

Internationalization and performance: a comparison of Brazilian exporters *versus* Brazilian multinationals

Internacionalização e desempenho: uma comparação entre exportadores brasileiros *versus* multinacionais brasileiras

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Abstract: This paper analyzes the relationship between export and the performance of Brazilian companies. To this end, exploratory research was conducted with a sample of 118 out of the 500 largest Brazilian companies. The core hypothesis, which was confirmed, is that there is a positive association between internationalization and performance up to a break point, at which the company becomes a multinational one. Contrary to research carried out in developed countries, the inverted-J curve in the Brazilian case offers an intriguing result, which seems to challenge the ‘related-unrelated market perspective’ applied to export processes, from the cultural distance approach. Our findings show that, from the level of 15% of exports, results increase up to 100%, and that, precisely when the companies start engaging in foreign direct investment (FDI), an inflexion point appears. This corroborates the perception that the main challenge concerns the transition process from export to FDI. One contribution of this paper is data origin. In the literature, it is obvious that researchers have predominantly relied on data from US and European organizations, but it is important to question whether the existing

theories also apply to firms from large developing countries such as Brazil.

Key words: Exports; Performance; FDI.

According to the “World Competitiveness Report” (IMD, 2005), the Brazilian economy is among the planet’s 20 largest. However, despite the prominent position in terms of national GNP, Brazil’s position is merely secondary in terms of international business-oriented competitiveness and volume. World Economic Forum data (2006) show that the Brazilian economy’s global competitiveness ranking is slipping every year: in 2005 it ranked 57th while by 2006 it had dropped to 66th place.

The internationalization of companies, though a phenomenon of long standing in developed countries, is recent among developing nations such as Brazil (BATISTA JR., 1998). The modest rate of Brazilian multinationals is surprising (ROCHA, 2002), although there is great internationalization potential (GHOSHAL; PIRAMAL; BARTLETT, 2000; BARTLETT; GHOSHAL, 2000).

Brazilian companies face many barriers to internationalization (ROCHA, 2003; CYRINO; OLIVEIRA JR., 2002) and few of them draw most of their revenues from abroad, following the example of Samarco, with 99%, Embraer, with 97%, Nibraso, with 90%, Aracruz, with 93%, and CVRD – Companhia Vale do Rio Doce, with 64%, among others (Melhores e Maiores, 2006). In Brazil, exporting is generally an activity for large firms: in 2004, according to SEBRAE, the Brazilian Small Enterprise Institute, large companies accounted for 77% of Brazilian exports; medium companies accounted for 16%, while the remaining 7% came from small companies (SEBRAE, 2004).

As compared to the rest of the world, Brazilian exports are still highly concentrated in natural resource-intensive sectors (farming, food and beverages, and metallurgy) and in labor-intensive sectors (leather and footwear) (PUGA, 2005). Up to 2004, Brazil’s leading export industries were: food and beverages, metallurgy, farming and automobiles (SECEX, 2004).

However, Brazil’s share of the worldwide exports markets grew. It is important to note the strong increase in Brazilian exports of automotive

vehicles of several kinds (rolling stock, aircraft, boats and motorcycles) (PUGA, 2005). The distribution of Brazilian exports shows a concentration of destination countries. FUNCEX data (2006) indicates that Brazilian exports to the USA are greater in certain industries, such as in the metallurgical, rail, aviation, boat and motorcycle industries. Commodities are exported mainly to Europe and Eastern Asia. To the Eastern Asia, we can highlight mineral extraction and metallurgical industry exports, whereas sales to other countries are heavily concentrated in food and beverages, followed by oil and alcohol products (PUGA, 2005).

Thus, although in exports Brazil is the fifth largest economy among developing countries (ANALISE, 2005), in the OMC ranking it is the 25th in terms of its share of global trade (OMC, 2005). Though this share is rising in absolute terms, it is dropping in relative terms. For some 50 years, Brazil accounted for some 2% of global trade, but this figure is now down to roughly 1% (OMC, 2005).

When we analyze the FDI (Foreign Direct Investment) position of Brazilian companies, the asymmetry becomes obvious: the country holds the 28th place, behind China, Russia, Chile, Korea, Singapore and Mexico, among others (UNCTAD, 2004). Brazilian companies are still very shy of the global market. In general, only some 50 of the country's enterprises can be regarded as multinationals. Still, three Brazilian companies are on the list of the 50 largest multinationals from developing countries: Petrobras (7th), CVRD (17th) and Gerdau (19th). (World Economic Competitiveness, 2005).

Costs seem to be a central problem in the internationalization process of Brazilian companies. What is the cost of internationalization through exports for companies headquartered in Brazil? Does the rising share of international trade of Brazilian companies help their performance?

