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Revista de Negócios

Studies on emerging countries

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PRESENTATION

Revista de Negócios is located in Blumenau, state of Santa Catarina, Brazil, in the campus of Universidade Regional de Blumenau—FURB, postgraduate programme in Business Administration. Revista de Negócios is published quarterly in January, April, July and October on the website furb.br/m.

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MISSION

Revista de Negócios advances the knowledge and practice of management learning and education. It does it by publishing theoretical models and reviews, mainly quantitative research, critique, exchanges and retrospectives on any substantive topic that is conceived with studies on emerging countries. Revista de Negócios is an interdisciplinary journal that broadly defines its constituents to include different methodological perspectives and innovative approach on how to understand the role of organizations from emerging countries in a globalized market.

SCOPE AND FOCUS

Revista de Negócios aims to create an intellectual and academic platform, under the perspective of Strategic Management Organization, to promote studies on Emerging Countries. The Journal looks and reviews for contributions to the debate about researches on two specific topics: innovation and competitiveness and strategic organization in emerging countries. The topic of innovation and competitiveness covers all studies and researches related to how organizations can sustain their competitiveness, particularly focusing on innovations, entrepreneurship and performance. The second topic covers studies and researches on strategic management of organizations, more specifically on how companies can or should act at strategic level looking mainly but not only to external context, supply chain, competitive strategies in international market, and marketing approach. The editorial policy is based on promoting articles with critical perspectives seeking for the understanding of the differences and similarities among emerging countries and in comparison with experiences and theories on strategic management in developed countries. It intends to promote specific contributions of how theoretical and empirical studies on emerging economies may contribute to the advance of theories related to innovations and competitiveness and strategic management of or-

ganizations. It is welcome scholars particularly working on such topics to submit theoretical essays, empirical studies, and case studies. The Revista de Negócios is open to different methodological perspectives and innovative approaches on how to understand the role of organizations from emerging countries.

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The target audience of Revista de Negócios is the Brazilian international academic community in related fields of knowledge on business management.

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Editorial Letter

The main objective of our Journal is to create an intellectual and academic platform, under the perspective of strategic management of organization, in order to promote studies in emerging countries. This editorial decision represents a new milestone in the history of our Journal, looking forward to contributing to the debate regarding researches on two specific topics: innovation and competitiveness, and strategic organization in emerging countries. We understand that the topic of innovation and competitiveness covers several studies and researches related on how the organizations are capable to sustain their competitiveness, particularly focusing on innovations, entrepreneurship, and performance.

The second topic covers studies and researches regarding strategic management of organizations. More specifically it focuses on how companies can or should act at a strategic level, examining mainly but not only to the external context, supply chain, competitive strategies in international markets, and marketing approach. We look forward to contributions from authors around the world, stating that this is our last joint edition, with articles published in Portuguese. We will continue accepting articles for both Portuguese and Spanish, but all publications and our website will be exclusively published in the English language.

Our editorial policy is based on promoting articles with critical perspectives, seeking for the understanding of the differences and similarities among emerging countries in comparison with experiences and theories on strategic management in developed countries. We intend to promote specific contributions of how theoretical and empirical studies on emerging economies may contribute to the advance of theories related to innovations and competitiveness, and strategic management of organizations.

We invite scholars particularly working on such topics to submit theoretical essays, empirical studies, and case studies. We are open to different methodological perspectives and innovative approaches on how to understand the role of organizations from emerging countries in a globalized market. Today all decisions go through a group of editors, but this journal continues with its headquarters at the Regional University of Blumenau - FURB, in the post-graduate program in Business Administration.

Guest editors were incorporated into the group of editors or into the academic and executive board. This new group is formed exclusively by researchers and editors with experience of several stemmed study centers from around the world, with publications related to emerging countries. The present issue is divided into two sections, Research & Reviews and Books & Resources Reviews, focusing on context effects and contextualization in entrepreneurship, governance and sales in management.

The present edition begins with European authors that write about identification of opportunities and threats to the innovation performance of firms by studying crisis effects upon external facilitators and barriers. Besides the literature review, case studies developed in Portuguese and Brazilian enterprises are used for the analysis of the practical effects of the identified aspects, in two distinct realities concerning the economic crisis. The results show that although Portugal has suffered the crisis effects, in a general way,

more than Brazil, when we look to innovation performance, Portugal has shown better results than Brazil during and after the crisis. This study contributes to enterprise and academic purposes since it classifies factors, which influence innovation positive or negatively in times of crisis.

The second paper presents a qualitative research developed in light of behavioral theories regarding company internationalization. Its objective is to study the internationalization process of two wine exporters, one Chilean and one Brazilian, while focusing on the liability of outsider ship. Data were collected from primary and secondary sources, mostly from semi-structured interviews with parties responsible for exportation. The data was treated with content analysis grounded in current literature. The Undurraga winery (Chile) overcame the liability of outsider ship by employing a market penetration strategy, consisting of stages, progressing to each consecutive stage depending upon the success in the current one. When the company enters into a new market, it identifies the liability and develops a strategy to deal with it. Even though the Brazilian winery, Salton, is over a century old, it has only attempted to internationalize recently. It showed characteristics of liabilities of foreignness.

The third article aims to analyze the profile of Brazilian entrepreneurs and the factors that shape the entrepreneurial ecosystem in the country. A survey was conducted with 76 entrepreneurs from the ICT sector, which was chosen because of its high growth rates. The research was developed in the context of a joint project called Entrepreneurship as a Growth Driver, involving universities from five countries: Italy, Brazil, Russia, India and China. The objective of the project was to study the key factors of entrepreneurial ecosystem that facilitate the growth of knowledge-intensive enterprises in each country, focusing on the results obtained for Brazil. Three groups of entrepreneurs with distinct profiles emerged from the analysis of the results. The data also reveals that social elements are more important than personal issues, and public policies have an essential role in the development and maintenance of the entrepreneurial ecosystem in Brazil.

To finish this edition with a theoretical essay as a tribute to one of the members of the academic editorial team, the last paper aims developing a bibliometric study about one of the main writers in the area of entrepreneurship, Shaker Zahra, who is a reference in most of the themes regarding entrepreneurship. The paper presents a survey of existing articles published, and analysis of contents, of 163 articles from the existing 212 articles published.

Marianne Hoeltgebaum and Gerson Tontini
Editor and Coeditor

BARRIERS AND DRIVERS FOR INNOVATION IN
TIMES OF CRISISAna Clara Cândido¹, Patrícia Feronha Wielewick², Ricardo Augusto Zimmermann³¹ Universidade do Estado de Santa Catarina – UFSC – e-mail: acc.anaclara@gmail.com² Universidade do Porto – e-mail: patriciafw@gmail.com³ Universidade de Aveiro – e-mail: ricardoaz@gmail.com

KEYWORDS

Innovation;
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ABSTRACT

The economic crisis which started in 2008 has demonstrated more clearly the importance of conjuncture aspects for organizational results evidencing associated opportunities and vulnerabilities. In such a context, if on one hand innovation is affected by investment reduction by most enterprises, on the other it has shown to be one of the “antidotes” against the crisis and appears as fertile soil for investments, in the organizational as well as in the territorial context. Enterprises and countries which maintained or even raised efforts toward innovation have demonstrated a higher resilience in times of difficulty. This study aims at identifying opportunities and threats to the innovation performance of firms by means of the study of the crisis effects upon external facilitators and barriers. Besides the literature review, case studies developed in Portuguese and Brazilian enterprises are used for the analysis of the practical effects of the identified aspects in two distinct realities in what concerns the economic crisis. The results show that although Portugal has suffered the crisis effects, in a general way, more than Brazil, when we look to innovation performance, Portugal has shown better results than Brazil during and after the crisis. This study contributes to enterprise and academic purposes since it classifies factors which influence innovation positive or negatively in times of crisis.

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1 Introduction

The economic crisis which started in 2008 has demonstrated more clearly the importance of conjuncture aspects for organizational results evidencing associated opportunities and vulnerabilities (Dervitsiotis, 2010). In such a context, if on one hand innovation is affected by investment reduction by most enterprises, on the other it has shown to be one of the “antidotes” against the crisis and appears as fertile soil for investments, in the organizational as well as in the territorial context (Filippetti & Archibugi, 2011).

Enterprises and countries which maintained or even raised efforts toward innovation have demonstrated a higher resilience in times of

difficulty. We can say, therefore, that the adoption of innovation strategies, as well as contribute to the increased competitiveness of organizations, for economic growth, job creation and the increasing wealth of the territories (Madrid-Guijarro, Garcia, & Van Auken, 2009), is a defense mechanism against the adversities imposed by any changes in the economic context. The innovation capacity of the organizations is the result of internal and external factors (Berghman, Matthyssens, & Vandenbempt, 2012; Dervitsiotis, 2010; Fawcett, Jones, & Fawcett, 2012; Hadjimanolis, 1999; Madrid-Guijarro et al., 2009; Roy, Sivakumar, & Wilkinson, 2004). Among the

major internal factors that influence innovation are: organizational culture, leadership for innovation, innovation strategy, availability of internal resources, technology ownership and participation of employees (Dervitsiotis, 2010; Gnyawali & Srivastava, 2013). External factors, however, include various aspects that relate to environmental, market and relations of companies with other actors. The increasing complexity of entrepreneurial environments, result of globalization, increases the impact of external factors to the overall performance of organizations. These factors, therefore, tend to be more affected in times of crisis.

The crisis effects upon innovation process have been explored in recent literature thanks to the scope of its impact. Ranga & Etzkowitz (2012) affirm that “innovation has been hit hard by the economic crisis, as R&D spending declined in many countries”. On the other hand, some enterprises can follow the opposite direction, taking advantage of new opportunities. The crisis led to a concentration of innovation in a small group of fast growing new firms and those firms already highly innovative before the crisis (Archibugi, Filippetti, & Frenz, 2013a). Thus, we can say that the moments of severe economic recession affect companies in different ways, depending on the profile and bound to innovate. Similarly, the crisis affects countries differently. On the one hand, Europe was strongly affected by the crisis, and Portugal was one of the countries that faced more difficulties at this time, and on the other hand Brazil is not considered one of the countries that most suffered the effects of the economic crisis.

With regards to the innovation scenery in both countries, Portugal has been positioned ahead of Brazil. According to The Global Innovation Index 2014 (Cornell University, INSEAD, & WIPO, 2014), Brazil occupies the 61st position in the global innovation ranking between 143 countries available. Portugal, on the other hand, occupies the 32th position and has shown good results in some important indicators, especially with regards to the politic and governmental environments and the human capital and research. It is noteworthy that, although in a general matter, Portugal has suffered more the effects of the crisis when compared to Brazil, innovation results show a different scenario and Portugal has shown a strongest growth in recent years.

Once the origin of the crisis is economic, as the main consequences, it is natural that the strongest effects upon the innovation process are also economic related, which is reflected in the reduction of the amount invested in innovation by companies. The literature on the effects of crisis upon innovation processes thoroughly explores financial and economic aspects and other aspects are rarely addressed, such as the development of partnerships with clients, suppliers and universities. According to Ranga & Etzkowitz (2012), the crisis triggered two main effects; affected the innovation system directly due to the reduction of investments, and indirectly aggravating existing systemic weaknesses in a process of "creative destruction" (concept originally used by Joseph Schumpeter and that will be explored in this article).

In such a context, this article aims to explore this existing gap in the literature by means of the study of the various effects of the crisis upon the innovation process, based on the barriers and facilitators (or drivers) that have impact in this process. Thus, the study aims at identifying opportunities and threats to the innovation performance of firms by means of the study of the crisis effects upon external facilitators and barriers. For this, will be explored the concept of persistence of innovation during periods of severe recession. The persistence of innovation concerns the extent to which the organizations that innovate once are more or less likely to innovate again in subsequent periods (Clausen, Pohjola, Sappasert, & Verspagen, 2012).

We emphasize that this article does not intend to discuss the causes of the economic crisis but its effects, particularly on the process of innovation of organizations. Thus, although we consider extremely important the study of factors that lead to moments of low economic growth, this issue will not be discussed in depth in this paper.

In addition to a review of the literature that addresses the issues "crisis and innovation" and "barriers and drivers for innovation", we analyze the scenarios of Brazil and Portugal, first with the use of secondary data on innovation in both countries and then analyzing case studies in four organizations, two in each country. From the conclusions of the case studies are pointed out the effects of the crisis on the companies studied,

which allows, in addition to diagnosis, the comparison between the two realities.

The paper is structured as follows. Next section introduces our theoretical framework about innovation and crisis, barriers and drivers for innovation. Following, the hypotheses are developed and dataset and methodology are introduced. Finally, we present the results that are discussed in the last section.

2 Innovation and crisis

Nowadays innovation represents an important advantage for organizations. The innovation capacity of organizations derives from internal and external factors and therefore the economic crisis has impact in such a process in different ways especially on the reduction of investments made by enterprises (Archibugi et al., 2013a; Archibugi, Filippetti, & Frenz, 2013b; Filippetti & Archibugi, 2011). Schumpeter (1943) suggested that economic cycles are a consequence of innovation, but also that innovative activities and organizations are strongly affected by economic crises. Filippetti & Archibugi (2011), following Schumpeter, argue that the relation between innovation and the economic cycles can be summed up into two hypotheses: (1) innovation is a cyclic process and enterprises tend to reduce efforts to innovate during economic recession periods (2) recession periods are fertile ambience for enterprises to innovate. Archibugi, Filippetti, & Frenz (2013a, p. 306), suggest that “because innovation is risky as well as costly, during a crisis many firms might focus more strongly on survival, and less on seeking out new opportunities”. Thus the financial crisis has reduced the short-term willingness of companies to invest in innovation (Archibugi et al., 2013a, 2013b). However, some enterprises manage to go the other way around and take advantage of opportunities emerging from less economic growth to lever up innovation activities.

Archibugi et al (2013a), are still using Schumpeter’s model that can be labeled ‘creative destruction’ and ‘creative accumulation’ (or ‘technological accumulation’), classify enterprises which innovate in periods of crisis in two types: (a) firms that cannot survive without changing their products and services. These dynamic firms innovate continuously, regardless of the business environment. (b) firms that were not necessarily

involved in innovation before the crisis, or the new innovators. Such enterprises are usually SMEs which had activities before the crisis or even new enterprises which take advantage of opportunities deriving from the crisis (Archibugi et al., 2013a). For the authors, the first scenery suggests that innovation is based on a cumulative learning process and path-dependent patterns rooted in organizational routines, what confers persistence to the innovation activity. According to the second scenery, economic turbulences made possible for new and small firms to stand out in the competitive market by means of innovation (Archibugi et al., 2013a).

Ranga & Etzkowitz (2012) also make use of Schumpeter’s model to feature the crisis effects. For the authors, the crisis causes two main effects: it affects the innovation system directly due to the reduction of investments as well as indirectly since it accentuates the existing systemic weaknesses in a “creative destruction” process. Kanerva & Hollanders (2009), analyzing data from Eurobarometer, suggest that highly innovative firms continued to invest in innovation also during the crisis, depending on the ‘persistence of innovation’. It’s one of the factors which explain the innovator behavior of organizations during the period of crisis refers to the fact that as organizations that innovate once have more or less probabilities to innovate again in subsequent periods (Clausen et al., 2012).

Persistence of innovation usually represented by a model in which the probability for a firm to innovate is explained by means of variables which measure if the enterprise has innovated as well as by means of control variables. The innovation persistence degree of firms therefore depends on various factors. Specific enterprise features which influence persistence are its strategies, managers’ attitudes, stage of development, domain of technologies, cash-flows and profits positive trend, among others. Industry demand features the enterprise is part of also influence, such as the profit opportunities and technology.

However, Filippetti & Archibugi (2011) argue that the national institutional setting has a preponderant role in enterprises behavior and performance.

Clausen et al. (2012) suggest that innovation persistence on the enterprise level may be explained by means of three factors: (1)

success generates success; that is, an innovation succeeding generates profit needed to invest in new activities or products; (2) dynamic economies of scale and “learning-by-doing”, that is, knowledge is cumulative, and current knowledge is the input for new knowledge; (3) enterprises keep innovation activities bound to investment “sunk costs” in I&D, that is, a firm will hardly discontinue such activities for a year to retake them the following year since the activity is based on the investigators’ knowledge.

In such a context one can say enterprises with established innovation activities which invest in R&D, usually big ones, tend to continue innovating along crises periods for the sake of what is called ‘innovation persistence’. On the other hand, the agility and flexibility of small and new enterprises allows taking advantage of changes in the environment and new market opportunities. Such scenery suggests the existence of opportunities and menaces from the moments of crisis for the innovation process of firms, what depends in a great extent of the environment in each country.

3 Barriers and drivers for innovation

The organization innovation capacity derives from external and internal factors (Berghman et al., 2012; Dervitsiotis, 2010; Fawcett et al., 2012; Hadjimanolis, 1999; Madrid-Guijarro et al., 2009; Roy et al., 2004). According to Fawcett, Jones e Fawcett (2012), innovation became a team sport. Great innovators depend on external actors to assure great part of the advantage in what refers innovation (Fawcett et al., 2012). Ozman (2009) and Radas e Bozic (2009) state that innovation is more effective when seen as a collective process and that collaboration with other enterprises is an important part of enterprise efforts toward innovation.

The external factors are treated by the authors as: (i) facilitators (Choi & Krause, 2006; Ettlíe & Reza, 1992; Koberg, Uhlenbruck, & Sarason, 1996; Rivas & Gobeli, 2005), (ii) barriers (D’Este, Iammarino, Savona, & von Tunzelmann, 2012; Fri, 2003; Galia & Legros, 2004; Holzl & Janger, 2014; Mohnen & Roller, 2005) or (iii) both (Calabrese, 2002; Ettlíe & Reza, 1992; Madrid-Guijarro et al., 2009; Radas & Bozic, 2009).

The impact of such factors can be observed in one or more points of the innovation process (Radas & Bozic, 2009), depending on its features. Financing difficulties, for instance, may have greater impact in the innovation implementation than in other stages. To Holzl & Janger (2013, 2014), analyzing barriers, more than being a facilitator, allows a view of the enterprises with focus on the innovation process and the definition of policies. It allows the identification of constraints in the process and therefore the decision making toward improvement.

Hadjimanolis (1999) divides external factors related to the supply (supply chain) with the search for environmental factors. Barriers related with supply chains include the difficulty to get information about technology, obtain raw matter and financing barriers. Barriers related to searching refer to the difficulty to get information about consumers’ needs, their perception of innovation risks and domestic Nat international market limitations. Environmental factors, in turn, include governmental regulations, measures and antitrust as well as political actions (Hadjimanolis, 1999).

Radas and Bozic (2009) group external factors into: collaboration with other enterprises, connection with knowledge centers and utilization of funds and regulatory support. The authors also point out that collaboration with suppliers may strongly contribute to the organization innovation power. Conceição et al. (2006) point out the relevance of market factors as the sector technological intensity and environmental factors as governmental regulations.

Holzl & Janger (2014) analyze two types of barriers: (i) financial and (ii) related to knowledge. Financial barriers refer to innovation financial difficulties due to uncertainties concerning refunding/profit. Barriers related to knowledge refer to the acquisition and processing of information needed for innovative activities. Financing difficulties are also approached by Mohnen et al. (2008).

According to Madrid-Guijarro et al. (2009) information about the external environment of organizations, such as market opportunities, technological changes and governmental policies have a great impact upon managers’ decision to adopt innovation as a strategy for increase competitiveness.

The authors also point out innovation high cost and market uncertainties as important barriers. To Galia and Legros (2004), besides widely discussed factors such as technological opportunities and market level of competition factors such as lack of: (i) qualified staff in the market, (ii) information as meaningful barriers against innovation.

Gnyawali (2013) stresses the importance of participation in strategic alliances or clusters as an innovation facilitator aspect due to the impact upon social interaction intensity, competition strength and the possibility of co-development of projects. Organizational interaction with suppliers is approached by Ettlie and Reza (1992) as a great powerful value addition factor for innovation which according to the authors must be used by enterprises in their innovation strategies.

Golgeci and Ponomarov (2013) specifically approach the importance of relationship with other actors of the supply chains for the increase of organizations innovation capacity. As firms become more specialized their engagement with supply chain partners increases even more in the innovation process. It becomes fundamental that enterprises align their investigation and internal development strategies with available knowledge in the supply chain, for having a better performance in what concerns innovation (Narasimhan and Narayanan, 2013).

