

THE TRANSNATIONALIZATION OF BRAZILIAN SMEs

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ABSTRACT

This paper analyzes the transnationalization of Brazilian small and medium enterprises (SME) through cultural, administrative-political, geographic and economic (CAGE) distance framework proposed by Ghemawat. In order to have an accurate understanding of the Brazilian SME's international strategies, CAGE framework is linked with Andersson's typology of international entrepreneurs: the technical, structural and marketing. To analyze the transnationalization of these firms, the authors randomly selected 30 SME out of the 244 best financially performed SME between 2005 and 2008. The method used was Cronbach's alpha to measure internal consistency of the sample and Pearson's bivariate correlation two-tailed to identify the link between the entrepreneurs' perception and CAGE distances as well as the entrepreneur's profiles and distances. The main research findings indicate that the economic and geographic features have influenced the decision-making of Brazilian SMEs. However, the technical and marketing profile entrepreneurs identify the participation of Brazil in a trade block as a relevant feature, which is confirmed by the number of times regional countries, such as Argentina, Chile, Paraguay and Uruguay, were mentioned.

Keywords: *internationalization approaches; transnationalization of Brazilian small and medium enterprises; CAGE framework; typology of international entrepreneurs.*

INTRODUCTION

The internationalization of Brazilian companies is a very recent phenomenon, which has started after the liberalization policies implemented in the 1990s. Brazilian companies have usually focused the expansion on the large domestic market, especially, Brazilian small and medium companies that have to deal with several financial and operational constraints in order to enter into the international market. Nevertheless, the combination of new government policies and the easy access to information and communication technologies have stimulated entrepreneurs to take more risks, including the internationalization as one of the main business strategies. Researchers and scholars are usually interested in understanding the internationalization process of large and

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multinational Brazilian firms, particularly, in South America (FDC 2010; Rocha, Silva, Carneiro; 2007). Few studies have looked at the process of internationalization of Brazilian SMEs, although the number of SME transnationalized represents more than half of the transnational companies in the country (Almeida, 2007; Floriani, 2010; Forte e Moreira, 2007). For instance, the number of Brazilian exporting firms was approximately 22.500 in 2010, in which SME represented 52% out of the total number or a FOB (Free on Board) of US\$ 10.0 billion (MDIC 2010). Yet, to date, little is known about the business strategy used by Brazilian SMEs to get into the international market. Scholars argue that there are not enough studies of Brazilian SME due to the small representation of exporting in financial terms. Thus, they have not identified which features, such as cultural, administrative-political, geographic and economic, have a greater impacted on the management decision, neither which type of entrepreneur seeks the global market. This paper attempts to fill this gap in the literature by randomly analyzing the 30 fastest growing SMEs in Brazil between 2005 and 2008.

In the first section, the paper introduces the theoretical debate around the internationalization process. The following section describes the four dimensions defined by CAGE framework (cultural, administrative, geographic and economic) as well as the typology of entrepreneur (technical, structural and marketing) (Andersson 2000; Ghemawat 2001). Then, it presents the statistical method used to analyze the sample, which first measures internal consistency of sample through Cronbach's alpha and the Pearson's bivariate correlation two-tailed to identify the link between the entrepreneurs' perception and CAGE distances as well as the entrepreneur's profiles and distances. Finally, the paper analyzes the research findings and its implication to future studies.

1. INTERNATIONALIZATION THEORIES

The internationalization process of firms is not a very new area of study. Many scholars and researches have analyzed the internationalization process of large companies, and more recently some scholars have focused on the internationalization of SME (Lu and Beamish, 2001; Knight and Kim, 2009). The literature on the internationalization process of firms is divided into two mainstreams: the economic approach and the behavioral approach (Anderson & Coughlan 1987, Buckley & Casson 1998, Dunning, 1988, Terpstra & Yu 1988, Vernon 1966).

The economic approach rests on the neoclassical economic model, which identifies investment and change as a consequence of rational decision-making based upon a comparative analysis of the return on value. The economic mainstream is based on several theories, such as the theory of Foreign Direct Investment (FDI), developed by Hymer (1976), the Transaction Cost Approach, by Williamson (1975), Hennart (1982) and Teece (1986), and the Internalization Theory, by Buckley and Casson (1976). According to these perspectives, multinational companies' goal is to maximize the profit by selling intermediate products in foreign markets with imperfect competition.

Dunning's Eclectic approach, for instance, is one of the most relevant contribution of the economic mainstream model (Dunning, 1988), which emphasizes the advantages of ownership, location and internalization. Additionally, there are the Theory Product Life Cycle Model, Theory of Oligopolistic Competition and the Theory of Foreign Direct Investment and Multinational firm. The first one, the Theory Product Life Cycle Model, affirms that there is a correlation between the product life cycle and the company investment cycle in the international market (Vernon 1966, 1979). Then, the theory of Oligopolistic Competition highlights that companies usually expand to international market in order to follow the expansion of others (Knickerbocker, 1973). Lastly, the theory of Foreign Direct Investment and Multinational firm focuses on identification and analysis of market imperfections that may result in internalization (Calvet, 1981).

In opposition to the economic approach, the behavioral approach outlines that uncertainty is the main aspect to affect the internationalization process of the firm (Johanson & Vahlne, 1977, 1990; Reid, 1981; Axelsson & Johanson, 1992; Ellis & Pecotich, 2001). As the knowledge of market opportunities is not available to everyone, managers who usually lack information of the opportunities in the international market are constraint in including other markets in their business strategy, in other words, they are inclined to restrain to the domestic market (Johanson & Vahlne, 1977). Thus, the internationalization process may not follow a standard pattern or reason, at least at the initial stage (Ellis & Pecotich, 2001). The theories included in the behavioral mainstream are: the Uppsala model, the Network Theory, the Born Global Approach and the Resource-Based View (RBV). This paper, here, focuses on the former one.

