses for emerging entrepreneurs: disconnection, delay, compensation, and adaptation.

Zhang & Cueto (2017) highlight how distinctive personality traits such as: self-confidence, selfishness, willingness to risk and control and excess optimism, condition the performance of the ventures and consequently their success or failure. Dimov & De Clercq (2006) explain that enterprises are prone to fail because they have not had time to develop internal performance, routines and labor relations. Additionally, emerging enterprises lack external legitimacy with potential investors, buyers, suppliers, employees, and other interested parties. Likewise, those authors recognize that failure is conditioned by the relationship of the venture with venture capital financiers. They tend to learn from the failures of others and accumulate experience that allows them to predict the failure and help entrepreneurs either through the establishment of capital relations or by direct advice on the business.

Entrepreneurs invest financial and personal resources in the creation and development of their business. For this reason, they are intensely emotionally linked to it and experience negative emotions in the face of business failure. Among the negative

emotions, they can feel: disappointment, sadness, fear, anger, shame, decreased self-esteem, among others. These emotions can hinder learning once they are above a certain level (Yamakawa et al., 2015). According to Funken et al. (2020), while failure encourages entrepreneurs to learn, it also generates strong emotions that can hinder learning behaviors. These authors suggest that there is an inverse parabola between learning by failure and the speed of the latter, because a high speed of failure generates high emotional disturbance and makes learning difficult.

According to the aforementioned authors, facing failures generates benefits such as: increased attention, generation of information and stimulation of exploration. Only a positive approach to mistakes by entrepreneurs can generate knowledge from problems.

The results of Mueller & Shepherd (2016) reinforce the idea that previous failure experiences become a key aspect for identifying and taking advantage of opportunities. Previous failure experience also favors prior professional knowledge. Yamakawa et al. (2015) assess how, both the previous failure, as well as those of the new attempt, influence the motivation and learning of entrepreneurs. According to these last authors, these variables condition the growth and success of new businesses.

Peng et al. (2010) carry out an exhaustive study of how local or national governments in general can limit or favor the development of enterprises. Specifically, they analize how the laws that are defined to face bankruptcy influence the closure of organizations. With similar purposes, Rauch & Rijsdijk (2013) assess how, in general, the management of human capital and, in particular, its levels of knowledge, condition the growth or failure of entrepreneurship.

Holland & Shepherd (2013) study what attributes or conditions favor or limit the abandonment strategy in the face of an entrepreneurial failure. According to these authors, business persistence occurs when the entrepreneur chooses to continue with a business opportunity, regardless of the negative effects or the existence of other attractive alternatives. Business persistence is influenced by personal characteristics and feedback from the environment. The level of persistence that characterizes the entrepreneur and his perception of: the possibilities of financial return, the other non-financial benefits, the cost of assuming a change and the perceived probability that these are the results, determine the strategy of abandonment or persistence.

According to Detienne & Chirico (2013), the decision to close a family business is not only conditioned by its level of economic performance but is influenced by other variables related to the socio-emotional ties that exist within it and the way in which that these connect with family members. Collewaert & Sapienza (2016) focuses on the technology industry and assesses some variables that condition the intention to leave the venture, such as: investment (age of the investor, investment time, investor control, flow of capital to the company, income tax rate), the organization (company controls, performance, human capital and heterogeneity of the work team), the entrepreneur (age) and the conflicts that arise between investor and entrepreneur.

Despite the importance given to the failure of new companies and the amount of research that has been carried out on the subject, the authors of this paper state that not enough research has yet been done on how various administrative decisions affect the probability of failure or closure of the enterprise. Especially in its first year of life, given that the research that seeks to analyze the problem focuses mainly on the psychological dimension of decision makers and does not assess other variables of an administrative nature.

Methodology

The first step of this research was modeling the processes by which the ventures arise and are launched, as well as the variables and decisions that condition their success or failure.

Definition of the variables to be studied

The variables under analysis were established according to the references of previous investigations and the inclusion of another group of variables selected by the researchers. This way of working seeks to achieve a general characterization of companies and entrepreneurs, as well as other specific variables related to the competences of the entrepreneurs and the management methods used and the results shown by the organizations under study.

Table 2 summarizes the variables under analysis. According to the defined variables and the objectives of the research, the methodology seeks to:

- Characterize the behavior of the variables in the different enterprises under study.
- Assess whether there are differences in the behavior of the variables analyzed between the different groups of behaviors.
- valuate how the different analyzed variables influence the dependent variable perception of the probability of closure.

Table 2: Variables under analysis.

Variable group	Variables
Businessmen	Sex, Age, Educational level
	Attitude towards failure, risk, perseverance and leadership. Number of previous ventures and link of these with the current business.
Business	Sector, Type (small and micro), Number of workers, likelihood of foreclosure.
Environment	Level of competence, Public administration (processing facilities, delays in processing, export and income tax), Financing (Financial facilities and interests)
Management methods	Quality of the feasibility study: Compliance with the estimated demand, Compliance with the estimated costs Logistics management: Supplier selection, Supplier facilities, Inventory level, Payment facilities, Commission inventories Marketing management (Promotion policies, Advertising, Advertising impact, Sales skills, Attractive prices, Cost-price ratio, Product quality) Human resources management: Importance of human resources, Interchangeability of human resources, Motivation, Previous experience, Training for the business, objective of the worker, Need to control the worker Economic management: Accounts payable and accounts receivable, high inventory levels, opportunity costs, income and expense levels

Source: own elaboration.

This research is aimed at evaluating the following general hypotheses:

General hypothesis 1: The behavior of the variables: attitude towards failure, attitude towards risk, perseverance, leadership, ease of procedures, economic performance, logistics performance, marketing, human resources, level of competence and the availability of financing, condition the probability of success or failure of new ventures.