We do not know. There is no empirical¹ study that establishes any relation between company performance and the internationalization process of

¹ Recently Carneiro (2006) presented an interesting study about the relationship of performance and strategy (internationalization). It concerns multivariate metrics with differentiated information about companies. We recognize the value of the study and metric proposed, but here we are unable to access all the necessary data to put Carneiro's model into practice and, to date, we lack access to an empirical application about the proposed model.

Brazilian companies. One exception it is the study conducted by Bezerra (2005). However, due to its small sampling (41 companies) and problems in the choice of the sample, it was inconclusive where performance and internationalization are concerned.

For more than 30 years (ANNAVARJULA; BELDONA, 2000) research has been conducted to estimate the relation between companies' degree of internationalization and their performance (RUIGROK; WAGNER, 2003; GOMES; RAMASWAMY, 1999; GRANT, 1987; HORST, 1972). There is no consensus about this relation and the studies do not refer to companies in Brazil. In fact, most studies are about the USA. One of the first attempts to analyze the relationship in different countries was carried out by Ruigrok and Wagner (2003). They showed that studies on USA companies result in an inverted J curve; in other words, internationalization through exporting increases in line with the rate of exports up to the point at which returns decrease. On the other hand, the study of German companies resulted in a normal U curve, meaning that when they first start exporting the returns are high but decrease when the company exports more, up to a point at which the curve begins to rise again.

This article analyzes the relationship between the exports and the performance of Brazilian companies. It is an exploratory study in which we defined exports as the internationalization variable. The study's main objective is to test whether the current theory on internationalization and performance also applies to firms from large developing countries, such as Brazil.

Theoretical framework

From the economic view point, one theoretical approach to the internationalization process is the so-called Eclectic Paradigm (DUNNING, 1980, 1988, 2000), which uses the concepts of transaction costs (WILLIAMSON, 1975) and internalization (BUCLEY; CASSON, 1976; RUGMAN, 1981) to explain company internationalization. This theory explains the decision of direct investment in foreign countries as consisting of a choice between markets or hierarchy (WILLIAMSON, 1975; BUCLEY; CASSON, 1976).

Although widely recognized, this economic theory has its limitations because it concentrates almost exclusively on Foreign Direct Investment (FDI) rather than on the company. Another criticism concerning the economic approach is its static character: it does not consider the effect of learning on the market. Moreover, it lacks an approach that explains cooperative arrangements in internationalization strategies.

However, these studies are very useful in attempting to explain the relation between internationalization and performance. Some scholars that embrace the economic approach reject the positive relation between performance and internationalization (KUMAR, 1984; HITT; HOSKISSON; KIM 1997), arguing that there are rising costs involved in the internationalization process in connection with monitoring, controlling, coordinating and performing activities abroad (SIDDHARTHAN; LALL, 1982; GERINGER; BEAMISH; COSTA, 1989), added to the high cost of processing a great volume of information related to political and financial costs (exchange rate, inflation) (REEB; KWOK; BAEK, 1998). Denis *et al.* (2002) also rejected the positive relationship and demonstrated that both variables are inversely proportional. The more one invests in foreign countries, the worse financial performance becomes.

If for some scholars the relation between internationalization and performance is not positive, other researchers analyze the question from another point of view, considering that there are costs and benefits to this process. The benefits result from the ability to leverage economies of scale, access new technologies, and leverage factor cost differentials across multiple countries. Some authors have formulated a positive relation between the volume of investment in foreign countries and financial performance (KOTABE; SRINIVASAN; AULAKH, 2002).

The inverted J curve (GOMES; RAMASWAMY, 1999) (Figure 1) was also found to represent the relation, explaining that it would bring more benefits than costs for the organization up to the point of excellence, as from which the costs involved would be marginally bigger than the benefits related to the investment increase. Therefore, financial performance would increase at the start of the process and decrease at higher levels of investments in foreign

countries, at which point benefits decelerate while costs increase (GERINGER; BEAMISH; COSTA, 1989). The initial periods of internationalization present low commitment; while intermediate periods of internationalization in the form of joint-ventures and alliances represent a rise in transaction costs, which can diminish the benefits of investments in foreign countries. In later periods, corporations become multinationals and adopt more complex structures such as a transnational structure (BARTLETT; GHOSHAL, 1989), where efforts to manage cultural differences, to stimulate knowledge and innovation exchanges and the need for strategic integration raise the company's costs (NOHRIA; GHOSHAL, 1997).