Uppsala school, one of the most prominent theories of the behavioral approach, was influenced by the Firm growth theory (Penrose, 1959), the Behavioral firm theory (Cyert & March, 1963), and combined them to the analysis of the foreign investment decision-making process (Aharoni, 1966). Uppsala model states that companies are heterogeneous unities, so the company's subsidiaries should define specific strategies

according to its corporate interests and resources in order to play an important role in the holding's strategy. In line with that, the internationalization is considered an incremental procedure that relies on the gradual commitment of the decision-maker to the foreign market (Johanson and Vahlne 1977; 1990). For Johanson and Vahlne (1977; 1990), the internationalization process pursues gradual steps in accordance with the manager experience. So, the manager's perception and knowledge of foreign markets or lack of it may directly impact on the company's internationalization process. Therefore, the model addresses the critical role of information to enter into the international market and places that companies usually start exporting to markets that uncertainty is reduced, in other words, markets with a low "psychic distance".

The concept of "psychic distance" has influenced many scholars specialized in the field of internationalization of SME as it defines many features that might affect the entrepreneurs' perception of the foreign market. The concept originally addressed the economic distance in terms of the transportation costs (Beckerman 1956). Then, the analysis of the internationalization of Nordic enterprises carried out by Uppsala school expanded it, including other features that may involve the managers' decision-making, such as language, culture, political system, level of development, level of education and so on. The Uppsala model, hence, stresses the gradual commitment to foreign market in accordance with the managers' knowledge and experience to those features. (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977; Vahlne & Wiedersheim-Paul, 1977, Nordstrom & Vahlne, 1994)

It is worth noting that the Uppsala model has been frequently misunderstood. Several studies of internationalization have limited the concept of "psychic distance" only in terms of the cultural distance (Kogut & Singh, 1988; Benito & Grispsrud, 1992; Barkema, Bell & Pennings, 1996). These studies have usually highlighted the Hofstede's dimensions of national culture, which excludes several aspects that might impact on the analysis of distance, such as political system, level of economic development, language and so on. Currently, many scholars have underlined the institutional dimension (Kostova, 1999) as well as the linguistic dimension (West & Graham, 2004) in the analysis of the internationalization process of the firm. These studies, among others, have criticized the one-dimensional analyses that mistakenly limited the concept of "psychic distance" in terms of cultural distance (Tihanya, Griffith & Russel, 2005, Drogendijk & Slangen; 2006; Shenkar, 2001, Dow, 2000; Clark & Pugh, 2001; Dow & Karunaratna, 2006).

Luostarinen's research (1979), for instance, has concentrated its analysis on four important dimensions: economic, physic, cultural and institutional. While Dow & Karunaratna (2006) have looked at what they called the "psychic distance stimulus" and the dimensions obscured in this concept to comprehend the country's perception. According to these authors, there are seven endogenous dimensions included in the "psychic distance stimulus": culture, language, industrial development, level of education, political system, time zone and religion; besides one exogenous dimension, the colonial ties. Ghemawat (2001) model has also stressed the importance of a multi-dimensional analysis, involving four broad dimensions: cultural, administrative, geographic and economic (CAGE). Although Ghemawat model is in line with Dow & Karunaratna's framework, it is important to highlight that this model focuses on the distance of firms instead of the country's perception. Once this paper aims to understand the internationalization process of Brazilian SME, the authors here have decided to adopt the Ghemawat model, then linking it to the Andersson's entrepreneurs profile model.

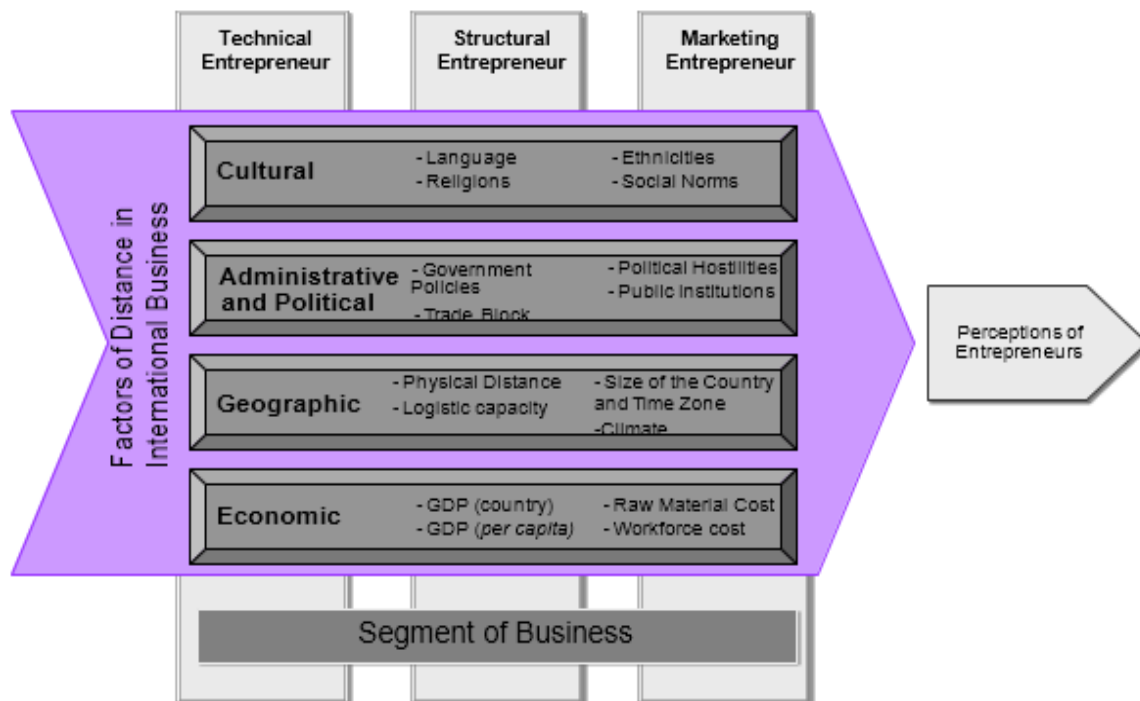
2. THEORETICAL FRAMEWORK: CAGE and Andersson's Typology