General hypothesis 2: The degree of incidence of the variables in the success or failure of the enterprise varies depending on variables that make up the category of diversity such as: type of company (family or personal), size of the company, economic sector or the age or sex of the entrepreneurs.

Design of measurement methods

The established variables were characterized through direct interviews with the businessmen and the application of a questionnaire designed for the proposed purposes. In the design of this instrument, dichotomous, Likert, open and multiple choice scales were used. Taking the above into account, 58 items were developed, related to the attitude towards failure, risk and persistence, perception of leadership, management methods and perception of the influence of the environment. The instrument used is shown in appendix 1.

The validity of appearance and content was verified by consulting seven experts: all with previous research in the field of administration and management, in

the teaching of administrative sciences, and in consultancies related to business administration and entrepreneurship. The internal validity was evaluated through the correlation analyzes that were carried out as part of the investigation to verify the hypotheses assumed and that are derived from the theoretical review and that will be presented as part of the results.

An analysis of the reliability of the instrument was carried out through the Cronbach's Alpha coefficient, which yielded a value of 0.843, a figure that is considered significant to accept the reliability of the instrument. Similarly, the value of this coefficient was analyzed for each of the dimensions that make up the instrument: attitude towards failure, attitude towards risk, attitude towards perseverance, perception of leadership, administration methods, perception of the influence of around. In all the dimensions, the values of the Cronbach's Alpha coefficient ranged between the figures of 0.746 for the perception of leadership dimension and 0.892 for the attitude towards failure.

Definition of population and sample

For the study, the sectors of agriculture, livestock, forestry and fishing, commerce and services were chosen, since they are the ones that have the greatest weight in the local economy and where the largest number of companies that are born and die before reaching the first year are reported. As the goal of the research is to analyze the causes that condition the high failure rates of nascent ventures, we worked with small companies less than a year old. In the sectors under study in the province in 2018, a total of 2,508 companies were registered as created between micro and small companies, which are distributed by sector as shown in Table 3. It should be clarified that, in Ecuador, for the classification of companies, it is established that micro-companies must have between 1 and 9 workers and less than $ 100,000 of income. On the other hand, the small ones can have between 10 and 49 workers and incomes between $ 10,000 and $ 1,000,000.

Table 3: Sample size description.

Sectors	Population		Sample (planned/actual)	
	Microenterprise	Small Business	Microenterprise	Small Business
Agriculture, forestry and fishing	501 (20%)	3	67/67	3/2
Commerce	964 (39%)	10	129/129	10/7
Services	1023 (41%)	7	137/137	7/5
Total	2488	20	333/333	20/14
	2508	353/347		

Source: own elaboration.

The sample size for the study was determined based on this universe, and by applying expression 1 (Spigel & Stephen, 2009).

$$n = \frac{z^2 * p * q + N}{e^2 * (N-1) + (p * q * z^2)} \tag{1}$$

Where:

n: sample size

p: probability of success and q: probability of failure = 0.5

z: Confidence level = 1.96

N: Population size

e: investigator error was set at 5 percent.

A sample size was established for the micro-enterprises, which are the majority, and an attempt was made to access 100 percent of the small companies. Only 20 companies belong to that category. The sample design plan was possible to comply with 100 percent in the case of micro-enterprises. However, in the case of the small ones, since they tried to work with 100% because they were few, it was not possible to get them to give access to information in all cases. It was only possible to work with 70 percent. According to the established sample size and according to the composition by sectors, stratified sampling was applied as shown in Table 3.

Table 4 presents a general characterization of the sample. As it can be seen, there is a predominance of family businesses with 80 percent. The male sex was present in 56 percent of the respondents in the companies. The age between 30 and 60 years represents almost 70 percent of the enterprises and the educational levels I and II are also represented with 80 percent of the total of the respondents.

Application of the instruments: The instruments were applied in the 353 ventures with the collaboration of students who contributed to applying each of the instruments designed with the information collected. A matrix of 347 rows and 69 columns was formed.

Table 4: Characterization of the sample.

Criteria	Categories	Value	Percentaje
Type of Company	Family businesses	278	80
	Non-family businesses	69	20
Sex	Female	152	44
	Male	195	56
Age	18-30	28	8
	31-60	239	69
	More 60	80	23
Educational Level	I	140	40
	II	138	40
	III	69	20

Source: own elaboration.

Processing and analysis of the results: The processing of results begins with a descriptive analysis of the variables under study. Then, we proceed to apply the ANOVA test with the Kruskal-Wallis statistic in order to verify whether the behavior of the variables differs between the different behaviors of the diversity category variables that characterize the sample. Once the variables are characterized, a discriminant analysis is applied, assuming as a dependent variable the perception of the probability of closing the business and as independent variables the different variables object of analysis, summarized in Table 3.

Discriminant analysis creates a predictive model for group membership. The model is made up of a discriminant function based on linear combinations of the predictor variables that provide the best possible discrimination between the groups. The discriminant function for the ith function is:

$$D_i = a + b_1 x_1 + b_2 x_2 + \ldots + b_n x_n$$

Where:
D_i: predicted score (discriminant score)
x: predictor variables
b: discriminant coefficient

Once the discriminant function is determined, the groups of companies analyzed differ. The usefulness of the function lies in its ability to classify, based on the predictors, the companies in their tendency or not to fail. The classification function is derived from linear discriminant functions to achieve this purpose. This function can be applied to new cases that have measurements for the predictor variables and for which the tendency to a membership group is unknown.

Group equality tests allow measuring the potential of each independent variable before creating the model. Each test shows the results of a one-way ANOVA for the independent variable, using the grouping variable as a factor. If the significance value F is greater than 0.10, the variable probably does not contribute to the model.

Wilks' lambda is another measure of the potential of a variable. Small values indicate that the variable is better for discriminating between groups. The Eigenvalues table provides information on the relative efficacy of each discriminant function. When there are two groups, the canonical correlation is the most useful measure in the table, and is equivalent to the Pearson correlation between the discriminant scores and the groups.