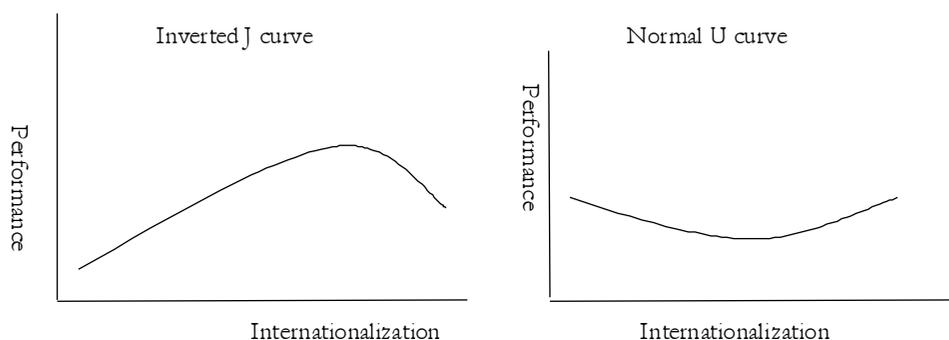


Figure 1: Internationalization and Performance

Source: Gomes and Ramaswamy (1999); Ruigrok and Wagner (2003)

From this point of view, an organization's financial performance increases according to the investment of resources in the foreign markets up to a point of excellence. Thereafter, performance falls as investment rises. This point is related to the degree of internationalization, according to Ruigrok and Wagner (2003), and it occurs when the company reaches some 50% to 80% of internationalization intensity. However, one problem in this discussion concerns the metrics of internationalization intensity. Different metrics are used in the literature. Some studies work with intensity of sales to exporter, others with profit or international market share (ROCHA; BLUNDI, 2005). These metrics are quantitative and qualitative, making comparisons difficult and the point of the J inversion also difficult to measure. Therefore, we use two propositions:

- 1) The classical economic studies that state that costs increase more than benefits at the moment at which the company becomes a multinational (own investments in the foreign country). Here we use quantitative metrics if there are Greenfield investments in a foreign country and not only exporting activities; and
- 2) Ruigrok and Wagner's (2003) proposition showing the break point, when internationalization intensity is greater than 50%. Here we use the metrics of exports divided by total sales.

If we think about the inverted J curve, it is a discouraging result for multinationals and companies undergoing an internationalization process, in that global expansion would yield diminishing returns. But how do we explain the great global multinationals? The behavioral perspective can help to answer this question.

The process of internationalization adopted for the behavioral model (JOHANSSON; VAHLNE, 1977, 1990; ANDERSON; HOLM; FORSGREN, 2002; JOHANSON; MATTSON, 1986) is not restricted to economic aspects where understanding the decision processes connected with the internationalization of companies is concerned. The Uppsala Model considers that companies accrue knowledge as a result of conducting international operations. It focuses on the acquisition, integration and gradual use of knowledge connected with operations in international markets, all of which lead to a rising exposure to such operations (JOHANSSON; VAHLNE, 1977, 1990; ERIKSSON *et al.*, 1997). This accrued knowledge drives the internationalization (ERIKSSON *et al.*, 2000; SIMPSON; KUJAWA, 1974). The greater the experience in international markets, the greater the accrued knowledge, which implies in stronger skills in international operations (YIP; BISCARRI; MONTI, 2000) and, therefore, greater possibilities of strategic exposure to new markets (ROOT, 1987).

Based on the Uppsala Model, researchers have included other determinants in the internationalization processes of companies, such as market size (NORDSTRÖM; VAHLNE, 1985), in those situations in which the gradual model could not be applied, as in the case of new entrants into internationalized industries (HEDLUND; KVERLAND, 1984). Criticism of the model points

out that internationalization processes in service and high technology sectors cannot be explained by the Uppsala Model. They do not support the hypothesis of a gradual increment of international operations (WELCH; LUOSTARIEN, 1988; JOHANSON; VAHLNE, 1990).

Reid (1983) also criticized the model, which he considered to be very determinist and general, because it does not absorb the heterogeneity of resources and contingencies involved in the internationalization process. Moreover, the Uppsala Model disregards the voluntary strategic choices made by management in the pursuit of external markets. The strategist can choose shorter paths that do not cover all the gradual stages of resources exposure in the internationalization process; alternatively, the company's strategy can aim at the positioning of other competitors in order to speed up involvement with an external market and skip stages, in this way.

Despite the criticism, we cannot exclude the hypothesis of better financial performance for companies with larger exposure to foreign markets. Recently, the theory of relationship networks has been consolidated; they are seen as an evolution of the School of Uppsala (ANDERSON; HOLM; FORSGREN, 2002; BJORKMAN; FORSGREN, 2000; ANDERSSON; JOHANSON, 1997). This theory strongly emphasizes internal and environmental relationships in foreign countries. A company would choose to advance into a foreign market according to the performance of the networks to which it belongs. The relationships in the foreign country would determine the choice of the market and its performance (ANDERSSON; JOHANSON, 1997).