The main reason to collaborate with other organizations is the access to internal unavailable resources; mainly to knowledge (Rese, Gemunden, & Baier, 2013). In that sense Radas & Bozic (2009) and Xie et al. (2010) point out the importance of alliances with investigation centers and universities as facilitating factors for the innovation process.

Then we can conclude that there are three main approaches to external aspects having impact upon the innovation process in organizations: (1) Relational factors – facilitators or barriers for the innovation process deriving from the organization relationship with external agents such as clients, suppliers and other partners – centers of investigation, universities, partnerships with other enterprises for the sake of innovation; (2) Environmental factors – themes such as economic uncertainty, governmental policies and legislation; (3) Market factors – themes related to the operating sector, market technology intensity and competition.

4 Hypotheses and development

Having as objective analyze the several effects of the crisis upon the innovation process and having as basis the barriers and facilitators which have impact upon it, in this section of the study the research hypothesis are defined starting from crossing factors which act as facilitators and as barriers to innovation as well as from the factors which have impact in innovation in times of crisis. Briefly described, the ability of organizations to innovate in times of crisis is linked to factors which increase innovation persistence and to market environmental factors which can potentially generate new opportunities. On the other hand, the main factor making innovation difficult in times of crisis according to literature is financing difficulty. In what concerns barriers and facilitators for innovation, relational, environmental and market factors are identified. Table 1 relates the main factors identified.

Table 1. Relationship between topics

Factors influencing the innovativeness of organizations in times of crisis	Barriers and drives for innovation
Financing difficulty	Environmental aspects
Market uncertainty	Environmental and market related aspects
Technonoly and raw material access	Relational aspects
Positive trend of cash-flows and profits	Environmental and market related aspects
Industry demand characteristics/features	Market related aspects
National institutional setting	Environmental aspects
Establishing partnerships	Relational aspects

Source: Developed by authors

The impact of crisis upon the innovation process of organizations was empirically proved by means of several studies carried out in the last years. Although its importance is recognized and its impact on innovation persistence is acknowledged as high (Clausen et al., 2012), the investment in R&D is not the only innovation source of innovation - other inputs include external knowledge (e.g. in the form of cooperation, alliances, or licensing), and internal activities like design, marketing, training, etc. Thus, to check different influences on the crisis

effect upon the process and the results of organization innovation, the first hypothesis presented is:

H1: The crisis has impact upon the innovation process in different ways - not restricted to investment reduction.

The success of innovation process depends on the enterprise ability to overcome obstacles ahead (D'Este et al., 2012), as well as to empower the existing facilitators. Taking into account the existence of relational, environmental and market-related external factors which have impact upon innovation in organizations, the second hypothesis presented is:

H2: The crisis affects the relational, environmental and market related aspects which have an impact upon innovation and change the drivers and barriers.

The recession periods bring together a game of difficulties for enterprises, including the innovation process. "However, economic crises also provide an opportunity for firms and entire nations to restructure productive facilities and to explore new opportunities. Smart companies do perceive that an economic crisis will not last forever and that a recovery will sooner or later arrive" (Archibugi et al., 2013b, p. 1247). Thus, the third hypothesis to be tested is:

H3: Drivers and barriers for innovation influenced by crises create new opportunities and threats to innovation within organizations.

Last, considering that the crisis impacts countries with different intensities, we have started from the principle that the more severe the crisis, the greater will be the impact in innovating activities. Thus, the last hypothesis of the study is:

H4: Companies located in countries most affected by crisis faced greatest difficulties concerning innovating in such periods.

To test the Hypothesis, after the literature review, we used two types of information. Secondary data, especially from The Global Innovation Index, to compare the context of innovation in Portugal and Brazil in three different periods – before the crisis, during the crisis and after the crisis (or during the recovery of the economies); and primary data from the case studies, using data from the same three periods. The case studies were developed in Portuguese and Brazilian enterprises and were used for the analysis of the practical effects of the identified aspects in two distinct realities in what concerns the economic crisis.

The analysis on the reality of the countries starts on the principle that the influence of the crisis upon society and the enterprises varies according to the reality in each country. The economic integration and globalization processes have great impact upon the States which start being influenced by external factors and, as a consequence have its sovereign compressed (Fernandes, 2012). In times of global severe recession like that beginning in 2008, the fragility of countries economies makes that influence intensified so that its effects reach different aspects of organization and people's lives. The selected countries for this investigation - Portugal and Brazil - were impacted in distinct ways by the crisis and its effects upon innovation will be further analyzed. For the empirical analysis on the crisis effects upon innovation, an option was made to carry out the study of multiple cases. A case study is an empirical research that investigates a contemporary phenomenon within a real life context, especially when barriers between the phenomenon and the context are not clearly evident (Yin, 2009). The use of multiple case studies confers more replication potential and reduces results vulnerability. Four enterprises were selected – two in Portugal and two in Brazil – whose features are presented in Table 2. Interviews were made with key representatives of the enterprises.

5 Data and Methodology

Table 2. Main features of enterprises investigated

Company A	Company B	Company C	Company D
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Country	Portugal	Portugal	Brazil	Brazil
Sector	Mold industry	IT-passenger transport sector	Passenger transport sector	Textile industry
Foundation	1947	1992	1955	1994
Number of employees	26	11	705	80
Annual revenues	1.200.000 €	700.000 €	17.000.000 €	4.000.000 €
Position of interviewee	CEO	Director	CEO	Supervisor
Target market	National and intern.	National	Regional	National
Types of innovation	Product and process	Product and process	Process	Process

Source: Developed by authors

6 Results and discussion

In this section we discuss our results in connection with the hypotheses. Firstly, an analysis of the crisis effect taking place in the two countries, using secondary data, is held in order to contextualize innovation. Thereafter, we analyze the results of the case studies.

6.1 Innovation and crisis in Portugal

Europe has undergone the period of crisis started in 2008 intensively. Portugal, in its turn, was one of the countries which faced more difficulties in that period with the reduction of the Gross Domestic Product (GDP) in four of the five last years (PORDATA, 2014). To Fernandes (2012), great part of the problems the Portuguese economy today faces is directly or indirectly linked to decisions taken in the late 90's related to joining the Euro. At the time, much was discussed about the demands and risks of adopting a single strong currency by fragile economies like the Portuguese. However; the desire for development left such worries behind.

In what refers innovation during the crisis period Portugal has shown to be able to overcome difficulties maintain or even improve results achieved in the previous years. Data from The Global Innovation Index, annual report elaborated by INSEAD, Cornell University and World Intellectual Property Organization – WIPO, which demonstrates the reality concerning innovation in more than 143 countries, reveal that Portugal raised from the 39th position in the

ranking in 2007 to the 32nd in 2014 (Cornell University et al., 2014).

Another annual report - the Eurobarometer - elaborated by the European Commission with data from the 28 member states of the European Union reveals the highlight of Portugal in the European scenery in a great number of indicators. Looking at the results it can be observed, for example, that Croatia (53%) and Portugal (52%) are the only countries where at least half of all companies say they have introduced new or significantly improved services since January 2011. Companies in Italy (49%), Portugal and Malta (both 48%) are the most likely to say they have introduced new or significantly improved goods and companies in Portugal (45%), Malta and Italy (both 44%) are also the most likely to have introduced new or significantly improved marketing strategies since January 2011. Companies in Portugal (47%) and Cyprus (43%) are the most likely to have introduced new or significantly improved organizational structures. Finally, companies in Portugal (44%), Malta (43%) and Croatia (41%) are the most likely to have innovated in the area of processes. A broad overview of these results across Member States shows companies in Portugal are consistently amongst the top three most likely to have introduced any of these innovations since January 2011 (European Commission, 2014). In addition, only in Portugal more than half of companies say they have innovations and commercialize them.

6.2 Innovation and crisis in Brazil

Unlike Portugal, Brazil is not taken as one of the countries which were most affected by the economic crisis beginning in 2008. However, Brazilian economy, unlike that of other countries constituting the BRICS, does not reveal representative numbers in the last years. Brazilian GDP raised 7, 5% in 2010, however has presented more modest results thereafter; with a growth of 2, 7% in 2011, 1, 00% in 2012 and 2, 5% in 2013 (Central Bank of Brazil, 2014). The expected results for 2014 are under 1, 00%.

Concerning innovation, also according to data from The Global Innovation Index, Brazil occupies the 61st position in the rank of the 143 countries analyzed. In 2007 the country occupied the 40th position and in 2011 the 47th, what

reveals that during the period of crisis Brazil showed a considerable decrease in its innovation performance. Considering, as already mentioned, that Brazil was not one of countries most affected by the crisis, it can be said that the policies adopted by the government and the enterprises efforts have not had the effect expected.

However, it could be observed that Brazil has reached its worst results in 2013, with a slight improvement in 2014. Brazil is ranked 61st (up from 64th in 2013), 16th among upper middle-income countries (up from 21st), and 5th in the region (up from 8th). Brazil is one of the four countries in the region that improves in the rankings this year (Cornell University et al., 2014). Brazil ranks as 63rd in the Input Sub-Index, 64th in the Output Sub-Index and as 71st in efficiency. For the report authors the country shows relative strengths in Business sophistication (37th), Infrastructure (60th), Human capital and research (62nd), Creative outputs (64th), and Knowledge and technology outputs (65th). Brazil's strongest performance is in the Knowledge absorption sub-pillar, ranking in the top 30 for three out of the four variables. Brazil's weaknesses remain in Institutions (95th), particularly in the Business environment sub-pillar (137th) (Cornell University et al., 2014).

Based in such analysis, one can say that although Portugal has undoubtedly suffered the effects of the crisis to a greater extent as compared to Brazil, what can be proved by means of the evolution of the GPD of both countries in the last years, data referring innovation reveals divergent scenery. The analyzed reports demonstrate Portugal improved its performance concerning innovation during the period of crisis; on the other hand, Brazil presented a decrease in results in the same period.

7 Conclusions

The literature on the effects of crisis upon the innovation process explores financial and economic aspects thoroughly, and other aspects are rarely addressed. However, the impact of crisis upon innovation is not constrained to financing capability, but it also comprises other aspects such as market uncertainty increase and customers' lack of response in what concerns innovation, what is in accordance with our first hypothesis.

With basis on the case studies investigated and the analysis of secondary data from Portugal and Brazil, it is concluded that the crisis affects/impacts companies and countries differently. With regard to the second hypotheses, the crisis effects are more clearly observed in environmental and market related factors as compared to relational factors. Enterprises located in Brazil, however, revealed major difficulty for establishing partnerships along and after the period of crisis.

Literature review, as well as the case studies analyzed also suggests the emergence of opportunities and threats to innovation processes in periods of crisis. Although Portugal has acknowledged having suffered the crisis effect to a greater extent if compared to Brazil, data concerning innovation reveal different scenery. Portugal improved its performance concerning innovation during the crisis. Brazil, on the other hand, decreased in results achieved in the same period. We can also conclude that, given the scarcity of resources in times of crisis and in the quest for competitiveness, many companies transfer their efforts from product innovation to process innovation, cheaper and with the potential to reduce costs.

Finally, we can say that the crisis has an impact upon innovation barriers and facilitators intensity in different ways generating new opportunities and threats and also that enterprises which adapt themselves more easily to constraints imposed by the economic crisis tend to present better results related to innovation.

This study may contribute for enterprise-related as well as academic purposes since it classifies factors which influence innovation positive or negatively in times of crisis. Its main limitation is the number of countries involved (only two) as well the number of case studies (only four). The enterprises studied also diverge as to size and sector, what also increases difficulty to compare and generalize findings. Finally, Brazilian companies revealed instability in what refers innovation strategies, making the analysis of crisis effects more difficult and less accurate. The main recommendation for further investigation is to test the hypotheses by making surveys comprising more firms and countries and with focus on specific firm sizes and sectors.

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WINERIES AND THE LIABILITY OF
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ABSTRACT

This qualitative research was developed in light of behavioral theories regarding company internationalization. Its objective was to study the internationalization process of two wine exporters, one Chilean and one Brazilian, while focusing on the liability of outsidership. Data were collected from primary and secondary sources, mostly from semi-structured interviews with parties responsible for exportation. The data was treated with content analysis as grounded in current literature. The Undurraga winery (Chile) overcame the liability of outsidership by employing a market penetration strategy consisting of stages, with progression to each consecutive stage depending upon success in the current one. When the company enters into a new market, it identifies the liability and develops a strategy to deal with it. Even though the Brazilian winery, Salton, is over a century old, it has only attempted to internationalize recently. It showed characteristics of liabilities of foreignness and outsidership in practically every period analyzed, and has yet to resolve these problems.

1 Introduction

Reinforced by recently industrialized countries' successful companies, emerging economies are changing their growth policies to focus abroad. They seek growth through exports instead of through import substitution policies (Kovacs, *et al*, 2007). Consequently, emerging countries are increasingly participating in the global economy, searching for opportunities on the international market, in order to gain and maintain competitive advantages (Aulakh, Kotabe, Teegen, 2000).

Given this context, Brazil and Chile are competing with the more established countries in the international market. Their natural resources offer inherent competitive advantages that can help diminish market barriers. This is especially

true for agriculture, a strategic market protected by more developed countries' domestic incentive and subsidy policies.

Similar to other agricultural sectors, the wine industry experienced growing competition between economic blocks between 2000-2010 (Protas, 2008). This sector increasingly depends upon management efforts and technological investments to help companies connect with consumer markets, especially those abroad (Johanson & Vahlne 1977). In addition to product and process quality and differentiation, competing globally in the wine sector demands capability in strategic coordination, up-to-date technology, and an efficient support infrastructure (Sato & Angelo, 2007).

Wine is a highly commercialized international agricultural product with high aggregated value. Successful production depends upon climatic conditions and sales are very dependent upon marketing efforts, with product differentiation primarily accomplished through price. In these regards, Chile has been quite successful, positioning itself among the top ten international players. On the other hand, Brazil has not had much success, despite having some historical similarities, equally good climatic conditions, and similar product quality. To understand this divergence, it is important to analyze the history behind the companies, describing their internationalization processes from the beginning, as well as understanding the industrial contexts where they operate. Therefore, this research seeks to know how occurred the internationalization process of two wine exporters, one from Chile and another one from Brazil, especially as concerns the liability of outsidership.

Internationalization doesn't just mean to move production abroad, but also includes developing potential relationships across borders. Thus, a company's international success requires it to be well positioned in one or more relationship networks (Johanson & Vahlne, 2009). Through these networks, companies learn and build trust and commitment, elements essential to the internationalization process. In this context, insidership is a necessary but insufficient condition to guarantee success in business development. If a company intends to enter a foreign market where it doesn't have any existing position within relationship networks, it suffers from liability of outsidership. Furthermore, its condition of being a foreign company probably complicates the process of becoming an insider. Outsidership makes it impossible to develop business deals and also to initiate the internationalization process (Johanson & Vahlne, 2006).

In order to understand the dynamics of this process in the wine industry, this research focuses on the internationalization process of two wine exporters, one from Chile and one from Brazil, especially as concerns the liability of outsidership.

2 Liability of Foreignness and Liability of Outsidership

The theoretical framework composed by Johanson and Vahlne (2009), the premises for the 1977 Uppsala model were uncertainty and limited rationality. Furthermore, they defined two change mechanisms. In the first, companies changed through learning while operating in foreign markets. In the second, companies change based upon commitment decisions, in order to strengthen their position in foreign markets. These commitments are investments in the target country which progressively lead a company to further commitment in the local market. As a company acquires market experience, its body of knowledge influences the level of commitment to activities increasing its participation in that particular market. This engenders a new level of commitment that results in more experience, invoking a dynamic model.

However, the model doesn't specify in which way commitment will occur. A company's market participation can even decline or cease to exist depending upon market performance. As such, the internationalization process normally advances when expectations and results are favorable. According to this approach, learning and commitment take time to develop. Thus, movement towards markets with higher psychic distance and higher risk, even with the promise of higher returns, tend to be incremental (Johanson & Vahlne, 2009).

Keeping in mind the intra-organizational (unilateral) perspective of the process, international expansion ends up being restricted to availability and use of a firm's internal resources (Zancan & Ribeiro, 2010). The model also doesn't consider such aspects as cooperation networks, product innovation, processes, or accelerated internationalization (Johanson & Vahlne, 2009; Mathews & Zander, 2007). The role governments have in promoting internationalization activities as part of socioeconomic development was also ignored in the original Uppsala model (Sato & Angelo, 2007).

Such considerations bring Johanson and Mattsson (1987), along with Welch and Welch (1996), Johanson and Vahlne (2003; 2006), and others, to conceive of the internationalization process from a multilateral perspective. Part of this view includes the possible influence of external agents on organizations'

internationalization processes. This change in thinking concerning the organizational internationalization process was formalized in the Relationship Networks model (Johanson & Vahlne, 2009).

The Relationship Networks model was considered to be an evolutionary product of the Nordic School of International Business (Björkman & Forsgren, 2000). The researchers from the Uppsala University played a fundamental role in the development of the perspective of industrial relationship networks, which focuses on the relationships that exist between industrial markets and firms (Zancan & Ribeiro, 2010). Johanson and Mattsson (1987) asserted that the competitive factors and forces in highly internationalized industries establish a heterogeneous standard for entry opportunities. This heterogeneity motivates organizations to choose markets and entry strategies that can be quite different than those predicted by the traditional Uppsala model, which was solely based on intra-organizational development, because other agents might be involved that affect resource availability. However, this is only made possible by establishing relationship networks in new markets. Additionally, both business and personal relationships can be used to facilitate entry into other networks (Zancan & Ribeiro, 2010).

Welch and Welch (1996) observed that the use of external relationship networks can be related to the learning process that permeates the entire internationalization process. Due to frequent non-deliberate formation of relationship networks, companies have difficulties incorporating new relationship networks into their internationalization strategy. Relationship networks influence the internationalization process in both intentional and unintentional ways, and act as an important element in international operations.

Due to its importance as a factor in the internationalization process, the Relationship Networks Theory also influenced the evolution of the Uppsala model. The concept of relationship-specific knowledge from the idea of business networks was aggregated into the Uppsala model. This type of knowledge is developed via interactions between two or more partners, including knowledge of heterogeneous resources and each other's capabilities (Johanson & Vahlne, 2009).

Research based upon this premise generally study how relationship networks influence internationalization processes without considering how they were formed nor how they are structured in the countries companies enter. The focus has generally been on business relationship networks as a market structure into which the company that is internationalizing is incorporated, and corresponding businesses within the relationship structure in the foreign market (Johanson & Vahlne, 2009).

The current viewpoint of the Uppsala model holds that the success of an internationalization process requires reciprocal commitment between a company and its counterpart in the foreign market. This process takes time and management efforts to create a working relationship, and many attempts fail (Johanson & Vahlne, 1990, 2003). Thus, a work relationship is the result of considerable investment and is an important company resource (Johanson & Vahlne, 2009).

Companies develop new knowledge through information exchange within interconnected relationship networks. This knowledge is the results of confrontation between the producer's and user's knowledge. It doesn't just come from a company's activities, but also from partners' activities, and partners' partners' activities. This offers a broad knowledge base for a company within the network (Kogut, 2000).

In this sense Johanson and Vahlne (2009) recognize that for an international company to be successful, it must be well position in one or more relationship networks. Everything that happens occurs within the context of relationship networks, and a company that is well positioned within such a network is considered an insider. Companies learn, establish trust and build commitment through these networks, all of which is vital to the internationalization process. A company that doesn't have a consistent position within a network is considered an outsider. If a company intends to enter a foreign market where it doesn't have a relevant position within a relationship network, it is considered to suffer from the liability of outsidership.

There are three activities that simultaneously occur with business development and internationalization: knowledge and learning, establishing trust and building commitment, and opportunity development (Johanson & Vahlne, 2009).

2.1 Knowledge of and learning about market players

The original Uppsala model was based on the assumption that knowledge development is fundamental to a company's internationalization process. While the lack of knowledge about the institutional market - that is, the language, laws and rules - are related to psychic distance and the liability of foreignness, the lack of knowledge about the business environment is linked to business relationships and the knowledge business partners possess. The lack of specific business and market knowledge together constitute the liability of outsidership.

2.2 Establishing trust and building commitment

The original Uppsala model didn't explicitly include any affective or emotional dimension for relationships, because they are implicitly present in the concept of knowledge (Johanson & Vahlne, 2009). In revising the model, these dimensions came to be more explicit in function of the importance of social capital, trust, and similar concepts that encompass the affective and cognitive side of research. Furthermore, it has been empirically observed that the affective dimension is important for understanding the relationships that are critical components of the current model. Another reason refers to the fact that trust is considered to be an important part of research into the development of relationships and business networks (Johanson & Mattsson, 1987).

