MASTER

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DISSERTATION

INTERNATIONALISATION STRATEGIES: A SECTOR ANALYSIS OF THE PHARMACEUTICAL INDUSTRY

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To my parents who supported me continuously for 28 years of continuous education. And to Sofia for all the understanding, especially during the last 2 years.

ABSTRACT, KEYWORDS AND JEL CODES

The purpose of this research is to develop a greater understanding of the internationalisation strategies followed by the companies operating in the pharmaceutical sector. This study reviewed and applied a range of relevant literature that was used to develop the research questions and hypotheses that were then empirically tested by the analysis of a questionnaire made to pharmaceutical companies.

The analysis focused on the different behaviours and drivers of the companies in their internationalisation strategies. And the main results are:

- Companies follow distinct entry mode for different countries and regions.
- Among the traditional theories, the OLI paradigm is the model that better explains the internationalisation of the pharmaceutical companies.
- On their decision of where to internationalise the companies tend to go to markets where they have established networks.
- During the last financial crisis (2008 – 2013) the companies took the decision to internationalise or increase the degree of internationalisation.

KEYWORDS: pharmaceutical industry; internationalisation strategy; international business administration

JEL CODES: B27; F1; F20; M16

INTERNATIONALISATION STRATEGIES: A SECTOR ANALYSIS OF THE PHARMACEUTICAL INDUSTRY

By João M. G. Ribeiro

The purpose of this research is to develop a greater understanding of the internationalisation strategies followed by the enterprises operating in the pharmaceutical sector. The study reviewed and applied a range of relevant literature that was used to develop the research questions and hypotheses, which were then empirically tested by the analysis of a questionnaire made to companies.

1. INTRODUCTION

Globalisation is widely seen as a dominating phenomenon of the 21st century, encompassing worldwide integration of financial systems, trade liberalisation, deregulation and market opening, resulting in a global market and patterns of industrial development. Traditionally, theories relating to the internationalisation of firms have been focused on different manufacturing industries. However, due to strict regulations and very differentiated factors, there are some general characteristics of the pharmaceutical industry that influence the internationalisation process and, therefore, create different trends when compared with others. This study analyses the structure of the sector and the different types of international decisions made by pharmaceutical companies in Portugal and then applies traditional and contemporaneous internationalisation theories to determine whether they are appropriate for explaining the recent trends.

Portugal is a small country and therefore the internationalisation of domestic companies and channels for exports are essential to guarantee the long-term success of her economy. When became a member of the European Union in 1986, the export profile of Portugal was mainly driven by intensive cheap labour. During the following years there has been a lack of capability from the country's enterprises to revert the situation, which resulted in a loss of competitiveness and market share with the entrance of players such as China (when joined the World Trade Organisation) or the Eastern European countries with the enlargement of the European Union. This is considered one of the main reasons why Portugal was one of the most affected countries by the Great Recession. Since 2008, the profile of the Portuguese companies has changed and the country managed to regain some of its competitiveness. This improvement is shown by the performance of exports

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representing now more than 40% of the gross domestic product, which is a very significant growth from the 27% it represented in 2008 (OCDE, 2017).

The pharmaceutical industry played some role in this recovery. In fact, in the period mentioned above, the exports of pharmaceutical products increased from around 400 million euros in 2008, which represented approximately 1.07% of the total exports, to more than 1,000 million euros in 2016, representing approximately 2.13% of the total exports (TABLE 1). This shows the weight gained by the sector in the Portuguese economy. Nowadays, the Portuguese pharmaceutical sector is considered as highly competitive and flexible and the medicines produced in Portugal are exported to more than 100 countries, with the most important partners being countries with very high health standards in the field such as the USA, Germany and the United Kingdom (AICEP, 2018).

TABLE 1 – Exports of pharmaceutical products and total exports of Portugal

| Year | Exports (Euros) of Pharmaceutical products in Portugal | | | |
| | Total exports | Exports of pharmac. prod. | Exports of pharm. intra EU | Exports of pharm. extra EU |
	10^6 euro	10^6 euro	10^6 euro	10^6 euro
2016	50,038.84	1,066.72	636.19	430.53
2015	49,634.00	846.48	464.93	381.55
2014	48,053.70	822.56	470.86	351.69
2013	47,302.91	682.26	450.55	231.71
2012	45,213.02	664.23	436.11	228.12
2011	42,828.03	577.04	403.92	173.12
2010	37,267.91	470.01	341.12	128.89
2009	31,696.76	457.07	336.47	120.60
2008	38,847.35	416.92	307.55	109.37
2007	38,294.06	393.85	293.41	100.44
2006	35,640.47	338.78	253.23	85.55
2005	31,137.08	298.66	220.19	78.48

Last update on the data: February 8th, 2018

Source: Instituto Nacional de Estatística, the National Statistical Institute of Portugal extracted from http://www.ine.pt in August 18th 2018

In order to analyse the internationalisation strategies followed by the Portuguese pharmaceutical companies, a quantitative research design was chosen, which included a survey to the companies with production activity in Portugal (excluding the firms limited to R&D or import/export). This focus allowed to better understand the internationalisation strategies and explain the drivers for the decision of "if", "how" and "where to" internationalise.

Following this introduction, this paper provides a review of the research that was made on the internationalisation of the pharmaceutical companies, as well as it explores the singularities of the pharmaceutical sector, in order to explain why it study in light of the international theories is relevant. The succeeding chapters include a short literature review with the objective of providing a theoretical background on both the classic and contemporaneous internationalisation theories and a brief overview of the economic structure of the Portuguese pharmaceutical industry. And then, they are followed by a chapter including the definition of the research questions and the hypotheses that will be tested.

The section ''research method'' describes the methodology that was used in addition to the data collection procedures and steps that were made to analyse the data. In the section ''analysis and discussion of results'' the findings are presented as well as a deliberation about the confirmation or disproval of the hypotheses. Finally, the last section concludes with some contributions and limitations of the study, and presents topics for further research.

2. Internationalisation of companies in the pharmaceutical industry

This chapter will explore the specificities of the pharmaceutical industry in the context of the internationalisation and provide a review of the work that has been done on the subject.

2.1. Specificities of the pharmaceutical industry

The pharmaceutical industry is defined as the group of companies that discover, develop and produce pharmaceutical drugs for medication use. It includes both generic and branded medicines, as well as the non-prescription drugs commonly known as over-the-counter products (Mcguire et al., 2012). The pharmaceutical industry is very important to the population, as one of the drivers supporting the increased longevity, ability to work and to improve the quality of life (Lichtenberg, 2015). Apart from that, it also plays a role in the worldwide economy with spending on medicines around the world, reaching nearly 0.95 billion euros in 2016 and expecting to grow to 1.3 billion euros in 2021 (QuintilesIMS, 2016).

Given the ethical requirements and the significant effects on health, medicines cannot be seen as normal consumer products. At the same time, manufacturing and development of pharmaceutical products require special knowledge and expertise. Therefore, the companies operating in the field are in general subject to a variety of specific laws and regulations that govern patenting, testing, safety, efficacy and marketing of drugs.

One of the first steps towards the increasing legislation of the sector was made in 1540 when the "Apothecaries Wares, Drugs and Stuffs Act" was applied in England, (Rägo and Santoso, 2008). Another important event was the creation of the World Health Organisation on 7th of April 1948, which nowadays still has a relevant role in the development and application of internationally recognised norms, standards and guidelines.