The Ghemawat model (2001) is the most comprehensive framework to analyze the internationalization of Brazilian small and medium enterprises as it properly outlines several features that managers must be aware of in order to enter into the international market. The model defines four dimensions: culture, administrative, geographic and economic (CAGE), in which one includes a number of factors as can be seen below:

- **Cultural dimension** compares the differences in terms of religion, social norms, language and ethnicity. For instance, the trade between countries with the same official language might be three times more intense than those with a distinct language (Ghemawat, 2001).
- **Administrative dimension** includes the government trading policy, whether the country belongs or not to a trade block, the efficiency of public institutions and the political hostility. Ghemawat (2001) points out that the distance may be greater if the country uses trade tariffs or quotas. Another factor that might negatively affect the perception is the institutional capacity and the control of corruption.
- **Geographic dimension** is not only the distance in terms of miles, but it involves the extension of the country, the climate and the logistic infrastructure, such as IT's capacity, telecommunication and transport. All these factors may influence the distance between two countries (Ghemawat, 2001).
- **Economic dimension** involves the country's GDP, income level, raw material and human resources. This dimension may be greater to those firms that depend on scale and standard procedures.

By connecting CAGE’s model to Andersson’s typology of entrepreneurship, this research has been able to identify if there is a positive relationship between the individual characteristics of Brazilian entrepreneurs and CAGE’s structure. According to Andersson (2000), individual characteristics have influenced on internationalization process of the firm, especially, small enterprises that are normally managed by one single person (Bilkey & Tesar 1977).

1: Factors of Distance in International Business and the Perception of entrepreneur



Source: Adapted by the authors (Andersson 2000 and Ghemawat 2001)

The study of Andersson (2000) in three Swedish companies has established three types of entrepreneurs: technical entrepreneur, structure entrepreneur and marketing entrepreneur. The technical entrepreneur is the one that concentrates its activities on the development of technical innovation, such as the creation of new products or new techniques in the production. The internationalization of the firm is not integrated to its business strategy, albeit new technologies generally diffuse to the global market at a fast pace. The structure entrepreneur, on other hand, understands that the internationalization is not disconnected to the business, but it is as a natural consequence of a well- implemented business strategy at the corporate level. Therefore, the structure entrepreneur plays an important role and tends to merge or acquire other firms in order to get into the external market. Finally, the marketing entrepreneur is the one who looks for demands in the foreign market and builds up an aggressive business strategy to explore the potential of this market. As can be seen, Andersson’s typology emphasizes that the internationalization process differs from the business strategy adopted by each entrepreneur. In other words, the entrepreneur’s capacity to allocate the financial resources directly impacts on the way internationalization flows.

3. METODOLOGY

This research has used a mix of techniques to collect primary database of Brazilian small and medium enterprise. The interview was divided into two stages, first it was applied open-ended research questions, and then close-ended questions through a web survey. The open-ended questions aimed at classifying the SME sector, the level of hierarchy and the frequency of decision making involving foreign market and the number of activities in other countries. Whereas the close-ended questions intended to identify the features of distance to the international market and the profile of entrepreneur by ranking the answers according to the Likert scale.

In order to verify which distances have a greater impact on entrepreneur’s decisions making, the authors have adapted Ghemawat (2001) variables, as can be seen from the Table 1 below:

Table 1: Defining the variables for CAGE’s distance

FACTOR OF DISTANCE	COD	VARIABLES	FACTOR OF DISTANCE	CODE	VARIABLES
CULTURAL	C1	LANGUAGE	GEOGRAPHIC	G1	PHYSICAL DISTANCE
CULTURAL	C2	RELIGIONS	GEOGRAPHIC	G2	LOGISTIC CAPACITY
CULTURAL	C3	ETHNICITIES	GEOGRAPHIC	G3	SIZE OF THE COUNTRY AND TIME ZONE
CULTURAL	C4	SOCIAL NORMS	GEOGRAPHIC	G4	CLIMATE
ADMINISTRATIVE AND POLITICAL	A1	GOVERNMENT POLICIES	ECONOMIC	E1	GDP (COUNTRY)
ADMINISTRATIVE AND POLITICAL	A2	TRADE BLOCK	ECONOMIC	E2	GDP (<i>PER CAPITA</i>)
ADMINISTRATIVE AND POLITICAL	A3	POLITICAL HOSTILITIES	ECONOMIC	E3	RAW MATERIALS COSTS
ADMINISTRATIVE AND POLITICAL	A4	PUBLIC INSTITUTIONS	ECONOMIC	E4	WORKFORCE COSTS

Source: Ghemawat (2001)

These variables were all included in the questionnaire and the respondents’ answers were ranked as the following: “I strongly disagree”, “I somewhat disagree”, “I have no opinion”, “I somewhat agree”, “I strongly agree”. Through the statistical analysis, the authors were able to verify which variables of CAGE’s distance affect entrepreneurs’ perception for going for the global market.

