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FINANCIAL SUSTAINABILITY ACTIONS IN COMPANIES OF THE MICROREGION OF THE TOWN OF PARÁ DE MINAS AND IN ITS SURROUNDING TOWNS

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Purpose: To examine, through entrepreneurial actions, the aspects of financial sustainability practiced, through entrepreneurial actions, in the companies located in the town of Pará de Minas microregion and its surrounding towns, describing and analyzing the perceptions of the managers and owners of these businesses.

Method: A quantitative, descriptive research was developed, applying a survey to 205 managers and / or owners. The modeling of structural equations was done using the PLS method.

Originality / Relevance: This study seeks to broaden the research on the longevity of companies, especially with regard to the entrepreneurial actions of financial sustainability, a reality little evident in small companies.

Results: It is suggested that although owners and managers of companies are aware of the administrative tools of management, they do not use them correctly, which could be observed in relation to the discourse of these managers and owners versus their practices, which makes the companies vulnerable in terms of longevity.

Theoretical / methodological contributions: The experience combined with financial control and a more transparent relationship of the organization are important elements for the longevity of a business. In theory, there are behavioral variables that directly interfere with financial sustainability.

Keywords: Entrepreneurial Behavior. Business longevity. Financial Sustainability.

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1. INTRODUCTION

The entrepreneurial actions of financial sustainability are generally associated with a group of financial strategies, as well as administrative, accounting and operational procedures aimed at the financial health and growth of the company (Hurst, & Lusardi, 2004) over a period of time considered as long-lasting. In the last few years, entrepreneurial actions have attracted attention from both the academic and business worlds. However, there is not yet a fully accepted definition in the literature, especially regarding the term "sustainability" (Payne, & Raiborn, 2001, Van Bellen, 2004, Reigota, 2007, Nascimento, 2012). In large part, this is treated as a general term, but the different connotations are given according to the meaning and purpose of the analysis employed.

The very categorization of the term "financial sustainability" can be a non-trivial task, with inherent implications for each object studied, given that organizations generally vary in size, form, organizational structure and managerial style (Berle, & Means, 1932, Churchill, & Lewis, 1983, Claro, & Claro, 2014). For any organization, either being it a small business, with little time to live, or large companies that have already gone through several phases of their existence, it is necessary to understand what sustainability mechanisms support their business balance.

The sustainability mechanisms are established by managerial actions (Hahn, 2013), and / or by the entrepreneurial activity itself - coming from an organizational arrangement, which usually adapts itself to risk environments. These actions are shaped by the structural and strategic factors necessary for the survival of a business (Chandler, 1962), as well as its development and competitiveness (Payne, & Raiborn, 2001, Parisi, 2013, Baumgartner, 2014, Epstein, & Buhovac, 2014). Although the theory points to the importance of strategic formalization focused on sustainability (Claro, Claro, & Amâncio, 2008, Payne, & Raibon, 2011, Hahn, 2013, Baumgartner 2014), this reality is still incipient (Judge & Douglas, 1998, Parisi, 2013).

Therefore, the study on entrepreneurship reveals characteristics that differentiate individuals as to their ability to establish planning for decision-making (Gerber, 2004, Barbosa, Noronha, & Castro, 2012), as well as identifying distinct special qualities that make a difference in terms of business development, and also



when it identifies a group of people with attitudes, behaviors and skills consistent with daily business life, especially in environments with big changes (Hisrich, Peters, & Shepherd, 2014).

Business longevity, in turn, is directly linked to the issue of entrepreneurship, innovation, planning, characteristics that constitute the entrepreneur profile that differentiate them from other entrepreneurs and investors in different areas (Palhares Jr. Silva, 2014). In global terms, in sectors where there is no protectionism, entrepreneurship plays an important role in economic growth that occurs as firms achieve sustainability by promoting greater longevity (Schumpeter, 1997, Payne, & Raiborn, 2001, Clarkson, Li, Richardson, & Vasvari, 2011) and benefits for future generations and stakeholders (Lange, Busch, & Delgado-Celballos, 2012), besides being a boost for the businesses (Campos et al, 2013).

The understanding of the entrepreneurial actions of financial sustainability and the promotion of the longevity of a business initially requires the understanding of the concept of sustainability in relation to the environmental, social and economic-financial perspective. Although recent studies are based on this tripod, the latter is little evidenced in the reality of small companies (Oliveira, Silva, & Araújo, 2013, Moreira, Silva, & Moreira, 2017).

The research in question was based on entrepreneurial sustainability actions that operationalize the daily control allowing structured analysis for decision making. Therefore, the objective of the study is to describe and analyze the entrepreneurial actions of financial sustainability of managers and owners of companies in the microregion of the town of Pará de Minas, state of Minas Gerais, and its surrounding towns, which lead to business longevity, using the model proposed by Matias (2007). The study also seeks to identify elements of financial sustainability of companies in the role of their entrepreneurs, and also to verify the perception of these managers and owners regarding the practice of entrepreneurial actions in relation to the use of financial control tools in the day-to-day of the organization, in order to promote business longevity. It emphasizes that the choice of this microregion is in its importance for the state of Minas Gerais, especially in the production of dairy cattle.

This study tries to broaden the research on the longevity of companies, especially with regard to the entrepreneurial actions of financial sustainability (Salgado, Silva, & Cunha (2012), which consist in the entrepreneur's ability to cover



opportunity and transaction costs, (Oliveira, Silva, & Araújo, 2007). In their study, Oliveira, Silva and Araújo (2000) identified that among national and international academic studies, there is a greater frequency of studies on entrepreneurial behavior in large companies, with few being directly related to Micro and Small Enterprises (MSE's). "The authors add that the knowledge about entrepreneurship and acquired experiences are revealed as a factor of longevity for organizations. This way, the answers to the main theoretical questions about the MSE's still persist, since the subject is controversial with respect to the management and development of the same ones (Alves, Antonialli, Lopes, Souki, & Reis Neto, 2013).