However, it was mainly due to the "thalidomide tragedy", which was revealed in 1962, that the current standards of safety were implemented. In fact, this tragedy has transformed a drug sold as over-the-counter (claimed to cure anxiety, insomnia, gastritis, and tension) into a tragedy, with enormous proportions due to its harmful effects by causing malformation of the limbs in newborns. Due to this tragedy, the drug became a

symbol of regulations, as it is considered to be the real starting point for the application of the concepts of safety and pharmacovigilance for medications (Moro, 2017).

Nowadays, before a drug can be sold in a country, it must be registered and approved by the national competent regulatory authority, in a process also known as "marketing authorisation". This includes the evaluation of the scientific information (called the registration dossier) and, in some cases, it includes an inspection to the manufacturing facilities, clinical trials, analytical and laboratory analysis, among others. The objective is to guarantee to national regulatory agencies that all products which can be used by the population (whether prescribed by health professionals or used as self-medication) meet the criteria of safety, efficacy and quality (Rägo and Santoso, 2008). It is important to refer that, without a specific proof of the previous requirements, a medicinal drug can easily cause significant damage to the human health.

The regulations of the sector are usually very strict and variable from country to country. It can include different requirements, such as plant approval, stability tests in different temperatures and humidity, format of the dossier, experiences to show the effectiveness of the products in animals and humans, among others (Badjatya, 2013). In fact, even within the European Union, where most of the procedures are mutually recognised among the countries, the approval of medicines is still pretty much dependent on national regulatory authorities. These requirements make the pharmaceutical market very unique and special, which imposes new challenges and different strategic thinking towards the internationalisation for all companies who wants to operate on this field.

In that sense, the internationalisation in the pharmaceutical sector is considered a very complex, expensive and above all, highly time-consuming process. Normally, from the first contact and negotiation until the time the first product enters a foreign market it takes more than two years (Tomás and Crespo, 2017). The timelines for the process are not fixed and vary from one country to the other. Just looking at registration, it can take around 6 to 7 months to get an approval in the USA or Europe, but it may take around 1.5 years in Japan (Thambavita et al., 2018) or 5 years in South Africa (Keyter et al., 2018).

2.2. The internationalisation in the pharmaceutical industry

The study of the internationalisation strategies followed by the pharmaceutical industry is rather scarce. The work that has been done in the past was focused on sectorial

or country-based analysis, not specific to the pharmaceutical sector. The few researches that were done especially on this sector are mentioned on this chapter.

The first study to explore the internationalisation in the pharmaceutical industry was published in 1996 and explored with great detail the process of internationalisation of Upjohn (later merged with Pharmacia in 1995 and then acquired by Pfizer in 2002) (Fina and Rugman, 1996). It is an interesting study as it concluded that the process of internationalisation was made in line with the Uppsala model, since it followed a sequential process. A few years later a longitudinal study covering the process of internationalisation of ten companies (eight pharmaceutical companies and two companies of scientific instruments) was performed by Peter and Malcolm (1998). From these ten companies, five were separated by the group as their internationalisation strategies were influenced by turbulence in the industry, namely mergers or acquisitions. It is interesting to find that the study of the internationalisation was not one of the goals of the study, but it was published as the research in this area was almost inexistent at the time.

The main difference between the studies mentioned above is the type of companies that were studied. While Fina and Rugman (1996) limited their study to one of the biggest corporations worldwide, Peter and Malcolm (1998) studied several smaller companies. The results were completely different, as while the first identified a sequential process in the internationalisation of Upjhon, the second present a very random scenario, in which the companies that were monitored during the three years pursued their own internationalisation strategies without following a clear stepwise or stage process. In the majority of the corporations, the author even noted that the internationalisation was followed independently from the global strategy of company. And in some cases, it was even pursued in parallel with other strategies, treated as a business project and not being consider as a target of the company. The study also highlights the huge impact that the mergers and acquisitions had in the definition of the internationalisation process. This is particularly relevant, since these activities are very common among the pharmaceutical sector, being considered one the most actives at this level among all the industries in the world. In fact, the ten biggest pharmaceutical companies account for 20% of the sales in 1985 and the value increased to 48% in 2002. With much of this growth being the result

of mergers and acquisitions that exceeded 500 billion US dollars between 1988 and 2000 (Çikhoroz et al., 2016; Kumar, 2012).

During the decade of 2000s, the research on internationalisation strategies in this sector was relatively scarce. There were only two papers published and both focused on very specific situations without including an analysis of the global strategy or theories. The first one studied the entry modes of the pharmaceutical companies. It is an interesting paper as it defined a conceptual framework for international pharmaceutical market entry and market analysis (Javalgi and Wright, 2003). The second one reviewed specifically the decision of why and how the companies would enter the USA market (Howell, 2004).

Still in this decade, it was published by Dunning and Lundan the 2nd edition of the book Multinational Enterprises and the Global Economy (Dunning and Lundan, 2008). Although this work was not restricted to the pharmaceutical industry, it is worthwhile to mention as it had several conclusions that are applicable to it (or shared with other technology and/or capital-intensive sectors). In particular, there are two ideas that are relevant to this research. The first is that the tariffs were an important trigger leading to foreign investment by pharmaceutical multinationals and one of the major precedents of the emergence and maturing of international production in the sector. Nonetheless, the authors also refer that nowadays the different stages of the production process are normally located across different countries (so-called global value chains) and so the tariffs and barriers may block the companies from investing in manufacturing sites in countries where they will have restriction on the import of raw materials or intermediates. The second interesting conclusion is that pharmaceutical multinational companies invest in markets as a part of the global or marketing strategy to have a physical presence in the leading markets served by their competitors.

During the last decade, the research on this area has also been small, with one study performed in 2010, having the objective of identifying the motives and patterns adopted by five Indian pharmaceutical companies (Kale, 2010). Despite its interest, the study has a big limitation, which is to be confined to a handful of very large corporations that managed to become big multinationals. The study ends up concluding that the internationalisation of the companies that took part on the research was mainly driven by

the need to improve global competitiveness. And that the strategy was mainly achieved by mergers and acquisitions in Europe, and organic growth in the USA.

Probably the more important research in this sector was published in 2012. Although it was very specific, it provided interesting insights about the relation between the choice of market and entry modes in transition economies (Wrona and Trapczyński, 2012). The biggest limitation of the study lies on its geographical focus on transition economies (such as Eastern European and Southeast Asian). Nonetheless, the conclusions are very interesting and the patterns found were several times replicated. The most important finding from this study was that the choice of entry and expansion mode were dependent on the perceived ratio between market potential and risk factors, which represents a new approach to internationalisation. The study compares the findings and establish the differences to the OLI paradigm and the Uppsala Model (both explained below) and defines the risk-potential ratio as the major driver for the definition of the operating mode. The study postulated three interesting conclusions:

- the more differentiated the products in the portfolio, the higher the confidence to command high market potential; meaning that the influence of this risk/potential ration is smaller in differentiated portfolios;
- the higher the prior experience with operations in transition economies, the lower the level of perceived risk;
- the higher the cultural proximity to transition economies, the lower the level of perceived risk.

In 2017, the more recent analysis of the internationalisation of the pharmaceutical industry was published (Pereira and Gomes, 2017). It was a qualitative analysis that reviewed the internationalisation, followed by four large Brazilian companies. The conclusions of the study are interesting as the authors managed to explain the internationalisation process followed by all companies based on the traditional theories, namely the eclectic paradigm and Uppsala model.

3. INTERNATIONALISATION THEORIES

The current chapter explores the most relevant internationalisation theories, in order to create the basis for the analysis of the data collected by means of the questionnaire.