This learning process causes us to review the economic forecast that indicates that internationalization is not aligned with the best financial performance. We must consider that some companies that increase their exposure in several foreign markets do not see a decline in their financial performance (UNCTAD, 2004 – 50 greatest MNCs). Multinationals, upon perceiving the point of excellence in the process of internationalization, can adopt strategies to surpass it and not enter the area of decreasing returns as Gomes and Ramaswamy (1999) suggest; or they learn from the process and from past experiences how to overcome difficulties encountered at a given

point in time (HITT *et al.*, 1997). In this way they may achieve good performance as their involvement with internationalization increases if their management is proactive in terms of making decisions and defining strategies (RUIGROK; WAGNER, 2003).

Moreover, diversity can be a way to encourage innovations within transnational corporations (NOHRIA; GHOSHAL, 1997; BARTLLET; GHOSHAL, 1989). There are competitive advantages to be derived from these activities in different cultures (MOROSINI; SHANE; SINGH, 1998). Nestlé, Dow Chemical and ABB are examples of good financial performance due to high exposure of resources to foreign countries with different cultures (RUIGROK; WAGNER, 2003).

Therefore, if on one hand the fact that a multinational is larger can cause it to have higher costs, on the other hand its internal management and knowledge exchange within the corporate network can help it to develop processes, products and services of higher value. Rather than the inverted J curve (GOMES; RAMASWAMY, 1999), Ruigrok and Wagner (2003) found that a U curve (Figure 1) is what represents the relationship. During the early stages of internationalization, performance is higher, thanks to taking advantage of opportunities in the foreign market; this then tends to fall as foreign investment rises, but this direction is inverted later, after a learning process has occurred, explained by proactive strategic choices, path dependency and embedment in environmental business networks. “Triggered by performance pressures accompanying such misalignment, organizational learning sets in firms begin to reconfigure internal systems, mechanisms, and process to match their new global environment. Successfully passing through the reorientation period, corporations experience a point of reversal and restore positive performance development” (RUIGROK; WAGNER, 2003, p. 71).

Propositions regarding Brazilian companies and financial performance

At first, based on the theoretical approach, there is an inclination to consider that a national company heading toward the international market has better financial performance than that of firms operating solely in Brazil.

One factor that we can consider as encouraging the profit of exporting

companies is cultural expansion. In general, Brazilian companies go to culturally related host countries, focusing their earliest foreign activities on South America. Studies (ROCHA, 2003) conclude that Brazilian companies at the start of their internationalization process adopt culturally related rather than unrelated expansion strategies, confirming theories of initial foreign location based on the 'psychic distance' premise.

Thus, in the early stages it is easier for the exporter to win over markets. However, two important factors about Brazil must be considered regarding this subject. First, the degree of internationalization of Brazilian companies is still modest. It is also immature: only in 2005 did the country reach US\$ 100 billion in exports (SECEX, 2005).

These companies are increasing exports but struggling against an important factor, the so-called "Brazil Cost". Studies that support the U-curve are based on developed markets where costs derive from logistics and port infrastructure as much as from the tax system. This is very different from what Brazilian companies and most of the emerging markets face. As seen in the recent years of national export growth, exporting companies incur in several additional costs vs. their international competitors. In other words, from the very start of their internationalization these companies suffer higher costs that in developed markets would only be reached at a more advanced point of their internationalization. Information from the World Economic Forum (2006) show the main obstacles to businesses in Brazil: tax rates, tax regulations, inefficient government bureaucracy, access to financing, labor regulations, inadequate infrastructure, corruption, policy instability, crime and a poorly educated workforce.

According to this analysis of the "Brazil Cost" and recalling the lack of managerial experience in doing business abroad, it is conceivable that the exporting process increases gradually and that the beginning of the process is difficult and costlier.

Similarly, because internationalization is a recent process for the rare Brazilian multinationals, the learning and the innovation processes resulting from their relationship with foreign business partners are not enough to provide a return higher than the costs. Moreover, the experience of Brazilian managers

in host countries is small and therefore insufficient to spur proactive strategies and decisions. Therefore, it is reasonable to expect the returns of Brazilian multinationals to be worse than those of Brazilian companies that are merely exporters.

In sum, exporting should be correlated with an improvement of company performance, but that may not be the case when we analyze Brazilian investments in other countries.

All of this leads us to formulate the following proposition: the internationalization of Brazilian companies through exports is associated with better financial performance.

No study shows the behavior of the performance curve for Brazilian companies. This is a question that begs an answer and we intend to contribute to this discussion with this paper.

Methodology

The data on the internationalization process of Brazilian companies in 2005 was obtained from the “Maiores e Melhores Empresas” report (2006), published by **Exame**, a Brazilian business magazine. In 2006 the magazine started to publish the value of exports of the largest national and foreign companies based in Brazil, which allowed us to conduct some statistical tests regarding the aforementioned proposition.