A feeling of trust implies the capacity to predict another's behavior. Hence trust is a prerequisite for commitment. If commitment further enhances trust, this implies the existence of a desire to continue in a relationship, including the sharing of information (Johanson & Vahlne, 2009).

2.3 Opportunity development

In the original model, Johanson and Vahlne (1977) assumed that market commitment and initial market knowledge affect the perception of opportunities and risks, which in turn influence decisions related to commitment and ongoing activities. However, Johanson and Vahlne (2009) perceived that market knowledge coming from networks and business partners includes

privileged information. Knowledge that comes from such business activities helps in the recognition of opportunities. Thus, one company's knowledge and resources are partially available to the others within a relationship network (Johanson & Vahlne, 2009).

In summary, the evolution of the Uppsala model has resulted in the recognition of relationship networks as a central element in the internationalization process. The absence of such networks creates a barrier to internationalization, the liability of outsidership. Overcoming this liability is key to international development, which characterizes the objective of this present research into Brazilian and Chilean wineries.

3 Methodology

This research used a qualitative approach in order to understand the nature of the behavioral aspects of the phenomenon under study (Richardson, 1999).

Companies were chosen based upon several criteria. The first was that they must be producers of fine wine. The second required them to be involved in international activities for at least 5 years. The third related to the possibility for collecting data in the company. The last called for them to be representative of the sector in their country of origin.

Data collection occurred in two stages. The first involved secondary research and the second consisted of semi-structured interviews. The secondary data that supported the study came from academic resources, company documents, industry associations, and agencies that monitor and research the international markets in Brazil and Chile. The four interviews with managers and ex-managers of wine exports were accomplished through the use of Skype, which allowed visual and verbal interaction with the subjects. The interviews were recorded. The average duration of each interview was approximately 30 minutes. The interviews were transcribed in their entirety and the interviews conducted in Spanish were translated into Portuguese.

Semantic Content Analysis (CA) (Navarro & Diaz, 1994) was used to treat the data. This consisted of discerning the meanings of textual expressions. The strategy chosen was intensive, meaning that all elements present in the text were integrated in to the CA in order to systematically

reconstruct the relationships. The objective was to integrate and relate all elements in the data to further analyze the liability of outsidership in the selected companies' internationalization processes.

The intensive CA strategy is divided into intertextual and extratextual (Navarro & Diaz, 1994). This research made use of intertextual, which seeks to determine the virtual meaning of a text based upon its relationships with other texts. This can take two paths: the aggregative or the discriminative. The discriminative method, used in this study, converts each text into different analytical domains, with the goal of making comparisons between them.

The analysis phase begins with establishment of the basic units of meaning that the researcher proposes to extract from the body. These units, labeled recording units (Navarro & Diaz, 1994) consisted of information about the companies' internationalization processes that were chosen based on reflection in literature review. However, the mere generic identification of recording units would result in very poor information about what is considered to be a relevant meaning (Navarro & Diaz, 1994). It was therefore necessary to not only detect the recording units, but to also locate them through context units (a higher order recording unit) which delineate how the recording units can be defined based upon two criteria: textual or extratextual (Navarro & Diaz, 1994). We used textual criteria, which consists of defining context units by some characteristic of each recording unit. Once the context and recording units were determined, the data was coded. All of the recording units encountered were linked to their respective context units. This allowed for all recording units to be counted and associated (Navarro & Diaz, 1994).

The next step in the CA process is called categorization. This consists of classifying the previously coded and interpreted recording units into their corresponding context units according to the similarities and differences, based upon certain criteria. These classification criteria can be syntactic, semantic, or pragmatic (Navarro & Diaz, 1994). We used the semantic criteria. This allows for the definition of sub-categories, reducing text complexity. The primary category used in this research was the liability of outsidership. The subcategories and their properties are described in Table 1.

Table 1 **Category: liability of outsidership**

Subcategories	Category properties
Presence or lack of knowledge of market actors.	Access to information.
	People to process and absorb information.
	Trust-based relationships with market actors.
Presence or lack of established trust-based relationships.	Desire to continue a relationship.
	Information sharing.
Presence or lack of structures for opportunity recognition and development.	Existence of ongoing business.
	Being included in a network.

Note. Source: Adapted from Johanson and Vahlne (2009).

Properties that represent each subcategory were defined as identified in the collected material, and as interpreted and related to the literature review.

The methods section provides the information by which a study's validity is evaluated. It requires a clear and precise description of how an experiment had been developed, and describe why specific experimental procedures were chosen. The methods section describes what was done to answer the research question, justifying the experimental design, and explaining how the results were analyzed. Scientific writing is direct and orderly. Therefore, the methods section still describes how the materials were used, depicts the research protocol, explains how measurements were made, what calculations were performed, and finally, states which statistical tests were done to analyze the data.

4 The companies Studied

4.1 Undurraga Winery

Undurraga is one of the oldest and most prestigious wineries in Chile. It was founded by in 1885 by one of the Chilean pioneers of viticulture. Under the supervision of French wine master M. Pressac, Undurraga brought vines from France and Germany to establish the first vineyards at Hacienda Santa Ana, named after his wife, Mrs. Ana Fernandez Iñiguez. The winery

first began shipping to the USA in 1903, and today is present in over 75 countries on 5 continents.

The company has over 200 full-time employees, with over 1,000 workers during harvest seasons. 45% of the controlling interest in the company is held by Chileans, with the other 55% in foreign hands. Its 2011 revenue totaled US\$45 million. Undurraga has 1854 hectares in various regions of Chile, as selected by wine masters. This variety of plantations allows the winery to offer a wide selection of wines.

The Santa Ana location, in Talagante, Chile, uses modern production facilities with the capacity for producing 20 million liters annually. It has cutting age technology for fermentation, processing, aging, and bottling wines and sparkling wines. In addition, this location has old underground caves that date to its foundation in the 19th century, which make the environment even more appropriate for aging wines.

Domestic sales count for only 28% of production, with foreign markets totaling 72%. These sales are spread across Asia, Africa, Europe, North America (including the Caribbean), and South America. There is at least one commercial officer and export director for each of these regions.

4.2 Analysis of Undurraga's Internationalization

Undurraga was Chile's fifth largest wine producer in 2011. It exported over a million boxes of wine, with the primary markets being Europe (630,000), Latin America (350,000), the USA (130,000) and Canada (68,000).

Undurraga's internationalization began in 1903 with initial exports to the USA. The company was the first to export wine from Chile. However, until 1980 the company still focused primarily on the domestic market and did little to document incidental exports. For this reason, the last 30 years are of more interest to this research project.

Changes in macroeconomic policies during the 1980's, increasing globalization, and important changes in the domestic and international wine markets led the company to focus more intently upon its internationalization process. For analysis, we have separated Undurraga's

internationalization process into five periods, as shown in Table 2.

Table 2 **Undurraga's internationalization periods.**

Period	Characteristics
1980 to 2000 Focus on internationalization and presence in primary markets	The company expanded internationally, encouraged by changes in domestic and foreign political and economic environments.
2000 to 2005 Opened a commercial office in the USA	The company opened its first foreign office, with the objective of become closer to the market and improving relationships with its stakeholders.
2006 to 2009 Change in management and a new strategic growth plan	The company became publicly traded, experienced management changes and redirected its international investment.
2010 to 2011 Established a holding company	The company began strategic brand management.
2012 Opened an office in China	The company redirected its efforts towards more rentable markets, and sought to develop better relationships with clients and commercial partners in Asia and South America.

Note. Source: Elaborated by the authors

4.3 1980-2000: Focus on internationalization and presence in primary markets

There was a serious crisis in the Chilean wine industry during the 1980's due to severe exchange rate fluctuations. At the time, many Chilean companies were strongly leveraged in debt in US dollars. With a small domestic market and weak conditions for sustaining the national economy, Chile began to focus abroad to stimulate growth. Various export incentives were established, such as reduction or elimination of taxes and promotion of the country and its products in foreign countries. These conditions made exporting an attractive alternative.

The wine industry was also active in this movement, experiencing a significant increase in exports. Even small companies ventured abroad, considering they needed to export 80-90% of their production to stay rentable. Undurraga changed its focus to internationalization and entered most of the world's primary wine markets. They stopped selling just bulk wine (to be bottled at the destination) and began selling their own bottled products abroad under the Undurraga brand. As with most other wineries at the time, they didn't

have experience in exporting high-quality products. Instead, they entered foreign markets by selling varietals, such as the Undurraga Varietal line of wines, which are considered the most basic and lowest quality type of Chilean wine, with little aggregated value.

Exports to the USA in this period were made through an intermediary (agent) responsible for all of North America, Central America, and the Caribbean. This person had connections with the importers in each of these regions, who in turn knew the distributors, wholesalers and retail outlets (such as supermarkets). Thus, their contact with the market was minimal and indirect. The company's business structure included a manager responsible for these markets who made frequent business trips to each.

The 1990's brought a new stage of development. This stage was characterized by higher exports of "reserve" wines that held higher aggregated value. These products were the result of investment in new vineyards with certified plants, modern winemaking equipment, increased technical support, as guided by technicians, oenologists and producers who decided to invest in Chile.

This stage also saw increased development of the US market. The company acquired market knowledge, including who the main players were, during its business ventures in the 1980's. With this expertise, it reorganized its activities in the USA. It bypassed the intermediary agents to establish direct relationships with US importers. It did the same with Central America and the Caribbean islands. A new front was opened in the Netherlands during these years when the company began a relationship with a Dutch supermarket chain.

In addition to these markets, by the end of the 1990's Undurraga was also exporting to the most important markets of South America, including Brazil, Peru, Colombia, and Venezuela, as well as England in Europe.

However, throughout the 1980's and 1990's, Undurraga and other Chilean wineries were mostly exporting entry level wines, with low aggregated value. This was the stage when the company first began to gain enough expertise in internationalization to overcome its liabilities. Its entry strategies into primary markets shifted towards contracting agents and local distributors for each respective market. These people were

familiar with each market in terms of dynamics, regulations and internal relationships. This networking helped Undurraga overcome its liability of foreignness. Still, the company suffered from liability of outsidership, since the agents and distributors in each market, not Undurraga, maintained the relationships within the networks.

To remedy this shortcoming, the company began sending employees on regular trips to key markets, in order to establish stronger ties with agents and enhance relationships with market players. Starting in 1990, with knowledge coming from ongoing ventures, the company established structures for identifying and developing opportunities. This led to the realization that markets were ripe for wines with higher aggregated value. Furthermore, based on knowledge of market players, the company began direct relationships with importers, distributors, and supermarket chains. This structure helped them overcome their liability of outsidership.

4.4 2000-2005: Opening a commercial office in the USA

Starting in the 2000's, Undurraga started exporting iconic wines, following a strategy of aggregating more value to its products. The intent was to help its brand become associated with higher quality wines. As part of this effort, the company launched top shelf wines, such as Undurraga Altazor, which became renowned as a Chilean wine icon.

In addition to maintaining its presence in Europe, South America, and North America, especially the USA, the company decided to increase its direct participation in these markets. It did so by setting up offices in strategic markets, expanding its networks, and establishing reciprocal trust relationships with market actors. Its first foreign office was in the USA, its oldest international market. Undurraga's strategy for market penetration and relationship development became more consolidated, following sequential and gradual stages. The first stage involved research, market prospects, and identification of the best agents. The second stage consisted of contacting agents and signing distribution contracts. The third stage included choosing a "brand ambassador" (wine experts engaged in each market), with the objective of developing a

set of marketing and promotion activities in order to bring the company closer to market actors and enhance client relationships. The last stage, particular to the more developed markets experiencing the best results, involved founding regional offices in the foreign countries, enlarging related work teams, and expanding relationship networks.

This strategy of opening regional offices began to overcome the liability of outsidership by furthering knowledge of market actors, enabling trust-based relationships, and initiating structures to help recognize and develop opportunities. Due to this period's success, Undurraga truly became an internationalized company dedicated to increasing its relevance on the international scene.

4.5 2006-2009: Change in management and a new strategic growth plan

In 2006, Undurraga sold stock to magnate José Jurasec. He developed a new strategic management plan to increase export volume from 600,000 boxes to 1,000,000 per year and raise the average selling price per box from \$24 to \$32. This plan was intended to increase the company's rentability and its market relevance.

Strategic pillars included improving the company's wines and creating new brands to exploit products with higher aggregated value. This would inevitably raise the average export price. Investment targeted the markets with greatest potential for selling such wines, including the USA, England, China, and Brazil.

To accomplish this objective, the company doubled its land under direct production from 600 to 1200 hectares. This gave it greater control over production and quality, necessary for developing the higher category of wines the company was launching. Undurraga invested in hiring renowned wine masters and the most modern wine equipment, such as a \$10 million bottling facility to ensure that wine quality wasn't harmed during the production process.

Concerning management changes, the company enlarged the export team to consist of 10 managers, intensifying trips abroad, and growing respective market shares. The wine masters and sommeliers were also engaged with the business team, and participated in wine presentations around the world where the company had market presence. Beyond this, the company continued to

establish offices in markets with the greatest potential. As a result, the average price of exports to the USA, England, and China rose to \$35 per box by 2008.

By this time, Undurraga was considered a highly internationalized company, focused on increasing and improving its rentability. It definitely showed evidence of overcoming its liability of outsidership, through existence of structures for identifying and developing opportunities, such as targeting higher quality wines at specific markets. This structure was so well consolidated it resulted in an investment plan costing of millions of dollars, which showed positive results in its first years after implementation.

4.6 2010-2011: Establishing a holding company

As a result of the strategy to aggregate value to its wines, Undurraga needed to reorganize its brand structure. Previously it had both iconic wines of high quality and lower value table wines under the same brand label. In order to manage a more diversified wine portfolio the company established the holding company "Grupo Vinos Del Pacifico" (GVP - Pacific Wine Group), with the objective of independently managing separate companies with different wine brands. The GVP umbrella includes three main companies. Undurraga is the most traditional brand of the group and owner of the label with the same name. Talagate International Brands (TIB) has various brands developed for specific clients and projects, such as wines bottled under client labels, such as resorts and supermarkets. Bodega Volcanes de Chile, a boutique winery, was founded to produce low production runs of iconic wines with refined characteristics and exclusive marketing.

This strategy resulted in a competitive advantage, as operational activities were shared, technological knowledge was diffused throughout the structure, production scale was increased, and the business team gained flexibility. During this period, these advantages helped the company extend into Africa, primarily South Africa, by contracting a regional agent who held relationships in the target market.

This period showed further evidence of overcoming the liability of outsidership, in which the company identified and developed business

opportunities stemming from interaction in relationship networks. An example of this was the identification of market space for wines and brands for specific clients and the production of more exclusive wines, all managed by businesses under the GVP holding company. We also identified consistency in the company's defined market penetration strategy, typified by the company contracting an agent in Africa that already had established relationship networks. This facilitated overcoming the liability of foreignness and began the process of overcoming the liability of outsidership. The company's strategy maintained its efficiency and success in overcoming its liabilities.

4.7 2012: Opening an office in China

As the result of increased sector competitiveness, and aligning with its strategy of aggregating more value to its products to sell them at higher prices, Undurraga began targeting Asia. It started this by opening an office in China. The company's strategy for this office is, beyond the essential task of developing personal relationships with Chinese clients, to serve as a headquarters for expanding throughout Asia.

This period reinforces the idea that Undurraga is a fully internationalized company today. Its strategy is grounded in sequential stages where each stage increases market investment and market commitment. The company gradually overcomes its liability of foreignness by contracting local agents, which helps it overcome disadvantages of not being local. It also surmounts liability of outsidership by acquiring knowledge of market actors, establishing trust-based relationships, and creating structures for recognizing and developing opportunities.

Table 3 displays an analysis of Undurraga's periods and how the company deals with liability of outsidership and its structures.

Premises of liability of outsidership	Premise structure	1980 to 2000 Focus on internationalization and presence in primary markets	2000 to 2005 Opened a commercial office in the USA	2006 to 2009 Change in management and a new strategic growth plan	2010 to 2011 Established a holding company	2012 Opened an office in China
Presence or lack of knowledge about market players.	Access to information	Present via agents	Present via agents, importers and company employees.	Present via networks.	Present and enhanced with new companies.	Present and enhanced with the new Asian structure.
	Personnel for processing and absorbing information	Present via managers	Present via managers.	Present and enhanced, with most people involved in internationalization.	Present via international team.	Present and enhanced via the Asian office.
	Trust-based relationships with market players	In development	Present in relationship networks.	Present in relationship networks.	Present in relationship networks.	Present in relationship networks.
Presence or lack of trust-based relationships	Desire to continue a relationship	Present for both company and agents	Present in relationship networks.	Present in relationship networks.	Present in relationship networks.	Present in relationship networks.
	Sharing information	Apparently present	Present via networks.	Present via networks.	Present via networks and holding company structure.	Enhanced via the Asian office.
Presence or lack of structures for recognizing and developing opportunities	Existence of ongoing business	New business ventures and expansion in existing markets.	Ventures in over 50 countries.	Ventures in over 60 countries.	Ventures in over 70 countries.	Ventures in 76 countries.
	Included in the network	The beginning of network development.	Development of various connected networks.	Extension of existing networks through new ventures.	Extension of networks through new businesses under the holding company.	Extension of networks through Asian office.

Note. Source: Elaborated by the authors.

4.8 Salton Winery

Salton was formally founded in 1910 in the Serra Gaúcha mountain range in Rio Grande do Sul (RS), the most southern state of Brazil. It was originally named Paulo Salton & Irmãos (Paulo Salton & Brothers). One century later, Salton is known as one of Brazil's most important wineries. It is a family-owned company, now in its third generation of family managers.

The company considers June 2004 to be an important milestone. That was when it opened a new headquarters in Bento Gonçalves, RS. This change was aligned with a family aspiration of changing the region and Salton itself into a tourist destination in the Serra Gaúcha.

Salton has both short-term (2014) and long-term (2020) strategic plans. The first states the company wants "to be a reference in terms of quality, technological capability, and human resource excellence within the wine industry". The second is "to be recognized as the best and most respected Brazilian winery". Its mission is to "Develop high quality wine, sparkling wines and juices that surpass expectations while promoting sustainable corporate development.

The company relies upon 400 full-time employees and its 2011 revenue totaled approximately R\$125 million (about US\$62,500,000). It has two production facilities, one in the Tuiuty district (Bento Gonçalves, RS), which produces wine, sparkling wines and grape juice, and the other in São Paulo, which produces cognac.

Salton is present throughout the domestic Brazilian market. Part of the management team is located in the São Paulo subsidiary, including the Chief Commercial Officer. The company has been the Brazilian sales leader in sparkling wines for four consecutive years.

4.9 Analysis of Salton's Internationalization

Salton's internationalization only began after the year 2000. This coincided with an internationalization surge among other Brazilian wineries, including Miolo, Valduga, Peterlongo, and Aurora, some of which actually began exporting in the 1990's. Salton's motivations for expanding abroad were mostly related to domestic impacts of internationalization. These impacts included improved brand image and competitiveness. Foreign market penetration and sales numbers were only of secondary concern.

There were four primary periods to Salton's internationalization process, as shown in Table 4.

Table 4 **Salton's Internationalization Process**

Period	Characteristics
2002 to 2005 Passive exporter	The formation of <i>Wines from Brazil</i> . The company engaged in passive exports through Brazilian agents or contacts mediated by business associates. No individual was responsible for the internationalization process.
2006 to mid-2008 First active exports	Salton contracted a professional specifically for internationalization. Participation in trade fairs and events and prospecting trips abroad increased.
Late-2008 to 2009 Internationalization paralyzed	The company lost focus in terms of internationalization, when the person responsible for the process left the company. This resulted in an interruption in active internationalization..
2010 to 2012 Professionalization of the internationalization process	Internationalization was inserted into the company's strategic plan. This involved creating an export department and a return to investing in existing markets abroad and exploration of new markets.

Note. Source: Developed by the authors.

4.10 2002 to 2005: passive exporter

Salton's internationalization process began in 2002 when the company, together with five other Brazilian wineries (Aurora, Miolo, Peterlongo, Lovara, and Valduga) formed the Export Consortium *Wines from Brazil* with support of the Industrial Federation of Rio Grande do Sul (FIERGS-RS). The primary objective of this initiative was to promote Brazilian wines abroad by participating in trade fairs, events and wine-tastings in target markets. This approach was similar to those used by other Latin American countries, such as *Wines of Argentina* and *Wines of Chile*.