3.1. Classical theories: the economic and behavioural approach

In general, the internationalisation theories study "why", "how" and "where" firms internationalise. There are several theories that tried to explain this process and from a classical point of view they can be broadly divided into two streams, the behavioural approach and the economic approach.

The **behavioural approach** is focused on the firm's decisions that lead to internationalisation. The main theory under this stream is the Uppsala Model, which is also one of the most important theories explaining the internationalisation process of firms. The theory was developed by Swedish authors, who observed that the companies usually started operating in nearby markets and only gradually entering into far away markets (either geographically or culturally). They also noted that the companies usually started by entering new markets through exports and only evolved to wholly-owned operations after several years of exporting to the markets, defending that the internationalisation of a firm would develop on a stepwise basis (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975). The Uppsala model presents then the internationalisation as a gradual process. It considers that the companies will follow a normal process of internationalisation by stages (FIGURE 1). And, although it does not need to necessarily go through all steps mentioned in the figure, it will follow some kind of flow. It means that the internationalisation decision is made based on a behavioural approach, since the first markets where the companies would internationalise to are those which are more similar to the domestic one. The objective would be to prioritize the countries where the companies have a higher degree of knowledge.
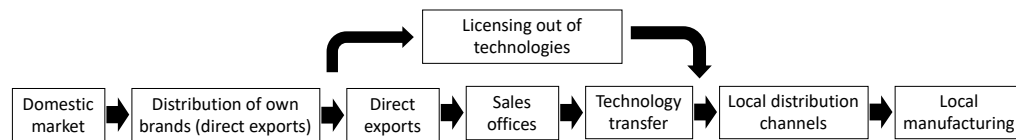
FIGURE 1 - Regular sequence of internationalisation of the companies, *adapted from* (Silva, 2002)

These theories are very much associated with the Nordic school, as it was developed based on the empirical findings, taking the example of several companies in the Nordic countries such as Sweden and Norway. It is important to refer that the theory was never consensual, however it is commonly seen as very relevant, especially to explain the first stages of the internationalisation process.

From a general perspective, the behavioural approach is linked to a certain level of path or stepwise internationalisation process in which the companies have a rational approach, both in terms of location and operating mode as according to the theory these would lead to a better knowledge of the foreign markets. Based on the Uppsala model other theories were born during the last years, one of the most relevant is the network theory, which is further explored in the next chapter.

Another explanation for the internationalisation is presented by the **economic approach**. These theories focus on the macro environment in which the company is inserted or where the company will be aiming to enter. There are several theories that follow this idea, and one of the first economists to discuss this was Stephen Hymer that considered that ownership or competitive advantages constitute themselves an incentive for international expansion of the companies (Hymer, 1960). Another theory following the economic approach is the International Product Life Cycle Model (IPLC Model) defending that the entry into new markets depend on the stage of the traded products. It also sustains that the companies should enter in less developed markets, taking advantage of the advanced stages of lifecycle of its products in the native market (Vernon, 1996).

However, the main relevant theory that follows this approach is called as the eclectic paradigm and it was mainly developed by John Dunning (Dunning, 2001). This author did not agree with the theories postulated by the Nordic school and tried to find an eclectic explanation that could describe the causality of single cases. This theory is also called as

OLI paradigm of international production, due to the fact that it considers three main causes for internationalisation (ownership, location and internalisation) and from the combination of all of them would result the decision of the company to internationalise, and if so, how and to where. A small description of each of the "advantages" is important to help to understand the theory:

o Ownership advantages – refer to advantages that the international companies have against local domestic enterprises, which give them a competitive advantage. These advantages are mainly due to the ownership of specific resources (human resources, technology, brands, and others).

o Locational advantages – this is referring to advantages the company have by being present in a certain foreign country. It can be access to some resources that the destination country has, material, natural (mineral, metal, fuel, among others) and also human resources. Another relevant factor is the production costs, which may be lower in the new country or even the access to other markets.

o Internalisation advantages – the companies are more interested in doing business in their own group and subsidiaries, and they only develop partnerships with third parties when that is clearly advantageous. This is also due to market uncertainty and the high transaction costs.

3.2. Contemporaneous internationalisation theories

Apart from classic models described above, there are a few "new" theories that are relevant to this paper. The majority of them could be seen as behavioural approaches. However, none of them is purely behavioural or economic.

One of the theories explain how small firms (mainly the ones created after 2000's) have quickly internationalised without the time or need to develop any firm-specific advantage in home markets. These companies have characteristics, such as a global mindset, proactiveness, innovativeness and risk taking, and are called "born global". Having far less resources than large firms, they take advantage from having a very significant knowledge, which is the result of learning derived from abroad and availability to create alliance network relationships (Contractor, 2007; Sullivan Mort and Weerawardena, 2006). Another relevant theory was the network theory, which was mentioned before. This model highlights the importance that business relationships (both

informal and formal) have on the internationalisation of firms (Cunningham and Culligan, 1988). The markets are perceived as a mixture of relationships between several players, including customers, suppliers, producers, competitors, private and public support agencies. And it is assumed that the strategy for internationalisation is many times dependent on the relationships that the firms are capable to develop with others. In that sense, the decision of the firm regarding the entry mode (and even the choice of markets) is influenced by their networks of partners and the entry mode may even be the result of initiatives taken by a partner.

Another interesting theory is the "strategic choice framework". This theory was developed on top of the Uppsala model, but with a much more pragmatic approach, assuming that companies take into account a big number of factors when deciding to internationalise. This is a more flexible model that considers the full range of foreign market servicing options available to firms. It also argues that companies do not follow a unidirectional pathway, but rather focus on evaluating the cost and profit potential of each alternative and decide based on their knowledge (Clark and Mallory, 1997).

4. The Research Questions and Hypotheses

The theoretical revision from the previous chapter was used to draw a number of research questions (RQ) and hypotheses (H) in order to provide a direction to our research. The first question is based on the internationalisation strategy and, considering the knowledge of the market (and the several companies that develop their activities in different regions), it is proposed to confirm if the destination of internationalisation would be associated to entry mode.

> **RQ1.** Do companies follow or associate a different entry mode for different regions/countries? **H1.** The companies will follow or associate different entry modes for different regions.

Considering that the OLI paradigm (Dunning, 2001) is one of the most important theories following the economic approach, this research tried to confirm if this theory could be helpful in explaining the decision to internationalise of the pharmaceutical companies.

> **RQ2.** Can the internationalisation process followed by the companies be explained based on the OLI paradigm? (Dunning, 2001). **H2.** The companies will follow a strategy in line with the OLI paradigm.

Considering that the Uppsala model (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975) is one of the most important theories following the behavioural approach, this study tried to confirm if this theory could be helpful in explaining the decision to internationalise of the pharmaceutical companies.

> **RQ3.** Can the internationalisation process followed by the companies be explained based on the Uppsala model (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975)? **H3.** The companies will follow a strategy in line with the Uppsala model.

The pharmaceutical sector requires a high level of knowledge (due to the strict regulations and requirements). This led to consider the hypothesis that the companies would rely on their network connections in order to reduce the risk of their decisions, in particular the choice of where to internationalise, in line with the network theory (Cunningham and Culligan, 1988).

RQ4. Do the companies tend to internationalise to markets where they have networking connections? **H4.** The companies will tend to internationalise to markets where they have established networks.