What internationalization does or does not consist of is an issue that had been widely discussed, but in this study we adopt exporting as a measure of internationalization, mainly because we lack statistical data on the assets of each Brazilian multinational abroad. The universe adopted herein consists of the 2005 export volume of the 500 largest companies with operations within Brazil, regardless of whether they are Brazilian or foreign-based. However, we excluded all the foreign companies in order to analyze only the Brazilian enterprises. We then selected only the industrial (commodities and manufacturing) companies to prevent errors due to the very different characteristics of service companies. Finally, we excluded all the companies that do not belong to the same industries to which the Brazilian multinational companies (companies that have already engaged in FDI) belong, to guarantee

internal sample consistency. Thus, the analyzed data correspond to a sample of 118 Brazilian companies divided into non-exporters (n=24; 20.3%), exporters (n=73; 61.8%) and multinationals (n=21; 18%).

Performance variable

The reason we chose EBITDA as a performance indicator is that it disregards the effect of interest, enabling one to compare companies with different capital structures. As shown by Brigham *et al.* (2001), two companies with different debt levels and therefore different financial expenditures may have identical operational performances, but different net income, the company with higher financial expenditures yielding the lower net income. Thus, net income does not always reflect the efficiency of a company's operations or the effectiveness of its management.

Regarding the performance of national companies in 2005, we chose to use EBITDA (earnings before interest, taxes, depreciation and amortization). EBITDA data as well as net revenue was obtained from the "Melhores e Maiores" report published by the business magazine "Exame", covering the 500 largest Brazilian companies. The difference between EBITDA and operating profit is that EBITDA, besides disregarding the impact of interest and taxes, also disregards costs that have no impact on upon cash, such as depreciation and amortization since these, although they are deducted from revenues for tax purposes, are not actually disbursed. Thus, we chose the following index to measure the operating performance of foreign companies: EBITDA/total sales. Below, we present the definition of the index based on Ross *et al.* (2002) and Matarazzo (2003).

EBITDA/Total Sales: this ratio reflects the company's capability of supplying a product, offering a low cost service or a high price service. In other words, it represents the efficiency of operating expenditures in relation to sales, since the smaller the operating expenditures, the greater the edge.

Internationalization variable

In line with studies that used objective metrics (MCGUINESS; LITTLE, 1981; AYAL; HIRSCH, 1982; AXINN, 1988; MADSEN, 1989; AXINN;

THACH, 1990; LOUTER; OUWERKERK; BAKER, 1991; KAYNAK; KUAN, 1993; WALTER, 1993; SHOHAM; KROPP, 1998; BALDUF; CRAVENS; WAGNER, 2000), we use the “Export Sales/Total Sales” ratio as a measure of internationalization intensity.

Control variables

We use as control variables: a) the industries in which the companies operate; b) the number of employee (size), and c) the technological intensity (manufactured goods/commodities).

Results

We used two statistical techniques: the multivariate linear regression model and ANOVA.

The first statistical technique we used to verify the association between performance and exporting intensity; it shows the model’s explanation power. The model is:

$$\text{PERF} = c + \text{EXP} + \text{SIZE} + \text{IND},$$

where PERF = performance = EBTIDA/total sales; c = constant; EXP = exporting intensity = exports /total sales; SIZE = company size, measured in terms of total assets and of total number of employees; and IND = industry (manufacturing or commodities).

The second statistical technique we used to verify performance per degree of internationalization, forming a curve for comparing with another studies.

Table 1, below, shows the correlation between the independent variables. The results indicate that the correlation between them it is not strong, thus allowing one to continue without multicollinearity between independent variables.

Table 1
Correlations

		exporter intensity	employees	total assets	industries
exporter intensity	Pearson Correlation	1	0.183	0.073	-.236(*)
	Sig. (2-tailed)		0.09	0.506	0.026
	N	89	87	85	89
employees	Pearson Correlation	0.183	1	.558(**)	-0.01
	Sig. (2-tailed)	0.09		0	0.921
	N	87	107	100	107
total assets	Pearson Correlation	0.073	.558(**)	1	-0.082
	Sig. (2-tailed)	0.506	0		0.398
	N	85	100	108	108
industries	Pearson Correlation	-.236(*)	-0.01	-0.082	1
	Sig. (2-tailed)	0.026	0.921	0.398	
	N	89	107	108	118

* Correlation is significant at the 0.05 level (2-tailed).

** Significant at the 0.01 level (2-tailed).

Table 2
Multivariate linear regression

Model	Unstandardized C.		Standardized C.	t	Sig.
	B	Std. Error	Beta		
(Constant) (a)	0.12878	0.041		3.144	0.002
exporter intensity (a)	0.17861	0.051	0.366	3.529	0.001
size2: total assets (a)	0.00003	0	0.304	2.483	0.015
manufact/commodities industries	-0.06905	0.046	-0.262	-1.486	0.141
size1: employees	0	0	-0.099	-0.77	0.444
R Square	19,80%				

Dependent Variable: Ebtida/total sales

(a) variables in the model, sig 0.05

Among the 118 greatest companies in Brazil, table 1 shows the association between performances according to exporting intensity. One sees that there is a significant association in the model. The multivariate linear regression shows 'R square' as equal to 20% (table 2). This it is not a good result but indicates a positive association between the variables. It is important see that the size control variable also explains the model. The more

internationalized and larger the company, the better the financial performance, meaning that for companies within Brazil, exporting and internationalization guarantee a difference in performance in relation to companies that do not export. However, we do not know the behavior of the curve that explains the relationship between performance and internationalization.