Classification functions are used to assign cases to groups. There is a separate function for each different behavior group of the dependent variable. For each case, a ranking score is calculated for each function. The discriminant model assigns the case to the group whose classification function obtained the highest score. Standardized coefficients allow comparing the variables measured on different scales. The coefficients with large absolute values correspond to variables with greater discrimination capacity.

Results

As a result of the application of the different research instruments, it was possible to obtain a general characterization of the variables under study, which is summarized in Table 5.

The analyzed variables, in general, showed a favorable behavior. The surveyed entrepreneurs were characterized by perceiving the failure as part of management, an opportunity to learn, consequences of the risk that must be assumed, evidence of an incapacity that must be overcome and to a lesser extent as a blow that gives life. All these ways of perceiving failure manifest a positive attitude towards failure. It was established that nearly 50 percent of the entrepreneurs had had previous ventures related to the business, in which they had failed on average twice. Around 38 percent recognized that previous failures had endowed them with experience for the current venture. The quality of persevering in the face of problems was also favored as one of the essential attitudes of the entrepreneurs studied.

Table 5: Description of the variables under study.

Variable level	Variables	Average (Xmed)
Individual	Failure attitude	4.55
	Risk attitude	4.26
	Perseverance attitude	4.56
	Leadership	3.5
Management methods	Quality of the feasibility study	1.77
	Logistics Management	2.52
	Commercial management	3.15
	Human resources management	3.13
	Economic results	2.68
Influence of the environment	Level of competition	4.49
	Public administration	4.37
	Financing facilities	2.95

Source: own elaboration.

A similar perception is appreciated regarding the risk that must be assumed in an enterprise, perceiving it as part of the administration, or the path to success. It is also appreciated as a response to the opportunities offered by the environment. However, leadership was not recognized as a need or advantage of management. It is assumed that the authority rests on the condition of being the owner and, therefore, the owner says what must be done and the employee must comply with the guidelines or leave the business. Behaving as a good example and charisma are not recognized as a source of power. The most recognized quality as a source of power, apart from business ownership, is derived from family authority, generally as a father or mother.

Regarding the management methods, the worst evaluated variable was the quality of the reliability studies. This variable was characterized from the relationship between the correspondence of the income and expenses predicted in the study and those achieved in practice. For the same reason, economic performance was not evaluated favorably: about 55 percent of respondents are dissatisfied with income and expense levels. Regarding other economic results: the relationship between income and expenses is negative in more than 81 percent of the companies studied. Similarly, 75 percent of the companies operate with high inventory levels. However, it is notable that the opportunity costs are low, which is understood from the high levels of inventories. The payable accounts are high, which is considered favorable because it gives more operation coverage to the business, although it increases debt levels. The accounts receivable levels are very low since these ventures generally do not provide payment facilities, which although it does not affect the economy, limits sales opportunities.

In logistics management, the non-selection of suppliers is identified as a difficulty by almost all of the enterprises. However, there are ventures that have suppliers that offer facilities and deliver inventories in commissions. Human resource management is not entirely favored either: the motivation of the workers, their previous experience and their management training for the business is low for about 90 percent of the respondents. All entrepreneurs perceive workers as a substitutable resource for another on the market, whose sole function is to abide by the owner's guidelines and which must be constantly monitored. Although, contradictory, they say that human talent is important.

Marketing management is perhaps the most favored variable. 40 percent of the entrepreneurs carry out promotional actions, 66 percent consider having attractive prices that correspond to the quality of the product and the cost of operations. However, sales skills and the real possibilities of evaluating the impact of advertising actions are considered insufficient by more than 90 percent of the ventures.

Regarding the environment, 100 percent of entrepreneurs agree to face a highly competitive environment, with a public administration characterized by levels of procedures for numerous, lengthy and cumbersome approvals, as well as high taxes on exports and income. It is stated that 60 percent of entrepreneurs consider that financing facilities exist and around 40 percent consider that the interest for financing is high.

After the behavior of the analyzed variables is characterized, it is desired to know if there are differences in the behavior between them according to the different variables of the diversity that is analyzed. For these purposes, the variance analysis test was performed for the means of classification variables of the companies: size, sector and family businesses or not, and similarly, for classification variables of entrepreneurs: sex, age and level of training. The results are shown in Table 6.

Table 6: Results of comparison of the variables by diversity groups.