Portugal was one of the most affected countries by the global financial crisis in the end of the decade of 2000s. This creates the perfect scenario to study how the companies reacted to this economic downturn and how was their internationalisation strategy affected by it. Moreover, apart from the changes in the internal market, the after-crisis period lead to several changes on the Portuguese companies, namely the export profile (OCDE, 2017). So, it is relevant to understand how did the Great Recession affected the decision of the companies towards the internationalisation.

RQ5. Do the companies decide to internationalise when they are exposed to crisis environment? **H5.** The companies have taken the decision to internationalise (or increase the degree of internationalisation) during the crisis period.

5. The economic structure of the Portuguese pharmaceutical industry and evolution over the last twenty years

The first steps towards development of the Portuguese pharmaceutical industry date back to 1891, with the foundation of the first pharmaceutical company. However, it was only in the middle of 20th century that the sector had a significant growth, with the creation of new regulations and establishment of production units by multinational companies. Later, in the end of 20th century, the pharmaceutical industry went through a difficult period related with the Portuguese membership of the European Economic Community due to a reduction of trade barriers, which resulted in the divestment of multinationals from the production units they had previously established (Apifarma, 2014).

In the 21st century, the sector underwent several changes driven by the growth of established companies and creation of new ones. An important difference in this new era is that, apart from the multinational companies, the local companies started looking at the international market as an opportunity to grow. And the exports of the sector increased a lot as it will be showed below. This new perspective gives the perfect background to identify the drivers that lead to the decisions of "if", "how" and "where to" internationalise.

Before starting the description of the structure of the Portuguese pharmaceutical industry, it is important to define it. The "pharmaceutical companies" are considered as enterprises registered with principal economic activity code as the manufacturing of pharmaceutical base products (211) and the manufacturing of pharmaceutical finished products, which includes medicines and other pharmaceutical products (21201 and 21202). As for the product-basis analysis, "pharmaceutical products" were considered as products classified in the combined nomenclature as medicines (3003 and 3004) and other pharmaceutical products (3001, 3002, 3005 and 3006). The full details of the economic activity code and combined nomenclature is provided in Appendix I.

The sector has 141 companies with 6,752 employees, representing around 0.01% of the total number of companies in Portugal. However, the population employed in the sector represents around 0.18% of the total population employed (TABLE 2). The small number of companies (compared with other sectors) may be explained by the barriers, namely high regulations. The pharmaceutical industry is a very high value-added sector

and much more productive compared with the average. With a relatively low consumption of resources, it fairly contributes to the country's economic prosperity. Based on the number of employees, the pharmaceutical companies have on average 47.8 employees, while the total sectors in Portugal have only 3.1. As for the value added, in 2016, each pharmaceutical company had on average a value added of 3.2 million euros, which is 44 times higher than the average.

TABLE 2 - Characterisation of the Portuguese pharmaceutical industry sector

Year	Sector	Number of companies	Number of employees	Wages of employees	Production	Gross value added
		Number	Number	10^6 euro	10^6 euro	10^6 euro
2016	Total	1,196,102	3,704,740	48,922	226,659	85,410
	Pharmceutical Ind.	141	6,752	217	1,065	441
2015	Total	1,163,082	3,578,913	46,890	220,338	80,548
	Pharmceutical Ind.	134	6,302	203	1,064	444
2014	Total	1,128,258	3,449,428	44,800	215,478	76,131
	Pharmceutical Ind.	131	6,243	200	971	398
2013	Total	1,098,409	3,377,598 *	43,923 *	212,977 *	73,111 *
	Pharmceutical Ind.	127	6,089	190	1,028	413
2012	Total	1,065,173	3,405,269 *	44,872 *	217,166 *	73,126 *
	Pharmceutical Ind.	122	6,098	191	1,107	388
2011	Total	1,113,559	3,631,747 *	48,136 *	232,478 *	79,339 *
	Pharmceutical Ind.	126	6,076	203	1,012	339
2010	Total	1,145,390	3,732,512 *	49,230 *	236,294 *	84,956 *
	Pharmceutical Ind.	127	6,084	211	1,025	364
2009	Total	1,199,843	3,834,544	48,709	225,792	84,227
	Pharmceutical Ind.	130	5,958	195	990	381
2008	Total	1,235,989	3,961,546 ⊥	49,248 ⊥	248,939 ⊥	88,037 ⊥
	Pharmceutical Ind.	135	5,974 ⊥	200 ⊥	970 ⊥	402 ⊥

Legend of symbols:
*: Rectified data
⊥: Break in the series/comparability
Last update on the data: February 8th, 2018

Source: Instituto Nacional de Estatística, the National Statistical Institute of Portugal extracted from http://www.ine.pt in August 8th 2018

According to the definition of the European Commission, the companies can be divided into micro, small, medium-sized and large enterprises. The category of micro, small and medium-sized enterprises (SME) is made up of companies which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro. Within the SME category, a small enterprise is defined as an enterprise which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed 10 million euro. And a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed 2 million euro (European Comission, 2003). Following this definition, from the total number of companies, 110 are micro and small enterprises, 78% of the total, but that are

responsible for only 5% of the total production value. 24 are medium-sized enterprises and represent around 43% of the total production value of this sector. And finally, there are 7 large enterprises (5% of the total), which represent a total production of more than 500 million euros (around 52% of the total sector). Since 2010 the number of companies have been growing (11% increase between 2010 and 2016) with the micro companies being the ones that grew more in number (without an increase in the production value). The biggest increase in the production value happened among the large enterprises (which increased around 60% growth from 2010 to 2016). All the data referred to in this last paragraph can be observed in TABLE 3.

TABLE 3 - Characterisation of the Portuguese pharmaceutical industry sector by size of the companies and production value

Year	Companies (by number of employees and production in €)									
	Total		Less than 10		Between 10 and 49		Between 50 and 249		More than 250	
	No.	10^6 euro	No.	10^6 euro	No.	10^6 euro	No.	10^6 euro	No.	10^6 euro
2016	141	1,065	90	19	20	38	24	456	7	553
2015	134	1,064	86	29	19	46	22	459	7	530
2014	131	971	77	...	24	...	24	472	6	426
2013	127	1,028	76	...	20	...	25	504	6	461
2012	122	1,107	68	24	22	67	26	538	6	478
2011	126	1,012	72	32	21	50	28	587	5	344

Legend of symbols:

...: Confidential data

Last update on the data: February 8th, 2018

Source: Instituto Nacional de Estatística, the National Statistical Institute of Portugal extracted from http://www.ine.pt in August 18th 2018

In terms of the Portuguese economy, the pharmaceutical industry holds a raising position (see TABLE 2, above). Although it represents only 0.18% of the total employed population, it accounts 0.44% of the total wages paid in Portugal (an increase from 0.41% in 2008). It is responsible for 0.47% of the total production value (an increase from 0.39% in 2008) and 0.52% of the gross added value by the Portuguese companies (an increase from 0.46% in 2008). Furthermore, the sector represents more than 2% of the total exports, which clearly shows its raising importance within the national economy (see TABLE 1, Chapter 1).

The Portuguese pharmaceutical industry is also seen as one of the best performing sectors in terms of international activity, particularly exports. The total value of exported pharmaceutical products was, in 2016, 1,066 million euros, which represents an increase

of more than 257% from 2008. This is even more impressive when compared with other Portuguese sectors, since the total exported value increased 61% in the same period. This means that, in 2006, 0.95% of the total Portuguese exports were derived from pharmaceutical products and this value has grown to more than 2.1% in 2016 (TABLE 1).