2. THEORETICAL REFERENCES

2.1 Financial Sustainability

Sustainability, in global terms, involves meeting the basic needs of a society today, without compromising future generations. Such an understanding has already been diffused since the United Nations Brundtland Commission in 1991. Regardless of the widely held view of the term sustainability, increasing social and environmental problems requires that society replace the vision of economic growth at any cost for a vision of growth sustainable development. This view pursues economic development by respecting the social boundaries and environments accepted by society (Payne, & Raibon, 2001, Hart & Milstein, 2003, Lange, Busch, & Delgado-Celballos, 2012, Stephanou, 2013).

When dealing with a sustainable enterprise, it must simultaneously generate economic, social and environmental benefits (Hart, & Milstein, 2003), known as the three pillars of the sustainable development. For this, the business must be economically viable, socially fair and environmentally correct (Hart, & Milstein, Lange, Busch, & Delgado-Ceballos, 2012, Seiffert, 2014) and equanimous (Seiffert, 2014, Wals, & Schwarzin, 2012, Peace, & Kipper, 2016).

The scope of corporate sustainability has been debated both from a strategic point of view (Zahra 1993, Shrivastava, & Hart, 1995, Hart, 1997, Roome, 1998,



Claro, Claro, & Amâncio, 2008, Payne, & Raibon, Hahn, 2013, Baumgartner 2014), as well as in the instrumental perspective (Schaltegger, & Burritt, 2000; Bennet, & James, 1999, Parisi, 2013), since economic performance has simultaneous environmental and social effects, Schaltegger, & Wagner, 2002, Stephanou, 2013).

In the view of Figge et al. (2002), economic aspects are perceived more quickly by the market through the prices of products, services provided, among others. It can be said that sustainability is due to technological ownership, heavy investments, conservatism of financial management, patent development and human capital (Thornton, 1999, Wals, & Schwarzin, 2012). As to the social and environmental issues, the impacts are perceived in part (as a retraction of market prices), although they are increasingly important for the business (Figge et al., 2002).

For Stephanou (2013), the big challenge is to provide a balance between management and sustainable economic growth in organizations, with little impact on the environment, besides making future generations aware of the importance of social responsibility in organizations.

Sustainability presents itself as a competitive differential (Lange, Busch & Delgado-Ceballos, 2012, Lameira et al., 2012). When the company has a management focused on sustainability, there is empirical evidence that a higher economic performance occurs (Clarkson et al., 2011).

Additionally, regarding its economic aspect, sustainability, based on Conway (1986), Ramos Filho (2000) and Lameira et al. (2012), is presented as the ability of the enterprise to provide itself with financial resources to face setbacks arising from its economic exploitation, which is articulated on financial autonomy, the balance of growth and the level of business. On the other hand, the provisioning of the inventory and the control of the expenses in the financial sources are determinant in the solvency of the organization. In light of this, the relationship between these inventories, financial sources and loans define the degree of financial sustainability of an organization (Stanislavchik, 2010).



Therefore, financial sustainability becomes one of the characteristics of an organization's economic-financial situation (Clarkson et al., 2011, Lange, Busch, & Delgado-Ceballos, 2012, Lameira et al., 2013, Nidumolu, Prahald, & Rangaswami, 2013, Silveira, 2013, Araújo, & Santana, 2015). Dum, Arbuckle and Parada (1998) already argued that financial sustainability is the capacity of the creditor to cover all of its costs, including opportunity and transaction costs, and to remain in the market in the long term. In this regard, it is understood that the self-promotion of the financial resources of an enterprise arises from the need of the organizations to take advantage of standardized procedures in relation to the conduct of an operationally organized financial management. Therefore, the financial management of an organization depends on the control tools necessary for its development. Its use requires rigor and method in planning and daily actions in the effective management of the company.

In this sense, entrepreneurial actions of financial sustainability require a set of financial strategies, administrative, accounting and operational procedures, which aim at the financial health and growth of the company (Hurst, & Lusardi, 2004) in a period of time, considered to be long lasting. These actions come from the entrepreneur's personal and behavioral characteristics, which influence business management (Wals, & Schwarzin, 2012), by generating new ideas and transforming profitable entrepreneurship (Raufflet, Bres, & Filion, 2014). Thus, the assumption that financial sustainability is related to entrepreneurial capacity becomes more evident.

2.2 Behaviors and entrepreneurial characteristics

In order to explain entrepreneurial behavior, researches tend to examine personal traits through influences of contextual factors such as resource availability and economic factors (Bessant, Lamming, Noke, & Phillips, 2005).

Currently, the entrepreneur has been assigned a responsibility role in relation to the economic and social development of a country (Raupp, & Beuren, 2011, Ésther, Rodrigues & Freire, 2012, Hisrich, Peters, & Shepherd, 2014, Lima, Lopes, Nassif, & Silva 2015), since it influences and is influenced by the environment in



which it is inserted (Dolabela, 2008, Storopoli, Binder, & Maccari, 2013). Thus, the entrepreneur would have a differentiated profile compared to other economic and organizational agents. This behavior would be related to the various skills acquired (Nassif, Hashimoto, & Amaral, 2014) and perfected throughout their entrepreneurial trajectory (Dolabela, & Fillion, 2013; Zampier, & Takahashi, 2014).

Since entrepreneurs learn from what they do, and as activities change constantly, they also need to change. Therefore, they become dynamic social actors, starting with behavioral issues (Minello, Marinho, & Büger, 2017). The entrepreneur presents itself as a fundamental element for increasing productivity and competitiveness, considering that it is the main responsible for the resources and the search for better use of opportunities and effectiveness of the enterprise (Barbosa, Noronha, & Castro, 2012, Borges, & Lima, 2012, Enoque, & Borges 2014).