Moreover, the authors have included in the questionnaire sentences related to the typology of entrepreneur were based on Andersson’s research. The Table 2 shows which variables were considered here:

Table 2: Defining the variables for the typology of entrepreneur

ENTREPRENEUR’S TIPOLOGY	CODE	DESCRIPTION
Technical Entrepreneur	TE1	Entrepreneur’s capacity to design new products or processes
Technical Entrepreneur	TE2	Choose exports and/or licensing instead of direct investment
Technical Entrepreneur	TE3	Prefer to expanding business in developing markets
Technical Entrepreneur	TE4	The overseas expansion depends on the recognition of your products or process
Structural Entrepreneur	SE1	Negotiation’s ability to structure Merger & Acquisition
Structural Entrepreneur	SE2	Choose the market in accordance with the intensity competition
Structural Entrepreneur	SE3	Internationalization as a result of Company’s strategy
Structural Entrepreneur	SE4	Prefer to merger or acquire instead of Direct exporting
Marketing Entrepreneur	ME1	High capacity to find new markets for your product or service
Marketing Entrepreneur	ME2	Proactivity to expand to international markets
Marketing Entrepreneur	ME3	Internationalization as the company’s main strategy
Marketing Entrepreneur	ME4	Choose market based on networks

Source: Andersson (2000)

Regarding these questions, the respondent have to choose one of these options to identify the entrepreneur profile: “I see no relation”, “I see some relation”, “I have no opinion”, “I see a relation”, “I see a strong relation”. Through this survey, the authors were able to verify the correlation between CAGE’s distance and internationalization process, as well as the relation between CAGE and the entrepreneur profile. First, the authors have evaluated the sample credibility by applying the Cronbach’s alpha. Then, a bivariate Pearson correlation with a significance level of 0.01 or 0.05 on a two-tailed test was used to understand the correlations related to the research’s question. Note that the authors have considered a very strong correlation (probability >0.7) to analyze the relationship between the entrepreneurs’ perception of CAGE distances features and a partial correlation (ranging from 0.5 to 0.7) to verify to the typology of entrepreneur and to what extent the entrepreneur’s profile impacts on the perception of CAGE distance (Hair, 2005).

3.1 Sample and Analysis

The sample was based on Deloitte ranking of Brazilian SME³, which has identified the fastest growing companies in the country between 2005 and 2008. Out of 244 SME, the study has previously selected 115 firms to respond the survey as these companies had at least once export to the external market. Out of 115 firms, almost 30% or 30 small and medium-size firms have properly responded all survey. The industrial sector has predominated among the participants, corresponding to 19 firms or 63%. The service sector was represented by 8 firms or 27%, the commercial by 2 or 7% and others by 1 or 3%. Regarding the segment, information technology has been mostly represented by 9 firms, while steel and metallurgy, civil construction segment corresponded 3 firms in each one. The remaining 50% of the sample was represented by several segments, such as pharmacy, chemistry, textile and agribusiness.

The study also shows that the firm's maturity may influence on the internationalization process. Despite SMEs established on market over 16 years were represented by 63% or 19 firms and 11-15 years by 6 firms, the research findings have demonstrated that the stage of internationalization is lower than one may expect, once the entry-modes chosen were at initial stage, which means a low level of commitment and complexity of managing international operations (Root, 1998). The most marked entry-mode⁴ was sporadic exporting, which has been selected twelve times. Exporting through sales representatives and direct exporting entries-mode have appeared eight and seven times, respectively.

In addition, the analysis illustrates that the most mentioned countries are located in the South American region, for instance, twenty-three times respondents have chosen Argentina, Chile, Paraguay and Uruguay as an external market. The United States, Canada and Mexico appeared as the second most relevant market as this region was mentioned fourteen times. Finally, China and India were elected only nine times. Thus, Brazilian SMEs tend to export to places where geographic and cultural distances are smaller, which confirms the hypothesis of Uppsala model (Johanson and Vahlne, 1977; 1990). This finding also demonstrates that a regional trade block, like Mercosur, is a relevant political incentive as the trade agreement among the countries seems to decrease the uncertainty to local entrepreneur.

In regard to the entrepreneur profile, the results have identified that 83% of respondents were manager, director or owner. 93% of these respondents have affirmed that they "always" or "very often" participated of the most important decisions of the company, which shows that the interviewees play an important role in the company's internationalization strategy. Next, we will discuss the correlation between the entrepreneur perception and CAGE as well as the correlation to Andersson's typology.

3.2 The internal consistency: Cronbach alpha

The Cronbach alpha has measured the internal consistency of the variables included in the sample, which has identified a low level of clustering between 16 items related to CAGE distance features and 12 items associated to the profile of entrepreneur. As can be seen from Table 3 and 4, Cronbach alpha of 0.879 to CAGE features and 0.782 to entrepreneur's profile emphasized the reliability of the sample, in which none variable had to be eliminated, unlike Child et al (2009) research.