The ANOVA tests (table 3) show a significant difference between the means of level of exporting intensity and performance ($p = 0.01$). Figure 2 shows the curve as an inverted J curve.

Table 3
Anova National/exporting and multinational

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.305	5	0.061	4.652	0.001
Within Groups	1.466	112	0.013		
Total	1.771	117			

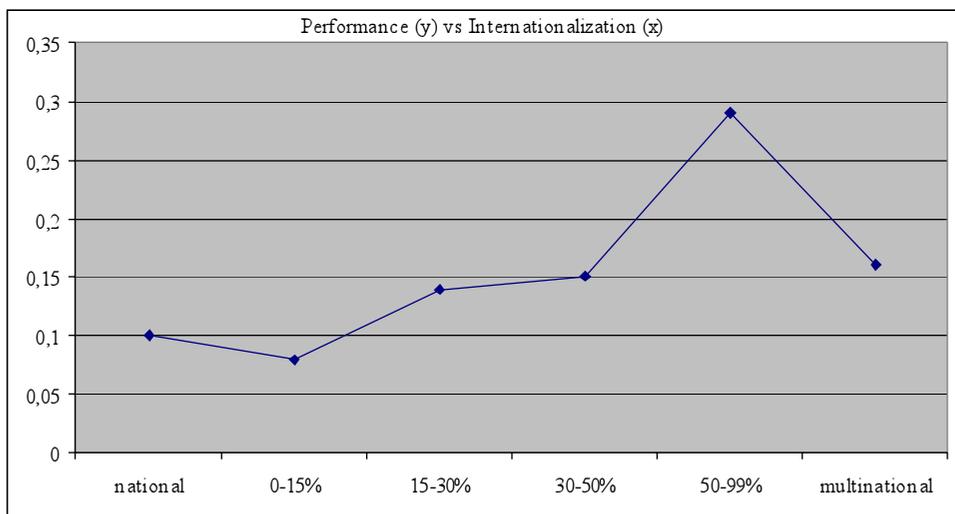


Figure 2: Inverted J curve (ANOVA)

When exports are first initiated, results are worse than those achieved by operating only in the domestic market. In other words, when the exporting is treated as a secondary activity, there are more costs for the company than when sales to the national market are resumed.

Later, however, once exporting surpasses about 15% of total sales, company performance becomes better than it would have been merely operating in the domestic market. This result and the curve show exporting as a good way to improve performance, despite the 'Brazil Cost'.

According to the others points of the curve, the exporting intensity metrics indicate that the same is true of performance up to the break point. When the company starts its foreign direct investments, and therefore becomes a multinational with international operations, performance decreases to the same point, at between the 30% and 50% level of exporting intensity.

Here, the curve is an inverted J curve, but the break point is different. In other studies the break point is reached when the company goes beyond the exporting stage, engaging in FDI in the form of Greenfield operations, acquisitions, joint-ventures and so on, and therefore becoming a multinational company.

So as to prevent problems and help future comparisons, the significance curve (table 4) in figure 3 shows only exports. As in the previous curve, exports rise throughout the different levels.

Table 4
Anova Exporting

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.242	4	0.06	5.144	0.001
Within Groups	0.987	84	0.012		
Total	1.229	88			

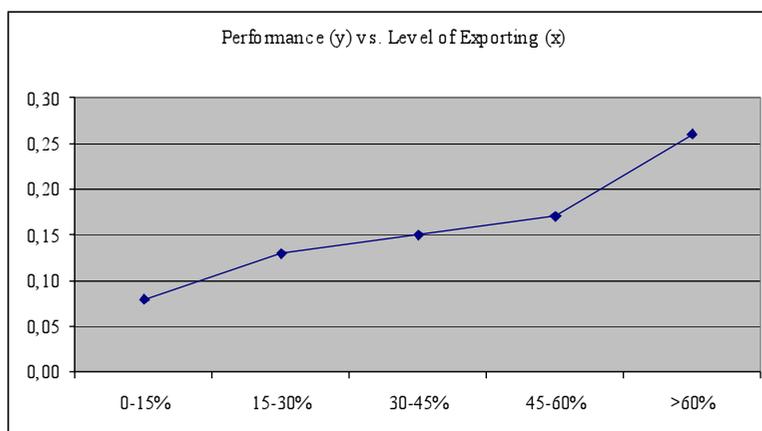


Figure 3 - Exporting curve (ANOVA)

Discussion

Overall, our results confirmed the hypothesis that the internationalization guarantees better performance for Brazilian companies, although we are dealing with a very modest number of Brazilian enterprises in foreign markets. When we analyzed the internationalization versus performance curve we found an inverted J curve. This supports the classic economic theory of performance orientation. However, some points must be taken into account in order to understand results better. The inverted J curve was based on the article explaining internationalization from an economic theory perspective. However it is important to understand the elements that explain this curve and why it does not have the shape of a U curve, as per the behavioral perspective.

