

A study of the strategies of internationalization of Brazilian pharmaceutical industries

Antonio José Patrocínio Pereira^a; Josir Simeone Gomes^a

^aUniversidade do Grande Rio

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Abstract

This research aims to analyze the internationalization strategies used by four Brazilian pharmaceutical industries. The methodology is characterized as descriptive, qualitative and documentary. The Brazilian pharmaceutical industries surveyed, classified as multinationals, use different typologies to enter the foreign market: Eurofarma, EMS and Cristália, through direct exports, and in the case of Biolab, contractually. The internationalization strategies adopted by these companies are some of those which have most been used in the past few decades, and are divided under two approaches: the economic model of the eclectic paradigm, developed by Dunning, and the behavioral model of the Uppsala School, developed by Johanson and Vahlne. The results suggest that the internationalization strategies of the organizations studied do not necessarily involve great sophistication, because they virtually follow what is recommended in the literature.

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1. INTRODUCTION

Brazilian organizations still give little focus to exploitation in foreign countries. However, due to the current crisis, the number of Brazilian companies internationalizing themselves for the first time increased 149% in 2016 compared to 2015, according to the Ministry of Industry, Foreign Trade and Services [MDIC] (2017).

According to data from IMS Health (2017), a company that audits the world pharmaceutical market, sales in this sector had a US\$ 1,068.8 billion revenue in 2015. The United States, Western Europe and Japan, in 2014, accounted for about 70% of sales and the twenty largest companies, called “big pharmas”, around 60% of the international market. The Agency predicts that Brazil, which occupied the 10th place in the world pharmaceutical market in 2010, will be the fifth largest market in 2020.

The sales of Brazilian pharmaceutical companies showed a 12.6% nominal growth in 2016 and, for the past six years, an average of 16.7% per year. In the last two years, the pharmaceutical industry had a real rate of 6.53%, while the Brazilian GDP had a negative 8% rate over the same period, according to the Pharmaceutical Industry Union in the state of São Paulo [SINDUSFARMA] (2017). On the other hand, according to the Central Bank of Brazil [BACEN] (2017), the industrial scenario suffered a 16% fall. Statistically, the pharmaceutical companies exhibit positive rates, far above other industrial parks.

In Brazil, the internationalization process started with exports of pharmaceutical products to Latin America, during the period from 2009 to 2013, representing more than 50% of sales, and introducing a competitive edge with respect to the scale and to sanitary quality, according to Gomes, Pimentel, Cardoso and Pieroni (2014). The main factors influencing the growth of the demand for pharmaceutical products in Brazil are: the population's ageing; the increased use of generic drugs; the improvement in the average level of income and subsidies granted by the federal government to low-income consumers, such as the Farmácia Popular Program, according to IMS Health (2017). On the other hand, generic drugs and the like (medicines with expired patents) are, on average, 60% cheaper than brand or reference products (innovative medicines).

Corresponding Author: Phone (21) 3219-4040

E-mail: patrocinioajp@gmail.com (A. J. P. Pereira); josirsgomes@gmail.com (J. S. Gomes)

UNIGRANRIO - Rua Professor José de Souza Herdy, 1160 - Jardim Vinte e Cinco de Agosto, Duque de Caxias - RJ, 25070-000, Brasil.

The Brazilian generic drugs market holds only 31.40% of sales in units, in relation to the total pharmaceutical market. According to the Brazilian Association of Generic Drug Industries [PróGenéricos] (2017), the goal is to reach from 35% to 40% in 2020, far below European countries (50%), Canada (50%) and the United States, where generic drugs have more than 20 years of existence, and approximately 80% of participation in volume.

Various researches, directed to the scientific literature on the topic of internationalization, were disclosed in national and international journals. In recent studies, the authors Ferreira, Chandra and Gomes (2014) identified 174 articles published in the electronic library of scientific journals (SPELL), in the period from 2009 to 2013. Within this subject, during the period from 2010 to 2012 there was an evolution in relation to the number of published articles about theories that had already been consolidated, both from an economic perspective and from a behavioral one, covered in this study. However, there is still a gap in relation to studies in this area focused on the pharmaceutical market.