At this time Salton still didn't have an export department, nor any individual responsible for this area. The internationalization was the responsibility of executives, who took turns participating in meetings, prospecting trips, and events organized by *Wines from Brazil*. These people integrated these activities into their other business responsibilities. Another important aspect was that none of these individuals spoke English or Spanish, which made communication

and direct contact with possible clients and wine critics from other countries very difficult.

Stemming from *Wines from Brazil* promotion and prospecting initiatives in 2003, Salton achieved their first export shipment to the Czech Republic. This sale was made to the Cosmopolitan East Europe company, but through the intermediary Cosmopolitan Brazil trading company, which had a long-standing relationship with the Czech company. Cosmopolitan East Europe had previously only imported Brazilian shoes, also with the help of the Cosmopolitan Brazil trading company. This trading company did most of the work, including finding and contacting prospective suppliers, organizing the production runs, and also consolidating and shipping the products.

In 2004 *Wines from Brazil*, previously an export consortium, was changed to an Integrated Sector Project (PSI), but still with the same name. This was to integrate it with programs similar to those in the Brazilian Agency for Promotion of Exports and Investments (APEX Brazil). With the support of IBRAVIN (Brazilian Institute of Grapes and Wine) and significant financial investment promoting internationalization efforts, *Wines from Brazil* entered a new phase (Zancan & Ribeiro, 2010). During this period, the program organized a series of ventures to promote Brazilian wines. These included participating in wine fairs in Miami, USA (*Miami International Wine Fair*), Prague, Czech Rep. (*Wine and Spirits*), Düsseldorf, Germany (*Prowein*), and Cologne, Germany (*Sial*). This last food trade fair is one of the world's largest. Salton also participated in some of these fairs.

During this period, the company began exporting to Germany, beginning with a contact made during the *Prowein* fair in Düsseldorf. Salton's wine master represented the company at this fair and became acquainted with a traditional German importer, Höfferle, that held a prestigious international wine portfolio, including Trapiche from Argentina. Höfferle started by importing Salton's entry level wines, which had lower prices and less aggregated value.

During this same period, Salton exported to Norway. The alcoholic beverage market in Norway is peculiar in that it is controlled by a state-owned monopoly, *Vinmonopolet*. Agents from this institution are responsible for seeking out and helping exporters from around the world

apply for registration and purchase orders. The monopoly's purchase order was coordinated by a Norwegian agent who initiated contact with Salton and registered the company. Salton's "Classic Merlot" was the wine chosen for purchase, and a single shipment of a few pallets of wine was sent, without any contract for future purchases.

This period was defined by the company's passive participation in the internationalization process. Most export opportunities came from foreigner's requests, often as a result of *Wines from Brazil* promotion efforts, such as the Norwegian and Czech contacts. One active effort on the part of Salton was the relationship started when one of Salton's executives pursued import companies at the *Prowein* fair. Salton clearly benefited from *Wines from Brazil* initiatives, as they were one of Brazil's more recognized wineries and were of interest to importers, agents, and critics.

Salton's internationalization efforts started in channels of low psychic distance, by Brazilian agents who acted as intermediaries, clients initiating contact, or business associates trusted by the company. There was definitely the existence of a liability of foreignness, since the company lacked knowledge of foreign institutional markets, including languages, laws, and rules. These aspects are related to both psychic distance and liability of foreignness. However, the company didn't show any evidence of overcoming such liabilities during this period, since it neither increased its market knowledge nor overcame the language barriers.

This period was also characterized by a lack of knowledge of market actors, buyers, suppliers, logistics companies, critics, and trade journals, which impeded exporting and wine promotion in target countries. They also didn't establish any lasting ties with foreign companies. This lack of knowledge about the business environments, from the relationship network point of view, specifically consists of not knowing who to do business with, as well as not being familiar with the relationships between market players. Such a lack of business and market knowledge defines the liability of outsidership. Salton didn't overcome this liability during this period, but did make initial efforts to this end, such as participating in international trade fairs.

4.11 2005 to mid-2008: First active exports

In 2005 Salton hired an international business expert to manage internationalization initiatives. The company perceived that it wasn't making progress in internationalization with the status quo, without focus and someone specifically responsible for the activity. The individual also needed to be fluent in English and have experience in international business. This effort marked the beginning of a new period of the company's internationalization process.

In this period, the company intensified its efforts at promoting Brazilian wine together with *Wines from Brazil*, participating in trade fairs in the USA, Canada, Czech Republic, Germany, England, France, The Netherlands, Singapore, and China. Salton was also active in projects designed to engage with buyers and enhance its corporate image, where *Wines from Brazil* invited groups of wine critics and journalists to visit Brazilian wineries and become familiar with the Brazilian wine regions, in order to develop ambassadors and positive press for Brazilian wine abroad.

With these coordinated efforts, Salton started to develop a business network and establish closer relationships with markets. This period also saw exports commence to Switzerland, Belgium, Poland, and the USA. The German and Czech markets were also further developed. The export processes for Switzerland, Belgium, Poland, and the USA began with the assistance of agents from these markets that Salton encountered at international trade fairs.

This period also saw changes in the export process to Germany. Höfferle was focused on wines with less aggregated value for Salton, and didn't import the higher aggregated lines nor sparkling wines. These higher cost wines would have been more profitable for Salton, and the relationship with Höfferle had low rentability. Therefore, Salton sought out Weinbrazilian, which already had experience with other Brazilian wineries, since it also worked with Miolo and Valduga. This importer focused on Brazilian wines with higher aggregated value, and also undertook significant investments in promotion and brand management. By the end of this period, Höfferle was losing interest in the business relationship and at the end of 2008 practically

didn't import more Salton wines. This left Weinbrazilian with Salton's entire portfolio.

This period also included more intensified exports to the Czech Republic, via the importer Cosmopolitan East Europe owned by Roman Vanek. Salton took part in promotion activities produced by Vanek, who also developed a close personal relationship with Salton's export manager. This helped Salton achieve premier status among Brazilian wines in the Czech market. Cosmopolitan East Europe was highly dedicated to promoting Brazilian wines, and cooperated closely with Czech wine industry critics and press, bringing many to visit Brazil to become acquainted with the wineries and increase their knowledge of both the wines and the country. This resulted in increased commitment to Brazilian brands.

There was a definite evolution in Salton's internationalization process during this period. The company rose from the 5th position in Brazilian wine exports in 2005 to 3rd place in 2008. Only Miolo and Aurora, the biggest exporters of Brazilian wine, were higher. This period also showed evidence of Salton's first efforts at overcoming its liability of foreignness, and attempts at learning more about the foreign markets. This was the case in Germany, where Salton understood the need for a change in importers. It was also evident in the Czech Republic, where a close, even personal relationship was developed with the importer that helped boost Salton to market leader in Brazilian wines in that market. Salton also started undertaking independent trips, including the Chief Commercial Officer traveling together with the Export Manager, to the USA to gain knowledge about the market and about possible agents.

The close relationship with Cosmopolitan East Europe and its manager also helped overcome the liability of outsidership. This relationship bypassed the Brazilian agent and connected directly with the foreign company, which delivered better results and performance as compared to other companies.

4.12 Late 2008-2009: Internationalization paralyzed

Despite the hiring of the export manager, internationalization still wasn't a part of Salton's strategic plan, and wasn't even considered to be

one of its priorities. As a consequence of this, alongside an appreciation of the Brazilian real (R\$) against the US dollar, this period experienced a contraction in exports and reassignment of the export manager to more domestic oriented responsibilities. According the export manager of that period, the company's interest in the internationalization process waxed and waned with oscillations in the exchange rate. When the rate was unfavorable for exports, Salton lost interest and reduced investments in internationalization. This situation, together with a lack of executive management and export incentives, provoked changes in 2008. The export manager left the company because he was offered a more challenging proposal and Salton's internationalization activities became paralyzed.

Without the export manager, the company halted active research into new markets and ended up leaving the US and Czech markets. In the case of the USA, there was a problem with the importer and agent hired to operate the market, causing the importer's disinterest in continuing with the operation. In the case of rep. Czech, the market has been lost due to the loss in the relationship between the parties, as well as the importer redirect efforts to another economic activity. It did keep exporting to Germany, Switzerland, Belgium, and Poland, but did not support promotion efforts in these countries. Operations in Germany shifted exclusively to Weinbrazilian, cutting out Höfferle completely. The agent representing Weinbrazilian was also responsible for the Swiss and Belgian markets, which also stayed relatively the same.

All efforts at market research and entry ceased during this period, along with marketing, promotion and brand management abroad. Without anyone from Salton directly supporting the importers, exports were sustained simply by inertia, with the same clients and markets in existence and relative stability. Concerning the US market, a lack of a close and working relationship with intermediaries resulted in quotidian problems, such as finalizing a contract. Consequently, Salton left the US market.

Salton showed a regression during this period in terms of being able to overcome the liability of outsidership, due to the lack of anyone capable of maintaining rapport with foreign markets, perform market research, and develop new relationships.

Even though Salton maintained some internationalization with existing stable markets, it stopped building structures for recognizing opportunities and dynamics with importers lost energy.

4.13 2010 to 2012: Professionalization of the internationalization process

Internationalization returned to gain momentum at the beginning of 2010. Salton created an export department with a dedicated manager and operational assistant. A decline in performance and returns during the previous period of paralyzation, as well as perception of the indirect benefits of the internationalization process, motivated the company to insert internationalization in its strategic planning. The current export manager asserts the company created a position for "one person to take 100% responsibility for the international aspects [...] it established an export department and we started little by little to implement a more exporter philosophy in the company, which until then it lacked [...]". However, this manager also stresses that the primary objective of internationalization is to capitalize on the benefits it brings in regards to the domestic market. He was convinced that because they are exporting to other countries, in Brazil its image would be positively affected. The importation of wine from Salton and acceptance in foreign markets would serve as an endorsement of the quality of products supplied in countries where the wine culture is more advanced

Salton started investing more in existing markets, including Germany, Switzerland, and Belgium. This included more support for the importer, such as a more constant market presence and participation in trade fairs, events, and promotions.

In terms of prospecting new markets, Salton started focusing efforts on target markets, defined according to consumption and market potential. These markets included the United Kingdom, Denmark, USA, China, Japan, and Hong Kong. This resulted in exports to China, Australia, Canada, and Finland, as well as a return to the US and Czech markets.

This period demonstrated the secondary role exporting took for Salton, since it considered foreign markets to be supportive of domestic market efforts. The company clearly perceived

the presence of its liability of foreignness, as shown in the export manager's comments. When questioned as to what makes a good international partner, he remarked: "the importer has to understand that it can be an optimal investment for them, that they can really gain a lot from this (*importing Brazilian wines*)". This corroborates the research by Hymer (1976) and Zaheer (1995), as cited by Johanson and Vahlne (2009), which explained that a foreign investor needs to have a specific advantage to compensate for the liability of foreignness when entering a market.

This perception was also apparent when the company realized that its best internationalization results came from the markets developed the longest time (Belgium and Germany). In these markets the relationships were stronger, trust levels were higher and better established, and partners were focused on managing and developing Salton's brand images. On the other hand, Salton still didn't make significant or conscious efforts at overcoming the liability of foreignness. This is given by the fact that the company targets new markets having large psychic distances, such as China and Japan, in search of transactional relationships, without a clear strategy for developing deeper relationships with clients. The evidence for this are few reports of the actions and work carried out in China and Japan for the development of the brand. Especially when compared to the strategy of Undurraga, who set up offices in priority markets, especially in Asia, seeking to overcome the psychic distance. This did not occur with Salton.

These facts reveal that there was little evidence of inter-organizational relationships between Salton and foreign competitors and suppliers. Contractual relationships notwithstanding, Salton's product insertion strategy depends upon foreign partners. Thus, its internationalization process has the possibility of changing depending upon each foreign agent. This is a definite lack of concrete strategy for dealing with the liability of outsidership in terms of developing trust-based relationships and structures for recognizing and developing opportunities.

Table 5 displays an analysis of Salton's periods and behavior in each period.

Table 5 Analysis of Salton's periods and behavior in each period.

Premises of liability of outsidership	Premise structure	2002 to 2005: Passive exporter.	2006 to mid-2008: First active exports.	Late- 2008 to 2009: Internationalization paralyzed.	2010 a 2012: Professionalization of the internationalization process.
Presence or lack of knowledge about market players.	Access to information	Little access to information and interaction with clients. Language barrier. First foreign market trips.	Increase in access to information due to interaction between the export manager and market actors. Surpassed the language barrier.	Reduction in interaction with markets, maintaining only existing clients. Cessation of prospecting trips.	Presence of market information access through documental research and market presence
	Personnel for processing and absorbing information	Process informally controlled by executives,	Presence of a professional responsible for managing the process.	Nonexistent, with the exiting of the international business professional.	Hiring of an international department team.
	Trust-based relationships with market players	Still not established. Existing business the result of intermediaries.	Developed the first trust-based relationships with market actors.	Break in continuity undermines trust with new clients, terminating the process.	Reestablishment of relationships with clients and opinion shapers.
Presence or lack of trust-based relationships	Desire to continue a relationship	Still unidentified, as the process is very recent.	Evidence of transactions lasting over 5 years.	Doubt regarding the future of internationalization .	Desire to maintain relationships with existing clients is explicit.
	Sharing information	Very little.	Present in some more developed markets, like the Czech Republic.	Impeded due to the lack of dialogue.	No evidence.
Presence or lack of structures for recognizing and developing opportunities	Existence of ongoing business	Beginning of export activities.	Expansion of new and current business.	Maintained four clients.	Extension of existing business and prospecting for new business.
	Included in the network	No evidence of inclusion in networks.	Evidence of initial inclusion in some networks, such as <i>Wines from Brazil</i> .	Network development paralyzed.	Restarting network development.

Note. Source: Developed by the authors.

In general, Salton winery only started making efforts at internationalization recently, despite being over 100 years old. The company still shows characteristics of liabilities of foreignness and outsidership in virtually every period analyzed, without showing evidence of overcoming either.

Table 5 presents an analysis of these periods and how Salton behaved in each regarding the liability of outsidership and its structures.

5 Results and Discussions

To investigate the internationalization process in these two wine exporters from Brazil and Chile, from an analytical perspective of the liability of outsidership, three basic premises were established. The lack of a premise identified a failure to overcome a liability and the presence of a premise identified success in overcoming a

liability. We identified different properties for each premise to facilitate its identification.

Concerning Undurraga winery from Chile, we identified the presence of liability during the beginning of its internationalization process, between 1980-2000. During this period, the company still hadn't established relationship networks, and relationships with agents and importers were still quite recent. We identified the creation of a market penetration strategy, based on sequential stages, which helped overcome the liability of outsidership. When the company entered a new market, it identified its liability and implemented a strategy for overcoming it. Thus, Undurraga today is a highly internationalized country, with a successful strategy for opening and developing markets for its wines, and ability in overcoming liabilities.

On the other hand, Salton winery from Brazil clearly showed internationalization as a secondary goal that is considered to support domestic market activities. We identified the liability of foreignness to the extent that a foreign investor, in this case an agent or importer, must have a specific advantage to compensate for this liability before entering a market. There are still few importers that deal with Brazilian wines in general, and Salton wines in particular. We didn't identify a clear and conscious effort by the company to overcome its liabilities, except for those developed by *Wines from Brazil* in promoting Brazilian wines.

The company still has few inter-organizational relationships with foreign suppliers and competitors. Despite contractual relationships with foreign market intermediaries, its product insertion strategy is completely dependent upon foreign partners. Hence, the internationalization process is capable of changing with each foreign agent.

The brief comparative analysis between the two wineries displayed in Table 6 reveals that two factors interfere in overcoming liabilities: corporate strategy and national context.

Presence or lack of knowledge about market players.	Access to information	Present through documental research and market presence.	Present via various established networks.
	Personnel for processing and absorbing information	Present during some periods, most evident recently.	Extensive team of professionals directly and indirectly involved in the internationalization process.
	Trust-based relationships with market players	Few and little developed, still under construction.	Present with various actors connected in relationship networks.
Presence or lack of trust-based relationships	Desire to continue a relationship	Present during most periods, but with little emphasis.	Present and evident during long-established relationships.
	Sharing information	Not evident during the study.	Evident via networks.
Presence or lack of structures for recognizing and developing opportunities	Existence of ongoing business	Presence in four countries for over 5 years.	Presence in over 70 countries for over 5 years.
	Included in the network	Few developed networks, with no evidence of structures for recognizing and developing opportunities.	Extensive development of relationship networks, with the presence of structures for recognizing and developing opportunities.

Note. Source: Developed by the authors.

Table 6 Comparison of the two companies

Premises of liability of outsidership	Premise structure	Salton	Undurraga

The Brazilian context, which includes an opening of the domestic market since the 1990's, is characterized by intensified domestic competition. This has generated negative repercussions in various sectors of the Brazilian

economy that were previously protected from foreign competition by import-substitution policies. One of the most affected sectors was the national wine industry. Salton itself still aims all of its commercial efforts at the domestic market.

The Chilean government, on the other hand, enacted systematic strategic planning to bring the country international success (Protas, 2008). Furthermore, Undurraga's strategy led the company abroad and helped it overcome its liabilities of foreignness and outsidership.

The cases studies corroborate Johanson & Vahlne (2009), Welch & Welch (1996) and others showing that the international success depends on one or more social networks.

The Undurraga process, for example, showed that company changed through learning while operating in foreign markets and based upon commitment decisions, in order to strengthen their position in foreign markets. As the company acquired market experience, its body of knowledge influenced the level of commitment to activities increasing its participation in the foreign market. This engendered a new level of commitment that resulted in more experience as showed Johanson & Vahlne (2009).

6 Conclusions

Its objective was to investigate the internationalization process in two wine exporters from Brazil and Chile, from an analytical perspective of the liability of outsidership. This research was developed with the intent of contributing to scientific research with a focus on how companies internationalize in light of behavioral theories, specifically from the Uppsala school.

The research revealed that there is a very important distinction between Brazil and Chile that may explain the differences between the two companies. The Brazil domestic market context is highly relevant. Brazil having such a large domestic market that is a direct explanation for Salton focusing on the domestic market, while Undurraga was forced to go abroad for growth maybe because of the size of the market.

This article contributes to research into overcoming liabilities in the wine industry, which has still been a rarely studied topic in the academic world. Indeed, it is the first of its kind in Brazil.

The study also contributes to both the scientific community and for business managers to understand how domestic market and structural and institutional conditions of the country interfere recursively in the way the decision makers they see threats and opportunities available.

Finally the paper contributes to literature demonstrating the different conditions for the internationalization in emerging countries, revealing the impossibility of the same hypothesis for different countries.

A possible limitation is the methodological approach and failure to identify network formation processes within and outside of the companies, as well as how personal relationships influence the speed and efficiency in developing these networks. These aspects could be used as topics for future research in the area.

The article points to future research that could study the wine industry in other countries of South America in order to understand the relationship between the conditions of those countries and the industry's internationalization process analysis from various theoretical perspectives.

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Entrepreneurship and creation of new business: Key factors of Brazilian entrepreneurial ecosystem

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ABSTRACT

This article aims to analyze the profile of Brazilian entrepreneurs and the factors that shape the entrepreneurial ecosystem in the country. A survey was conducted with 76 Brazilian entrepreneurs from the ICT sector, which was chosen because of its high growth rates. The research was developed in the context of a joint project called Entrepreneurship as a Growth Driver that involves universities from five countries: Italy, Brazil, Russia, India and China. The objective of the project was to study the key factors of entrepreneurial ecosystem that facilitate the growth of knowledge-intensive enterprises in each country. In this paper, we focus on the results obtained for Brazil. We used exploratory factorial analysis and non-hierarchy cluster K-means as methods in order to reach the research objectives. From the analysis of the results, three groups of entrepreneurs with distinct profiles emerged. The data also revealed that the social elements are more important than the personal issues and public policies have an essential role in the development and maintenance of the entrepreneurial ecosystem in Brazil. As limitations, we consider that the low quantity of entrepreneurs can jeopardize the generalization of the findings. Therefore, the replication of this research and the performing of cross-cultural studies are presented as suggestions for future research. Besides, new concepts of Brazilian entrepreneurs based on a quantitative analysis constitute the originality of this study.