Table 3: Cronbach alpha Scores for 16 items of CAGE distance features ($\alpha = 0.879$ for all items)

CODE	Cronbach Alpha
LANGUAGE	0.875
RELIGIONS	0.885
ETHNICITIES	0.871
SOCIAL NORMS	0.876
GOVERNMENT POLICIES	0.867
TRADE BLOCK	0.865
POLITICAL HOSTILITIES	0.878
PUBLIC INSTITUTIONS	0.882
PHYSICAL DISTANCE	0.871
LOGISTIC CAPACITY	0.865

³ Deloitte ranking defines small and medium enterprises as those with net revenue between R\$ 5 - 200 million and operating for at least 5 years, excluding subsidiaries that are part of a conglomerate with net revenue above R\$1 billion per year or 30% of its shares belonging to foreign capital.

⁴ Regarding the entry-mode, the respondent could have marked more than one.

SIZE OF THE COUNTRY AND TIME ZONE	0.863
CLIMATE	0.865
GDP (COUNTRY)	0.873
GDP (PER CAPITA)	0.860
RAW MATERIALS COSTS	0.874
WORKFORCE COSTS	0.866

Source: Developed by the authors

Table 4 : Cronbach alpha Scores for 12 items of the entrepreneur’s typology ($\alpha = 0.782$ for all items)

CODE	Alfa de Cronbach
TE1	0.780
TE2	0.752
TE3	0.746
TE4	0.771
SE1	0.771
SE2	0.793
SE3	0.772
SE4	0.779
ME1	0.760
ME2	0.740
ME3	0.774
ME4	0.758

Source: Developed by the authors

3.3 Testing Pearson bivariate, two-tailed test of significance and the sample’s internal consistency

3.3.1 The correlation between the perception of entrepreneur and CAGE’s distance features

Table 5 exemplifies the descriptive statistics and the correlation between CAGE’s distance features and the perception of Brazilian SME. The distance factor A3 and A4, related respectively to political hostility and fragility of public institutions, show a strong positive correlation (0.736 at significance of 0.000), which indicates that corruption and expropriation risk have a direct impact on SME’s decision-making regarding the international market.

Table 5: Correlation between entrepreneurs’ perception and CAGE features – Bivariate Pearson correlation on a two-tailed test; N=30

VARIABLES	CODE	C1	C2	C3	C4	A1	A2	A3	A4	G1	G2	G3	G4	E1	E2	E3	E4
LANGUAGE	C1																
RELIGIONS	C2																
ETHNICITIES	C3																
SOCIAL NORMS	C4																
GOVERNMENT POLICIES	A1																
TRADE BLOCK	A2																
POLITICAL HOSTILITIES	A3																
PUBLIC INSTITUTIONS	A4							0,736**									
PHYSICAL DISTANCE	G1																
LOGISTIC CAPACITY	G2								0.712**								
SIZE OF THE COUNTRY AND TIME ZONE	G3																
CLIMATE	G4											0.775**					
GDP (COUNTRY)	E1																
GDP (PER CAPITA)	E2										0.705**	0.707**					
RAW MATERIALS COSTS	E3																
WORKFORCE COSTS	E4									0.708**							
MEAN		2.77	1.57	1.77	2.67	4.03	3.23	3.50	3.26	3.27	3.47	2.67	2.33	3.13	3.03	3.50	3.53
SD		1.41	0.86	1.14	1.35	0.93	1.28	1.33	1.23	1.44	1.36	1.35	1.40	1.38	1.35	1.07	1.01
* Level of significance 0.05.																	
** Level of significance 0.01.																	

Source: Developed by the authors

Geographic distance may also be considered relevant to the Brazilian entrepreneur, as the geographic distance between the countries (G1) and the hosting country's logistic capacity (G2) confirm a positive strong correlation of 0.712 at 0.000 significance. Moreover, the size of the country (G3) and climate and time zone (G4) illustrate a positive strong correlation of 0.775 at 0.000 significance.

There is a positive strong correlation of 0.708 at 0.000 significance between cost of workforce (E4) and country distance (G1). This fact points out why Brazilian SMEs have decided to internationalize to China as the high operating cost might be compensated by the low costs of workforce. Additionally, the results demonstrate a strong positive correlation of 0.705 and 0.707 at 0.000 significance between PIB per capita (E2) and the hosting country's logistic capacity (G2) and PIB per capita (E2) and the size of the country (G3), respectively. The fact that there are few Brazilian SME in the United States and Canada reaffirms to what extent the purchase power (PIB per capita) and the hosting country's logistic capacity are considered important features to the respondents. It is important to note that these features influenced the entrepreneur's decision-making to go to other developed countries, such as Italy, Germany, France, Netherlands and Japan.

The main findings here indicate that the most significant features for Brazilian SME's entrepreneurs are geographic and economic. The geographic features that are likely to impact on the entrepreneur's decision making are physical distance, logistic capacity and access to information, while the economic features considered are PIB per capita, cost of workforce and resources. The administrative and cultural factor, however, are not substantially correlated to the entrepreneur's perception with the exception of administrative features, such as corruption and risk of expropriation. These features are in line with global competitive indexes, such as the 2009 World Competitiveness Year Book ranking (IMD 2010) that places Venezuela at the last position due to the high risk of property expropriation. The results here confirm the ranking as Venezuela was only mentioned twice by the respondents despite its geographic proximity to Brazil, while Argentina maintains a very good position as one of the most important destinations to Brazilian SMEs, which confirms the influence of features, such as A2 (trade block), G1 (physic distance), G2 (logistic capacity) e E2 (GDP per capita)

3.3.2 The correlation between the typology of entrepreneur

According to Andersson (2000), the types of entrepreneurs are: technical entrepreneur (TE), structure entrepreneur (SE) and marketing entrepreneur (ME). Table 6 demonstrates descriptive statistics, standard deviation and the correlation between the respondents and entrepreneur's typology.