Thus, this article has as research question: What are the strategies adopted by the pharmaceutical companies Eurofarma, EMS, Cristália and Biolab, which have evaded the current Brazilian economic crisis? To answer this question, the objective is to analyze the strategies adopted by these pharmaceutical companies, which arose primarily in the 1990s, shortly after the establishment of the law of generic drugs, with the aim of becoming strong competitors in the domestic market within a context of internationalization.

Given this, the research methodology adopted is descriptive, qualitative and documentary, the main four internationalized pharmaceutical industries in Brazil having been chosen. The theoretical framework used in the study included the internationalization strategies used over the past few decades, based on their economic and behavioral aspects. The results indicate an approximation with traditional models of internationalization strategies, generating an organizational learning that allowed these companies to stay competitive and face these new challenges, despite the current economic and political crisis.

2. THEORETICAL FRAMEWORK

In the theoretical framework of this study, the companies' internationalization process is presented along with the theories, using an economic and behavioral approach, portrayed through a summary chart.

2.1 The companies' internationalization process

Internationalization is the name of a process of elaboration and implementation of the strategic planning of enterprises, so they can operate in countries other than the one in which they are originally installed, according to Barreto (2002). This process can be considered a strategy that accelerates the economic activities of organizations with international markets, in a sense close to that presented by Ruzzier, Hisrich and Antoncic (2006) and Souza and Fenili (2012).

Internationalized companies are usually classified, according to Bartlett and Ghoshal (1992), Canals (1994) and Dymont (1987), as follows:

- a) Exporting company – it is the beginning of the process of internationalization, the factories are usually located in the country where it is based;
- b) Multinational company – the purpose of these organizations is the development of similar activities to those of the parent company in each of the branches in foreign countries;
- c) Global company – it has a centralized system of production of goods that is installed in a particular country and only commercializes production for others;
- d) Transnational company – it seeks to be efficient to obtain a global edge.

In addition to the classification of internationalized companies, there are various researches in the literature with different typologies for entering foreign markets. Sarathy and Terpstra (1991), Cateora and Graham (1996) and Brito and Lorga (1999) conceptualize the most used forms in the following manner:

- a) Direct exports: produces and exports its products directly to the final foreign consumer;

- b) Indirect exports: Brazilian companies that buy the products to market them abroad, usually through agents, representatives and distributors (trading companies);
- c) Distribution agreement: agreement signed between the exporter and a legally established distributor to foreign markets with technical knowledge about its products;
- d) Licensing/franchise: the licensee authorizes, through a contract, the company licensed in the production and/or marketing of its products, not changing the original characteristics of the brand, model and layout, among others, which shall be paid through royalties;
- e) Sales subsidiary: through a sales office, the production company fixes its physical presence abroad;
- f) Distribution center of its own: the exporter disseminates its production abroad. The financial burden is higher compared to the implementation of a sales subsidiary;
- g) Strategic alliances and joint ventures: a type of consortium or agreement of collaboration between the local and foreign organizations that admit sharing the risks, costs and values, etc.;
- h) Fusion: union of two or more companies of complementary or equal branches, which have as strategy increasing their participation in the market, or benefitting from this cooperation;
- i) Acquisition: an organization buys the shareholding control of another that is already established in the country and only one of them will keep their identity;
- j) Greenfield: the creation of a subsidiary, starting from scratch.

Given the above, Root (1994) proposes 3 different typologies for entering the foreign market: 1) through exports (direct and indirect exports); 2) contractually (licensing, franchises, agreements and contracts); and 3) through investments (new ventures, acquisitions and joint ventures).

2.2 Economic approach

This approach tends to interpret decision-making internationalization processes as logical and material, with a focus on the right distribution of resources, reducing the total costs of a transaction, with a competitive edge. This dimension includes: the market power theory, the product cycle theory, the internalization theory and the eclectic paradigm.

The market power theory, by economist Hymer S. (1960), considered to be its main representative, focuses on the idea that Foreign Direct Investments (FDI) are more noticeable in industrial companies.