Economic theory portrays that the presence of the entrepreneur brings benefit to the business cycle and to the economy as a whole. In addition, it induces the increase of economic productivity through a cyclical and incessant movement in which there is the quest for greater competitiveness. It is notorious that those considered as non-entrepreneurs will hardly survive this environment; only in specific cases where protectionist measures exist, such behavior is unlikely to occur.

An entrepreneur or group of entrepreneurs are able to combine resources, skills, knowledge and competences to take advantage of market opportunities (Borges, & Lima, 2012), with a long-term orientation (Eddleston, Kellermanns, & Zellweger, 2012). On the other hand, when these are part of family businesses, they are more prone to conflicts of interest, accentuated by the relationship between relatives (Santos, Drape, Dornelas, & Calvo, 2013). In this context, some authors (Martins, Maccari, Campanario, & Almeida, 2008; Santos et al., 2013) defend the idea of professional management, minimizing the chances of conflicts between administrators, employees and the public outside the organization.

In cases of networked environments, in which democracy and cooperation prevail, the development of entrepreneurship (Dolabela, 2008) is based on the



knowledge of a particular type of market in which entrepreneurs develop new products or processes (Filion, 1999). Thus, "entrepreneurial opportunities are situations in which new goods, services, raw materials, and organizational methods can be introduced and sold for a value far greater than their cost of production" (Hisrich, Peters, & Shepherd, 2014: 6). This would be the case of a (temporary) monopoly originated from the innovation process.

In McClelland's (1961) behavioral view, the most common characteristics identified in entrepreneurs are: the search for opportunity and initiative, persistence, commitment, quality and efficiency, the ability to take calculated risks, to establish goals, to seek information, to plan and to monitor systemically, to have persuasion and network of contacts, as well as independence and self-confidence (McClelland, 1961).

Oliveira, Silva and Araújo (2013) describe the importance of observing such factors related to economic development and also referred to McClelland (1972), who, in his first study in India, observed significant increases in the entrepreneurial activities of those who participated in specific training on characteristics that motivate the behavior. Using quantitative approaches, the entrepreneur's psychological and cultural factors were isolated and the importance of observing such factors related to economic development were noticed (Oliveira, Silva, & Araújo, 2013).

Thus, McClelland (1971, 1972) distinguished three needs that motivate people: achievement, power, and affiliation. The achievements are personal and professional. In personal fulfillment, the limits of the individual are put to the test, with the intention to achieve better performance, to fulfill goals and objectives in competitive situations, and to seek professional fulfillment in order to promote oneself. Power refers to the ability to organize a team, persuade it and influence it, in order to achieve goals within the organization. Affiliation is the fact of considering belonging to the group, the concern with the human factor and teamwork in a cooperative way. In addition to these entrepreneurial behavioral traits, such as achievement and power, Olivo (2003) also emphasizes planning, which involves knowing the processes to lead the organization in the right direction, according to the



individual, including the ability to obtain information and evaluate an opportunity in an opposite environment.

The entrepreneur, by having a creative personality, deals better with the unknown, stimulate the future, creates probabilities among possibilities, and transforms chaos into harmony. In the presence of his strong personality, he needs to control people and events, and because he is a person who sees the future, he becomes an agent of change who anticipates and directs his group toward achieving his aspirations (Gerber, 2004).

Because they have different visions of the others, regarding the business environment, entrepreneurs have distinctive skills that allow them to make risky and daring decisions in the marketplace, believing firmly in the potential of their choices, because of these different points of view regarding the business environment (Hisrich, Peters, Shepherd, 2014). In the authors' view, an entrepreneur needs to: i) think in a rationally structured way; ii) adopt management techniques and tools; iii) execute processes; iv) have adaptability. It is worth stating that the entrepreneur's success lies in his ability to innovate, to take calculated risks, to achieve his goals and to have self-confidence (Hisrich, Peters, & Shepherd, 2014). All these questions shape the entrepreneurial actions.

In the presence of these mitigating characteristics, a given person cannot be seen as an entrepreneur simply because he leads a business. The term entrepreneur differs from businessman and administrator - the attributed competences, in this case, are distinct and are not part of the same object. When considering a businessman entrepreneur, we are talking about a person with different skills; while as a common businessman or administrator, the simple question of competence in non-strategic areas can be a considerable barrier (Dornelas, 2005).

Hisrich, Peters and Shepherd (2014) and Sebrae (2013) mention that, in addition to the other characteristics, the need for achievement and the interpersonal / leadership relationship are often pointed out in the literature to describe the entrepreneurial behavior that leads to longevity or organizational continuity.



2.3 Business longevity from financial sustainability

For the economic development of a country or a business activity, the long-term perspective must be present. Venturoli (2004) reports that longevity means the quality of the one who is very old. This, in turn, is always related to the life expectancy influenced by the factors of the environment.

Thus, corporate longevity is linked to the function of adjusting the internal environment to the conditions imposed by the external environment, in an attempt to adapt the evolution of the organization to external pressures, to keep it in operation for many years, and always opened to changes (Montuori, 2000). Long-lived companies are sensitive to their environment, with a strong sense of identity, and they also anticipate market changes, as well as being conservative in their finances (Geus, 2005) and experiencing a continued existence over several generations of command, reaching many centenarians of life (Mayfield, Mayfield, & Stephens, 2007).

Therefore, management style is an important factor for the short or the long existence of companies (Ferreira, 2001). Another factor is knowledge or acquired experiences, which represents the individual's consciousness about himself and about the environment, being deeply influenced by the physical and social environment, and by his previous needs and experiences (Vasconcelos, & Lezana, 2012). The longevity of the enterprise would be achieved when combining the abilities to utilize the physical and intellectual capacities of the agents for a central goal.

The entrepreneurial force encourages the growth of a country, and that occurs as companies reach sustainability, promoting business longevity (Schumpeter, 1997). On the other hand, recent technological changes enable the reduction of barriers between organizations and the market, spreading innovations and bringing about business transformation in order to increase capital gain (Financial Conduct Authority, 2014).