The increase of traded value was relevant in the intra-EU market. However, the biggest increase was in the extra-EU trade, which represented, in 2016, 40% of total trade value (after achieving a peak of 45% in 2015), a substantial increase from the percentage it represented in 2008 (26%). This is a significant contribution to the diversification of Portuguese exports insofar as the extra-EU only represent 25% of total exports (FIGURE 2).
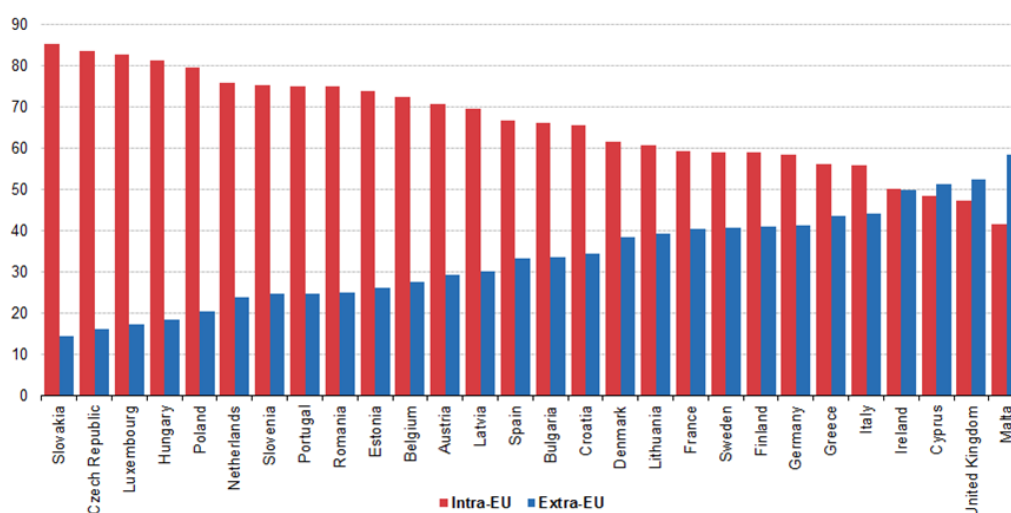
FIGURE 2 - Intra EU exports of goods compared with Extra EU export of goods by Member State, 2016 (share %), *source: Eurostat, Comext table DS-063319*

Summing up, the Portuguese pharmaceutical sector is becoming important to the Portuguese economy and it seems to be very dynamic, considering the several countries to where the companies export to. In that sense, despite being small, the growth that it had over the last years, especially on international trade, makes it the perfect sample for the study of internationalisation strategies.

6. RESEARCH METHOD

The present research was carried out between June 2018 and August 2018. The target group was Portuguese companies with principal economic activity code as the manufacturing of pharmaceutical base products (211) and finished products, including medicines and other products (21201 and 21202) as referred to in the Appendix I. The sample was obtained from an online database (https://iberinform.pt/pesquisa.jspx).

A first screening was done over the total sample to identify companies belonging to the same group[1]. The objective of this step was to avoid sending the questionnaire to the same group of companies more than once. Otherwise the answer would be duplicated and given the small sample size it would impact the results. The sample was comprised of 163 companies and 15 were excluded after this initial screening.

The database was further analysed aiming at removing small and micro companies with reduced production activities. This is important as there are several companies which are only focused on R&D (including spin-offs from universities) or import and export activities that have limited production activities (or do not have at all) and therefore were not the target of the study. The methodology defined was to type the name of each company in an internet search engine (https://www.google.pt) and all the companies which didn't have any type of internet presence (including website or social media page with contact detail) were excluded from the analysis. From this second step 73 entries were excluded. Reducing the final sample to 75 companies which were considered as the target of the study. In order to further explain the scope of the research, the sample was cross-checked with the list of companies that held a *Good Manufacturing Practice license for the manufacturing of pharmaceutical products*, since this permit is essential for the companies to manufacture medicines. There are currently 171 licenses in Portugal (each manufacturing unit represents one license) belonging to 25 companies involved in the manufacturing of medicines. The sample of contacted companies included 20 of those, which represent 80% of the total companies with a permit to manufacture pharmaceutical products in Portugal.

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[1] Group of companies meaning parent and subsidiary corporations that function as a single economic entity through a common source of control.

The method chosen for the research was a quantitative web survey. This gave the opportunity to reach more companies than a qualitative approach, namely case-study analysis. The objective was to replicate the results for the target group of companies and create a general picture of the drivers for the decision of "if", "how" and "where to" internationalise. The survey was designed based on international standards (University of Wisconsin, 2010) and it was available in two languages, Portuguese and English (see Appendix II and Appendix III). The survey was performed using an online platform (https://www.qualtrics.com) and it was optimised for being answered both in desktop, tablet or smartphones.

The questionnaire was sent directly to the CEO, international business development managers or export managers whenever it was possible. And all questionnaires which were not answered within one month were followed with a reminder also sent by e-mail. When a direct e-mail address could not be used, the e-mail was sent to a general address at the attention of the international department. The questionnaire was effectively (without bounce back) sent to 60 companies. And 14 answers were received, with one company mentioning that the economic code was outdated and they no longer had any production activity. So, a total of 13 effective replies were received which represents 17% of the total sample of companies with principal economic activity code as 211, 21201 and 21202 (Appendix I) and 44% of all the companies with a *Good Manufacturing Practice license for the manufacturing of pharmaceutical products*.

7. ANALYSIS AND DISCUSSION OF RESULTS

The purpose of this chapter is to report findings and analyse the data based on the review of the literature along with observations and the conceptual framework provided in Chapter 3.

7.1. Background information of the respondents

The core business of the respondents is presented in FIGURE 3. Among the total answers, 67% of the companies selected generic medicines. Closely followed by the over-the-counter medicines, chosen by 42%. The innovative medicines were selected by 33% and the fast-moving consumer goods (food supplements, nutraceuticals, medical devices and other less regulated products) were selected by 25% of the companies. The cosmetics and services were only selected by one company, making it less relevant in the context of the analysis. And there were no companies involved in the production of veterinary products, medicinal gases and active pharmaceutical ingredients or raw materials.
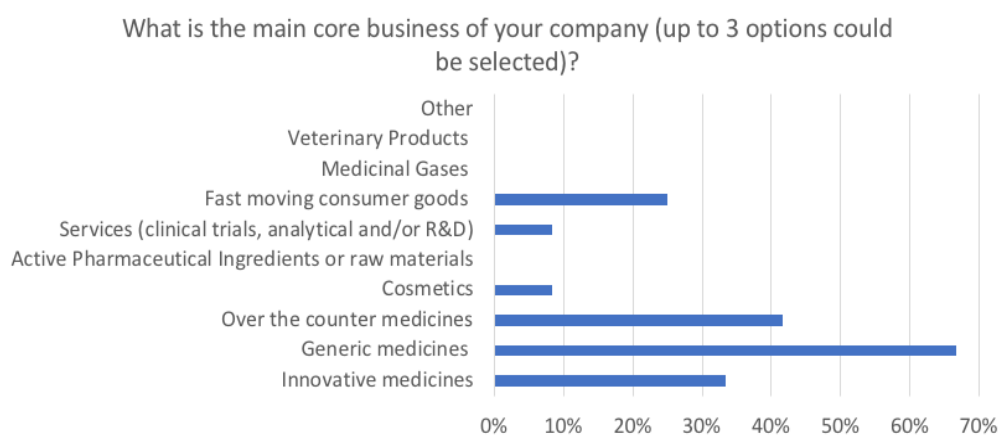
FIGURE 3 - Core business of the respondent companies

In terms of the year of creation, not all companies provided the information (since it was optional on the survey). Moreover, given the small sample size, it was needed to group the answers in order to avoid a possible identification of the respondents. From the total respondents, 60% of the companies were founded before 1989, while 20% started operations between 1990 and 1999 and 20% between 2000 and 2010.