The main representative of the product cycle theory is Raymond Vernon (1931-1999). For Vernon (1966), companies that undergo stages of maturity in local markets should increase the life cycle of their products, entering the markets, which would be at an early stage of development, by withholding comparative advantages from the already validated novelties of their products. In the Internalization Theory, which has as main authors Buckley and Casson (1976), based on the concepts of Williamson's Transaction Costs Theory (1985), importance is given to the concept of internalization to justify the existence of internationalization processes.

The eclectic paradigm is grounded on the principles of Economy, on the concept of transaction cost and on the Internalization Theory. Dunning (1998), its developer, acknowledged that it is not a new theory, but which seeks to explain the process of internationalization of companies.

Ownership, internationalization and localization are the three important elements in the decision making of organizations that operate through their production in international markets. The Eclectic Paradigm Theory or OLI Theory tries to explain the amplitude, shape and standard of international production based on three groups of advantages: 1) Ownership (O) – ownership advantages of specific assets of the company; 2) Location (L) – advantages associated with the environment and its effects on the company's skills, 3) Internalization (I) – advantages derived from the company ensuring the development of its activities in another country through its own means.

According to Souza and Fenili (2012), the eclectic paradigm is a “broad analytical framework” which is able to encompass the market’s shortcomings caused by the development of the company in its domestic market (market power theory) and the fact that companies internationalize themselves with a focus on the use of substandard foreign markets (internalization theory). The eclectic paradigm elucidates when a firm seeks to initiate international production and whether it has some competitive edge. Given this, the firm will internationalize itself through FDI – considering this is the best decision to be taken and there being economic interests (profit) associated with production abroad.

2.3 Behavioral approach

While in the economic approach the Internationalization Theories were developed from a macro perspective, an alternative approach was proposed within the context of administration, based on explanations about the process by which a company enters the international market and on the influence of the behaviors, perceptions and expectations of its executives (known as behavioral or procedural approach), according to Barreto (2002). This approach introduces greater subjectivity, admitting a behavioral perspective, observing internationalization from the stances and the insight of the decision makers of companies. In this regard, the theory of the Uppsala School (or simply Uppsala model) and of the Nordic International Business School are summarized below.

The theory of the Uppsala school, which was developed by Swedish researchers in the 1970s and created by scholars from the Nordic School, emphasized the studies conducted by Johanson and Vahlne (1977), Johanson and Wiedersheim-Paul (1975), defending the thesis that an organization that undergoes stages and models contains data with proportional adjustments and increases. The organization of these data leads to various operations, including the selection of the target market, ways to enter the international market and situations that will ensue.

In this way, an organization starts exporting to a particular country through representatives, then establishes a sales subsidiary and, finally, initiates the effective production for the country chosen. For this model, “*globalization is a process of incremental adjustments to the varying conditions of the company and its environment, featuring the following stages of international engagement*” (Rodrigues, & Gomes, 2003):

- Stage 1 – non-existence of regular export activities;
- Stage 2 – exports carried out through independent representatives;
- Stage 3 – establishment of a subsidiary for selling abroad;
- Stage 4 – operation units abroad (production, for example).

For Johanson and Vahlne (2009), “*this sequence of stages indicates a growing commitment of resources with the market. It also indicates the current activities (operations) that differ because of the accumulated experience.*”

The theory or model of the Uppsala School indicates a relevant feature in the perception of psychic or psychological distance between the country of origin and the foreign countries in the firm’s internationalization process, according to Hemais and Hilal (2004). This distance can be defined as the perceived differences between values, languages, managerial practices or controls, industrial development and education of two countries, that is, the companies carry out business with countries that are culturally closer. A very large cultural distance, according to this theory, could be an obstacle to conducting international business.

In the Uppsala theory, the prospect of the internationalization process was revisited particularly from the complexity of the market, previously unknown. On the contrary, it would be driven by the nature of what is incremental to the firm, which aims to acquire knowledge through the growing commitment to foreign markets. It would be thus possible to accelerate the process and enter directly in psychically distant markets, according to Johanson and Vahlne (1977).