1 Introduction

In the current capitalist society small sized enterprises have been calling policy makers' attention. This is due to their role in generating jobs and innovating activities, which is becoming increasingly important (Audrestch, 2001; La Rovere, 2001). Such factor leads to a growing number of authors addressing the entrepreneurship issue (Estrin *et al.*, 2013). Although the interest in entrepreneurs has increased in the last decades, the literature has been dealing with the topic for a

long time (Simpeh, 2011). Indeed, Schumpeter (1934) was one of the first authors to discuss the phenomenon of entrepreneurship substantially, revealing entrepreneurs as agents of social transformation that create new productive combinations, moving economy towards its growth.

Thus, in developing countries such as Brazil, where entrepreneurship grows at high levels (CPS/FGV, 2010), the importance of these actors is revealed in the impacts of the productive and competitive trajectory, that impact different

sectors and the economy as a whole. In the Brazilian case, such entrepreneurship expansion is mainly due to the growth of the middle class and the purchasing capacity of this class, which provided the internal market growth and consequently the creation of new business opportunities. Understanding how entrepreneurs find easy ways for their development in an environment like the Brazilian one can provide suggestions to policies guidelines towards those agents.

Thus, the entrepreneur, defined as an agent who transforms the social context, by creating new and innovative business (Labrianidis, 2006) often does not depend only on his/her personal entrepreneurial characteristics and his/her efforts to achieve projects and goals, but is also influenced by environmental variables of the most diverse social spheres. Yet, the success of the entrepreneurs in their functions will be influenced by generation and accumulation of knowledge in their enterprise and by other elements such as: i) the form of competition in the industry where their company is located, ii) the sociocultural context and iii) the support of the government.

Hence, in line with the theoretical studies reported in the literature, this article aims to analyze the profile of the Brazilian entrepreneur, as well as the main factors that contribute for the structuring of the national entrepreneurial ecosystem. Moreover, it aims to know how such factors may be discussed in the Brazilian context, which types of entrepreneurs are found in the country and their main features, and what is the correlation between the factors that cause entrepreneurial action and the profiles of entrepreneurs.

To do so, we conducted a survey with 76 Brazilian entrepreneurs. The research is part of a project involving universities from five countries, called "Entrepreneurship as a Growth Driver: A study of key elements of the entrepreneurial ecosystem enabling, supporting, and harnessing the growth of Knowledge Intensive Entrepreneurship in the ICT sector across BRIC Countries". The project's overall objective was to analyze the key factors of the business ecosystem that facilitate the growth of critical business knowledge in each country and specific objectives: i) to identify and measure the levels of importance of general key factors that facilitate entrepreneurs in business knowledge-intensive; ii)

to characterize the formation of different groups of entrepreneurs based on the importance they attach to the general key factors that facilitate the critical business knowledge and iii) to characterize the differences between groups of trained entrepreneurs.

This work is organized in four sections besides the introduction. First of all, we introduce a brief review of related studies about entrepreneurship; after that, we introduce the main methodological aspects, and finally we assess the results and present the final considerations and recommendations for future research.

2 Entrepreneurship and Entrepreneur Environment

Entrepreneurship is a multifaceted phenomenon, defined through different meanings (Pato & Teixeira, 2013). Schumpeter (1934) was one of the first authors to contribute meaningfully to the development of the theory on this subject. The entrepreneur, according to Schumpeter is fundamental to economic development as he or she creates innovations that allow companies to grow and face competition in the market. The entrepreneur is an individual who innovates and creates new combinations, becoming an economic and social agent. However, entrepreneurship is not only connected to the idea of creation of new products or services, but also to adding new ideas and subversive concepts to the context in which the entrepreneur is located (in his home, his city or even in his country), breaking paradigms and opening the horizons of communities (Zahra *et al.*, 2009). The entrepreneur, can be an idealizer of new business (Labrianidis, 2006), besides developing an idea, the or she foresees an opportunity of attainment and transform it in a new product or service, introducing innovations and taking risks (Estrin *et al.*, 2013). Innovation can be in the managing, selling, producing, or distributing products or services, adding additional value to the company.

Entrepreneurship is a tool not only for economic growth but for social development as well, because it transforms the local scenario through innovation, besides making the economy more dynamic. Likewise, entrepreneurship is a cultural, collective and consequently, a community phenomenon. (Mair, & Marti, 2009; Mair *et al.*, 2012; Estrin *et al.*, 2013). It is the

community that creates the proper environment for the development of new entrepreneurs. Therefore, a community creates the entrepreneurs it deserves.

About two thirds of the employees in Brazil are in formal micro or small enterprises, so we emphasize the importance of such enterprises for Brazil's economic development (SEBRAE, 2011). However, the statement about the strong tendency of micro entrepreneurs towards bankruptcy is true. According to data raised by SEBRAE (2013), although 73% of micro enterprises survive the two first years, small enterprises (less than 100 employees) are the ones that file more bankruptcy requests in Brazil. While some are successful in getting support, most of them fail, because often the entrepreneurs that wish to create a new business have only technical knowledge about the product and the decisive factors to its production, but they do not have any knowledge about the importance of managerial tools and the business concept itself. Yet, according to SEBRAE, managerial failures are the main motivation factors to request bankruptcy, followed by problems related to the economic situation, to operational logistics and to difficulties related to public policies.

Indeed, without support, the entrepreneur is almost like a ship without sails drifting in a sea of uncertainties. Therefore, it is judicious to the public institution to support creation and development of enterprises as well as to diffuse opportunities for entrepreneurship (Banerjee, & Duflo, 2011; Estrin *et al.*, 2013). The government activity, translated into support and follow up of the entrepreneurial activity, helps expansion and maintenance of the entrepreneurs' ecosystem, according to Estrin *et al.* (2013). However, the authors notice that government actions can harm the development of the entrepreneur activity in case of introducing centralized and authoritarian practices, like usually happens in Latin America and African countries; in the same way, the variables linked to the social contexts also have an important influence on the enterprises. Although government actions are indispensable, we highlight how important it is for the entrepreneurs to have straightforward knowledge of their own business, which is a decisive condition for the success of a small business. The self-knowledge is the basis for the guidance and control of the business and the cornerstone for the business

improvement.

According to Pato and Teixeira (2013), another factor that influences entrepreneurship, though not as an externality, is the personal traits of entrepreneurs, as suggested by Casson (2003). According to this author, the individual entrepreneurs' characteristics, including particular demographic and psychological traits, would be responsible for forming the attitude with which such agents act in society, influencing how they make decisions, and whether they would take risks to invest in innovative projects. Demographic traits, among which are the age, gender and place of origin of the entrepreneur, influence entrepreneurship in different ways. Psychological traits emphasized by the literature are duration of education, personal values and passions, entrepreneur's motivations, desire for autonomy, money, challenge or adventure (Gladwin *et al.*, 1989), and aiming at an entrepreneurial life style (Marcketti *et al.*, 2006).

There is a number of theories that try to explain entrepreneurship (Simpeh, 2011). Among those, psychological theories stand out by studying the *locus* of control, achievement needs and the disposition for risk taking (Korunka *et al.* 2003; Simpeh, 2011). Locus control is the entrepreneurs' ability to view and control actions that permeate their life. The necessity of achievement is treated as leadership power, ability to understand the risks and desire to get the best possible performance. Disposition to risk taking depends on the entrepreneurs' knowledge and ability to self-knowledge to assess the context (Reimers-Hils *et al.*, 2005).

Korunka *et al.* (2003) state that in order to be successful in their business, entrepreneurs must have an internal *locus* of control, a high need for achievement and an average disposition to risk-taking. Câmara *et al.* (2006) after performing a research in the Brazilian informal market, observed that, opposite to what suggested Korunka *et al.* (2003): to these authors, entrepreneurs have external *loci* of control, which means that for them their business destination does not depend on them and their actions will vary according to changes in the environment.

La Rovere and Melo (2012), in a fundamental work for the construction of this research, approached entrepreneurship through seven dimensions of analysis in order to briefly

assert the characteristics shared by Brazilian entrepreneurs. In their research, connected to the project Entrepreneurship as a Growth Driver, the scale used was based on the following factors: individual characteristics; sociocultural context; government policies and programs; access to finance; access to information, knowledge, opportunities and building skills; companies' internationalization; and factors of success and failure of the business. These factors were identified by Manimala (2008a, 2008b) as the most important to analyze and explain the creation of new businesses and their performance.

Although the subject of entrepreneurship is widely discussed in the literature, there is no single theoretical framework regarding studies related to this topic in the Brazilian scenario. On one hand, several authors emphasize the psychological aspects to entrepreneurs' individual characteristics. On the other hand, other authors emphasize the importance of institutions, public policies and social context for entrepreneurial activity.

This article follows the steps of neo-institutionalist theory, in which the institutional context explains the decisions taken by entrepreneurs. Therefore, the article aims to contribute to the debate on the topic of entrepreneurship, by offering a brief discussion of the profile of Brazilian entrepreneurs and the main aspects and conditions of entrepreneurial activity.

3 Methodology

To meet the research purposes, we undertook an exploratory-descriptive study, with a quantitative nature, carried out by a single cross-sectional study, which achievement was obtained by applying a survey (Hair *et al.*, 2009; Malhotra, 2006).

The survey instrument is divided into two

sections. The first section consists of 33 variables in 3-point scale, ranging from weak to strong. The scale used in this study is part of a pioneering project on entrepreneurship in different cultures. The project "Entrepreneurship as a Growth Driver" involved five universities, one from each of the BRIC countries (Brazil, India, Russia and China) and was led by the University of Milano Bicocca, Italy. The study proposed to use an ecosystem model to collect information on the factors that enable the growth of companies in the ICT sector, listed in Table 1.

In the second section we raised information about the companies that answered the questionnaire such as: age, ICT activity sector, sales range, employees' number etc.

In Brazil, we sent the questionnaires in September 2011 and 98 questionnaires were completed and returned in February 2012. After a process of validation of the questionnaires and information checking we came to the total of 76 answers. We performed statistical analysis using the Statistical Package for Social Sciences software (SPSS), which was used as descriptive statistics modules, factor analysis, statistical k-means, multiple discriminant analysis, and one-way ANOVA.

Exploratory factor analysis was performed to identify and measure the levels of importance of the key factors that enable entrepreneurs in intensive business knowledge. The k-means is a non-hierarchical clustering method that performs the separation into groups; the technique was used to characterize the formation of different groups of entrepreneurs based on the importance they attribute to the general key factors that enable the creation of knowledge-intensive enterprises. Finally, ANOVA was used to characterize the differences among the groups of entrepreneurs.

Table 1. Questionnaires

Nº	VARIABLE	CONSTRUCT
1.	Ability to recognize start-up opportunities	Individual and Personal Characteristics
2.	Ability to risk taking	
3.	Ability to organize required resources to a start-up	
4.	Presence of family-based entrepreneurship in your society	Sociocultural

5.	Culture of promotion and creation of new business and risk taking in the community	Context
6.	Culture of support to creativity and innovation	
7.	Entrepreneurship connected to the idea of desirable careers in the community	
8.	Opportunities for the creation of new businesses	
9.	Opportunities for the creation of new businesses related to gender	
10.	Opportunities for creating new businesses for young people	
11.	Special policies and programs of encouragement and support to start-ups	Support and Public Policies Program
12.	Favorable public policies in general	
13.	Favorable tax policies (special treatment in respect to taxes and fees)	
14.	Easy access to obtain licenses to start a business	
15.	Quality of physical infrastructure, ICT and transport	
16.	Availability of government funds	Access to Financing
17.	Availability of resources of friends and family	
18.	Availability of venture capital funds	
19.	Availability of private funds or angel investors	
20.	Availability of bank loans	
21.	Favorable educational system to entrepreneurship	Access to Information, Opportunities to Knowledge and Qualification
22.	Availability of formal training in entrepreneurial practices	
23.	Assistance and advice to start-ups in colleges and universities	
24.	Support of business associations for membership and networking	
25.	Access to incubators and technology parks	
26.	Assistance from universities and research institutes for development and technology transfer	
27.	Specific support programs to provide products and services to start-ups	
28.	Opportunities for collaboration between public and private sectors to enter into new business	
29.	Attitude towards internationalization	Internationalization of Small and Medium-Sized Enterprises
30.	Access to information and required qualifications for internationalization	
31.	Government enabling entry of new firms in new markets (domestic and international)	
32.	Access to financial resources to deal with internationalization	
33.	Access to expertise in foreign languages in the home country	

Source: Authors

4 Analysis of the results

Considering that our objective is to analyze the key factors of the entrepreneurial ecosystem that enables knowledge-intensive enterprises, we analyzed the results of the survey, divided in the four following steps.

4.1 Descriptive Analysis of the Variables

The descriptive analysis of the survey can be observed on Table 1. From its results, we can notice that Brazilian entrepreneurs have strong individual and personal towards entrepreneurship characteristics, highlighting that 67.1% have strong ability to recognize start-up opportunities.

Table 1. Descriptive analysis of the variables

F	Q	Item 1 (%)	Item 2 (%)	Item 3 (%)	F	Q	Item 1 (%)	Item 2 (%)	Item 3 (%)	F	Q	Item 1 (%)	Item 2 (%)	Item 3 (%)
1	Q.1	2,6	30,3	67,1	3	Q.12	30,3	55,3	14,5	5	Q.23	25	56,6	18,4
	Q.2	21,1	48,7	30,3		Q.13	44,7	35,5	19,7		Q.24	15,8	64,5	19,7
	Q.3	18,4	44,7	36,8		Q.14	43,4	46,1	10,5		Q.25	23,7	56,6	19,7
2	Q.4	3,9	27,6	68,4		Q.15	19,7	67,1	13,2		Q.26	31,6	52,6	15,8
	Q.5	3,9	44,7	51,3	4	Q.16	35,5	53,9	10,5		Q.27	36,8	56,6	6,6
	Q.6	18,4	38,2	43,4		Q.17	34,2	53,9	11,8		Q.28	50,0	40,8	9,2
	Q.7	18,4	47,4	34,2		Q.18	36,8	56,5	6,6		6	Q.29	52,6	35,5
	Q.8	6,6	44,7	48,7	Q.19	32,9	52,6	14,5	Q.30			50,0	35,5	11,8
	Q.9	14,5	44,7	48,7	Q.20	21,1	55,3	23,7	Q.31	52,6		38,2	9,2	
	Q.10	18,4	47,4	34,2	5	Q.21	32,9	56,6	10,5	Q.32		64,5	31,6	3,9
3	Q.11	27,6	57,9	14,5		Q.22	28,9	53,9	17,1	Q.33	26,3	47,4	3,9	

Source: Authors

The sociocultural analysis pointed that entrepreneurs see Brazil as favorable to large enterprises and most of them (68.4%) see the presence of family-based entrepreneurship in their society. Regarding the support programs from public policies, the interviewees do not see such aspect as something strong in the Brazilian context, reaching the number of 44.7% that do not believe there is a tax policy favorable to entrepreneurship. The access to financing was evaluated as having medium importance by the majority of people who answered the questionnaire.

The interviewees evaluated Brazil with reasonable access to information, knowledge opportunity and qualification. Regarding collaboration opportunities among the public and private sectors, 50% of the entrepreneurs who answered the questionnaire did not evaluate it well. In the same way, the internationalization of small and medium sized enterprises was badly evaluated in the big majority of its constituting

variables. The incentives to the creation of business by women were considered medium for 57.9% and 31.6 % analyzed it as weak.

We performed an exploratory factor analysis aiming at observing how the variables were grouped. Indeed, the scale showed some inadequacy, due to the analysis of the anti-image matrix, questions Q.2, Q.4 and Q.5 did not obtain absolute values higher than 0.5 (Hair *et al.*, 2009); so, the variables were excluded from the analysis. In a similar way, the variables Q.21 and Q.33 were excluded from the analysis because they presented low common grounds, less than 0.5 (Hair *et al.*, 2009). By doing so, we could proceed with a new exploratory factor analysis.

Thus, one can infer that the ability to take risks (Q.2) is not important in the formation of Brazilian entrepreneurs, the presence of family-based entrepreneurship in the society (Q.4) also does not affect Brazilian entrepreneurs and they do not observe culture of promotion and creation of new business and risk taking in the community

(Q.5). This shows that entrepreneurs do not like to take risks and business environments are not influencers in a citizen's entrepreneurial training; refuting the concepts addressed by Korunka *et al.* (2003) that the entrepreneur must have an average risk disposition. Q.21 and Q.33 variables show the weakness that Brazilian educational system has on entrepreneurs' training: it does not help with a favorable education and does not support learning of foreign languages. The lack of training in foreign languages prevents the insertion of enterprises in external markets.

4.2 General Factors that Make Intensive Knowledge Easy in Knowledge

We continued by using the method of main components analysis, through orthogonal varimax rotation and the criterion of higher self-values in one (Hair *et al.*, 2009), we obtained eight factors that, as a group, explain 8.91% of the total variance. As for the KMO (0.727) and Bartlett's sphericity test ($p=0.000$), we reached satisfactory values.

Concerning reliability, only the Cronbach alpha referring to factor 7 did not point to satisfaction (0.462), since it did not reach a value higher value than 0,6 (Malhotra, 2006). The other constructs reached values considered satisfactory. (Hair *et al.*, 2009): F1 – 0.848; F2 – 0.755; F3 – 0.794; F4 – 0.735; F5 – 0.773; F6 – 0.672. We did not measure, on the other hand, the reliability of factor 8, as the construct consists of only one question. So, based on the results obtained, we only excluded factor 8 of future analysis; although construct 7 does not meet the reliability requirements, we decided to keep it due to its theoretical explanation capacity. See table 2.

By examining the first factor, evidenced on table 2, we can notice that almost all variables that constitute the original construct, that is access to information, opportunities to knowledge and qualification have grouped, while questions Q.21, Q.22 and Q.24 did not due to their exclusion. Thus we approached as much as possible of denominating the factor to the initial construct, originating the latent variable access to information and to knowledge and other resources. It is important to highlight, though, that there was a small alteration in the original name of the construct, once the variable Q.16 (availability of government funds) has also adhered to the

factor. However, although Q.11 has grouped to the factor, the name of the construct was not changed due to its approach to the question and to the other questions. Besides, due to the high explained variance, 26.99%, reached by the factor, we highlight the relevance of the construct for the analysis, bearing in mind it represents more than one third of the total explained by the structure built by the factor analysis.

From this result, it is important to stress that access to information, knowledge and other resources is the main characteristic observed by Brazilians entrepreneurs. However, to Brazilians, the variables: Favorable educational system to entrepreneurship (Q.21); Formal training availability in entrepreneurial practices (Q.22); and support of business associations for membership and networking (Q.24), are not seeing as ways of knowledge and qualification, with the last two ones grouping to form a new factor, training in entrepreneurship and business association (factor 6). However, entrepreneurs observe special policies and programs of encouragement and support to start-ups (Q.11) and availability of government funds (Q.16) along with Q.23, Q.25, Q.26, Q. 27 and Q.28 variables as tools to better skill, knowledge and obtaining resources.

Likewise, the second factor is formed by all variables of the construct internationalization of small and medium-sized enterprises. Therefore, the construct is named in the same way. It should be noted, moreover, that the factor explains 9.71% of the total variance, positioning itself as the second most important construct of the analysis. The variable access to expertise in foreign languages in the home country (Q.33) was not included in this factor showing that entrepreneurs do not see this issue as a strong trait in Brazil and that it does not explain the internationalization of small and medium-sized Enterprises. In the same way, the third factor, support programs and public policies, consists of all variables that made up the original construct. Thus, the same name was maintained. By observing the variance explained by the factor, it appears that the construct reaches the value of 7.47%, standing as the third most important construct of analysis.

On the other hand, different from the constructs mentioned above, in which almost all variables adhered to their original factors, the fourth originated latent variable is not formed by

all its initial variables, besides having a variable arising from a different factor. From this construct, we notice that the original one, sociocultural context does not influence the entrepreneurs by itself, being all fragmented in different constructs, revealing that our context only has influence in certain cases. In this case, context influences the variables ability to recognize start-up opportunities (Q.1); opportunities for the creation of new businesses

(Q.8); opportunities for the creation of new businesses related to gender (Q.9); and opportunities for creating new businesses for young people (Q.10), showing that there are entrepreneurs that have abilities to recognize business opportunities in Brazil. This way, from the analysis of the questions' statements comprising it variables, we named the fourth factor, ability to recognize business opportunities.