The majority of the companies are classified as large enterprises (European Comission, 2003). Analysing this parameter in terms of the number of employees (TABLE 5), 67% of the companies are classified as large companies (with 25% having more than

500 employees, and 42% between 251 and 500 employees). The percentage of medium-sized companies is 25% and the remaining 8% are small or micro companies. Considering the turnover (TABLE 4), the numbers would be similar, with 58% of the companies being considered large enterprises (33% with a turnover of over 100 million Euros and 25% between 51 and 100 million Euros). 33% medium-sized enterprises (25% with a turnover between 26 and 50 million Euros, and 8% between 11 and 25 million Euros). And again, the remaining 8% falling under the category of micro companies. Making a classification of companies based on both parameters would be interesting, however, given the small size of the sample, and to protect the identity of the respondents, this was not done.

TABLE 4 - Size of the companies in turnover	
Turnover	% of companies
< 1 Million €	8%
1 to 5 Million €	0%
6 to 10 Million €	0%
11 to 25 Million €	8%
26 to 50 Million €	25%
51 to 100 Million €	25%
> 100 Million €	33%

Note: percentages may not total to 100 percent due to rounding.

TABLE 5 - Size of the companies in number of employees	
Number of employees	% of companies
0 to 25	8%
26 to 50	0%
51 to 100	8%
101 to 250	17%
251 to 500	42%
More than 500	25%

Note: percentages may not total to 100 percent due to rounding.

It is important to refer that the profile of the companies that answered the questionnaire does not match the overall general profile of the companies of the sector that can be seen in TABLE 3. In this study, 67% are classified as large enterprises, while in the overall sector only 5% of the companies belong to this category. This may have three explanations. The first is that the data in TABLE 3 is referring to the official data from the Portuguese statistic office and considers each individual fiscal identity a different company, while in the study the whole group was considered. So, several of the companies that answered the questionnaire are actually comprised by smaller companies (under a common source of control).

The second reason for the overrepresentation of large enterprises is related with the small size of the sample. The research was limited to companies having the principal economic activity code as manufacturing of pharmaceutical base and finished products, which are activities requiring a large scale and high level of capital investment (BAK Economics AG, 2017). In that sense, the small and micro companies are probably

unipersonal enterprises (in many cases start-ups focused exclusively on research and development activities or import and export business) with reduced production activities (some of those without even any kind of website or contact that were excluded during the first screening). The third and last reason for this is that probably the bigger companies are more likely to have already established international activities and therefore were more open to answer the questionnaire.

Apart from evaluating the size of companies by their turnover and number of employees, it is also important to make this analysis regarding the importance that these companies have to the domestic market. According to IQVIA data (considered as the reference for market data in the sector) the companies that answered the questionnaire have in total 27% of the market share (in units) in Portugal[2]. This number is relevant considering that the study only covered the enterprises with production in Portugal, while the market has several players (some of those market leaders), which are multinational companies only with a commercial presence. In the sample, 5 of the companies are included in the top 15 of companies in terms of market share, while the others have smaller market share.

7.2. International activities and operating mode

All the companies that answered the questionnaire reported to have some kind of international activity (see FIGURE 4) and 92% have some degree of internationalisation. The licensing out of product/technologies is the most frequent model, selected by 85% of the total companies. The import of active pharmaceutical ingredients was mentioned by 77% and, although it is not considered as an activity contributing towards the internationalisation of the company, it is line with the literature review as it shows how much the companies of the sector are exposed to the global value chains (Dunning and Lundan, 2008).

The higher degrees of internationalisation, including having a manufacturing site in a foreign country or sales facilities outside Portugal, as well as joint ventures and co-developments, were mentioned by a smaller number of companies. And, although the

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[2] This market share is related to the total consumption of pharmaceutical products in Portugal and it also includes all the imported products. It is different from the percentage referred to in Chapter 5 which was related with the total production value.

numbers are similar to what has been observed in other sectors (Forsman et al., 2006), it is an interesting finding, especially due to the fact that the majority of the companies that answered the questionnaire have a large size, which is typically associated with higher internationalisation levels. In that sense, there may be some barriers preventing the companies from developing their activities in foreign countries particularly when it requires foreign direct investment, such as the creation of manufacturing sites. An interesting subject for further investigation can be to identify those reasons as it contributes to help understanding the internationalisation strategies in this sector.

FIGURE 4 - International activities (by model) that companies report to have

In terms of the most relevant destination countries of the international activities (FIGURE 5), Spain, Germany and Angola appear as the main countries, each one mentioned by 45% of the respondents. Regarding the most important country, Angola was mentioned by 31% of the companies (followed by Spain, 23%). This shows that the proximity may have some influence on the decision of where to internationalise, given that Spain is the geographically closest country to Portugal and Angola is an ex-colony and therefore culturally and linguistically close. The trends in terms of destination countries for internationalisation seems to be in line with what has been found in the past for other sectors (Oliveira and Teixeira, 2011).

FIGURE 5 - TOP 5 most important countries for the companies

It is clear that there is a pattern between the operating or entry mode and the country of destination of internationalisation (TABLE 6). Starting with Angola, a less regulated country, 63% of the companies that selected this country aim at the distribution of own brands (direct export). While in more regulated markets such as Spain, Germany, the USA and the UK, the companies are following very heterogeneous business models. In Spain, there is a large number of companies that opened sales office, which may be explained by geographical proximity. While in the USA the companies are following models requiring a high integration with local companies (through licensing out of technologies, co-developments and joint ventures), which is also understandable due to the size and complexity of the country, not only from a regulatory perspective, but also in terms of market access.

The questionnaire was also used to identify changes on the operation model over the time, by asking the companies to refer, for their top 2 countries, what was the business model followed since their entrance on that market and for the following years (2000, 2005, 2010, 2015 and 2017). In the majority of the cases, the companies were following the same operating mode in 2017 that they did in their first year of activity on that country, which shows that there was no change over time. This is a clear sign that the theories of the Uppsala model (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul,

TABLE 6 - Kind of international activity per country

Country	International activity	Total
Spain	Distribution (own brand)	30%
	Sales Office	20%
	Licensing out of your products/technologies	20%
	Manufacturing site	10%
	Co-development of products	10%
	Other	10%
Germany	Licensing out of your products/technologies	33%
	Distribution (own brand)	33%
	Sales Office	11%
	Co-development of products	11%
	Joint venture with local company	11%
Angola	Distribution (own brand)	63%
	Other	13%
	Sales Office	13%
	Licensing out of your products/technologies	13%
USA	Licensing out of your products/technologies	60%
	Co-development of products	20%
	Joint venture with local company	20%
UK	Distribution (own brand)	40%
	Licensing out of your products/technologies	40%
	Sales Office	20%

Note: percentages may not total to 100 percent due to rounding.

1975), which postulated the internationalisation as a dynamic and sequential process, are not able to explain the entry modes followed by the companies in the pharmaceutical sector. These theories indicate that companies would start with a small presence (distribution of own brands, meaning direct exports) and would then increase to the creation of affiliated companies and manufacturing sites. In the pharmaceutical sector,

this seems not to be the case as the operating mode appears to be associated with the region or country and it does not change over time.