Variables		Type of Company		Sector			Family Business		Age			Sex		Educational level		
		Micro	Small	Farming	Commerce	Services	No	Yes	-30	30-60	+60	Female	Male	I	II	III
Failure	Xmed	4.63	2.79	4.88	4.85	4.11	4.57	4.55	4.75	4.60	4.36	4.60	4.54	4.50	4.61	4.57
	Sig	.000		.000			.847		.087			.552		.629		
Risk	Xmed	4.33	3.00	4.54	4.52	3.92	4.29	4.27	4.50	4.31	4.11	4.35	4.25	4.28	4.27	4.29
	Sig	.000		.000			.882		.062			.316		.952		
Perseverance	Xmed	4.63	3.00	4.86	4.85	4.15	4.59	4.56	4.86	4.60	4.36	4.63	4.55	4.54	4.59	4.59
	Sig	.000		.000			0.712		.006			.436		.849		
Leader	Xmed	3.50	3.66	3.48	3.54	3.49	2.97	3.64	2.89	3.52	3.69	3.47	3.52	3.51	3.77	2.97
	Sig	.311		.203			.000		.000			.930		.000		
Feasibility	Xmed	1.64	5.00	1.12	1.21	2.63	1.70	1.79	1.29	1.72	2.10	1.63	1.82	1.86	1.72	1.70
	Sig	.000		.000			.653		.042			.365		.708		
Economy	Xmed	2.68	2.69	2.69	2.64	2.72	3.00	2.61	3.06	2.60	2.81	2.62	2.70	2.60	2.62	3.00
	Sig	.954		.203			.000		.000			.123		.000		
Logistics	Xmed	2.52	2.79	2.55	2.49	2.55	2.48	2.54	2.48	2.55	2.48	2.59	2.51	2.55	2.52	2.48
	Sig	.006		.595			.295		.263			.137		.485		
Marketing	Xmed	3.15	3.23	3.13	3.14	3.18	3.09	3.17	3.08	3.17	3.12	3.17	3.15	3.18	3.16	3.09
	Sig	.410		.464			.065		.360			.688		.174		
Human Resources	Xmed	3.07	3.14	3.04	3.04	3.11	3.00	3.09	3.00	3.08	3.09	3.10	3.06	3.09	3.09	3.00
	Sig	.384		.127			.034		.421			.391		.105		
Competition	Xmed	4.50	4.43	4.51	4.48	4.50	4.62	4.58	4.68	4.44	4.58	4.41	4.52	4.43	4.49	4.62
	Sig	.694		.902			.506		.116			.106		.130		
Public administration	Xmed	4.40	4.39	4.39	4.41	4.39	4.44	4.39	4.46	4.41	4.34	4.33	4.42	4.38	4.40	4.44
	Sig	.966		.916			.502		.384			.027		.619		
Financing	Xmed	2.95	3.11	2.87	3.06	2.90	3.00	2.95	2.93	3.00	2.84	2.84	3.00	2.91	2.98	3.00
	Sig	.359		.214			.835		.548			.315		.806		

Note: Statistically significant relationships are underlined and shown in bold.

Source: own elaboration.

From the analysis of Table 5 it is possible to say that the behavior of the analyzed variables does not tend to show variations with respect to the different classification variables. There are notable exceptions. There are variations in the behavioral means of the variables attitude to failure, risk and perseverance in relation to the size of the company and the sector in which they operate. This is, to some extent, understandable from the level of investments and financial risk that the variation in size presupposes, as well as the increased complexity of management. Likewise, the operating characteristics of companies change according to the sector where agriculture has a high dependence on climate and safety and its lower control capacity. Meanwhile, the characteristics of commerce presuppose greater complexity in logistics operations and purchase risks, while services presupposes less risk.

According to the analysis carried out, the variables that characterize the individual such as: their attitudes before failure, risk taking, perseverance and leadership, as well as the quality variables of the feasibility study and economic performance are those that most affect the perception of business closure. For similar reasons, changes in the behavior of the means are observed in the efficacy of the feasibility studies, where both size and sector determine changes.

Regarding the classification in family companies or not, there are differences in the leadership variable, which is understandable since these organizations have a markedly different culture, with particular affective ties. The paternal or maternal authority over its members is also present. These particularities also show their influence on the methods of human resource management and to a lesser extent on economic performance. Aspects of affective capital are valued in addition to financial capital.

In the variables of personal characteristics of the entrepreneurs, there is only a difference between the behavioral means of the variables regarding leadership and economic performance. The recognition of leadership increases with age, which is not understandable since people under 30 seek their own experience and decision-making, while those over 60 have as a rule a more flexible and greater emotional stability. However, the level of training shows different behavior as leadership is recognized less. They tend to be more persistent people in defending their points of view, protected by the recognition that their titles and self-esteem certify. Related to these behaviors, the distinctions in the economic performance variable are manifested where the differences in perception regarding these variables are conditioned by age and educational level. The differences observed regarding sex and the evaluation of the level of competence are interesting. However, this aspect is not studied in depth because it does not directly affect the objective of this research.

After this analysis, the relationship between the studied variables and the perception of business closure by the entrepreneurs was deepened. It should be noted that in the study carried out it was observed that more than 80 percent of the studied companies perceived the closure of the venture as highly probable. The variables valued in Table 5 were introduced for the analysis. The determinant analysis and the

ANOVA test allowed establishing that only four had discriminating power regarding their incidence on the probability of closing the business (see Table 7). Both analysis corroborate the potential of the independent variables for the construction of the model, as observed in the four cases, the values of F are less than 0.10.

Table 7: Introduced variables /excluded variables[a,b,c,d]

Step	Introduced	Wilks´ Lambda							
		Statistical	gl1	gl2	gl3	F exact			
						Statistic	gl1	gl2	Sig.
1	Feasibility	0.018	1	1	345.000	18585.259	1	345.000	0.000
2	Perseverance	0.014	2	1	345.000	11954.329	2	344.000	0.000
3	Failure	0.013	3	1	345.000	8608.902	3	343.000	0.000
4	Risk	0.013	4	1	345.000	6578.810	4	342.000	0.000

At each step the variable that minimizes the global Wilks´ lambda is introduced.
a. The maximum number of steps is 26.
b. The minimum partial F to enter is 3.84.
c. The maximum partial F to exit is 2.71
d. The level of F, the tolerance or the VIN are insufficient to continue the calculations.

The table 8 suggest that attitude towards failure, risk assumption, perseverance and efficacy of the feasibility studies are the variables with more discriminant power among the analyzed variables. According to the results, each variable in its discriminant model is significant. Table 8 shows the Eigenvalues according to which it is possible to say that the found discriminant function is 99.4 percent effective. Once again, a low Wilks´ lambda value is observed.

Table 8: Eigenvalue and Wilks´ Lambda.

Function	Eigenvalue	% Variance	% Accumulated	Correlation canonica
Eigenvalue	76.945[a]	100.0	100.0	0.994
Contrast of functions	Wilks´ Lambda	Chi-square test	gl	Sig.
Wilks´ Lambda	0.013	1494.110	4	0.000

Source: own elaboration.