The Behavioral Theory of the Nordic International Business School derives from the Uppsala theory, which could be considered a natural evolution according to Hemais and Hilal (2004), in association with relationship networks. In relation to the new trends in international business studies, Andersson (2000) is one of the main representatives of this behavioral theory of the Nordic School, and he indicates entrepreneurship as relevant in this case.

To allow a more global perspective of the main internationalization theories, a summary chart prepared by Hemais and Hilal is presented below (2004), focusing on the main authors and particularities of the two dimensions studied: one focused on the economic aspect and the other on the behavioral or organizational aspects.

In Chart 1, it can be observed that the theories are more complementary than conflicting. The firm's internationalization process is not simple to understand and a theory would not be able to find enough explanations to fully clarify the phenomenon.

Focus	Theory	Main author	Basic idea	Driving force
Economic	Market Power	S. Hymer	Firms operate abroad to control other companies and use their competitive edge.	Extension of collusive networks and restrictions to the competition in each market.
	Product Cycle	R. Vernon	Firms innovate in their local markets and transfer the production of less sophisticated products to developing countries, that is, mature products are produced in developing countries.	Looking for locations that have lower costs for stable technologies.
	Internalization	P. Buckley e M. Casson	Firms internalize markets when transaction costs of an administrative exchange are lower than the market costs; in this way, the group's collective efficiency is increased.	Expanding or contracting international production depends on changes in the cost of transactions when operating in a broader set of markets, compared with the cost of coordinating transactions directly.
	Eclectic paradigm	J. Dunning	Firms operating abroad, when they have a competitive edge in relation to ownership (O), location (L) and internalization (I).	The use of OLI in the company's internationalization process.
	School of Uppsala	J. Johanson e J.E. Vahlne	Psychic distance, incremental internationalization and networks.	The firm's growing involvement from the increase in knowledge about the new location
	Behavioral or Organizational	Nordic School	Andesson. S	Entrepreneurship

Chart 1. Summary of the main Internationalization theories
Source: Hemais and Hilal (2004, p. 36)

3. METHODOLOGY

3.1 Methodological framework

When entering the field of scientific research, it may be verified that there are various classifications of applicable typologies developed by several authors, in addition to the results arising from them. Vergara (2016) proposes two basic criteria: in relation to the purposes, which may be exploratory, descriptive, explanatory, methodological, applied and interventionist, and to the means: field, laboratory, bibliographic, experimental, ex pos facto and participatory researches, action-research and case studies.

In the search for answers to the research's problem, the methodology adopted is descriptive in relation to its purposes, because it is concerned with observing the facts, registering, analyzing, classifying and interpreting them without interference by the researchers, that is, the phenomena of the physical and human world are studied, but not manipulated by the researchers.

The research was developed in a systematic bibliographical and documentary study. Materials published in books, magazines, newspapers and electronic networks were used as primary and secondary sources, in addition to the use of internal documents of the organization that were forwarded by electronic means.

Finally, the research can be considered to be predominantly qualitative in relation to its approach, since it is characterized by the nonuse of statistical tools. Richardson (1999) defines qualitative researches as studies that seek to describe the complexity of a given problem, analyze the interaction between certain variables and understand and classify dynamic processes experienced by social groups. The use of the qualitative approach is quite usual in Accounting and Administration. It should be stressed that, although both sciences deal with numbers, they are social, not logic sciences, hence the importance of using the qualitative approach.

3.2 Data collection

To conform to the theme, the choice of the criteria and selection requirements was based on an intentional sample of the pharmaceutical segment, within the group of companies responsible for the production and marketing of generic drugs and the like, considering the following factors for analysis: a) the shareholding control interest being national; b) belonging to the industrial sector; c) interest in internationalization; d) being large-sized.

The data presented in Charts 2 and 3 of the study were obtained from materials published on the websites of the companies analyzed, press releases, institutional videos, the Exame "Melhores e Maiores" magazine from July 2016, the Valor Econômico "1000 Maiores Empresas" magazine from September 2016, the Valor "Inovação Brasil" magazine from July 2016, the Folha de São Paulo Magazine from 29 July 2016, the annual report for 2016 forwarded by the Eurofarma Laboratory, financial reports posted on the website of the laboratories and information collected on the websites of the Brazilian Development Bank [BNDES] (2017) and of the Brazilian Service of Support to Micro and Small Enterprises [SEBRAE] (2017).