According to Xisto (2007) a financially sustainable and long-lived organization, the management of its physical, human and financial resources must be in perfect harmony to generate value. Moreira, Silva and Moreira (2017) share the same idea of Xisto (2007), when they argue that for a company to have a greater chance of reaching longevity, it should have as its main objective to maximize its value in the long term, independent of the vision or mission of the company.

Accordingly, Matias (2007) points out that corporate longevity will occur through financial sustainability, which is related to: (i) the working capital management of the organization (how much is necessary to keep in cash resources to fulfill the daily obligations of the company to pay suppliers - Net Working Capital Need), (ii) financial management - (the entrepreneurial success of these organizations is linked to the entrepreneur's ability to visualize opportunities that combine communication and information); (iii) operational risk management - related to image and environmental and social aspects (the challenge for financial managers is to identify, to measure and to manage operational risks that integrate all environmental and social aspects, making the company competitive and, consequently, generating value to all its stakeholders); (iv) and the generation of value and competitiveness (competitiveness is relative and not absolute, and to create value, the company must be in a competitive, technological and innovative environment).

The sustainability model proposed by Matias (2007) and used as a basis to develop the research in question, summarizes the actions, described above, with the objective of directing the operationalization of economic / financial management in order to efficiently guarantee corporate financial sustainability. It is also possible to observe that the environmental and social concern is expressed in the same context, and these integral parts are intrinsically linked and priority factors to guarantee corporate longevity, observing the need to manage operational risks related to the organization's image.

The entrepreneurial actions of financial sustainability are about how to operate management controls in the day-to-day of the organization in order to clearly



visualize results that can and should be achieved. Controls constructed from a systematic monitoring that will determine the success of the business directly related to its conduct through these actions, that is, the discipline to follow standard operating procedures adapted to the needs of the company.

According to Moreira, Silva and Moreira (2017), these forms of entrepreneurial actions are appropriate to the reality of small Brazilian companies and, therefore, to small retail supermarkets. However, in order to achieve the proposed objectives of this research, the actions proposed by Matias (2007) regarding the finances of an organization were stratified in order to identify factors that contribute to the better performance of financial management and administration, as to the tools financial controls.

3. METHODOLOGY

The research is characterized as descriptive (Cervo, & Bervian, 2005), of field, with quantitative approach (Dalfovo, Lana, & Silveira, 2008). After consultation with the competent bodies (Brazilian Service for Support to Micro and Small Enterprises - SEBRAE, Registry of Commerce of the State of Minas Gerais – JUCEMG, and the Chamber of Store Managers - CDL), the pertinence of this study was realized by the lack of data on the microregion and surrounding towns chosen for analysis. The choice of this microregion is due to its importance for the state of Minas Gerais, especially in the production of dairy cattle.

The unit of analysis was a group of Brazilian companies located in a microregion of Minas Gerais and its surrounding towns, through a simple random sample of 205⁵ owners or managers of these organizations, comprised of a total of 3,036 companies, according to data from the Brazilian Institute of Geography and Statistics - IBGE (2014). The sample was obtained from the following equation, with

⁵ Although the sample calculation showed the necessity of applying 93 questionnaires, a total of 205 was used, which was achieved by the success of obtaining answers given to the questionnaires sent. In this sense, it was possible to reduce the sampling error from 10% to 6.61%, which further increased the reliability level of the research.



the purpose of estimating the proportions in a finite population for categorical variables (Triola, 2017):

$$n = \frac{Z^2 pq N}{(N-1) e^2 + z^2 pq}$$

In which the terms mean:

N = population size.

n = sample size to be searched.

e = sample error established at 10%⁶.

z = standardized variable, with confidence level set at 95%.

p = proportion that in this research will be defined as 50%.

q = complement of p, therefore equal to 50%.

To reach the desired sample, 250 questionnaires were sent to several companies chosen at random. However, the expectation was exceeded, and 205 questionnaires were answered and used.

The primary data from a structured questionnaire with 50 objective questions (14 questions related to the socio-demographic characteristics and characteristics of the companies, 34 questions related to the entrepreneurial actions of financial sustainability of the organizations, and 2 specific to the application of financial controls and their use), was based on the *Likert* scale (5 points) and some questions contained dichotomous selection (yes or no) (Cooper, & Schindler, 2003). The questionnaire, as presented in table 1, included questions on sustainable corporate actions and perceptions in three dimensions: environmental, social and economic / financial: Working Capital Management - CG (9 questions), Competitiveness and value generation - COMP (6 questions), Financial controls - CFIN (3 questions), Family management linked to succession and behavioral aspects - GEFA (7 questions), Business organization - ORGE (5 questions) and Operational risk management related to image and to environmental and social aspects - ROPE (4 questions).

⁶ 10% is considered a high percentage, but was used because it is a pilot study in the region.



It should be noted that the data collection instrument used is part of a larger research in the area of sustainability, in line with the study by Matias (2007) and adapted for the research. For the validation of the questionnaire, pre-tests were performed. In the first phase, 15 Master's Degree students from the Federal University of Minas Gerais, in the area of Applied Social Sciences, were invited. After the requested changes, the questionnaire was applied to 5 entrepreneurs. After the correct corrections, the data collection was started.