Table 9 shows the coefficients of the classification function and structure matrix. As observed, the coefficients for attitude towards failure, risk, and perseverance are lower for the classification function No. This means that entrepreneurs who show a positive attitude towards failures, greater risk tolerance and are more persevering are less likely to close the business. Regarding feasibility, the behavior is reverse: as the quality of the feasibility study decreases, there is a greater probability of closure.

Table 9: Classification function coefficients.

	Sustainability		Structure matrix
	Yes	**No**	**Function**
Failure	64.103	38.943	-0.281
Risk	21.362	14.069	-0.147
Perseverance	110.067	66.582	-0.387
Feasibility	23.319	109.006	0.831
(Constant)	-492.641	-447.677	

Note: Fisher's linear discriminant functions

Source: own elaboration.

The structure matrix shows the correlation of each predictive variable with the discriminant function. Based on this result, it is noted that the effectiveness of feasibility studies better discriminates between enterprises with a tendency to be sustainable or not.

Table 10 shows the practical results of using the discriminant model. As it can be seen, of the 68 cases that exceed one year of life, the discriminant analysis manages to predict 67 of them based on the behavior of the selected variables, for a success rate of 98.52 percent. On the other hand, in the case of the 272 companies that did not exceed the year, 100 percent of them were predictable by analyzing the four selected variables, which is interpreted as a good predictive power of the result from the analysis of the discriminant.

Table 10: Results of classification [a,c]

		Sustainability	Predicted membership group		Total
			0	**no**	
Original	Count	0	279	0	279
		no	1	67	68
	%	0	100.0	0.0	100.0
		no	1.5	98.5	100.0
Cross validation[b]	Count	0	279	0	279
		no	0	68	68
	%	0	100.0	0.0	100.0
		no	0.0	100.0	100.0

a. Correctly classified 99.7% of the original grouped cases.

b. Cross validation only applies to the cases in the analysis. In cross validation, each case is classified using the functions derived from the rest of the cases.

c. Correctly classified 100.0% of grouped cases validated by cross-validation.

Source: own elaboration.

Discussion

The results presented in this paper show correspondence with previous research regarding the incidence of variables related to the characteristics of the entrepreneur in the performance of the venture. The influence of attitude towards failure or learning derived from previous failures in the decision to close the business correspond to the results reported by several authors (Coad et al., 2013; Frankish et al., 2013; Funken et al., 2020; Mueller & Shepherd, 2016). Nevertheless, it was not possible to distinguish differences of these influences according to the sex or age of the entrepreneur.

Therefore, the statements of Baù et al. (2017) are not corroborated or denied. The previous alternatives are correlated with the age and gender of the entrepreneurs during and after failure. Similarly, the influence of attitude towards risk correspond to what was exposed by Zhang & Cueto (2017). The influence of attitude of persisting and the leadership of entrepreneurs identified as variables of incidence in the presumed early closure of the ventures was previously recognized by different authors (Holland & Shepherd, 2013; Yamakawa et al., 2015).

Although the possible incidence of environmental elements was investigated: such as the public administration and, as an expression of this, the administrative procedures that are established, as well as the duration of these and the income or export tax policy; it was not possible establish that these variables show a direct relationship with the early closure of the ventures. Since the administration affects equally both companies that close and those that do not. For this reason, it was not possible to corroborate or deny the statements made by previous research such as: Peng, et al., 2010; Rauch & Rijsdijk, 2013. Similarly, considering that nearly 80% of the enterprises studied are family-owned, it was not possible to establish the incidence of this variable in the dependent variable under analysis, an aspect that other researchers did deepen (Detienne & Chirico, 2013).

In the previous studies that served as a referential basis for this research, it was observed that several researchers analyzed the incidence of the administration mechanisms or variables related to these, such as: sources of financing and risk management, commercialization, quality and the management of intellectual capital (Chirico et al., 2020). However, it is the criteria of the authors that the incidence of these variables is not one of the most addressed in the literature. Specifically, this research shows that the mortality of the enterprises with less than one year of foundation is influenced by the non-correspondence of the projections that served as the basis for their creation with the actual performance achieved by the business. This occurs for several reasons. On the one hand, the lack of knowledge of the entrepreneurs of the analysis methods to carry out a study with the highest quality, together with their lack of capacity to apply effective mechanisms administrative. On the other, the lack of commitment of those who carry out these studies with the quality of the same and the effectiveness of the actions that are derived from their results, as well as to the same

extent of the financiers. These actors who participate in the entrepreneurship process benefit from the birth of any venture, but are rarely affected by its failure, among other reasons because it is difficult to clearly establish their direct responsibility for the final consequence.

The limitations recognized in this research are perhaps associated with one of its main positive qualities, which is the analysis of the behavior of variables in a particular socio-cultural context. This impedes the general nature of their results. It is expected to stimulate testing if the found results are also specific to the context or common to other possible scenarios. For example, in the context of other nations, the prevailing culture may not show the same behavior regarding the perception of human resources, the levels of competencies and facilities of providers, as well as the behavior of public administration, sources of financing and interfaces that carry out business feasibility studies. In this same sense, the development of research in only three economic sectors is considered a limitation that could be explored by subsequent research.

The main managerial implications to which the results of the research are associated in general are identified. Different groups of variables that can influence the success or failure of the undertakings were identified from the analysis of the multiple previous investigations. In particular, it was recognized the need for effective feasibility studies for the proposals of new ventures in correspondence of the high degree of incidence that this showed in the success or failure of the emerging businesses. The influence of the personal characteristics of the entrepreneurs, condition to a greater or lesser extent the future results of the business. The results show a high degree of correspondence with previous research. This research corroborates those results in a new and specific context.

Conclusions

Entrepreneurship is a source of permanent reactivation of national economies. It serves as a source of employment and solution of needs for a large part of the population. Due to the great diversity of existence and representativeness, as well as the wide range of variables with which they are linked, they are the object of multiple investigations each year.