4. DESCRIPTION AND ANALYSIS OF THE RESULTS

4.1 Description of the analyzed industries

The organizations, object of analysis of this study, were chosen from an array of options with the Eurofarma, EMS, Cristália and Biolab laboratories having stood out, in relation to the different methodology aspects for entering the international market. A brief history of the portfolio of the featured laboratories is shown below. The information was collected in their respective websites.

4.1.1 Institutional scenario of the pharmaceutical laboratories surveyed

Founded in 1972, with 100% national capital, Eurofarma started exporting its products in 2002; thus, it remained removed from commercial advances in foreign markets for 30 years. However, from this date on it became aligned with its goal of covering 90% of the demand for Latin American countries until 2015. In 2009, the company acquired Argentinean laboratory Quesada and between 2010 and 2014, it acquired five more laboratories in other countries of Latin America. With this, the organization started covering 68.6% of the Latin American market, according to the information contained on the website of the Eurofarma Laboratory (2017).

Based on the balance sheet of 31 December 2015, the value of Eurofarma's net sales was 2,164.4 million reais, the equivalent of 554.3 million dollars. The company occupies the 7th place in the ranking among the largest, ranked by net sales in millions of dollars, according to the Exame "Melhores & Maiores 2016" Magazine.

The EMS Laboratory, according to information contained in its website, has 100% national capital, having started its activities in 1964. In 2000, 36 years after its foundation, it began the internationalization process, with exports to other countries in Latin America, in addition to Europe, Africa, Asia and the Middle East; currently, it is present in more than 40 countries. In 2013, company Brace Pharma was installed in the United States, in the state of Maryland, with a total focus on radical innovation. It has 5 thousand employees throughout Brazil. According to the Exame “Melhores & Maiores 2016” magazine, the value of its net sales was 2,211.3 million reais, which is equivalent to 566.3 million dollars, and it occupies the 6th place in the ranking among the largest, ranked by net sales in millions of dollars.

The Cristália Laboratory, according to the information collected on the website of the company (2017), started operations in 1972, as a small laboratory to meet the demand for psychiatric medications. It exports both medicines and APIs (Active Pharmaceutical Ingredients) to over 30 countries in Latin America, Africa and the Middle East, with 300 records abroad. It currently has about 5,200 employees (Laboratory and Affiliated Companies). According to the Exame “Melhores & Maiores 1.427,6” magazine, the value of its net sales was 1,427.6 million reais based on its balance sheet from 31 December 2015, which is equivalent to 365.6 million dollars, and it occupies the 9th place in the ranking among the largest, ranked by net sales in millions of dollars.

Company Biolab initiated its activities in 1997, focusing on innovative medicines, which account for more than 50% of its revenue, and it invests 10% in research, development and innovation. It currently has more than 2 thousand employees and pays monthly visits to 250 thousand doctors throughout the Brazilian territory, ensuring a friendly presence to the medical class, in addition to the constant updates and innovative options, according to information contained in the Laboratory’s website (2017).

4.2 Analysis of the results

To organize the study, the laboratories were structured in a descriptive manner, based on the information obtained from the collection of data, summarized in Charts 2 and 3. In Chart 2, which presents the data summary, it is shown that Eurofarma, EMS and Cristália have acted in the pharmaceutical market for at least 40 years, with the exception being Biolab, considered as young in relation to the analyzed group. All are considered large-sized, both with regard to their revenue as in relation to the number of employees. All have as main activity the pharmaceutical industry, in addition to being private enterprises and having 100% Brazilian shareholding control. In relation to the time of internationalization, Eurofarma and EMS have operated in this market for an average of 15.5 years, the Eurofarma laboratory having initiated this process with exports and acquisition of enterprises 7 years ago. On the other hand, the internationalization process of Cristália and Biolab is more recent, with an average of 4 years.

In Chart 2 it can be observed that the Eurofarma and Cristália Laboratories have internationalization goals (sales abroad), which correspond to more than 10% of the total sales, however, there was no data available about EMS and Biolab. The main focus of these laboratories is the sale of generic drugs and the like; there is an important percentage of investments in Research, Development and Innovation (RD&I).