Chart 1: Issues Applied in the Research

Itens	Issues
CG1	The company gets loans for Working Capital if the financial cost is below profit in sales.
CG2	The company has already gotten loans for Working Capital.
CG3	The company must observe the average time and turnover in order not to compromise the Working Capital.
CG4	The Working Capital spent on the disclosure of products must be negotiated with suppliers.
CG5	The company has already negotiated with suppliers longer deadlines for carrying out Marketing actions.
CG6	Inadequate management of the Working Capital is the main reason for closing the deal.
CG7	The company has control of cash flow.
CG8	Constant improvements to facilities and customer services are required to survive.
CG9	The company has already contracted loans to improve services and facilities provided by the company.
COMP1	Strategic planning is a source of reflection on new processes, innovation and sustainability.
COMP2	The company has a formal strategic plan.
COMP3	Creating value requires the company to seek continuous improvement and support from competitors.
COMP4	The company invests looking for competitive advantages.
COMP5	The performance of a company is conditioned by a set of factors, economic environment...
COMP6	The company knows its main factors of competitiveness.
CFIN 1	The company has financial controls.
CFIN2	The main financial controls used are ...
CFIN3	The company uses these controls to analyze the financial situation in its day-to-day operations.
CFIN4	The company uses indexes such as capital structure, liquidity and profitability.
GEFA1	Longevity is related to the ability of members to manage and communicate core values.
GEFA2	The company has defined its mission, its vision and its values.
GEFA3	Good family governance considers the principle of entity and non-family interference.
GEFA4	It is clear, in the company, the division between the patrimony of the company and the family.
GEFA5	Members use the company account to pay personal debts.
GEFA6	Formal succession planning and the long-term goal ensure the longevity of the company.
GEFA7	The heirs are being prepared to continue business.
ORGE1	Business consulting guides the company with market positioning and new strategies.
ORGE2	The company has gone through business consulting to diagnose management problems.
ORGE3	Consultancy is never sought because of insecurity...
ORGE4	A third look allows you to glimpse new horizons, knowledge ...
ORGE5	I want to receive specialized people who can guide in the management of my business ...



ROPE1	The possibility of financial losses should result in a contingency plan to reduce losses.
ROPE2	The company has contingency planning.
ROPE3	The company has sought to present a responsible image on environmental and social issues.
ROPE4	The company has a formal relationship plan with the community (stakeholders).

Source: prepared by the authors

The data collected were tabulated and submitted to univariate and multivariate analyzes with the help of *SPSS (Statistical Package for the Social Science)* and *SmartPLS* software, in order to verify the entrepreneurial sustainability actions of the sample in question, which lead to the longevity of the companies. The analysis was based on the technique of structural equations (Hair Júnior, Black, Babin, Anderson, & Tatham, 2009). To determine if the associations found to be statistically significant, a significance level of 5% (p-value less than or equal to 0.05) was used.

4. PRESENTATION AND ANALYSIS OF RESULTS

4.1 Characterization of Respondents and Companies

The characterization of the sample was performed by means of a univariate analysis of the information contained in the questionnaire, aiming at describing the companies. This information is important for determining the general profile of the group studied.

Regarding the age group, the majority of respondents are between 25 and 49 years old (63%), followed by those who are 50 years old or older (34%). This information was not stated by two participants. Regarding the level of education, almost all the respondents have high school education, only 2% have postgraduate degrees and 90% of them called themselves owners (four did not respond).



Most of the companies analyzed are small (70%), as shown in Table 1 (information omitted in 11 questionnaires), which operate in the commerce sector (64%), followed by services (13%) and industry trade (10%) (information not declared by four companies). Almost 81% of the companies do not have any affiliation, either with any entity, association or other body (in this respect, 26 companies did not provide this information). Thus, the monthly turnover of 60% of the companies is up to R\$ 50,000 and only 2% have a turnover greater than R\$ 750,000 (nine companies did not respond).

Table 1: Distribution of companies by size and sector

	Frequency	Percentage		Frequency	Percentage
Size			Sector		
Small company	135	65.85%	Commerce	128	62.44%
Medium-sized company	52	25.37%	Service	27	13.17%
Large company	7	3.41%	Trade and Industry	21	10.24%
Nonrespondents	11	5.37%	Industry	18	8.78%
			Commerce and Services	5	2.44%
			Trade, Industry and Services	2	0.98%
			Nonrespondents	4	1.95%
Total	205	100%	Total	205	100%

Source: prepared by the authors

Most companies have more than 15 years of operation (36%), followed by companies that have up to 2 years of operation (21%). This information was not obtained for 4 companies. The companies have up to 10 employees (80%), followed by those with 11 to 20 employees (11%). Less than 10% of companies have more than 20 employees (information omitted from 2 companies).

More than half of the companies studied have a sales area of up to 200 m² (55%), followed by those with between 201 and 300 m². Only 6% of companies have up to 750 m². This information was not obtained for 4 companies. It was observed that 96% of the companies have up to 3 boxes (in 13 companies this information was not obtained) and approximately 2/3 of these companies are computerized (10 companies have omitted this information).



4.2 Model of Structural Equations

In order to answer the main objective of this study, which is to describe and analyze the entrepreneurial actions of financial sustainability of managers (22 respondents) and owners (181 respondents) of companies located in the this microregion of the state of Minas Gerais and its surrounding towns, that lead to business longevity, the modeling of structural equations via the PLS (Partial Least Squares) method was used.

In order to evaluate the reliability of the scales of the structural model, we used composite reliability, considering the criticisms related to the use of Crombach's Alpha when testing constructs within a structural model (Vehkalahtin, Puntanen & Tarkkonen, 2006). It is recommended to use the composite reliability of the construct with acceptable levels above 0.7. All the constructs studied presented satisfactory reliability or very close to satisfactory reliability.

The discriminant validity was verified by comparing the factorial loads of each indicator with its latent variable and with the other latent variables, verifying that it is generally higher for the latent variable when compared to the other constructs, proving the discriminant validity of the structural model. In this study, 6 latent variables, explained by 34 indicator variables, were described.

For the problem in question, the path diagram was constructed (Figure 1), which shows the causal relationships between the variables used to measure the relationships between working capital management, financial control, operational risks, business organization, competitiveness and generation of value and family management besides sustainability.

The measurement model evaluates the relationship between the manifest variables (items of the questionnaire) and the constructs studied, indicating the magnitude of this relation, as well as the trend and significance of the same. Table 2 presents the factorial loads obtained for the research questions.