The investigations about entrepreneurships are oriented, in general, or particularly, to a group of dimensions. Among these dimensions, there are variables such as the analysis of psychological and sociological characteristics of entrepreneurs and their families; the study of the incidence of the variables of diversity categories like age or gender; the regulations for the public administration that drive the environment and the finance sources that can support the development; the administrative mechanisms that these organizations use, and particularly, the way the organizations manage the

associated risks; the performance shown as a result of the influence of the mentioned variables with the final consequence: success or failure.

According to the results of this study, the high mortality rate shown by nascent entrepreneurships in Ecuador in its first year is not only affected by the individual characteristics of the entrepreneurs, but is directly impacted by the quality of the feasibility studies that are carried out to justify its birth and assume the risk of its management. Therefore, there is a need to create mechanisms that ensure greater commitment among all the actors involved in the birth of an enterprise.

Declarations

Funding

Conflicts of interest/Competing interests

There is no conflict of interest/competing interests.

Availability of data and material

The data that support the findings of this study are included within the article and/or supporting materials.

Code Availability

The computer program results are shared through the tables in the manuscript.

Authors' Contributions

Reyner Pérez-Campdesuñer: Conceptualization, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft.
Alexander Sánchez-Rodríguez: Formal analysis, Investigation, Visualization, Writing – review & editing.
Gelmar García-Vidal: Data curation, Investigation, Methodology, Validation, Visualization.
Rodobaldo Martínez-Vivar: Investigation, Project administration, Methodology.
Jenny Ruiz-de la Peña: Data curation, Methodology, Visualization.
Margarita De Miguel-Guzmán: Supervision, Methodology, Validation.

REFERENCES

Aastha, B., & Shazi, S.J. (2019). Corporate social responsibility practices in small and medium enterprises. *Polish Journal of Management Studies, 19*(1), 9-20. https://doi.org/10.17512/pjms.2019.19.1.01

Abdul-Halim, H., Ahmad, N.H., Geare, A., & Thurasamy, R. (2019). Innovation Culture in SMEs: The Importance of Organizational Culture, Organizational Learning and Market Orientation. *Entrepreneurship Research Journal, 9*(3). https://doi.org/10.1515/erj-2017-0014

Adla, L., & Gallego-Roquelaure, V. (2019). The gift in shared HRM ethics in SMEs. *Employee Relations, 41*(5), 997-1014. https://doi.org/10.1108/er-06-2018-0171

Agyekum – Mensah, G. (2019). The degree of accuracy and factors that influence the uncertainty of SME cost estimates. *International Journal of Construction Management, 19*(5), 413-426. https://doi.org/10.1080/15623599.2018.1452094

Ahlstrom, D., & Bruton, G.D. (2010). Rapid institutional shifts and the co-evolution of entrepreneurial firms in transition economies. *Entrepreneurship: Theory and Practice, 34*(3), 531-554. https://doi.org/10.1111/j.1540-6520.2010.00373.x

Al Anshori, M.R., & Ahamat, H. (2019). The use of customs law and regulation to support the development of small and medium enterprises: Evidence from Indonesia. *World Customs Journal, 13*(1), 129-140.

Arun, T.M., Joseph, R.P., & Ul Akram, M. (2019). Entrepreneur's gender and firm innovation breadth: An institution-based view of smes in an emerging market context. *International Journal of Innovation Management.* https://doi.org/10.1142/s1363919620500681

Baù, M., Sieger, P., Eddleston, K.A., & Chirico, F. (2017). Fail but Try Again? The Effects of Age, Gender, and Multiple-Owner Experience on Failed Entrepreneurs' Reentry. *Entrepreneurship: Theory and Practice, 41*(6), 909-941. https://doi.org/10.1111/etap.12233

Behrens, J., & Patzelt, H. (2016). Corporate Entrepreneurship Managers' Project Terminations: Integrating Portfolio-Level, Individual-Level, and Firm-Level Effects. *Entrepreneurship: Theory and Practice, 40*(4), 815-842. https://doi.org/10.1111/etap.12147

Blackburn, R.A., & Smallbone, D. (2008). Researching small firms and entrepreneurship in the U.K.: Developments and distinctiveness. *Entrepreneurship: Theory and Practice, 32*(2), 267-288. https://doi.org/10.1111/j.1540-6520.2007.00226.x

Block, J., Thurik, R., Van Der Zwan, P., & Walter, S. (2013). Business takeover or new venture? Individual and environmental determinants from a cross-country study. *Entrepreneurship: Theory and Practice, 37*(5), 1099-1121. https://doi.org/10.1111/j.1540-6520.2012.00521.x

Byun, H., Raffiee, J., & Ganco, M. (2019). Discontinuities in the Value of Relational Capital: The Effects on Employee Entrepreneurship and Mobility. *Organization Science, 30*(6), 1125-1393. https:doi.org/ 10.1287/orsc.2018.1262

Burton, M.D., Sørensen, J.B., & Dobrev, S.D. (2016). A Careers Perspective on Entrepreneurship. *Entrepreneurship: Theory and Practice, 40*(2), 237-247. https://doi.org/10.1111/etap.12230

Busenitz, L.W., Plummer, L.A., Klotz, A.C., Shahzad, A., & Rhoads, K. (2014). Entrepreneurship Research (1985-2009) and the Emergence of Opportunities. *Entrepreneurship: Theory and Practice, 38*(5), 981-1000. https://doi.org/10.1111/etap.12120

Canales, R. (2016). From Ideals to Institutions: Institutional Entrepreneurship and the Growth of Mexican Small Business Finance. *Organization Science, 27*(6), 1043-1573. https://doi.org/10.1287/orsc.2016.1093

Coad, A., Frankish, J., Roberts, R.G., & Storey, D.J. (2013). Growth paths and survival chances: An application of Gambler's Ruin theory. *Journal of Business Venturing, 28*(5), 615-632.