Table 2. Factors

Factor	Variables	Factorial Loadings	Explained Variance (%)	Construct
Factor 1	Q. 11	0.627	26.998	Access to Information, Knowledge, and other Resources
	Q. 16	0.473		
	Q. 23	0.750		
	Q. 25	0.528		
	Q. 26	0.819		
	Q. 27	0.755		
Factor 2	Q. 28	0.620	9.714	SMEs Internationalization
	Q. 29	0.729		
	Q. 30	0.790		
	Q. 31	0.614		
Factor 3	Q. 32	0.547	7.474	Support and Public Polices Programs
	Q. 12	0.549		
	Q. 13	0.711		
Factor 4	Q. 14	0.701	5.968	Ability to Recognize Business Opportunities
	Q. 15	0.673		
	Q. 1	0.538		
	Q. 8	0.742		
Factor 5	Q. 9	0.840	5.427	Culture of Support and Ability of Organization
	Q. 10	0.679		
	Q. 3	0.768		
Factor 6	Q. 6	0.693	5.136	Entrepreneurship Training and Business Association
	Q. 7	0.781		
Factor 7	Q. 22	0.667	4.494	Access to Informal Private Funding
	Q. 24	0.793		
	Q. 17	0.629		
Factor 8	Q. 18	0.604	3.707	Access to Bank Funding
	Q. 19	0.625		
Factor 8	Q. 20	0.827		

Source: Authors

In a comparable way, we named factor 5 as culture of support and organization ability, because this comprises two other sociocultural variables and one individual characteristic: ability to organize required resources to a start-up (factor 3); culture of support to creativity and innovation (Q.6); entrepreneurship connected to the idea of desirable careers in the community (Q.7). So we

may consider Brazilians as organized entrepreneurs that have the intention to build up a career while helping their communities.

The other constructs were named according to the relationship between their variables, obtaining the following names: factor 6 - training in entrepreneurship and business association (already addressed in previous paragraphs); factor 7 - access to informal private

funding, this factor was formed by the variable availability of resources of friends and family (Q.17); availability of venture capital funds (Q.18); availability of private funds or angel investors (Q.19). We observe from this factor that Brazilians do not see the availability of government funds (Q.16) as a way of financing and analyze the availability of bank loans as an isolated factor that forms factor 8. Even if this factor has 3.7% of the explained variance, it becomes important because it is a unique form of financing that Brazilians use little but know it is available. A plausible explanation for the unsuitability of these two variables with each other to form a single factor of access to finance is the difficulties to get financing.

From the point of view of the entrepreneur's locus of control, it is clear that Brazilian entrepreneurs in knowledge-intensive sectors attribute significant importance to external factors (external locus of control), which explains the failure to form a factor with the variables related to their profile as entrepreneurs and the importance given to the factor of access to information and knowledge. It seems that the entrepreneurs studied do not value their individual skills, their success probably is strongly attributed to environmental and external issues.

Such perception goes against propositions by Korunka *et al.* (2003), concerning the ideal training of entrepreneurs. For the authors the ideal entrepreneur must have an internal *locus* of control, while the results show that Brazilians have, in contrast, external *loci* of control; confirming the research by Câmara *et al.* (2006).

4.3 Entrepreneur Groups

Proceeding with the analysis, the k-means statistical technique was conducted as a way to investigate the quantity of different groups originated. It is worth noting that for the analysis, we used only the first seven factors, due to the fact that the eighth factor presents only one question. Therefore, through this method, three clusters emerged. By forcing the analysis with a larger number of groups we did not observe an increase in the difference of variance among them, obtained through the tests results of ANOVA, which reveals meaningful differences among the groups in almost all the eight variables raised in the factor analysis. The values reached in the test

can be visualized on Table 3.

Concerning the results visualized on Table 3, regardless of test F results evidenced by K-means should be used only for descriptive purposes, we highlight that only in factor 6 the difference in variance of clusters was not verified, which indicates there is no meaningful difference among the groups observing the variable training in entrepreneurship and business association.

To the validation of the solution with three clusters, raised by the analysis, we performed a multiple discriminating analysis. The results obtained indicate that 97.5% of the original grouped cases were correctly classified. Besides, 90.8% of the grouped cases by crossed validation were correctly classified. The results show that there is, in fact, a rigorous outline among groups emerged in the analysis.

By examining the group factor loadings separately, pointed on Table 4, we notice that the first cluster, comprised of 35.5% of the total sample (27), includes people who answered the questionnaire whose factor loadings reached positive values only in factor 1: access to information, knowledge and other resources; while all other factors reached negative value, or very close to zero. Thus, we named the group Learners, since its entrepreneurs stand out for the importance of access to information and to knowledge.

Similarly, the second cluster, consisting of 27.6% of all people who answered the questionnaire (21), includes people who answered the questionnaire who obtained average positive factor loadings on factors 4, 6 and 7, respectively: ability to recognize business opportunities; training in entrepreneurship and business association and; access to informal private financing; moreover, all other factors had negative average. Based on the proposed measurement of positively received constructs, the group received the name of Attentive Collaborators because they seek cooperation, but they are aware of business opportunities and availability of funding to take better advantage of such opportunities.

Finally, the third cluster, representing 36.8% of the sample (28), include people who answered the questionnaire who achieved average positive factor loadings on factors 2, 3, 5, respectively, of small and medium-sized enterprises internationalization support programs and public policies, and culture support and

organization skills; while all other factors had negative or near zero indexes. According to the evaluation of the constructs that directly influence its formation, the cluster was named Dependent

Competitors because they compete in the international market, but they consider public policies and culture of support as relevant.

Table 3. ANOVA test between the factors (K means statistic)

	Cluster		Error		Teste F	Sig.
	Mean Square	df	Mean Square	df		
Factor 1	14.506	2	0.630	73	23.025	0.000***
Factor 2	5.190	2	0.885	73	5.863	0.004***
Factor 3	3.669	2	0.927	73	3.958	0.023**
Factor 4	5.472	2	0.877	73	6.237	0.003***
Factor 5	9.746	2	0.760	73	12.817	0.000***
Factor 6	0.623	2	1.010	73	0.616	0.543
Factor 7	8.778	2	0.787	73	11.155	0.000***
Factor 8	Do not Analysed					

** Significant at 5%

*** Significant at 1%

Source: Authors

In this way, the groups were named, according to their main characteristics: Learners, Attentive Collaborators, and Dependent Competitors. Such classification shows there is a certain diversity of types of entrepreneurs in Brazil and intensive sectors knowledge, it also

reveals that entrepreneurs have predominantly external *loci* of control, but in different directions; confirming, once again, the results found by Câmara *et al.* (2006).

Table 4. Factorial loadings between groups

		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Quantity		27	27	27	27	27	27	27
Mean	Group 1	0.7666	-0.2097	-0.2904	-0.5873	-0.1648	-0.0207	0.0481
Quantity		21	21	21	21	21	21	21
Mean	Group 2	-0.6075	-0.0963	-0.3631	0.6755	-0.5023	0.1465	0.6380
Quantity		28	28	28	28	28	28	28
Mean	Group 3	-0.2836	0.2745	0.5523	0.0597	0.5357	-0.0898	-0.5249

Source: Authors

4.4 Differences among the Entrepreneur Groups

Consequently, we performed ANOVA tests among the clusters originated by the analysis using each factor in an isolated way; visualized on Table 5 and on Graph 1. Thus, as it is possible to notice on Table 5, cluster 1 – Learners – had meaningful difference in variance as compared to

other groups, fixing factor 1 – access to information, to knowledge, and other resources as parameter; which would make the group identity stronger, since it is characterized as the only group to reveal positively the scanned factor. In a similar way, the cluster also presented a meaningful variance compared to other two groups when we analyzed factors 4 and 7.

Similarly, as it is possible to notice on Table 5, by using factor 2 as parameter of analysis, results showed that there are differences among the variances obtained by the clusters 1 and 3 – Dependent Competitors; in confidence interval of 10%. The same procedure was performed using factors 3 and 5 as dependent variable. The results contribute to the importance of factor 1 to the conceptual formation of cluster 3, revealing the fundamental importance of the two factors for the formation of individual identities classified as Dependent Competitors. The group, besides, showed differences in the variance compared to other clusters when factor 7 was analyzed.

Fixing factor 4 as dependent, on the other hand, the second cluster – Attentive Collaborators – presented meaningful differences in the variable

when analyzed with the other groups. Although the other groups have also demonstrated significant differences in the variance, we highlight the importance of such factor to build the conceptual framework of the cluster, observed through the analysis of factor loadings examining factor 4. In the same way, we repeated the procedure using factors 6 and 7 as dependent variables. Even though when we examine factor 6 there is no difference in the variance between groups, indicating that the factor is not characterized as a different barrier for the construction of the cluster, when we fix factor 7 as a dependent variable, the Attentive Collaborators group presented differences in variance compared to the other groups; it is worth noting that we also verified differences among the remaining groups.

Table 5. ANOVA between clusters

		Cluster 1	Cluster 2	Clusters 1, 2 e 3
Factor 1	Cluster 2	32.916***	-	19.222***
	Cluster 3	20.687***	2.096	
Factor 2	Cluster 2	0.171	-	1.782
	Cluster 3	3.082*	1.662	
Factor 3	Cluster 2	0.093	-	8.07***
	Cluster 3	9.672***	12.280***	
Factor 4	Cluster 2	25.564***	-	12.380***
	Cluster 3	6.414**	6.998**	
Factor 5	Cluster 2	1.411	-	8.429***
	Cluster 3	9.615***	14.897***	
Factor 6	Cluster 2	0.333	-	0.338
	Cluster 3	0.061	0.660	
Factor 7	Cluster 2	5.475**	-	10.156***
	Cluster 3	5.49**	19.431***	

Source: Authors

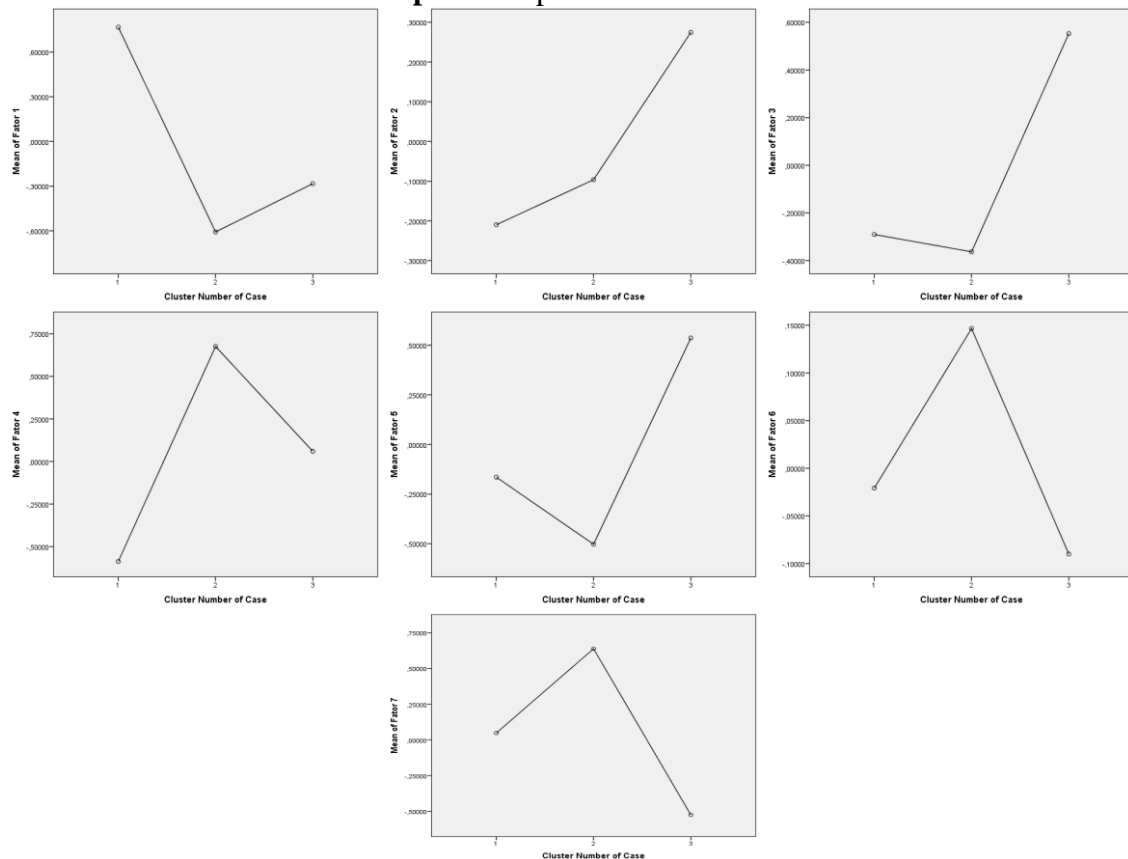
Based on the analysis of the variables and constructs that constitute the groups that emerged in the research, we observe that people who answered the questionnaire named Learners are entrepreneurs that search more actively for the intellectual improvement connected to business activity. The Learners share the same objective concerning the expansion of the theoretical contribution that would support the business opening, in the expansion of control both in the business operational activities and in the search of

new opportunities. Although the intellectual dimension comes strongly for the conceptual explanation of the group, we highlight the importance of obtaining resources for the cluster. Therefore, the fact that the cluster Learners has emerged from the analysis reveals the importance of investing in entrepreneurship education, as well as in offering mechanisms that provide entrepreneurs the chance to climb higher levels in the business trail, such as incubators, subsidies, consultancy and legal advice.

Similarly, we observe that Attentive Collaborators entrepreneurs demonstrate an ability to recognize business opportunities meaningfully different from other groups of entrepreneurs; they also search for improvement of the skills required to today's entrepreneur, as well as the expansion of business through the implementation of partnerships and associations. Another important factor for Attentive Collaborators is access to informal private funding, indicating that the search group for parallel sources of funds, which probably incur lower interest and damages to the business. Such results reveal the bold and impassive nature of these entrepreneurs facing the perception of new business opportunities or in the management of their companies.

Finally, examining the variables statements that characterize the entrepreneurs belonging to the third cluster, we can notice that individuals classified as Dependent Competitors have a strong inclination to expand their business. Entrepreneurs in this group search for expanding the influence of their companies, once the construct Internationalization of Small and Medium-sized Enterprises emerged as a seminal factor to the theoretical framework of the group, relying on subsidies and public policy programs. Such results suggest that Dependent Competitors make good research on infrastructure, tax policy, and public and social environment to support entrepreneurship for the opening and expansion of their businesses.

Graph 1. Graphs of ANOVA test



Source: Authors

As we can observe by analyzing the constructs making up the groups formed in all clusters the factor of government support emerges. Whether in the form of monetary support, such as funding and resources, or as incentives to professional qualification and access to training, education and business skills, public policies play an essential role in the development of local entrepreneurship. Thus, although other

dimensions were also considered relevant by our research, the distinct contribution of Government in the conceptual construction of the groups, highlights the research by Câmara *et al.* (2006) according to which Brazilian entrepreneurs have external *loci* of control.

5 Conclusion

We reached our general and specific objectives in the article when: i) we identified and measured the levels of importance of general key factors that enables entrepreneurs in knowledge-intensive enterprises; ii) we characterized the formation of three different groups of entrepreneurs based on the importance they attribute to the general key factors that enable the knowledge critical to enterprises and iii) characterized the differences among the three groups that emerged from the analysis.

Therefore, we can conclude that Brazilian entrepreneurs in the studied sector, have strong external *loci* of control and in general show great importance to access to information and knowledge, which was expected due to the characteristics of the sector analyzed. The culture of developing countries possibly accounts for the assignment of success to external conditions in detriment of personal values and efforts.

Data analysis also revealed the formation of a typology of three distinct groups, which explain the possible subtle differences among the entrepreneurs' groups. In this case, the following groups stood out, namely: i) focused on learning and knowledge accumulation; ii) having probably more opportunities of strategies and collaboration at the same time, which seems contradictory, but there is a vast literature that meets the competition with collaboration as a business success strategy, and last; iii) entrepreneurs with strong competitive bias and international perspectives, but, who, at the same time value the policies and culture of support. Thus, three dimensions of external dependence for the studied entrepreneurs were revealed: i) dependence on knowledge; ii) dependence on collaboration and favorable markets and iii) dependence on public policies and culture of support to entrepreneurs.

Considering the three dimensions revealed, we can conclude that the strategies for the stimulus and promotion of entrepreneurship in Brazil should go through public policies that: i) encourage assimilation and generation of growth ii) stimulate the collaboration between entrepreneurs and e iii) provide access to financial resources and expand networks of support of entrepreneurs.

It is important to remark that the study has some limitations. First of all, we researched only 76 entrepreneurs, an extremely low number that affect the generalization of the inferred results. It

is also important to add that the research was not based on a probabilistic sample.

As a suggestion to future research, we indicate the replication of the used scale used in this study so that its validity is verified. In the same way, we suggest the expansion of the analysis concerning the entrepreneur's profiles. The theory on entrepreneurship in Brazil needs more conceptual contributions about the core and restrict characteristics of entrepreneurs that act in Brazil. In the same way, cross-cultural researches that compare Brazilian entrepreneurs' profiles with other nations are valid as tools for benchmarking and proposition of support policies.

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Shaker Zahra Author Bibliometric Study - Analysis of Scientific Publications from 1985 until 2014

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ABSTRACT

The study aims to demonstrate through a bibliometric study, an analysis of academic, scientific and technical publications developed by Shaker Zahra between the years 1985-2014, representing 29 years of study. To enhance this objective, we sought in the first instance to a bibliographic description of bibliometrics, entrepreneurship and the relationship between them. After this, was demonstrated academic and professional history Zahra, describing their field. In sequence, it was presented the methodology of the study, which had focused its characterization longitudinal and quantitative research, which allowed the development of bibliometric analysis. The final part included the description of limitations and proposals for future studies, closing the research, with conclusions and references. The study was developed through the analysis of 160 scientific papers published by Shaker Zahra in partnership with other researchers in high-impact journals and academic and scientific importance were obtained at Portal Capes and Google Scholar Portal.

1 Introduction

The development of scientific research establishes milestones and principles for the formation of ideas, methods and behaviors. This brings a huge bag of thoughts and understanding, making new theories are created, new strategies and new research criteria. Finally, scientific research allows new revolutions occur as it relates to discovery, invention and innovation.

Conduct scientific research is therefore an event that lets you know how people and organizations think and act as is also set new technical and scientific parameters for the development of science itself. The reflection of this is the creation of new scientific structures and new formulas, classifications and theories in order to allow the emergence of definitions and

interpretations that did not exist in the social or environmental human.

For this reason, it is important to know and investigate who develops these scientific efforts that profile these people carry with them, to investigate issues that desires, curiosities and interests have and who develop and share their ideas and experiences. In short, this leads to know and to know who these people are and how they shape the academic life of these curious investigators of human and social science.

With the interest in presenting answers to these questions, this study is characterized as a longitudinal study aims to demonstrate through bibliometric analysis, the academic life of one of the most renowned scientific researchers in the

field of entrepreneurship - Professor Shaker Zahra . In order to make an investigation of all the papers that has developed and published in the period comprising between the years 1985-2014, representing 29 years of studies and academic and technical research.

It is known in advance that their research already exceed more than 250 different studies, in which they all had high level of academic interest, being published in high impact journals and scientific representation. For the study in question, after a thorough conference published articles, gave a final sample of 160 scientific articles, in which they went through a general conference of data and information, allowing you to arrive the responses of the study presented.

The structure of this study occurs through three stages, the first being the most bibliographic elaboration of general understandings of concepts of bibliometrics and entrepreneurship, the second being to the methodology to be used and the third phase, shown by survey data held, showing the quantitative results and making analysis by descriptive technique.

Finally, the study also presents its considerations, limitations and proposals for future studies, describing in general, the direction of the study, the difficulties that had in its implementation and the opportunities.

2 Bibliometrics and Entrepreneurial Research

It is known saying that entrepreneurship has acquired an important highlight in the last 30 years, influencing society's behavioral change and, for that, if analyzed in the macro context, people, organizations and countries had to reinvent and create new ways of doing things and to relate to their environment. This required that arose and were called practices in modern society, new attitudes, behaviors, thoughts and forms of relationship, aiming adaptability, 'reinvention' and 'recreation' of economic systems and new personal and professional profiles.

If directed to the field of science, to better learn about this social transformation, it is necessary to know historical information of academic research on the recent interpretations of entrepreneurship and that these interpretations have contributed to the development of scientific research.