Table 2 - Initial Factorial Model

Questions	Working capital	Competitiveness	Financial Controls	Family managements	Business Organization	Operational Risks	P-value
CG1	0.629	0.421	0.196	0.375	0.437	0.386	< 0.001
CG2	0.411	0.228	0.365	0.192	0.190	0.236	0.015
CG3	0.696	0.439	0.185	0.536	0.380	0.409	< 0.001
CG4	0.676	0.442	0.253	0.300	0.415	0.370	< 0.001
CG5	0.333	0.207	0.292	0.191	0.230	0.236	(0.059)
CG6	0.517	0.290	0.047	0.345	0.271	0.307	0.002
CG7	0.572	0.308	0.585	0.237	0.288	0.315	< 0.001
CG8	0.716	0.449	0.207	0.397	0.552	0.356	< 0.001
CG9	0.458	0.158	0.222	0.134	0.172	0.087	0.019
COMP1	0.469	0.770	0.124	0.764	0.563	0.340	< 0.001
COMP2	0.241	0.510	0.524	0.332	0.234	0.295	< 0.001
COMP3	0.462	0.826	0.259	0.491	0.567	0.425	< 0.001
COMP4	0.371	0.318	0.394	0.140	0.290	0.323	(0.103)
COMP5	0.466	0.767	0.155	0.497	0.673	0.382	< 0.001
COMP6	0.320	0.368	0.562	0.108	0.336	0.182	0.400
CFIN1	0.285	0.160	0.749	0.128	0.058	0.257	< 0.001
CFIN2	0.410	0.405	0.890	0.260	0.337	0.374	< 0.001
CFIN3	0.324	0.437	0.696	0.230	0.419	0.273	< 0.001
GEFA1	0.414	0.599	0.192	0.843	0.387	0.405	< 0.001
GEFA2	0.106	0.200	0.273	0.186	0.129	0.177	(0.455)
GEFA3	0.377	0.479	0.060	0.711	0.326	0.355	< 0.001
GEFA4	0.332	0.269	0.480	0.250	0.177	0.208	(0.279)
GEFA5	0.158	0.286	0.133	0.384	0.149	0.066	(0.070)
GEFA6	0.472	0.555	0.175	0.850	0.479	0.363	< 0.001
GEFA7	0.231	0.177	0.317	0.157	0.037	0.174	(0.490)
ORGE1	0.524	0.655	0.228	0.513	0.887	0.428	< 0.001
ORGE2	0.341	0.339	0.347	0.131	0.397	0.305	(0.094)
ORGE3	0.046	0.065	0.027	-0.042	0.055	0.070	(0.765)
ORGE4	0.452	0.566	0.227	0.360	0.807	0.267	< 0.001
ORGE5	0.270	0.286	0.365	0.128	0.335	0.180	(0.125)
ROPE1	0.538	0.389	0.152	0.465	0.318	0.748	< 0.001
ROPE2	0.290	0.335	0.516	0.182	0.298	0.516	< 0.001
ROPE3	0.284	0.258	0.066	0.266	0.288	0.642	< 0.001
ROPE4	0.153	0.271	0.399	0.183	0.149	0.465	0.001

Source: Prepared by the authors

The analysis showed that most of the manifested variables have a significant impact on the working capital management construct, considering that the probability of significance of the t test is less than 0.05. However, variable CG5 (negotiation with long-term suppliers for marketing actions) was excluded from the final model because it had a low factorial load (0.333) and was not significant (0.059).



In the Competitiveness and Value Generation construct, the variables COMP4 (investment in the search for competitive advantage) and COMP6 (the company knows the main competitiveness factors) were excluded because the factorial loads were low (0.318, 0.368, respectively) and did not present significant impacts (0.103, 0.40, respectively). Two main points that go through the competitive advantage are: the understanding of the factors of competitiveness and also the investments. According to Lange, Busch and Delgado-Ceballos (2012) and Lameira et al. (2012), they may imply less sustainability of these companies.

On the other hand, the family management construct, GEFA2 (mission, vision and defined values), GEFA4 (division between family and business assets), GEFA 5 (discharge of personal debts with business resources) and GEFA7 (preparation of succession heirs) presented a low factorial load, respectively (0.186, 0.250, 0.384, 0.157) and no significant impact (0.455, 0.279, 0.070, 0.490) in the construct.

It can be assumed that the companies surveyed have not yet passed definitively by the professionalization process. This process is pointed out by some authors as necessary for the good performance and continuity of family businesses (Lodi, 1993; Garcia, 2001; Casillas, Vasquez, & Días, 2007; Martins, Maccari, Campanario, & Almeida, 2008; Freitas, & Krai, 2010; Freitas, & Barth, 2012; Santos et al., 2013). These results may indicate that companies are aware of the need to separate personal and corporate assets (GEFA3), but would not be effective in everyday life.

In the results of the Enterprise Organization construct, it is observed that the items ORGE2 (use of consultancy to diagnose management problems), ORGE3 (search insecurity advisory, price ...) and ORGE4 (perception of third parties to glimpse new horizons) presented low factor load (0.397, 0.055, 0.335) and below significant impact (0.094, 0.765, 0.125) in their respective construct. This may mean, in accordance with the previous item, that in the stage in which the companies are, although they understand the importance and necessity of hiring specialized help, there is still no evidence of their effective use.



All items used to measure the Financial Control and Operational Risks constructs had high factor loads and had a significant impact ($p < 0.05$).

After the exclusion of items that did not present significance level and significant impact ($p < 0.05$), the model was run again, as presented in Table 3. Note that the factor loads obtained for the items used to measure the Working Capital, Competitiveness, Financial Controls, Family Management, Business Organization and Operational Risks presented higher values, except for CG2 items (working capital contract) and COMP2 (existence of formal strategic planning).