One explanation for the different curves came from the cultural dimensions and psychic distances inherent to the Uppsala Model. Ruigrok and Wagner (2003) had already given this explanation, showing that studies from the USA resulted in an inverted J, while the authors' study that resulted in a normal U curve worked with data from Germany, its being one of the few studies with non-US data.

According to the Uppsala Model and the results above, the singularity of the internationalization process of each country can explain the performance curve. First, US companies follow the Uppsala Model when they start their internationalization process, aiming first at culturally related countries – Canada and England are the preferred and more typical places for US companies to begin investing abroad.

On the other hand, German companies only have a small domestic market, so that they see the international market as the best way to increase their operations. This is different from the case of countries with great domestic markets. Exporting occurs early in small countries and consequently, during the course of several years, this process creates an organizational and institutional environment that is favorable for the development of international or multinational companies. The same process can be seen in other of European countries, especially in the Nordic countries. The case of Germany, as an example for understanding other countries in the same situation, shows that due to cultural similarities the first destinations of their internationalization

processes are Switzerland and Austria, two markets that are limited in terms of size relative to England and Canada.

Therefore, at the start of the process the companies need to sell to different countries with unrelated cultural, geographic and psychological characteristics. This difficult situation drives an intense learning process that explains the performance curve drop. Thus, if in the beginning of the exporting process performance improves thanks to market similarities and internationalization, as it becomes necessary to open and exploit new markets revenues start dropping.

On the other hand, all these difficulties and early learning processes lead to the development of improved managerial capabilities and an institutional atmosphere that is favorable to internationalization as compared to other markets in which the internationalization process lags behind, as there is a large domestic market at hand to exploit, before venturing into foreign markets. These capabilities and atmosphere, in this case, help to explain the normal U curve. When these companies begin to make direct investments in foreign countries, i.e., when they become multinationals, the managerial capabilities and the institutional context are ready for the development of the business and performance growth. This performance curve movement happens at the same point in time at which the performance curve of other companies with different characteristic begins to decrease, forming the inverted J curve. This makes it easier to understand Brazil's inverted J curve.

First, thanks to the large internal market, exporting is a secondary strategy. Second, when it first embarks upon the adventure of international markets, the exporter follows the rule of psychological and cultural similarity, so that Brazilian companies tend to export to Latin American markets or to other Portuguese-speaking countries. Thus, exporting begins cautiously and gains strength over time. This gradual increase in exporting goes hand in hand with performance improvement until the break point, when the company becomes a multinational. However, here there is a difference between Brazil and other studies. In the Brazilian case, the break point did not come about at the 50% and 85% export level, but rather at the start of foreign direct investments.

An explanation for this difference is that Brazilian companies undergo a slow internationalization process, so that major difficulties only arise during the transition from exports to the FDI process, whereas in other countries this transition occurs earlier due to the greater involvement with the exporting processes.

Final comments, contributions to the literature and limitations

This study confirms the core hypothesis that, for companies operating in Brazil, there is a positive association between internationalization and performance until a break point occurs, when the company becomes a multinational company with operations in foreign countries.

This paper contributes to the literature on internationalization and performance. One contribution is that this study focuses on enterprises from an emerging country, while previous studies did research into firms from developed countries. If one looks at the country of origin of the data analyzed in these earlier studies, one sees that researchers relied mainly on US or European organizations. However, firms from large emerging economies such as China, India, South Africa, Russia and Brazil should play a more important role in global competition in coming years and it is important to understand whether the existing theory also applies to firms from developing countries. From this point of view, the very fact of presenting results from a large emerging economy such as Brazil contributes to this field of research.

The inverted J curve in the Brazilian case is also an intriguing result that should be tested and researched in greater depth in Brazil and abroad, especially in large emerging markets. It seems that due to the lack of an adequate infrastructure to do business in a large country (Brazil is the world's 5th largest country in square kilometers, ranking just after the USA, China, Canada and Russia) exporting in Brazil produces a positive result from the very start, as compared to other countries. Our results show that as from the 15% level of exports, results increase all the way up to 100%, with an inflection point materializing precisely when the companies start engaging in FDI. These intriguing results challenge the 'related-unrelated point of view' applied to exporting processes, according to which firms achieve better results when

they move into countries that are culturally close to them (related markets) and weaker results when they start doing business in countries that are further removed from them culturally (unrelated markets). The Brazilian case produced results that lend strength to the notion that the main challenge concerns the transition process from exporting to FDI. This might also apply to other developing nations.