Industries	Eurofarma	EMS	Cristália	Biolab
Company Size (^{1,6})	Large-sized	Large-sized	Large-sized	Large-sized
No. of employees	6,521 (2015) ⁷	5,000 ⁴	4,000 ⁴	2,350 ⁴
President (CEO)	Maurizio Billi	Carlos E.Sanchez	Ogari Pacheco	Cleiton Marques
Main activity ⁴	Pharmaceutical industry	Pharmaceutical industry	Pharmaceutical and chemical industry	Pharmaceutical industry
Type of Capital ⁴	Enterprise of closed capital	Enterprise of closed capital	Enterprise of closed capital	Enterprise of closed capital
Capital ⁴	100% Brazilian	100% Brazilian	100% Brazilian	100% Brazilian
Time of Operation (Establishment) ⁴	44 years (1970)	52 years (1964)	44 years (1972)	19 years (1997)
Time with Internationalization ⁴	14 years	17 years	6 years	2 years
Start of the Internationalization Process ⁴	2002	2000	2011	2015
Main Focus ⁴	Medical prescription and generic drugs	Medical prescription and generic drugs	Differentiated, no generics ³	No generics, innovative only ³
Portfolios of Products ⁴	280 drugs	500 drugs	200 drugs ³	100 drugs
No. of Licenses abroad ⁴	NI	400	300 ⁵	220
Global Sales (BR + International) million ³	R\$ 2,164.4 US\$ 554.3	R\$ 2,211.3 US\$ 566.3	R\$ 1,427.6 US\$ 365.6	R\$ 1,350.0 (Expectation for 2015) ⁴
Strategies with Internationalization (sales abroad) ⁴	10% (2014) ⁷ 13% (2015) ⁷ NI (2016) ⁷	NI	6% (2014) ³ 10% (2015) ³ 15% (Goal for 2017) ³	NI
Investment in R&D, and Innovation	5.3 % Net Revenue ⁷	6% Revenue ³	8% Revenue	7 to 10% Revenue ⁴

Chart 2. Summary of data collected from Brazilian pharmaceutical companies

Source: Prepared by the authors

Notes: ¹Company Size Classification (BNDES). Annual gross operating revenue greater than R\$ 300 million, considered as large. ²Source: Revista Exame “Melhores e Maiores” (July 2016). As maiores farmacêuticas, classificação venda líquidas, base 2015. ³Revista Valor Econômico “1000 maiores empresas” (Sept. 2016); Inovação Brasil (July 2016), o TOP 5 do Segmento Farmacêutico. ⁴Company’s website or institutional video. ⁵Revista Folha de São Paulo (July 2016). “Farmacêuticas brasileiras compram empresas no exterior por inovação”. ⁶SEBRAE uses IBGE’s number of employees criterion to classify the size of the firms (industries), more than 500 employees being considered as large. ⁷Eurofarma Laboratory’s Annual Report (2016). NI – No information included in the surveys collected.

In Chart 3, the internationalization strategies relate to the approaches presented in the theoretical framework. In the economic approach, the theory/model of the eclectic paradigm is present in the four laboratories surveyed, grounded on the OLI concept.