Table 3 - Final Factorial Model

Questions	Working capital	Competitiveness	Financial Controls	Family managements	Business Organization	Operational Risks	P-value
CG1	0.629	0.405	0.196	0.349	0.417	0.386	< 0.001
CG2	0.411	0.151	0.365	0.151	0.119	0.236	0.016
CG3	0.696	0.460	0.185	0.539	0.399	0.409	< 0.001
CG4	0.676	0.411	0.253	0.275	0.359	0.370	< 0.001
CG6	0.517	0.307	0.047	0.341	0.289	0.307	0.002
CG7	0.572	0.215	0.585	0.155	0.218	0.315	< 0.001
CG8	0.716	0.423	0.207	0.385	0.537	0.356	< 0.001
CG9	0.458	0.095	0.222	0.095	0.111	0.087	0.022
COMP1	0.469	0.833	0.124	0.783	0.602	0.340	< 0.001
COMP2	0.241	0.455	0.524	0.273	0.159	0.295	0.002
COMP3	0.462	0.831	0.259	0.478	0.534	0.425	< 0.001
COMP5	0.466	0.799	0.155	0.489	0.674	0.382	< 0.001
CFIN1	0.285	0.082	0.749	0.070	0.015	0.257	< 0.001
CFIN2	0.410	0.302	0.890	0.183	0.250	0.374	< 0.001
CFIN3	0.324	0.367	0.696	0.175	0.343	0.273	< 0.001
GEFA1	0.414	0.621	0.192	0.861	0.410	0.405	< 0.001
GEFA3	0.377	0.522	0.060	0.737	0.328	0.355	< 0.001
GEFA66	0.472	0.579	0.175	0.852	0.488	0.363	< 0.001
ORGE1	0.524	0.644	0.228	0.512	0.917	0.428	< 0.001
ORGE4	0.452	0.550	0.227	0.350	0.825	0.267	< 0.001
ROPE1	0.538	0.401	0.152	0.464	0.312	0.748	< 0.001
ROPE2	0.290	0.273	0.516	0.147	0.231	0.516	< 0.001
ROPE3	0.284	0.254	0.066	0.264	0.285	0.642	< 0.001
ROPE4	0.153	0.226	0.399	0.140	0.094	0.465	0.001

Source: Prepared by the authors

When analyzing the results of the variables presented in Table 3, it is observed that the higher the values of the factor loads, the greater the relation of these with the sustainability categories. In practice, it can be said that companies considered sustainable would be more sensitive to financial variables, generating



value, above all, encouraged by the search for lower operational and financial risks. This reality can be confirmed in the factorial loads of variables CG1 (loans made if the financial cost is low), CG3 (Observe deadlines not to compromise the Working Capital) and CG8 (constant improvements in facilities and customer services).

In compliance with the model proposed by Matias (2007), listing the sustainability actions, the objective was to direct the operationalization of management, in order to efficiently guarantee corporate financial sustainability. In this regard, for the respondents, such efficiency could be expressed through the perception of value creation (COMP3) and strategic planning related to new processes, innovation and sustainability (COMP1), given that these variables presented higher factorial loads within the Competitiveness construct. As to innovation as a mechanism of sustainability, the results corroborate the studies of Barbosa, Noronha and Castro (2012), Palhares Jr., Tomaz e Silva (2014), Minello, Marinho and Bürger, (2017).

Still, some concern for environmental and social sustainability aspects can be observed in the same context, as is the case of ROPE3 (responsible image in environmental and social issues), observing the need to manage operational risks related to the image of the organization. However, the one that most affects the group is the possibility of financial losses (ROPE1).

It is also noteworthy to mention that there is a concern with corporate longevity. Therefore, the largest factor loadings were: the capacity of the partners to manage and communicate the central values (GEFA1) and succession (GEFA6). However, it was not possible to observe, or at least identify, whether heirs are being prepared for the succession process in these companies (GEFA7).

The entrepreneurial actions of financial sustainability also concern how to operate management controls in the day to day of the organization (Dum, Arbucke, & Parada, 1998, Matias, 2007, Stanislavchik, 2010). This aspect can be evidenced, from the construct Organization Enterprise - ORGE1 (consulting the company with positioning and market and new strategies) and ORGE4 (to glimpse new horizons



and knowledge) - and Financial Control - COFIN 2 (mechanisms of financial control) whose factor loads, presented the level of sensitivity of the respondents.

4.2.3 Measurement Model

The structural model evaluates the interrelationships between the constructs of the model (latent variables), based on the hypotheses raised by the research, indicating the magnitude of this relation as well as the trend and significance of the same. Figure 1 presents the estimated structural model, with the coefficients and their significance estimated by means of bootstrap simulations.