Table 6: Correlation between the typology of entrepreneurs- Bivariate Pearson correlation on a two-tailed test; N=30

CODE	TE1	TE2	TE3	TE4	SE1	SE2	SE3	SE4	ME1	ME2	ME3	ME4
TE1												
TE2												
TE3	0.512**											
TE4												
SE1												
SE2												
SE3												
SE4												
ME1												
ME2		0.639**							0.568**			
ME3										0.502**		
ME4												
MEAN	3.76	3.06	3.06	3.83	3.66	3.30	3.56	2.36	3.76	3.40	3.20	2.83
SD	0.93	1.38	1.26	1.05	1.09	1.02	0.93	1.16	0.85	1.33	1.37	1.12
* Level of significance 0.05.												
** Level of significance 0.01.												

Source: Developed by the authors

The survey shows that there is no correlation between the structure entrepreneur (SE1, SE2, SE3, SE4) and the participants. The structure profile is usually linked to mature industries, which frequently use M&A practices to restructure its core business strategy. The research findings indicate that although 63% of the sample is represented by mature industries, these companies have not yet incorporated M&A as a common practice for going global. Actually, these SMEs might be classified in earlier stages of the internationalization process as they have only included sporadic exporting and exporting through sales representatives into their strategy (Root, 1998; Johanson & Vahlne, 1977, 1990).

On other hand, the results demonstrate a moderate correlation of 0.639 at 0.000 significance between technical (TE2) and marketing profile (ME2). Technical entrepreneur normally chooses low risk entry-modes, such as direct exporting and licensing or franchising, instead of a high risk entry-mode like implementing its own subsidiary, whereas the marketing profile tends to take more proactive steps to enhance overseas expansion. This correlation is accordance with the descriptive analysis that shows that the entry-modes incorporated by most Brazilian SME are sporadic exporting, direct exporting and exporting through sales representatives.

In addition, the table highlights a moderate correlation (0.512 at 0.004 significance) between the firm’s capacity to create a new market demand through the design of innovative products (T1) and its overseas expansion to developing countries (T3), such as Argentina, Chile, Paraguay, China, India and so on. Note that the analysis also indicates that the company’s ability to find a new consumer market is moderately correlated to the entrepreneur’s proactiveness for going global (0.568 at 0.001 significance). In other words, the marketing profile (ME2) may directly influence the company’s international strategy. Another feature that the marketing profile (ME3) may impact on business strategy is to what extent he/she fully incorporates internationalization process as a feasible alternative to the local market with a positive moderate correlation of 0.502 at 0.005 significance.

These findings reinforce the descriptive analysis that shows that information technology, civil construction, steel and metallurgy currently are the most competitive industries in the international market. The entrepreneurs of these sectors are very keen on looking for opportunities outside the local market as the high international demand might have motivate them to be even more proactive.

3.3.3 CAGE features versus the entrepreneur’s typology

In order to address the third goal of this paper, the authors have run a statistical analysis to identify whether there is a relationship between entrepreneur’s profile and its perception of CAGE’s distances. Table 7 indicates that there is a reasonable correlation between the marketing entrepreneur (ME1) and the country’s participation in a trade block (A2) (0.523 at 0.003 significance). Therefore, marketing entrepreneur tends to look primary at external markets that are directly connected to the country’s policy, seeking to take advantages of the previously established agreements. The technical profile (TE2) also decides for going global at the regional level first as he/she understands that the trade block agreement might mitigate investment risks (a moderate correlation of 0.574 at 0.001 significance). This result is confirmed by the descriptive analysis in which most respondents have marked Argentina, Chile, Paraguay and Uruguay as their principal external destination. However, it is worth highlighting that trade block was not relevant in the correlation between CAGE’s distances (See Table 5), where the geographic and economic features demonstrate a greater correlation than the administrative features. This fact reinforces the research of Child et.al (2009) that attempts to study physic distance separately as shown here in the section 3.2.1.

Table 7: Correlation between entrepreneurs’ profile and CAGE features - Bivariate Pearson correlation on a two-tailed test; N=30

CODE	MEAN	SD	C1	C2	C3	C4	A1	A2	A3	A4	G1	G2	G3	G4	E1	E2	E3	E4
TE1	3.76	0.93																
TE2	3.06	1.38						0.574**										
TE3	3.06	1.25																
TE4	3.83	1.05																
SE1	3.66	1.09																
SE2	3.30	1.02																
SE3	3.56	0.93																
SE4	2.36	1.15																
ME1	2.76	0.85						0.523**										
ME2	3.40	1.32																
ME3	3.20	1.37																
ME4	2.83	1.11																
* Level of significance 0.05.																		
** Level of significance 0.01.																		

Source: Developed by the authors

4. CONCLUSION

This study indicates that the concept of “psychic distance” should be constantly reviewed in order to have an accurate understanding of the sample. It also demonstrates that the inclusion of other approaches, like the typology of entrepreneur, may increase the research’s complexity as it affects the way entrepreneur perceives CAGE’s features. Several scholars have previously shown that the entrepreneur’s perception might be affected by unpredictable variables (Child et al, 2009; Dow and Karunaratna, 2006; Drogendijk and Martin, 2008; Ghemawat, 2001). This fact makes difficult to establish a behavioral pattern to all countries and enforces researches to build up their own framework.