Industries	Eurofarma	EMS	Cristália	Biolab
Classification	Multinational	Multinacional	Multinational	Multinational
Type/mode of entry	Direct Exports, acquisition of local Companies and installation of Branches	Direct Exports	Direct Exports	Miami Office
Reason for Internationalization	83.29% Latin-American market Consolidating itself as a Latin-American big pharma focusing 90% of its Goal (2015) on innovation.	Consolidar como uma big pharma com foco na inovação.	Focused on innovation.	Selling technology through licenses with a focus on innovation.
Countries of Operation	Exports to 18 countries Latin-American countries and Mozambique, 11 factories, 5 factories in Brazil and 6 in Latin America. Eclectic Paradigm Use of the OLI theory, with expertise in the sector, prospecting of new target markets and expansion. It started entering the Latin American market with exports in 2002 and with the acquisition of Argentine laboratory Quesada in 2009. In the beginning, small operations that it was able to fund with its own resources were prioritized.	40 countries: Europe, África, Ásia, Latin America and Middle East Eclectic Paradigm Use of the OLI theory, with expertise in the sector, focus on innovation, exclusive technologies and investments in the American market, created Brace Pharma in 2013. Prospecting of new markets and ways of entering the European market (Portugal), and exports to more than 40 countries.	Exports to more than 30 Latin-American countries, Africa and the Middle East. Eclectic Paradigm Use of the OLI theory, with expertise in the sector, focus on innovation, prospecting of new markets and expansion and modes of entry bought a company that exports to Latin America and the Middle East in Argentina.	Canada and the United States. Eclectic Paradigm Use of the OLI theory, with expertise in the sector, developed its strategy based on its own portfolio. Opened an office in Miami to adjust its dossiers and drugs to the standards of the American regulating agencies, to expand in Brazil. Slower internationalization process. Products registered in nine countries, currently preparing to branch out and inaugurate a center in Canada.
Model / Theory adopted	Uppsala Model Both acquisition of a local company and construction of branches; the gradualism process was not considered: it is currently in the fourth stage. Considers the shortest psychic distance.	Uppsala Model There is no information on the acquisition of local companies or construction of branches; the gradualism process was considered: it is currently in the 1st stage. Considers the shortest psychic distance.	Uppsala Model Acquisition of a local company; the gradualism process was considered: it is currently in the 3rd stage. Considers the shortest psychic distance.	Uppsala Model No companies have been acquired yet. The gradualism process was considered: it is currently in the 2nd stage. It did not consider the shortest psychic distance.

Chart 3. Internationalization Process, Classification, Typology, Motivation and Model
Source: Prepared by the authors.

In relation to the behavioral approach, the applicability of the Uppsala model or theory may be verified in Chart 3, in the four laboratories studied. However, with regard to the perception of psychic distance, the Biolab laboratory did not consider the shortest psychic distance in relation to the others. It may be noted that each of the industries studied is in a different stage of internationalization. Eurofarma is in the 4th stage; EMS in the 1st stage; Cristália in the 3rd stage and the Biolab laboratory in the 2nd stage. It may also be noted that all industries adopted, as mode of entry, the gradualism process. It is evidenced, in Chart 3, that the four laboratories have one motivation in common, in addition to internationalization: innovation, to seize advanced technologies.

5. FINAL CONSIDERATIONS

This article aimed to analyze and associate the internationalization strategies used by the four Brazilian pharmaceutical industries with the main internationalization theories available in the literature. It is observed, with the analysis of the results obtained, that all the companies studied are from similar industrial segments and considered as large, fitting the criterion adopted by BNDES and SEBRAE.

In relation to their classification, all are classified as multinationals, as described in the literature by Bartlett and Ghoshal (1992) and Canals (1994). Dymont (1987). The companies feature different typologies for their ways of entering the foreign market: Eurofarma, EMS and Cristália, through direct exports, and in the case of Biolab, contractually, according to Root (1994).

All laboratories studied, looking for some competitive edge, adopted internationalization strategies from the perspective of the economic approach, which includes the theory of the eclectic paradigm or the OLI theory, according to its developer, John Dunning (1998). Regarding the behavioral perspective, developed by Johanson and Vahlne (2009), it was verified that all laboratories examined fall into the theory of the School of Uppsala and are in distinct stages of international involvement. Only the Eurofarma laboratory did not consider the gradualism process recommended by the literature, and the Biolab laboratory did not consider the shortest psychic distance in relation to the others.

Finally, it may be concluded that the internationalization strategies adopted by these companies are some of those which have most been used in the past few decades, and are divided under two approaches: the economic model of the eclectic paradigm and the behavioral model of the Uppsala School. In this way, the results suggest that the internationalization strategies of the organizations studied do not necessarily involve great sophistication, because they virtually follow what is recommended in the literature.

It is important to note that due to the possible generalization of the results of this study, as it is a research based on the internationalization process of only four Brazilian pharmaceutical companies, its conclusions should not be extrapolated indiscriminately.

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