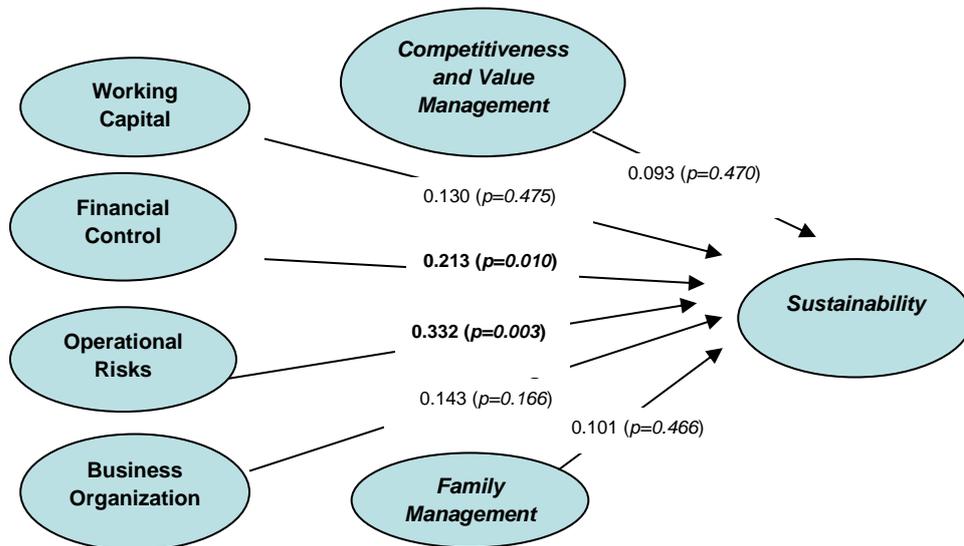


Figure 1 - Estimated structural model

Source: Prepared by the authors

From the analysis of Figure 1, it can be observed that financial control and operational risk management have a direct and significant impact on sustainability, considering that the probability of significance (p-value) is lower than 0.05. The observed relationships are direct, indicating that the greater the financial control and the management of operational risks, the greater the sustainability perceived by the interviewees in the companies.

It is presented, in Table 4, the quality measures of the estimated model that describes the Average Variance Extracted (AVE), the estimated coefficient of



determination for each of the constructs of the model besides the composite reliability also for each of the constructs.

Table 4 - Quality Measures of the Structural Model

Constructs	AVE	Composite reliability
Working Capital	0.326	0.805
Competitiveness	0.558	0.828
Financial Control	0.613	0.824
Family Management	0.670	0.858
Business Organization	0.761	0.864
Operational Risks	0.363	0.688
Average	0.548	-
<i>Sustainability</i>	R² = 0.570	
R² Global (GoF)	0.559	

Source: Research data, results obtained by SmartPLS software.

The convergent validity is evaluated through the Average Variance Extracted (AVE), which is a measure of the quality of the measurement model, showing how much the manifest variables explain the constructs. Note that the overhead variables explain 33% of working capital management, 56% of competitiveness, 61% of financial controls, 67% of family management, 76% of the business organization and 36% of operational risks. The mean AVE was 55%. It was decided not to exclude items with AVE of less than 50% (Fornell, & Larcker, 1981), because it was a model initially explored in this study and because it was categorical variables. In addition, the constructed model was able to explain 57% of sustainability variability.

The modeling of structural equations PLS does not optimize the global function, unlike modeling in structural equations based on covariance (LISREL, for example). Therefore, there are no global validation indexes for the model, such as the Chi-square in the LISREL models (Tenenhaus, Amato, & Vinzi, 2004; Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). Thus, Tenenhaus, Amato and Vinzi (2004) propose a Goodness of Fit (GoF) index, which is the geometric mean between the mean R² (structural model adequacy) and the mean AVE (adequacy of the measurement model).



For the model of FIG. 1, the GoF was 0.559 (shown in table 4), interpreted as if it were a general determination coefficient (R^2), which considers both the adequacy of the measurement model and that of the structural model. Thus, the global model is able to explain 56% of the relations of the measurement model and the structural model. This value is considered satisfactory, considering the complexity of the studied problem and the significance obtained.

5. FINAL CONSIDERATIONS

Regarding the companies surveyed, it is possible to verify their importance in the economic, political and social scenarios in what concerns to the creation of employment and income in the microregion where they are inserted. Although 21% of the companies have up to 2 years of existence, when analyzing the cumulative frequency, it was verified that 68.2% of the companies are over 5 years old, which can be considered long-lived companies. Already the questions related to the life cycle of the organizations, the results present different indications. Lack of planning and financial control can, in some way, affect longevity.

Therefore, based on the model of entrepreneurial actions related to financial sustainability that lead to corporate longevity, some results were achieved:

Most companies do not have contingency planning to cover unexpected losses, and they do not have a formal community relationship plan. However, they are companies that have a certain maturity and experience in the market. Although managers and entrepreneurs, for the most part, claim to have financial controls and use them to survey their daily financial situation, they do not use them to identify more sophisticated indicators such as capital structure, liquidity and profitability. When checking the financial controls used, it is confirmed that there is contradiction in their speeches (questionnaire responses) when dealing with daily practice in the application of these controls.

It was observed that financial control and operational risk management impact directly and significantly on sustainability, that is, the greater the financial control and the management of operational risks, the greater the sustainability perceived by the



respondents in the companies. Although the respondents are aware that the maintenance of financial controls and the management of operational risks effectively lead to financial sustainability, they are not organized in this sense, which reiterates the contradictory question of the discourse.

As to human financial management - succession and behavioral aspects - it was observed, in full, that the respondents tend to agree that the company has clear procedures regarding its internal and external public, from a professional management perspective. Although there is such agreement, just over half of the companies analyzed have mission, vision and values defined, and 2/3 of them comprise the division between the company's equity in relation to personal assets. It should be noted that a third of respondents are concerned about the long-term business fate.

Thus, in forming a vision of the dynamics of corporate sustainability, it was found that not all the variables present in the study are conclusive arguments in the construction of a representative model. However, it must be considered that the experience associated with a financial control and a more transparent relationship of the organization are important elements for the longevity of a business. In theory, there are behavioral variables that directly interfere with financial sustainability.

The results identify that, although managers and owners of companies are aware of the tools of administrative management and understanding of the practices of financial controls that allow efficiency in the management of the entrepreneurial actions discussed, as to the entrepreneurial actions discussed, it was noticed that they are, in most cases, negligent (perhaps because they do not understand) when practicing them, often becoming vulnerable to the micro and macro business environment in which they are involved.

The perceived limitations were the lack of answers in some questionnaires. Thus, it suggests the extension of this study in other Brazilian regions in order to confirm or refute what has been presented in the intention to identify the chances of possible modifications of this scenario, and if it agrees or not with the results found here, because in this way the question of longevity entrepreneurship could be



discussed in the light of science in an attempt to increase its life cycle more and more, and in order to reduce the mortality rate of existing companies as previously noted.

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