In general, the paper emphasizes that Brazilian SMEs perceive administrative, geographic and economic features as the most important to analyze before going for the global market. The correlation illustrates that all geographic features (physic distance, logistic capacity, size of the country and climate and time zone) may impact on the entrepreneur’s decision-making. The economic features that can be considered important are GDP per capita and work force costs, which indicates that the use of market-seeking as one of the most influential business strategy. The administrative factors, however, are not substantially correlated to the entrepreneur’s perception with the exception of the one related to political hostility, such as corruption and risk of expropriation.

Nevertheless, this research concludes that CAGE distances are not perceived in the same way, once they are related to the typology of entrepreneur. The technical and marketing entrepreneurs tends to look primary at external markets that are directly connected to the country’s policy, thus seeking to take advantages of the previously established agreements. While the former decides going global at the regional level to mitigate investment risks, the latter makes the same decision based on its proactivity.

Regarding the typology of entrepreneur, the survey reports that none participant has identified itself as a structure entrepreneur, because they do not include M&A in their business strategy. The profile of Brazilian SME is hybrid as there is moderate correlation between technical and marketing entrepreneur. Technical entrepreneur normally chooses low risk entry-modes, such as direct exporting and licensing or franchising, instead of a high risk entry-mode like implementing its own subsidiary, whereas the marketing profile tends to take more proactive steps to enhance overseas expansion. This finding is confirmed by the entry-modes incorporated by most Brazilian SME, as well as the diversity of countries pointed out as a destination.

Therefore, this research makes a novel contribution to the debate around the internationalization of small and medium enterprises in emerging markets, particularly, in Brazil. Evidently, comparative studies are needed to deeply understand in which way the entrepreneurs’ perception differ in emerging markets, as well as the profile of entrepreneurs. Moreover, the use of mix techniques, including qualitative case-studies, may elucidate few points not completely answered here.

BIBLIOGRAPHY

- Aharoni, Y., (1996) *The Foreign Investment Division Process*. Boston, MA: Harvard Business School Press.
- Almeida, A (Org). *Internacionalização de empresas brasileiras, perspectivas e riscos*. FDC, São Paulo: Elsevier, 2007.
- Andersson, S., The Internationalization of the Firm form an Entrepreneurial Perspective. *International Studies of Management and Organization*, v.30, n.1, p.65-94, 2000.
- Axelsson, E.; Johanson, J. Foreign Market Entry. The Textbook vs the Network View. in. Axelsson, B.; Easton, G. (EDS), *Industrial Networks: a New View if Reality*. London: Routledge, p. 218-234, 1992.
- Barkema, H.G.; Bell, J.H.; Pennings, J.M., Foreign Entry, Cultural Barriers, and Learning. *Strategic Management Journal*, v.17, n.2, p.151-166, 1996.
- Beckerman, W., Distance and the Pattern of Intra-European Trade. *Review of Economics and Statistics*, v.38, n.1, p.31-40, 1956.
- Benito, G.R.G.; Grisprud, G., The Expansion of Foreign Direct Investments: Discrete Rational Location Choices or a Cultural Learning Process? *Journal of International Business Studies*, v.23, n.3, p.461-476, 1992.
- Bucley, P.J.; Casson, M.C., *The Future of the Multinational Enterprise*. London: MacMillan, 1976.
- Buckley, P.J.; Casson, M.C. Analyzing Foreign Market Entry Strategies: extending the Internationalization Approach. *Journal os International Business*. V.29, n.3, p.539-562, 1998.
- Calvet, A.L., A Synthesis of Foreign Direct Investment Theories and Theories of the Multinational Firms. *Journal of International Business Studies*, v.12, Spring, p.43-59, 1981. Child, J.;