Figure 4 illustrates the different results related to the degree of internationalization and performance, according to the role of prevailing country-specific types of expansion (culturally related and unrelated). Even though the Brazilian curve may seem similar to the US curve, there are differences in the type of expansion, as explained above.

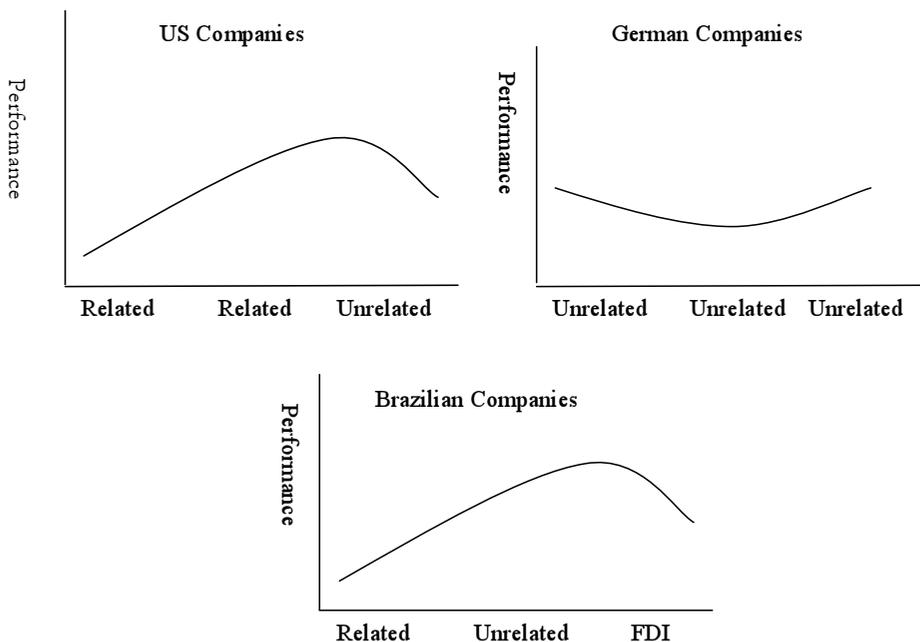


Figure 4 - Degree of Internationalization and Performance

Source: Ruigrok and Wagner (2003); authors (Brazil curve)

Finally, this paper tries to explain the curve relative to two perspectives: the economic and the behavioral ones. Though the curve is compatible with economic studies findings, we show that it can also be explained from a behavioral point of view.

It is important to point out the limitations of this paper. First, as Brazilian firms are still very shy of FDI, we focused on exports data, which imposes certain limitations, mainly related to comparisons with other countries. We must also recognize that analyzing performance through a single external index can be questioned, particularly if we consider the different performance measurement tools, which encompass not only numerical ratios but also managerial indicators, such as the BSC, though our choice of method was performance driven by the availability of data and its nature. Nonetheless, measuring internationalization through exports and with no reference to internal, strategic and managerial indicators may draw some criticism. On the other hand, the exports indicator used has the advantage of being objective data, devoid of the subjective issues of interpretation that sometimes surround surveys with executives. Another form of data that could be used with studies of other countries is the volume of assets held in foreign countries. In this study this indicator was not used because the owner of this data (the Brazilian Central Bank) does not release it, in order to protect the strategic information of companies' investments in foreign countries.

With this article we hope to have contributed to the discussion of the relationship between internationalization and performance in Brazil.

Resumo: Esse artigo analisa a relação entre exportação e desempenho de empresas brasileiras. Para analisar, um estudo exploratório ocorreu com uma amostra de 118 das 500 maiores empresas brasileiras. A hipótese central do estudo, e que foi confirmada, é que há uma relação positiva entre internacionalização e performance até um ponto de ruptura, quando a companhia torna-se uma companhia multinacional. Em oposição às pesquisas feitas países desenvolvidos. A curva J-invertido no caso brasileiro apresenta um resultado intrigante, que parece desafiar as perspectivas do mercado relacionado-não relacionado aplicadas ao processo de exportação, da abordagem da distância cultural. Nossos resultados mostram que de 15% do grau de exportação os resultados aumentam até 100% e logo quando as empresas iniciam o IED, há um ponto de inflexão. Os resultados reforçam a perspectiva que o principal desafio está relacionado com o processo de transição entre exportação e IED. Uma

contribuição deste artigo é a origem dos dados. Na literatura, é evidente que pesquisadores basearam-se predominantemente em dados de organizações americanas e européias, mas é importante entender se as teorias existentes também se aplicam a firmas de países em desenvolvimento como Brasil.

Palavras-chave: Exportação; Desempenho; FDI.

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