Collewaert, V., & Sapienza, H.J. (2016). How Does Angel Investor-Entrepreneur Conflict Affect Venture Innovation? It Depends. *Entrepreneurship: Theory and Practice, 40*(3), 573-597. https://doi.org/10.1111/etap.12131

Cornelius, B., Landström, H., & Persson, O. (2006). Entrepreneurial studies: The dynamic research front of a developing social science. *Entrepreneurship: Theory and Practice, 30*(3), 375-398. https://doi.org/10.1111/j.1540-6520.2006.00125.x

Chirico, F., Criaco, G., Baù, M., Naldi, L., Gomez-Mejia, L.R., & Kotlar, J. (2020). To patent or not to patent: That is the question. Intellectual property protection in family firms. *Entrepreneurship: Theory and Practice, 44*(2), 339-367. https://doi.org/10.1177/1042258718806251

Davidsson, P., & Gordon, S.R. (2016). Much Ado About Nothing? The Surprising Persistence of Nascent Entrepreneurs Through Macroeconomic Crisis. *Entrepreneurship: Theory and Practice, 40*(4), 915-941. https://doi.org/10.1111/etap.12152

De Massis, A., Kotlar, J., Mazzola, P., Minola, T., & Sciascia, S. (2018). Conflicting selves: Family owners' multiple goals and self-control agency problems in private firms. *Entrepreneurship: Theory and Practice, 42*(3), 362-389. https://doi.org/10.1111/etap.12257

Detienne, D.R., & Chirico, F. (2013). Exit strategies in family firms: How socioemotional wealth drives the threshold of performance. *Entrepreneurship: Theory and Practice, 37*(6), 1297-1318. https://doi.org/10.1111/etap.12067

Dimov, D., & De Clercq, D. (2006). Venture capital investment strategy and portfolio failure rate: A longitudinal study. *Entrepreneurship: Theory and Practice, 30*(2), 207-223. https://doi.org/10.1111/j.1540-6520.2006.00118.x

Eesley, C. (2016). Institutional Barriers to Growth: Entrepreneurship, Human Capital and Institutional Change. *Organization Science, 27*(5), 1065-1341. https://doi.org/10.1287/orsc.2016.1077

Franco, M., & Prata, M. (2019). Influence of the individual characteristics and personality traits of the founder on the performance of family SMEs. *European Journal of International Management, 13*(1), 41-68. https://doi.org/10.1504/ejim.2019.096498

Frankish, J.S., Roberts, R.G., Coad, A., Spears, T.C., & Storey, D.J. (2013). Do entrepreneurs really learn? Or do they just tell us that they do? *Industrial and Corporate Change, 22*(1), 73-106.

Funken, R., Gielnik, M.M., & Foo, M.D. (2020). How Can Problems Be Turned Into Something Good? The Role of Entrepreneurial Learning and Error Mastery Orientation. *Entrepreneurship: Theory and Practice, 44*(2), 315-338. https://doi.org/10.1177/1042258718801600

Gambardella, A., Ganco, M., & Honoré, F. (2015). Using What You Know: Patented Knowledge in Incumbent Firms and Employee Entrepreneurship. *Organization Science, 26*(2), 311-631. https://doi.org/10.1287/orsc.2014.0937

Grégoire, D.A., Noël, M.X., Déry, R., & Béchard, J.P. (2006). Is there conceptual convergence in entrepreneurship research? A co-citation analysis of Frontiers Entrepreneurship Research, 1981-2004. *Entrepreneurship: Theory and Practice, 30*(3), 333-373. https://doi.org/10.1111/j.1540-6520.2006.00124.x

Grove, H., & Cook, T. (2011). Whitetracks design, Inc. *Entrepreneurship: Theory and Practice, 35*(4), 831-848. https://doi.org/10.1111/j.1540-6520.2011.00478.x

Hatak, I., & Zhou, H. (2019). Health as Human Capital in Entrepreneurship: Individual, Extension, and Substitution Effects on Entrepreneurial Success. *Entrepreneurship: Theory and Practice*. https://doi.org/10.1177/1042258719867559

Holland, D.V., & Shepherd, D.A. (2013). Deciding to persist: Adversity, values, and entrepreneurs' decision policies. *Entrepreneurship: Theory and Practice, 37*(2), 331-358. https://doi.org/10.1111/j.1540-6520.2011.00468.x

Hubner, S., Baum, M., & Frese, M. (2019). Contagion of Entrepreneurial Passion: Effects on Employee Outcomes. *Entrepreneurship: Theory and Practice*. https://doi.org/10.1177/1042258719883995

Jennings, J.E., Jennings, P.D., & Sharifian, M. (2016). Living the Dream? Assessing the "Entrepreneurship as Emancipation" Perspective in a Developed Region. *Entrepreneurship: Theory and Practice, 40*(1), 81-110. https://doi.org/10.1111/etap.12106

Kacperczyk, A., & Marx, M. (2016). Revisiting the Small-Firm Effect on Entrepreneurship: Evidence from Firm Dissolutions. *Organization Science, 27*(4), 801-1064. https://doi.org/10.1287/orsc.2016.1065

Lampe, J., Kraft, P.S., & Bausch, A. (2019). Mapping the Field of Research on Entrepreneurial Organizations (1937–2016): A Bibliometric Analysis and Research Agenda. *Entrepreneurship: Theory and Practice*. https://doi.org/10.1177/1042258719851217

Lanivich, S.E. (2015). The RICH Entrepreneur: Using Conservation of Resources Theory in Contexts of Uncertainty. *Entrepreneurship: Theory and Practice, 39*(4), 863-894. https://doi.org/10.1111/etap.12082