- Rodrigues, S.; Frynas, G. Psychic Distance, it's impact and coping modes: Interpretations of SME decision makers. *Management International Review*, n.49, p.199-224, 2009.
- Clark, T.; Pugh, D.S., Foreign Country Priorities in the Internationalization Process: a Measure and a Exploratory on British Firms. *International Business Review*, v.10, n.3, p.285-303, 2001.
- Cyert, R.D.; March, J.G., *A Behavioral Theory of the Firm*. Prentice-Hall, Englewood Cliffs, NJ, 1963.
- Dow, D., A Note on Psychic Distance and Export Market Selection. *Journal of International Marketing*, v.8, n.1, p.51-64, 2000.
- Dow, D.; Karunaratna, A., Developing a Multidimensional Instrument to Measure Psychic Distance Stimuli. *Journal of International Business Studies*, v.37, p.578-602, 2006.
- Drogendijk, R.; Slangen, A., Hofstede, Schwartz, or Managerial Perceptions: The Effects of Various Cultural Distance Measures on Establishment Mode Choice by Multinational Enterprises, *International Business Review*, v.15, n.4, p.361-380, 2006.
- Drogendijk, R.; Martin, O. Country Distance: an Objective Measure and Its Impact on International Market Selection. *Proceedings of the Academy of International Business*. Milan:Italy, 2008.
- Dunning, J.H., The Eclectic Paradigm of the Production: A Restatement and Possible Extension, *Journal of International Business Studies*, v.19, n.1, p.1-31, 1988.
- Ellis, P.; Pecotich, A. Social Factors Influencing Export Initiation in Small and Medium-sized Enterprises. *Journal of Marketing Research*, v.38, n.1, p.119-130, 2001.
- FDC – Fundação Dom Cabral. Ranking 2010 Transnacionais Brasileiras: Repensando estratégias globais. Disponível em: http://www.fdc.org.br/pt/Documents/ranking_transnacionais_2010.pdf. Acesso em 10.09.2011.
- Floriani, D.E. *O grau de internacionalização, as competências e desempenho das PMEs brasileiras*. Tese de doutorado. Universidade de São Paulo, 2010.
- Forte, S.H e Moreira, M.Z. Internacionalização das maiores empresas exportadoras no setor calçadista brasileiro: estudo do perfil, estratégia e desempenho. In *EnAnpad*, Rio de Janeiro: 2007.
- Ghemawat, P., Distance Still Matters: The Hard Reality of Global Expansion. *Harvard Business Review*, p.137-147, 2001.
- Hair, J.F. et al. *Análise Multivariada de Dados*. 5 ed.: Porto Alegre: Bookman, 2005.
- Hennart, J.F. A Theory of the Multinational Enterprise. Ann Arbor: *University of Michigan Press*, 1982.
- Hofstede, G. *Cultural Consequences: International Differences in Work Related Values*. Sage: Beverly Hills, CA, 1980.
- Hofstede, G. *Cultures and Organizations: Software of the Mind*. Harper Collins: London, 1994. Hymer, S.H., *The International Operations of National Firms: A Study of Direct Investment*. Cambridge, MA: MIT Press, 1976.
- IMD. *IMD World Competitiveness Yearbook*, 2009. Disponível em: <http://www.imd.ch/osite/publications/wcy/upload/scoreboard.pdf>. Acesso em 23 mar 2010.
- Johanson, J., Wiedersheim-Paul, F., The Internationalization of the Firm: Four Swedish Cases. *Journal of Management Studies*, v.12, n.3, p.305-322, 1975.
- Johanson, J.; Vahlne, J.E., The Internationalisation Process of the Firm: A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, v.8, n.1, p.23-32, 1977.
- Johanson, J.; Vahlne, J.E., The mechanism of Internationalization. *International Marketing Review*, v.7, n.4, p.11-24, 1990.
- Knickerbocker, F.T., *Oligopolistic Reaction and Multinational Enterprise*. Cambridge MA: Division of Research, Harvard Graduate School of Business Administration, 1973.
- Knight, G and Kim, D. International Business competence and contemporary firms. *Journal of International Business Studies*, n. 40, p 255-273; 2009.
- Kostova, T., Transnational Transfer of Strategic Organizational Practices: a Contextual Perspective. *Academy of Management Review*, v.24, n.2, p.308-324, 1999.
- Lu, J. and Beamish, P. The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6/7), p. 565-586; 2001.
- Luostarinen, R., The internationalization of the Firm. Doctoral Dissertation, *Helsinki School of Economics*, 1979.
- Nordstrom, K.A.; Vahlne, J.-E.. Is the Globe Shrinking? Phychic Distance and the Establishment os Swedish Subsidiaries During the Last 100 year, in. M. Landeck (ed.). *International trade: Regional Globe Issues*, St Martin's Press: New York, p.41-56, 1994.
- Penrose, E., *The Theory of the Growth of the Firm*. Basil Blackwell, London, 1959.
- Reid, S.D. (1981) The Decision-maker and Export Entry and Expansion. *Journal of International Business Studies*. V.12, n.2, p. 101-112.
- Rocha, Ângela da; SILVA, Jorge Ferreira; CARNEIRO, Jorge. Expansão internacional das empresas

- brasileiras: revisão e síntese. In: FLEURY, Afonso; FLEURY, Maria Tereza Leme (Orgs.). *Internacionalização e os países emergentes*. São Paulo: Atlas, 2007.
- Root, F.R.(1998) *Entry strategies for international markets*. New York: Lexinton Books.
- Shenkar, O. (2001) Cultural Distance Revisited: Toward a More Rigorous Conceptualization and Measurement of Cultural Differences. *Journal of International Business Studies*, v.32, n.3, p.519-536.
- Teece, D.J. (1986) Transaction Cost Economics and the Multinational Enterprise. *Journal of Economic Behavior and Organization*, v.7, p.21-45.
- Terpstra, V. & Yu, C.M. (1988) Determinants of Foreign Investment of U.S. Advertising Agencies. *Journal of International Business*, v.19, n.1, p.35-46.
- Tihanya, L., Griffith, D.A.& Russel, C.J. (2005) The Effect of Cultural Distance on Entry Mode Choice, International Diversification, and MNE Performance: a Meta Analysis. *Journal of International Business*. V.36, n.3, p.270-283.
- Vahlne, J. E. & Wiedersheim-Paul, F. (1977) Psychic Distance: an Inhibiting Factor in International Trade., Centre for International Business Studies, *Department of Business Administration*, University of Uppsala, working paper nº2.
- Vernon, R., (1966)International Investment and International Trade in the Product Cycle. *Quarterly Journal of Economics*, v.80, p.190-207.
- Vernon, R., (1979) The product Cycle Hypothesis in a New International Environment. *Oxford Bull of Economics and Statistics*, v. 41, p.4.
- West, J. & Graham J.L. (2004) A Linguistic-based Measure of Cultural Distance and its Relationship to Managerial Values. *Management International Review*, v.44, n.3, p.239-260.
- Williamson, O. (1975) Markets and Hierarchies: Analyzis and Antitrust Implications. *New York: The Free Press*.