Companies were asked to correlate a business model to different countries or regions (TABLE 7), and the result clearly indicates that they associate different entry modes to different regions. This may be a sign that the pharmaceutical companies tend to define their internationalisation strategy, namely the entry mode, not so much on the stage of the company, the products, or their competitive advantages. Rather, they support their decision on different factors, which may be related with the potential of the market and its specificities, such as complexity, potential and facilities of access.

TABLE 7 - Operating mode per region

Region / Operating model	Portuguese speaking African countries	Brazil	Spain	Europe and Australia	Middle East and Africa	North America	Latin America	Asia
Distribution (own brand)	90%	33%	33%	13%	80%	0%	50%	14%
Licensing out	0%	33%	0%	63%	10%	100%	38%	86%
Manufacturing site	0%	0%	0%	0%	0%	0%	0%	0%
Joint venture	0%	33%	0%	0%	0%	0%	0%	0%
Sales office	10%	0%	50%	13%	10%	0%	13%	0%
Import from this country	0%	0%	17%	13%	0%	0%	0%	0%
Co-development	0%	0%	0%	0%	0%	0%	0%	0%

Note: percentages may not total to 100 percent due to rounding.

The less regulated countries, Portuguese speaking African countries, Middle East, Africa and Latin America, are associated with direct exports (distribution of own brand), while more regulated regions, Europe and the USA, seem to be linked with more complex modes, requiring higher integration with the market or the local partners, with licensing being the main model associated to these regions. The only exception to this is the Asian region, where the licensing is also relevant, even though it has several less regulated countries, particularly in the South East. One explanation may be that this is a very heterogeneous region with highly regulated markets, such as Japan (which is considered a stringent regulatory authority in line with the USA and Europe), while other are less regulated markets.

The time it takes for the companies to start developing their international activities has also been studied. On average, companies were operating for 23 years when they started their internationalisation process. However, 20% of the companies that answered

the questionnaire started their international activities in the same year of establishment, and 40% before achieving 10 years of operation. Another interesting detail is that all companies that started the international activities in the same year of foundation were created after 2000, which is in line with the theories of the "born global".

7.3. Internationalisation drivers

In terms of the drivers for the decision of "if", "how" and "where to" internationalise, the first subject to clarify was the strategy followed by the companies in terms of the countries in which they want to operate. The answer was not conclusive, as 54% of the respondents reveal that they concentrate their activities on carefully selected target countries, while 46% reveal that they try to do business in as many countries as possible. Given the small sample size, the difference is not significant and this probably shows that, on this sector, there is neither a clear strategy of market concentration nor market diversification. The results are similar to what has been found in other sectors and countries (Kymen and Pietilä, 2007).

Regarding the reasons influencing the decision of companies to internationalise or not (TABLE 8), the most relevant was "to explore new markets to grow". 54% of the respondents strongly agreed and 38% agreed that this affected their decision to internationalise, which means that the great majority of the companies consider this a relevant driver for their decision to internationalise. The reason for this may be the fact that, as referred above, the Portuguese market is small and, therefore, the pharmaceutical companies try to get scale from the international market, as result of the industry's high capitalisation, workforce with an above-average level of qualifications and a high level of production efficiency (BAK Economics AG, 2017).

TABLE 8 - Factors influencing the decision to internationalise

Do you agree that the following influenced your decision to internationalise?	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
Successful experience from other companies in the internationalization process	15%	23%	31%	31%	0%	0%	0%
To reduce the exposure to the national market	46%	31%	8%	8%	0%	8%	0%
Explore new markets to grow	54%	38%	8%	0%	0%	0%	0%
Governmental measures (inc. national or EU programs)	0%	23%	31%	38%	8%	0%	0%
Contacts received from foreign companies	8%	69%	0%	23%	0%	0%	0%
Reduction of the transaction costs (commissions, taxes, etc.)	0%	8%	15%	54%	8%	15%	0%
Increase the lifecycle of established products in the current markets	15%	38%	8%	31%	8%	0%	0%
Possibility of explore a superior competitive position of rival domestic companies	15%	46%	15%	23%	0%	0%	0%
Take advantage of the location of the destination country	8%	46%	23%	23%	0%	0%	0%
Avoid the knowledge to be shared with third parties (traders, agents, etc.)	0%	8%	31%	46%	0%	15%	0%
Exhibition and networking events	8%	15%	23%	46%	0%	8%	0%

Note: percentages may not total to 100 percent due to rounding.

Another relevant factor was "to reduce the exposure to the national market", with which 77% of the respondents agreed or strongly agreed. This may be related with the fact that Portugal was one of the most affected countries during the Great Recession, which included mandatory price decreases of the medicines implemented by the government. This reduced the profitability of sales in the domestic market and, therefore, promoted the internationalisation of the companies that tried to look for new markets in order to keep growing. This is further confirmed by the answer to the question on how have the financial crisis influenced their willing to internationalise. The same percentage (77%) of the respondents revealed that during this period their willing to internationalise increased, and only 23% revealed that it did not affect, while no company indicated that the crisis negatively affected their decision.

The answers mentioned in the previous paragraphs are aligned with the findings from other researches (Wrona and Trapczyński, 2012) and the new theories of strategic choice (Clark and Mallory, 1997), they show that the companies do not have a rationale or step approach to internationalisation. Rather, they have a decision based on the potential profits that new markets may bring, which can show that they tend to follow a decision based on the profit/risk ratio.

In any case, the results are not totally clear, as topics such as "the possibility of explore a superior competitive position of rival domestic companies" and "take advantage of the location of the destination country" seem also to contribute to the decision to internationalise, but in a smaller degree (TABLE 8). At a certain extent, the traditional theories, namely the economic approach (OLI paradigm), may also be able to explain the internationalisation process of some companies. This could be a major topic for further study as companies with different degrees of internationalisation could potentially follow different strategies.

Also 53% of the respondents agreed or strongly agreed that one of the drivers for internationalisation was the increase of the lifecycle of established products in the current markets, which may be a validation of the IPLC Model. This theory sustains that internationalisation is a process where the entry into new markets will depend on the life stage of the traded products, and that the companies should enter in less developed markets, taking advantage of the advanced stages in the lifecycle of its products in the

native markets (Vernon, 1996). Again, it would be interesting to further study how the type of products affects the decision to internationalise.

The companies were also asked to select the three main factors that influenced their decision of where to internationalise (TABLE 9). And the established network in the country of destination appears as the most relevant factor, selected by 77% of the companies. This is a strong indication that the "network theory" may be relevant in the context of the pharmaceutical industry and that the strategy for internationalisation in this sector is quite often dependent on relationships that the firms are capable of developing with other firms in the destination country. One of the reasons for this strong impact of the relations between companies may be the long, complex and extensive process for sale of a pharmaceutical product in a new country. Consequently, companies focus their efforts on markets where they have already identified a partner in which they can trust.

TABLE 9 - Factors influencing the decision of the destination country of internationalisation

Which of the following most influenced your decision about the **destination** of the international activities?	
Established network in the country of destination	77%
Market size of the country of destination	62%
Regulatory and legal environment in the country of destination	46%
Similar business culture and/or language in the country of destination	31%
Country of destination belongs to the European Union	23%
Country of destination openness to international trade (with little barriers to entrance)	15%
Successful experience from other companies in the same country of destination	8%
International business activities in geographically close countries to the country of destination	8%
Exhibition and networking events	8%
Other	8%
Access to finance (namely credit) in the destination country	0%
None of the above	0%

The market size was also one of the main factors selected by companies. This is not directly associated with any traditional internationalisation theory, however, in combination with regulatory and legal environment (selected by 46% of companies), it indicates that the risk/benefit ratio is taken in consideration when selecting the target countries for internationalisation, in line with other researches (Clark and Mallory, 1997; Wrona and Trapczyński, 2012).