As for the bibliometric method, which is a

mapping tool of evolution and social change as it relates to literary research, this method acquires real importance in numerical research data, seeking to demonstrate the importance of use and the influence of their technical evolution academic and literary research. Using publications counting techniques, subjects studied, developed variables, periodicity, authorship and co-authorships and investigated population, bibliometrics seeks to make a general survey, giving answers that most influenced the researchers in their past investigations and which may influence investigations future.

Having therefore these two issues as the basis of the study of this research is carried out, are based on first, more historical information about bibliometrics and entrepreneurial terms, getting to a second stage, within its own line of analysis, the description more conceptual and interpretative these issues.

2.1 Brief history understanding the method bibliometric

The term bibliometrics as well is currently known, had its initial studies that occurred more than 80 years, when three researchers created their own frequency measurement and analysis techniques. Known as laws, these techniques came to allow a better understanding of the methodology of literary data count published in journals. The first technique Zipf's Law call attempts to measure the frequency of words. The second technique known as Lotka Law, is intended to measure the productivity of authors, while the third technique, known as Bradford's Law Act, is intended to measure the productivity of journals (LIMA, 1984).

With the passage of time, these laws were moving away from each other as to its applicability, getting the Bradford Law as the best known and most used, due to the application of static and dynamic techniques in data analysis. Lima (1984) says that arose in 1934, the Bradford Law focused mainly on studying the literature by examining the quantity, frequency and productivity of the publication of journals and eventually becoming the best known, having been used numerous times in various fields of science.

Over the years, the Law of Bradford was being improved by several other scientific researches. Lima (1984) sets out 14 researchers

who sought to improve the application of the techniques of Bradford Law. They are: Vickery (1948), Garfield (1967), Brookes (1969), Fairthorne (1969), Goffman (1969), Pritchard (1969), Saracevic (1970), Pinero L. (1972), Hjerppe (1978), Braga (1972), Figueiredo (1973), Roberts (1981), Pinheiro (1982) and Maya (1982). These studies have allowed a better understanding of the applicability of Bradford Law.

What is known is that it was through this law and the initial studies by Otlets and complemented by Pritchard in 1969 that the term 'bibliometric' arose where it was decided that this would be a technique to be used to describe the studies that seek quantify the processes of written communication, applying mathematical, static and dynamic methods in information count in books, journals and other media (LIMA, 1984).

In 1977, Braga created the static and dynamic methods of application of bibliometrics, seeking to better structure the application of its techniques. These techniques have their particularities and allowed better targeting of studies. For example, the static method, its function is primarily to deal with the parameters regarding the size and distribution of the literature (authors, titles, articles, journals, etc.) in a particular period, while the dynamic method, the commitment is to deal with growth and the exchange rate of the same parameters (authors, titles, articles, periodicals, etc.) used by the static method (BRAGA, 1977).

Lima (1984) also used this interpretation, arguing own thoughts on the static and dynamic method. This says that the static technique turns in measuring in a determined period of time, parameters related to the size and distribution of the amount of authors, securities, documents and publications while dynamic methods seek to measure growth and the rate of change of these parameters.

Of course, if perceived by the evolution of studies that bring the meaning of bibliometrics, these were very important to clarify your purpose and applicability, but concentrating only the Bradford Law and its principles, these more than 80 years has passed its creation, still perceive a lack of understanding as to its real purpose and or applicability. As much as the same has already been used in many scientific researches, yet there is a lack of clarity and accuracy the importance of

the results that their analysis let you create.

2.1.1 Concepts and basic interpretations of bibliometric method

The realization of bibliometric research is by studies in bibliographic databases, involving the analysis of quantitative aspects, aiming to spread the use of the information published. This conveys the importance of bibliometric study in the analysis of literary publication, as this allows it to be served the need to know and evaluate in-depth way, productivity and quality of scientific research.

Ikpaahindli (1985), he says Bibliometrics is a generic term that describes a number of techniques that seek to quantify the written communication process. These techniques have been used to identify the most productive authors, identifying paradigms in science, fusion and fission of scientific disciplines and in identifying the most productive journals in different fields, allowing demonstrate a thorough examination of published issues, adopting and adopting standards communication publishing specific writing and authors.

Ravelli et al. (2009) also values this thinking, noting that the importance of bibliometric studies is supported by the need to know and evaluate the productivity and quality of research actors (authors / researchers), allowing the detection of dispersion models and behavior patterns citations in scientific production. Such models and behavior patterns help to understand how scientific knowledge is widespread and embedded between the actors and their peers, as well as among the general public (RAVELLI, et al., 2009).

Already Spinak (1998, p. 142) provides another understanding of bibliometrics, saying that this is considered "is a discipline with a multidisciplinary range, since analyzes one of the most important aspects and objectives of the printed communication," in which is can It is considered by the numerical count of existing data in publications made in different periods. This technique allows the development of relevant analysis and even, often surprising, providing analysis that go in depth about the subject that you study.

Soft-Chapula (1998, p. 135) say that bibliometrics as to their type, counts among study subjects with

periodicals or journals, articles and authors, and the measure is verified by simple frequency count.

The bibliometrics can be considered an excellent tool for quantitative studies, as its goal is to develop increasingly reliable indicators as the demonstration of the data being analyzed. She bibliographic catalogs, structural data of titles, keywords, subjects of study, applied research methods, analyzed profile and publishing bases, performing demonstrations that allow to know the essence of scientific publication.

Finally, when studying bibliometrics, it is understood that it is considered as a methodology to develop indicators on literary production, covering various fields of study and having the function of creating quantitative data bibliographic publications already undertaken in order to better explain the way that the research was adopted.

2.2 History recent entrepreneurship

Developments in entrepreneurship studies can be marked by numerous discoveries, whether scientific or technological that marked the course of time the evolution of society.

More recently, the 1980s was marked by a strong deepening in scientific research, especially one that was related investigations focused on the theme entrepreneurship, making it one of the main subjects of debate and whetting the interest of the academic community to describe how it forms the behavioral characteristics of the entrepreneur and as is the emergence of companies process. Several were scholars and researchers who presented arguments and understanding at this time, trying to answer mainly as forms and is characterized entrepreneurship and entrepreneurial individual.

Studies such as McClelland (1961) who tried to describe who is the entrepreneur; Schumpeter (1964) who said that this phenomenon occurs as an act of innovation; Drucker (1970) who argued that the enterprising person is one who venture into any business; Van de Ven, Hudson and Schroeder (1984), Churchill and Lewis (1985) have studied the process of creating companies, Gartner (1985), Bygrave (1989a, 1989b), Bygrave and Hofer (1991), Filion (1991) and Bruyat (1994) with studies on the multidimensional characteristics and the dynamics of this process; Zahra (1986) with corporate entrepreneurship; Low and

MacMillan (1988) who described as an entrepreneur acts and Carter, Gartner and Reynolds (1996) with the concept of organization were valid and important for the whitening of such claims, but even so, however these results were surprising, according says Oliveira (2012) so it was not possible to trace a psychological profile of the entrepreneur.

This is justified by the fact that people are then changing and adapting to new scenarios, whether social or environmental, having to express different behaviors for each situation presented, so exposed, their anxieties, desires, expectations, interests, individual goals and dreams. What is known is that entrepreneurship allows people can invent and reinvent themselves, improving their adaptability to the environment and the basic conditions for survival and social development.

2.2.1 *Conceptual understandings about entrepreneurship*

The phenomenon of entrepreneurship, a more empirical view, comes down to a social study, seeking to know how people act in the sense of thoughts, habits, desires and social values. This alone, turns to an analysis of social, cultural and economic environment in order to allow people the knowledge of their capabilities, their actions and the way they manage their interests.

Gimenez et al. (in: Souza, 2001, p 22) comments that entrepreneurship in the various approaches, is seen as the search for "tangible and intangible results of a person with creative skills, being a complex function of life experiences, opportunities, skills and individual capacity and that the exercise is inherent to the variable 'risk', both in your life and in your career. " Ferreira and Mattos (2003) do know that entrepreneurship is seen as an act of undertaking has the task or duty, to develop processes in different scenarios, causing changes in economic systems through innovations brought by individuals who generate and or respond to opportunities economic value creators.

Pereira and Santos (1995) constitute entrepreneurship as one of the management models that stand out in this period of transition and the emergence of new paradigms. The characterization of entrepreneurship as a suitable new management model to new paradigms (economic, political, social, technological,

cultural, etc.) is evidenced by the growing literature, especially from the second half of the 1980s, a period that Professor Shaker Zahra also begins its academic and scientific publications.

Undertake can not be seen only as the act of creating a new business. Undertake in Schumpeter's view, should develop actions that will turn the creation of innovation, invention and development of new models, new paradigms and new ideas. Undertake is to develop a new method for the evolution of culture, society and a certain geographic space technology. Schumpeter (1964) emphasizes the importance of entrepreneurship to society, saying that undertake is to introduce innovation, linking this to the concept known as 'creative destruction' (replacement of old methods and processes for new), as the main driver of economic growth.

Already, Carland et al. (1984) says that entrepreneurship is linked to the concept of competence, since the formation of the entrepreneur should seek to acquire knowledge, skills, experience, creative and innovative capacity. Undertake is therefore to invent and reinvent, it is to create something of value that will benefit both its creator and society. It is to develop ideas that add value for the exploitation of knowledge, to facilitate economic actions, is above all, be different in creativity, communication and attitude. Zahra (2003) also says that entrepreneurship at the level collaboration also involves taking the additional risks placed through partnerships with others.

By this thinking, entrepreneurship is a study of a phenomenon that goes far beyond just form new ideas and new economic attitudes. It comes with the task of creating a new society, a new thinking and a new system of capabilities, envisioning allow social, cultural, political and economic environment in which the company is formed.

2.3 USE OF bibliometrics IN ENTREPRENEURSHIP STUDIES

To study entrepreneurship, which seeks to know is how this develops and interferes with people's daily lives. Through its actions, it is correct to say that the social behavior tends to change and transform. Already bibliometrics is worth precisely these actions to map the way that entrepreneurship is taking when carrying out academic research.

Giarola et al. (2013) states that the identification work on the entrepreneurship process [...] contributes both to the academic world as to the practical, because it creates a better understanding of management initiatives, as well as support and identify the most relevant points in each case.

The relationship which is therefore between the study of entrepreneurship and the use of bibliometric method helps to guide the academic research, is seen by the scientific point of view, because the connection between them transpires the techniques of static and dynamics of developed investigations.

Among the numerous studies that have been developed uniting bibliometrics with entrepreneurship, they all contributed in some way to map the path that was taking the survey. Some national bibliometric investigations that can be cited as examples of this practice are: women's entrepreneurship (Silveira, 2008), entrepreneurship in social business (Iizuka et al, 2014), strategic formation of small companies (ROCHA et al, 2011), entrepreneurial behavior (BRANCHER; de OLIVEIRA; Roncon, 2012) (. OLIVEIRA et al, 2014), entrepreneurial marketing, research in entrepreneurship in Enanpad (MOREIRA; MOREIRA; SILVA, 2014)., entrepreneurship technological based incubators (Martins et al, 2014), entrepreneurship in hospitality (ALMEIDA; ANDALÉCIO, 2012) and intrapreneurship innovation (WERUTSKI et al, 2012).

These can be some examples of the relationship between the two sciences - bibliometrics and entrepreneurship, where the first is considered a great tool to know and study the most important work in the area and new gaps research findings (SILVA; NASSIF, 2014).

3 Shaker Zahra

The choice to analyze the publications of Professor Shaker Zahra, settled for being considered one of the most renowned the world's scientific researchers in the field of entrepreneurship, searching through this theme, more than fifty other related issues, in which it has a highlighted research conducted with the following directions: guidance and strategic process, financial performance, international entrepreneurship, corporate entrepreneurship,

governance, internationalization, family entrepreneurship and business opportunities.

The amount of academic research developed by Zahra is such that between 1996-2014, his works were extremely important for the advancement of other academic research, scientific and technical, receiving more than forty-two thousand citations. In terms of publication of scientific articles through Google searches done to School portal, gave an initial list of 257 titles of scientific papers published by Zahra over 29 years of academic studies.

Being a professor in entrepreneurship courses and strategy at the University of Minnesota, United States, Zahra is also heads the school management Carlson of Management in own University Minnesota. The academic and professional background is wide and interesting, and has served on the editorial boards of more than 25 professional journals. He received the awards for Best Research numerous magazines, as well as teaching awards, including best teacher in the MBA program and a mentoring award. He was the keynote speaker for more than 40 conferences and conventions and also acts as a consultant in both the United States and other countries for the largest technology companies in the world.

The themes that investigate are: entrepreneurship and national politics in global industries technology-based, entrepreneurship international and corporat entrepreneurship, creation knowledge, absorptive capacity and conversion and also knowledge entrepreneurship and capacity development in industries global emerging. In addition, Zahra also research robotics, software applications, global mobile applications, the video game, the pharmaceutical industry and nanotechnology.

In addition to concentrating his research mainly in the US, Shaker Zahra also develops projects in China, Swaziland, Brazil, India, Morocco, South Korea, Sweden, Denmark, Italy and Spain, making use, through their studies, various methods and theories and multiple levels of analysis.

The academic recognition and technical of Shaker Zahra has is huge, which has given him several awards, honors and merits, including three titles Ph.D., two in Sweden and one in Belgium. Among the many awards he received in 2014, stands the Global Award for Research in

Entrepreneurship.

4 Methodology

This study, considered bibliometric and longitudinal character, presents both descriptive fundamentals as well as quantitative. Knowing that bibliometrics evaluates, over time, the way that scientific research has taken, longitudinal research is concentrated, according to Remenyi et al. (1998) in studying the phenomenon search for a substantial period of time and the researcher studied the phenomenon caused by changes in time.

Descriptive grounds enable know interpretations of the responses obtained in the survey while the quantitative fundamentals show through charts, tables and network structure, the numerical and structural mapping of research conducted.

It was used as a source of research data, the Journal Portal CAPES and Google Scholar Portal. Having acquired an initial list of 257 scientific articles via Google Scholar Portal itself, in the field quotes after general conference authoring Shaker Zahra, obtained a list of 209 valid surveys and available to obtain and bibliometric analysis. After a search made in both mentioned portals, gave the final PDF file, and 160 a total scientific articles to be analyzed, representing 76.55% of the 209 items displayed on the bottom listing. These articles are published in high-impact academic journals from 1985 to 2014, representing 29 years of academic and scientific research.

In bibliometric study analyzed the number of publications per year, the general co-author, the main author with one co-author, with two co-authors and co-authors 3. Were also analyzed the gender of the co-authorships, Periodicals and country of publication, the field of study, the keywords, the variables set - dependent and independent, the type of research, methods and types of analysis, and at the end, the profile of the studied population was defined as the sample of each investigation.

The numerical and quantitative data occurred through tables and networks using the Office Excel 2013 software and Ucinet 6. In each presented statement follows a descriptive analysis, enforcing the interpretation of what is researched.

5 Data Analysis

Research and presentation of research data, which refer to the history of academic and scientific publications of the author Shaker Zahra allowed at the end of data collection, were obtained a total of 160 jobs for analysis.

For this number of jobs, investigations have turned the search for legitimate file with the Portal Google Scholar and the Journal Portal Higher Education Personnel Improvement Coordination - CAPES. The search procedure of these files obeyed the rule to display the title of the work and then obtaining the electronic file.

Obtaining 160 electronic files determined the activities of the first data collection phase, and this quantitative scientific articles represented 76.55% of the total of 209 available last filtering performed publications list also obtained in Google Scholar Portal. The second phase was the knowledge, determination and the counting of data, in order to have available, the main issues that would serve to further bibliometric analysis of the data that would be characterized as the third phase of this study.

Initially using the software Data tab spreadsheet Excel 13, were transcribed the information contained in the articles, which are divided into two main groups: 1 group) identification of the title and introductory matters involving authorship, journal name, co-author, country publication, year of publication, field of study and keywords; 2nd group) identification method involving dependent and independent variables, type of research, analysis methods, software used, population profile, sample number, basic theory and type of analysis.

With the completion of the transcription of data, began the bibliometric analysis, characterizing is as the third phase of the study. This analysis allows various information about the studies carried out by Zahra. This information is: publications produced per year and their representativeness; authored and co-authored and lead author of networks with general co-authored with 1 co-author, co-authors 2 and 3 co-authors with the help of software UCINET 6; central themes of study; periodic the name used by Shaker Zahra and his co-authors; most cited keywords; dependent and independent variables; types of research, analysis or methods

used and methodological techniques and main profiles and the number of the interviewed sample.

In the final phase, it was also pointed out some limitations that are realized in the realization and execution of this study and also an indication of future research proposals based on the knowledge acquired by the developed analysis.

5.1 Presentation of results

The first information displayed is the year and the total number of publications and the corresponding gradual representative each period. To know this information, Table 1 shows the results of this subject.

Table 1 - Year of publication, total publications and representativeness

Year of Publication	Total Publications Analyzed	% Representation
1985	1 publication	0.63%
1986	1 publication	0.63%
1987	3 posts	1.88%
1989	4 posts	2.50%
nineteen ninety	3 posts	1.88%
1991	2 posts	1.25%
1992	1 publication	0.62%
1993	8 posts	5.00%
1994	4 posts	2.50%
1995	3 posts	1.88%
1996th	3 posts	1.88%
1997	1 publication	0.62%
1998	3 posts	1.88%
1999	8 posts	5.00%
2000	10 publications	6.25%
2001	5 posts	3.12%
2002	10 publications	6.25%
2003	10 publications	6.25%
2004	4 posts	2.50%
2005	11 publications	6.87%
2006	8 posts	5.00%
2007	10 publications	6.25%
008	8 posts	5.00%
2009	8 posts	5.00%
2010	3 posts	1.88%
2011	9 publications	5.62%
2012	7 posts	4.37%
2013	7 posts	4.37%
2014	5 posts	3.12%
Total	160 publications	100.0%

Source: Adapted by the author. July / 2015.

In Table 1 are marked years that there were more publications developed by Zahra in partnership with its co-authors. These statements let you know that periods of major publications were those with quantity greater than 1 digit, with the highlight the years 2000, 2002, 2003 and 2007, all of these 10 publications each. The overall highlight of the period was in 2005, where it contributed to 11 publications. In summation of the respective five years, there has been a total of 51 publications, representing 31.88% of 160 publications were analyzed.

For countries in which publications were carried out, the United States is considered the leading country with a total of 154 research and developed publications coming in sequence, Britain, 3 publications, and finally, Denmark, Scotland and Sweden, with only one publication each.

In relation to the total number of publications made by Shaker Zahra with other co-authors, these were represented by 123 research involving 118 researchers / coauthors. These were represented by 83.90% of men and 16.10% women, determining that the studies by Zahra were mainly supported in achieving and training for people male. Table 2 shows how these coauthors were distributed in the work performed.

Table 2 - coauthors quantity published scientific article

Number of authors publishing with Shaker Zahra	Number of Publications
Articles with exclusive publication	37
Articles with 1 co-author	50
Articles with 2 co-authors	57
Articles with 3 co-authors or more	16

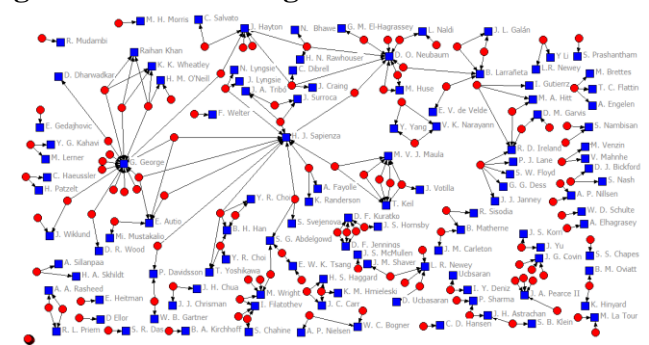
Source: Adapted by the author. July / 2015.

Observing table 2, it is clear that Zahra followed the trend to develop his studies on the participation of at least two co-authors, which makes sense in general terms, the extent and complexity of the studies, requiring more researchers involved. This occurred in 57 studies

involving 70 co-authors, as follows: 80% were men and 20% were women, proving again that Zahra develops and publishes its more studies in partnership with men than women.

In the statement of authorship and co-authorship, it was decided to develop a network structure in which was made in four models. These followed the demonstration of 160 publications by Zahra with all co-authors statements 1, 2 and 3. Figures 1, 2, 3 and 4 show these models.