Malmström, M., Johansson, J., & Wincent, J. (2017). Gender Stereotypes and Venture Support Decisions: How Governmental Venture Capitalists Socially Construct Entrepreneurs' Potential. *Entrepreneurship: Theory and Practice, 41*(5), 833-860. https://doi.org/10.1111/etap.12275

Marvel, M.R., Davis, J.L., & Sproul, C.R. (2016). Human Capital and Entrepreneurship Research: A Critical Review and Future Directions. *Entrepreneurship: Theory and Practice, 40*(3), 599-626. https://doi.org/10.1111/etap.12136

Mueller, B.A., & Shepherd, D.A. (2016). Making the Most of Failure Experiences: Exploring the Relationship Between Business Failure and the Identification of Business Opportunities. *Entrepreneurship: Theory and Practice, 40*(3), 457-487. https:doi.org/10.1111/etap.12116

Peng, M.W., Yamakawa, Y., & Lee, S.H. (2010). Bankruptcy laws and entrepreneur- friendliness. *Entrepreneurship: Theory and Practice, 34*(3), 517-530. https://doi.org/10.1111/j.1540-6520.2009.00350.x

Rauch, A., & Rijsdijk, S.A. (2013). The Effects of General and Specific Human Capital on Long-Term Growth and Failure of Newly Founded Businesses. *Entrepreneurship: Theory and Practice, 37*(4), 923-941. https://doi.org/10.1111/j.1540-6520.2011.00487.x

Sørensen, J.B., & Sharkey, A.J. (2014). Entrepreneurship as a mobility process. *American Sociological Review, 79*(2), 328–349.

Spigel, B. (2017). The Relational Organization of Entrepreneurial Ecosystems. *Entrepreneurship: Theory and Practice, 41*(1), 49-72. https://doi.org/10.1111/etap.12167

Spigel, M.R., & Stephen, L.J. (2009). *Estadística*. 4th ed. McGraw-Hill/ Interamericana Editores.

Sui, S., Baum, M., & Malhotra, S. (2019). How Home-Peers Affect the Export Market Exit of Small Firms: Evidence From Canadian Exporters. *Entrepreneurship: Theory and Practice, 43*(5), 1018-1045. https://doi.org/10.1177/1042258718764907

Yamakawa, Y., Peng, M.W., & Deeds, D.L. (2015). Rising From the Ashes: Cognitive Determinants of Venture Growth After Entrepreneurial Failure. *Entrepreneurship: Theory and Practice, 39*(2), 209-236. https://doi.org/10.1111/etap.12047

Zhang, S.X., & Cueto, J. (2017). The Study of Bias in Entrepreneurship. *Entrepreneurship: Theory and Practice, 41*(3), 419-454. https://doi.org/10.1111/etap.12212

Appendix 1. Survey to evaluate the performance of the entrepreneurship

This research aims to identify causes that limit the growth of entrepreneurship. Considering your valuable opinion in this regard, we ask you to collaborate by answering the following questions.

Answer the following questions:

Questions	Strongly disagree	Partially disagree	Unsure of the validity of the claim	Agree	Strongly agree
ATTITUDE TO FAILURE					
The failure of a previous undertaking gave him experience to avoid the failure of the current one					
I consider failure to be:					
Blows that life gives:					
Opportunities to learn					
The result of the disability					
Owned by who assumes risks					
Important part of running a business					
ATTITUDE AGAINST RISK					
I consider the risk to be:					
The opportunity to grow					
Important part of management					
A test to overcome for what they aspire to win					
Something worth avoiding					
A requirement of success					
ATTITUDE FACED PERSEVERANCE					
I believe that perseverance is:					
What leads to success					
The opportunity to grow					
A manifestation of need					
A feature that every administrator should possess					
Something that is not valid for my context					
PERCEPTION OF LEADERSHIP					
In this business:					
the boss is a leader					
We follow the boss by his example					
We follow the boss for being the owner					
We follow the boss to avoid retaliation					
We follow the boss because of his way of directing the tasks					
We follow the boss for being the father of the family					
METHODS OF ADMINISTRATION					
I consider that:					
The demand of the business corresponds to the initial forecasts of the feasibility study					
Business income levels are satisfactory					
The operating costs of the business correspond to the forecasts of the study of the venture					

Questions	Strongly disagree	Partially disagree	Unsure of the validity of the claim	Agree	Strongly agree
Business expense levels are acceptable					
We use the provider what more ease it offers us					
As a rule, we select among various suppliers the best					
Business inventory levels are high					
We never lose the opportunity to sell because we do not have inventories for the business					
It is good to offer payment facilities to customers					
We have high levels of accounts receivable					
We have high levels of accounts payable to suppliers					
We receive our inventories in commissions					
We have full control over our products and expenses					
We apply promotion policies or sales discounts					
We invest in advertising					
It is easy to evaluate the impact of what we invest in advertising					
Sales depend on the ability to sell					
The sale depends on the quality of the product.					
Our prices are attractive					
Our price is in line with the cost					
Business workers are important					
Business workers must be motivated					
Business workers must have previous experience					
Business workers must have training for the business					
If a worker does not perform, it is easy to change him for another					
The workers are there to fulfill the ideas of the owner					
What workers do must be well controlled					
The probability that the business will last is high					
PERCEPTION OF THE INFLUENCE OF THE ENVIRONMENT					
The environment of our company is characterized by:					
High level of competition					
High level of public administration procedures					
Delays in public administration procedures					
Purchase tax level					
Income tax level					
Offer financing facilities					
Offer high interest on investment loans					

Sex:_____ Age:_____ Education level: _____

Sector in which the business operates: _____

Number of business workers: _____

It is the first time that you undertake: Yes___ No___

If you answered No to the previous question. How many ventures have you previously assumed: _____

If you have been in other previous ventures, please respond:

The previous undertakings were of the same type as the current one: Yes___ No_____

We would appreciate any type of additional comment that allows us to understand the performance of the venture.