Figure 1 - Structure of nets - Authorship and general co-authoring

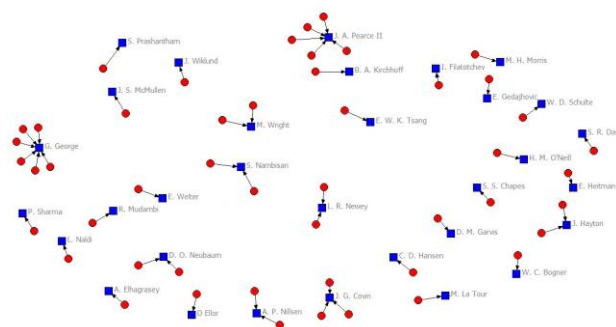


Source: Ucinet. July / 2015.

It is felt that the connection and interconnection between authorship and co-authorship, in the general framework, allows the formation of three major networks, involving three main co-authors in which Zahra sought to publish more. The first network is G. George, HJ Sapienza interconnecting with and therefore with OD Neubaum.

One can see that there is a strong relationship between Zahra's research with these co-authors and that through them, several other small networks are formed, structured as illustrated. An example of this is precisely the relationship among Zahra, George and Neubaum with J. Hayton, allowing the formation of a fourth network and understanding that there is a scientific dialogue between the initial three researchers with this room researcher.

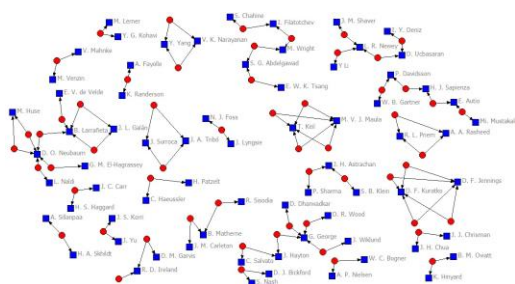
Figure 2 - Structure of nets - Authored with 1 coauthor



Source: Ucinet. July / 2015.

In Figure 2, indicating Zahra publications with coauthor 1, it is clear that two are the co-authors cited, as follows: G. George and JA Pearce II. But what is also noted that there is no interconnection between these two coauthors, making understand that the main search author to develop studies with them, but individualized, i.e., not involving these at * Similar studies and not creating relationships academic and scientific research between them.

Figure 3 - Structure of nets - Authored with 2 coauthors



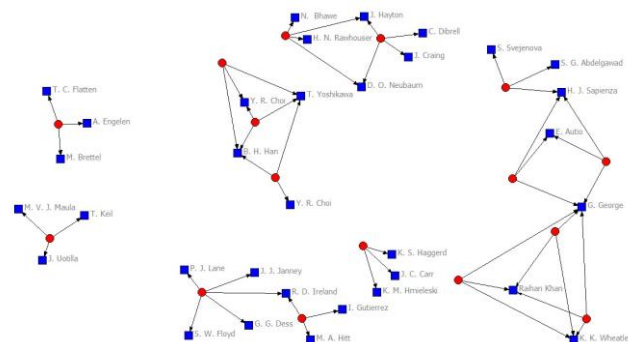
Source: Ucinet. 07/2015.

Figure 3 provides the formation of four chains, two with co-authorships that do not interconnect and two others where the co-authorships create partnerships with other co-authors, all being interconnected with Zahra. Example of the first two initial structures researches done by Zahra together with Kuratko and Jennings and others with Keil and Maula. As there is no connection between these two networks, one realizes that the above co-authors, being in each of its structures, develop contacts research together with Zahra.

In the third and fourth demonstration of the network structure, Neubaum as the co-author and his relationship with four co-authors in the study developed in partnership with Zahra and George

as the co-author with four other co-authors, following similar model developed by Neubaum. Finally, Figure 4 shows the formation of networks involving three or more coauthoring researchers with Zahra.

Figure 4 - Structure of nets - Authorship 3 coauthors



Source: Ucinet. 07/2015.

In the co-authorships with three or more researchers, it is highlighted the initial relationship with George Zahra, Yoshikawa and Han. As the first co-author has no correlation with the following two coauthors, even so, it is clear that the latter two have correlations with each other and at the end, the three co-authors were the ones that had partnerships in research by Zahra when the participation of three or more co-authors. It is also worth considering that the studies made between Zahra and George, other co-authors were also important, getting directions and participation in research. These are Khan, Wheatley and Sapienza, noting that when Zahra publishes with George, these coauthors also have co-participation.

By analyzing the 160 study subjects, where the targets were developed individually and Many were made collectively between Shaker Zahra and other participants in the direction of facing entrepreneurship. It was known then that the total analyzed of 35 had entrepreneurship as a central theme, and these were as elaborate as to its authorship: 13 studies were conducted individually and 22 with the participation of other researchers. The higher incidence of events of these studies was in the years 1999-2003.

In these 35 articles, the topics related to entrepreneurship were: corporate entrepreneurship, international entrepreneurship, financial performance, environment, skills,

organizational capacity, global economy, governance, competitiveness, international expansion, and culture, business advantage, building theories, entrepreneurship education, ecosystems and global innovation.

As for the 13 individual studies by Zahra, the issues that most had correlation with entrepreneurship were: financial performance, strategies, theory building, public management, market orientation, organizational learning and governance. The themes within their individual research in relation to the collective research, only 7 were studies in which Zahra developed in partnership with other researchers, taking place between the years of 1999-2005.

Another important information obtained in the analysis corresponds to the names of journals Shaker Zahra published his studies. In all, the 160 reviewed scientific articles that represented 29 years of research; Zahra got publications in 55 different journals in which these are shown in Table 3.

Table 3 - Name of journals and number of publications

Regular Name	No. publications
Journal of Business Venturing	17
Entrepreneurship: Theory and Practice	16
Journal of Management	12
Academy of Management Journal	8
Academy of Management Executive	8
Strategic Management Journal	7
Academy of Management Proceedings	7
Journal of Management Studies	6
European Management Journal	6
Academy of Management Review	6
Journal of Business Ethics	5
International Business Journal	4
Frontiers of Entrepreneurship Research	4
Journal of High Technology Management Research	3
Family Business Review	3
Strategic Entrepreneurship Journal	3
Long Range Planning	two
Academy of Management Best Paper Conference	two
Journal of International Business Studies	two
Small Business Economics	two
Journal of World Business	two
Corporate Governance: An International Review	two
International Journal of Commerce and Management	1
Advanced Management Journal	1

Institute of Industrial Engineers	1
Journal of Consumer Marketing	1
Academy of Journal	1
Confer. Proceedings, Entrepr, Academy of Management	1
Journal of Small Business Management	1
Administrative Science Quarterly	1
Strategic Entrepreneurship: creating a new mindset	1
Information Systems Research	1
Global Entrepreneurship Monitor	1
Journal of the Iberoamerican Acad. of Management	1
Int. J. Technology Management	1
Innovating Strategy Processes	1
Emerald Group Publishing Limited	1
Handbook of Research on Family Business	1
AIM Research Working Paper Series	1
organizational Dynamics	1
Entrepreneurial Strategic Processes	1
Journal of Business Research	1
Industrial and Corporate Change	1
Human Relations	1
Journal of Management Strategy and	1
Entrepreneurship and Higher Education OECD Publishing	1
Research Policy	1
British Journal of Management	1
AMS View	1
Journal of Management Inquiry	1
Entrepreneurship Research Journal	1
Academy of Management Learning & Education	1
Business Horizons	1
Journal of Leadership & Organizational Studies	1
Organization Science	1

Source: Adapted by the author. July / 2015.

The journal 'Journal of Business Venturing' was the most published Zahra's studies, both individual studies (8 publications) as well as with co-authors (9 publications). Upon receiving 17 publications, the representative that it was acquired 10.63% of the 160 analyzed publications.

Already, the journal 'Entrepreneurship: Theory and Practice', the second that received publications, its representativeness was at 12.30% of the total analyzed. What draws attention on this figure is that it represents 16 publications and, of these, 15 were conducted with the participation of co-authors, being only 1 where Zahra published the study individually. The third prominent journal is the Journal of Management, having received 12 publications (7.5% and

representativeness) of 160 analyzed.

At the end of the first group of subjects analyzed, there is still the analysis of keywords. Considering the 160 studies analyzed, 111 of them did not present or did not meet key words quoted, representing 69.38% of those articles. In the 49 remaining articles were obtained keywords, 39 were made by Zahra in partnership with co-authors and 10 were cited exclusively. Altogether, these 49 articles were found 134 keywords, 98 in the collective and the individual articles 36 articles.

The keywords that occurred most in 39 scientific articles made by Zahra with co-authors were:

Table 4 - Main keywords

Keywords	Quantity quotes
Absorption capacity	7 quotes
entrepreneurship	6 quotes
Innovation	6 quotes
governance	5 quotes
alliances	5 quotes
internationalization	4 quotes
Knowledge	4 quotes
ecosystem	4 quotes

Source: Adapted by the author. July / 2015.

In 10 articles developed exclusively by Zahra, the most cited keywords were: entrepreneurship (3 citations); learning (3 citations); action strategies (2 quotes); performance of the company (2 quotes); family business (2 quotes); production geared to the market (2 quotes) and governance (2 quotes).

It is noticed that the keywords most cited in Zahra publications with his co-authors, only two were repeated in the individual publications, which are: governance and entrepreneurship. This makes us understand that the focus and direction of the author's research with his co-authors tend to be differentiated when defining the study subjects was seen by the individual perspective of the same. With regard to governance, Malo (2001), making a link between the governance structure and the concept of collective entrepreneur emphasizes that decision-making is developed to the extent that the actors in each instance act guided by a set of relevant principles a venture of cooperative and collective nature.

The second group of analysis is established to present the studies by Zahra, is directed in the

statement of the methods used in their research. The first issue to be addressed is fixed in the indication of the dependent and independent variables. Of the 160 studies analyzed, 80 of those had information both dependent variables as independent variables or of one or another, representing 50% of the analysis made in this regard.

To achieve these core issues, there was a longitudinal scan of the 160 papers analyzed between the years 1985-2014, seeking to get the issues that most were studied by Zahra, thus reaching the number of 80 studies with indications of dependent variables and independent. In this analysis, 80 studies allowed to reach eight core subjects, where these are known as: orientation and strategic processes, financial performance, international entrepreneurship, corporate entrepreneurship, governance, internationalization, family entrepreneurship and business opportunities, the presentation of the same is given by determining each subject that the author seeks in order to search. For more specific knowledge of this information, Table 5 presents the central theme name, the number of variables (dependent and independent) in each theme and the name of the variables.

Table 5 - Variables for study topic researched by Shaker Zahra

Study of Central Themes	Studied variables (Total)	Dependent variables	Independent variables
Guidance and strategic process	22	Age of the company; size; type of industry; management team composition; power bases; beliefs and management goals; strategic flexibility; competitive orientation of the company; number of employees; Total sales growth; return on sales after taxes; domain; key role in the ecosystem; strategic thought; factors that facilitate strategic thinking; barriers of strategic thinking.	Trading on the success of the market; dominator niche; entrepreneurs; new learning advantages; cognitive limitations of the entrepreneur; busy schedules.
financial performance	17	Property type; phases of the business life cycle; complexity of internal operations; corporate social responsibility; financial performance; biotechnology; alliance between universities and businesses; innovation; knowledge; productivity; profitability; revenue growth.	Features of the external environment; Type of Company; technological orientation; high tech; low technology.
international entrepreneurship	6	entrepreneurship; internationalization; knowledge; organizational learning; Skills; accept risks.	
corporate entrepreneurship	33	Strategy; environmental considerations; organizational factors; financial performance; entrepreneurship; product innovation; risk taking; liquidity; debt to equity; non-durable capital goods; emphasis on proprietary activities; support management; reinforcement rewards; availability; organizational boundaries; sustainable regeneration; reset domain; the role of leadership; social exchange.	Dynamism; hostility; heterogeneity; financial goals; competitive advantage; marketing objectives; social advantage; scanning; differentiation; integration; control; culture centered on the person; communication; success in culturing value.
Governance	11	Social interaction; assets of human capital; assets of property; relational goods; the company's age; company size; spent abroad; internationalization.	Outsider property; possession of the executive; long and short-term institutional.
internationalization	28	sales percentage in the foreign market; number of countries that the Company serves; parts of the export; parts of importation; parts of the advertising budget directed to international markets; the share of the costs of R & D abroad; Parts of production made abroad; heterogeneity; munificence; professional manufacturing; services, retail and wholesale; the company's age; the proportion generated by international operations revenue; modal commitment; High industrial technology; intensity in R & D; patent; experience and international levels; industry growth rate; concentration; foreign penetration; government aid; current liquidity; consumer non-durables company; technology industry; international alliances; revenue growth; number of companies have introduced products in foreign markets.	Property of the CEO; institutional ownership; share capital; input mode.
family entrepreneurship	24	Family institutions; family size; shared vision; use of national alliances; use of alliances in foreign markets; entry into new domestic markets; entry into new foreign markets; investment in emerging radical technology; introduction and product innovation radical; commitment of family culture; culture-oriented management; active participation of the family in the business; no active participation of family members in the business; but with interest; amplitude; depth; speed of organizational learning.	family involvement; family property; CEO is also the founder; mandate of the CEO; family property; number of family generations; the company's status indicators.
business opportunities	29	Slack resources; age of the Joint Venture; corporate risk; technological leadership; internal dynamic technology licensing; intensity of rivalry; type of regime; innovation; product line and amplitude; product differentiation; Modularity of the product; sales growth; distinction between the growth of domestic and international sales; market definition; cooperation; communication; troubleshooting; performance; performance and strategic variety; average return on equity; product	Inclusion of expenditure on R & D; employment of scientists and engineers; the R & D portfolio; the number of products; the use of patents; origin and development of

		development in new companies.	ACAP; vertical alliances; horizontal alliances.
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Source: Adapted by the author. July / 2015.

It is noticed that there were several issues presented as 'dependent variables' and as 'independent variables', stating that the studies developed by Zahra, both individually and collectively, have different central themes but with certain variables that the end were similar or close in terms of studies.

Regarding the type of research, analysis or methods and methodological techniques that 160 articles analyzed studies were submitted, the first description that is, turns on the demonstration of reliability analysis, measurement scales, and hypothesis testing. These three techniques were found in 78 studies, representing 48.75% of the scientific material available. In the reliability analysis, the main was Cronbach's alpha coefficient. The measurement scale that stood out was the Likert Scale and hypothesis testing; the highlight was the T test, X2 test and single factor test Harman. The latter test according to Souto and Rego (2007) assumes that, if there is a substantial amount of variance common method, then emerge one factor or a general factor that explain the most variance when all study variables are inserted into a factor analysis.

The types of research, analysis studies allowed finding 84 studies with information surrounding this event, representing 52.50%. All of these studies allowed us to know 21 different types of searches made by Zahra and his coauthors. Therefore, the most used types of research were: empirical research, Miles-Snow research, cognitive research, exploratory research, email search and interview.

It is noticed that the direction and focus of Zahra was just to gather information for their research on events that were happening or happened and to enable it to better understanding and deepening their occurrence. This is confirmed in the research used in those cited in which the empirical research was highlighted. Therefore, allowing Zahra to know and describe facts and situations of social conditions experienced by people and organizations studied in his research. Demo (. 2000, p 21) adds, saying that "empirical research is dedicated to the treatment of empirical and factual face of reality; It

produces and analyzes data, always proceeding by way of empirical and factual control".

Analysis methods were also presented in relation to the analyzed studies. Therefore, the 160 articles available, 69 of these (43.40%) had or allowed to know the method of analysis, which are a total of 37 different models. The most frequently cited or used were regression analysis, moderate regression analysis, hierarchical regression analysis, confirmatory factor analysis, factor analysis, multivariate analysis of variance (MANOVA), multivariate analysis of covariance (MANCOVA), mixed univariate analysis (ANOVA) analysis of covariance (ANCOVA) and varimax rotation process. In individual studies Zahra, of the 37 studies, 19 of these have allowed to know the method used, with the highlight: analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), multivariate analysis of covariance (MANCOVA), analysis of covariance (ANCOVA) and factor analysis.

In the final phase of this study, there is still a public profile analysis analyzed, where the types of research, analysis or methods and methodological techniques could be tested and applied by Zahra. Initially it is clear that the author and his co-authors sought to collect data and information of all kinds of existing public business and active both in the United States but also in Europe and in Asian Continent. Having the focus of Zahra studies and his co-authors with core issues facing the guidance and strategic process, financial performance, international entrepreneurship, corporate entrepreneurship, governance, internationalization, family entrepreneurship and business opportunities, the profile of the public interviewed focused on professionals working in universities, family businesses, food, automotive, biotechnology, telecommunications, software, high and low technology, plastics, traded, post offices and even companies with less than 500 employees.

This focused public was found in 93 articles, representing 58.49% of the 160 articles analyzed. The most searched public were professionals working in companies that appear in

the Fortune 500 and also in family businesses, manufacturing, and biotechnology, high and low tech, international, with fewer than 500 employees and companies with less than 8 years of existence. The studies carried out in these types of organizations occurred in Spanish companies, Danish, South Korean, Finnish and Israeli, which makes us understand that the analyses by this author occurs in several global regions, allowing to establish are these, global studies in the field of entrepreneurship, giving importance to scientific research and valuing the research of this subject in the academic and scientific context of the academy.

6 Limitations

In the period in which the collection and subsequent analysis of the data, we noticed some difficulties while limitations in their implementation. These difficulties and limitations passed both the scrutiny of obtaining articles as well as the execution of their analysis. From a final list of 209 possible products to be obtained and analyzed, the first limitation introduced was in obtaining the articles themselves, because due to lack of registration in some search portals, especially in the portal Capes, there was a limitation only showed in 160 articles.

The second limitation is halted by the fact that certain periodicals required buying dollar of your electronic file, where it prevented the acquisition of about 30 to 40 items.

A third limitation occurred in those articles in which their periodic asked username and password and these journals not being registered at the Regional University of Blumenau - FURB prevented the original document obtained. The fourth limitation was that certain articles only having the summaries available as making the depth of the analysis.

And, finally, the fifth limitation was the lack of guidance on the use of Ucinet 6 data software, in which the same handling learning was due to the application of trial and error attempts, in order to obtain the understanding usage and performing in the desired analysis, thereby, forming the co-authorship networks.

7 Proposals for Future Studies

This being one of the first bibliometric

studies directed longitudinal investigation of a single author publications, it is proposed to study in a more specific way, the central theme of study related to 'corporate entrepreneurship' because this was one of the most researched central themes by Shaker Zahra.

It is also proposed to undertake further studies with all 160 articles available, to find out about these possible limitations and / or implementation difficulties and also to know about the direction of future research and the core subjects studied.

And the third proposal is directed to know more specifically, studies by leading coauthors Zahra, appointed by Donald O. Neubaum, Gerard George and Harry J. Sapienza, proposing longitudinal study of its academic and scientific historical publications, seeking to know the central themes of their research, comparing them with those of Zahra, aimed at developing new research materials.

8 Main Conclusions

The intention of understanding the path of scientific research developed by Shaker Zahra allowed the development of this longitudinal historical analysis, where they were shown the results of 29 years of academic studies through technical publications that portrayed the quest for knowledge in several areas correlated to the field entrepreneurship.

Being prepared developed by bibliometric technique, the study initially presented the concepts that allow knowledge about entrepreneurship and bibliometrics, making a relationship between them, in order to demonstrate through the literature review, the importance of linking these with scientific research.

Based on the data collection occurred in pursuit of academic portals like Capes Portal and Google Scholar Portal, they allowed us to obtain scientific material that allows the study. Were presented in the data analysis phase, the bibliometric and quantitative reading of Shaker Zahra publications between the years 1985-2014 through 160 publications that have taken place in 29 years of research. These statements were divided into two groups, the first being responsible for presenting and analyzing issues on the introductory structure of academic material as

authorship, co-authorship, journal publication, year, coauthors gender, fields of study and keywords, getting the second group to demonstrate matters relating to the type of research, analysis or methods and methodological techniques.

Whereas, therefore, that the prospects of the study were to analyze the academic background and technical Zahra, it is understood that this goal was achieved. The statement of research data was presented in the form of networks and tables, and as a result, the descriptive analysis applied to each quantitative demonstration, which allowed knowledge of the paths and author of that research focuses.

It is hoped that this study can form the basis for new and future academic research involving longitudinal research of scientific publications from other authors, since as the bibliometric and longitudinal analysis of research Shaker Zahra, this study is considered a pioneer in the field of academic research.

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