The similar business culture and language was selected by 31% of the respondents, a similar value to what can be observed in the companies that have Spain or Angola as the most important country for their international activities (Chapter 7.2). Spain is geographically close and Angola is culturally and linguistically close, so the results may

indicate that, in some stages, the Uppsala Model may also be useful to understand their internationalisation process (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975). It is clear that the process is not gradual in terms of operating mode, but it seems that, at least in some cases, the companies prefer to start operating in markets that have these characteristics of proximity and gradually start to enter into far away markets.

The impact that the experience of the senior management had and the possible relation with the percentage of international sales of each company were also studied. The results were not conclusive, but it seems that there is no correlation between the two parameters.

7.4. Experiences and perceptions of internationalisation

It is clear that the pharmaceutical companies that answered the questionnaire consider internationalisation as an important part of their business. However, and as already detailed in other chapters, competing in international markets is not effortless. Therefore, the perception of the companies regarding their experience with internationalisation was evaluated in the study.

As it can be seen from the TABLE 10, the perception of the companies about their past experience with internationalisation is very positive, with 62% of the companies referring a very positive experience and the remaining 38% showing a positive experience. Similar results were also observed on the perspective for the next 3 years (TABLE 11) in which just 15% of the companies indicated that the importance of the international activities will be kept, while the remaining 85% of companies forecast their increase. Both cases show that the perception and experience of the pharmaceutical companies in Portugal towards the internationalisation is evaluated as very positive.

TABLE 10 - Perception about the impact of international business activities in the companies

What is your perception about the impact of the international business activities to your company?	
Very positive	62%
Positive	38%
Neutral	0%
Negative	0%
Very negative	0%
The company does not have any experience with internationalisation	0%

Note: percentages may not total to 100 percent due to rounding.

TABLE 11 - Perception about evolution of international business activities in the next 3 years

In your opinion, what will happen to the importance of international business activity for your enterprise within the next 3 years?	
Increases a lot	23%
Increases somewhat	62%
Stays the same	15%
Decreases somewhat	0%
Decreases a lot	0%

Note: percentages may not total to 100 percent due to rounding.

7.5. Discussion of the results

The first question this paper tried to answer was whether the companies follow or associate different entry modes to different regions/countries. The results in the TABLE 6 and TABLE 7 show that H1 is supported as there is a connection between the entry mode of the companies and destination. Regions such as Portuguese speaking African and Middle Eastern countries (less regulated) are clearly associated with distribution of own brands (direct exports), which requires less productive integration with local players. While European countries and the USA are more associated with licensing, joint-ventures and other models insofar as they require higher degrees of cooperation.

The second goal was to assess if the traditional models based on an economic approach, namely the OLI paradigm, can be used to understand the decisions to internationalise followed by the pharmaceutical companies. The H2 seems to be confirmed, although results are not conclusive. The main assumptions can be made based on the data from TABLE 8, where the possibility of exploring a better competitive position of rival domestic companies and taking advantage of the location of the destination country contributed to the decision to internationalise. Although these are no main drivers for the decision, it supports the fact that the advantages considered in the eclectic paradigm (especially ownership and location) are clearly relevant in the context of the pharmaceutical industry.

The behavioural approach to internationalisation, in particular the Uppsala model, seems to apply in a much less extent to the pharmaceutical sector and, therefore, the H3 is more difficult to prove than otherwise. This theory sustains that the companies usually start by operating in new markets through direct exports and then develop on a stepwise basis (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975). As it has been seen before, the pharmaceutical companies seem to select their operation model based on the region/country rather than the stage (H1). Furthermore, most of the companies are operating with the same business model over time, a sign that there is not a clear rational approach for an internationalisation by stages.

However, the application of this theory cannot be fully excluded because the authors also argue that the companies start by operating in nearby markets and only gradually start entering into far away markets. This may be observed in TABLE 9, with 31% of the

companies revelling that similar business culture and language were important on their decision of where to internationalise. And the same may be confirmed by the high percentage of companies selecting countries such as Spain or Angola as the most important country for their international activities. Although it is clear that the process is not gradual in terms of the operating mode, the destination of the internationalisation may be explained by the Uppsala model to some extent.

The results of the TABLE 9 show that the H4 is supported, with 77% of companies selecting the existing network in the target country as a driver for their decision regarding where to internationalise. This is in line with the "network theory" explored in the Chapter 3.2.

The H5 was also supported, given that 77% of the respondents revealed that during the financial crisis their willing to internationalise increased and only 23% revealed that it didn't affect their decision (while no companies mentioned that the crisis reduced their willing). Also, results from TABLE 8 reveal that 77% of the respondents agree or strongly agree that the reduction of exposure to the national market influenced their decision to internationalise, which may also be related with the Great Recession.

8. CONCLUSION

The importance of internationalisation in an increasingly globalised world is apparent for all countries and sectors, with Portugal and the pharmaceutical industry being no exception. It is clear that the specificities of the sector, namely the strict regulations and requirements, make it a very interesting case to be studied in this context. Taking the example of the European Union, where the single market is described as one territory without internal barriers or other regulatory obstacles to the free movement of goods and services, the pharmaceutical sector appears as an exception, where there is always a national registration procedure, which can take a long time and is essential for selling pharmaceutical products in any country. Furthermore, the quality and safety requirements create new challenges for the companies to enter in new markets, which oblige for an extensive knowledge.

This paper has given an overview of the internationalisation process, focusing on the strategies followed by the pharmaceutical companies in Portugal. The results of the quantitative study support the majority of hypotheses developed by the author. In several cases, the internationalisation decision of the companies cannot be explained by a single internationalisation theory, but rather a combination of all.

8.1. Limitations of the study and need for further research

Like any other empirical research, this study is confronted with limitations. Due to the quantitative character of the study, it is affected by a restriction faced also in other studies, which is the existence of a relatively small population to be studied. This limits the availability to perform a more detailed analysis and especially the possibility of performing tests to validate hypotheses with a robust statistic result. Another relevant limitation is the differences found between the profile of the respondents and the profile of all companies of the sector (the reasons for that were explored above).

In terms of the need for further research, this study opens the door for a more detailed analysis on the internationalisation of the sector. Seeking to have a better knowledge of the process some subjects are proposed for further research:

- to analyse the financial data from the companies and compare it with the results from the study in order to verify the link between the perception of the managers towards the several markets and the real exporting performance;

- to identify correlations between the internationalisation theories and the size of company, degree of internationalisation or type of marketed products;

- to study the reasons why so many large companies have decided not to increase their internationalisation degree with foreign direct investment, namely the creation of manufacturing sites abroad;

- to repeat the research, but limited to small and medium-sized enterprises and find if the strategies followed are different.

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APPENDIX I - ECONOMIC ACTIVITY CODE & COMBINED NOMENCLATURE

Economic activity code – detailing

Section C – Manufacturing industry				
Division	**Group**	**Class**	**Subclass**	**Definition**
21.	Manufacturing of pharmaceutical products – base and finished products.			
	211	2110	21100	Manufacturing of pharmaceutical products: base.
	212	2120		Manufacturing of pharmaceutical products: finished.
			21201	Manufacturing of medicines
			21202	Manufacturing of other pharmaceutical products

Adapted from (INE, 2007)

Combined nomenclature

CN code	**Description**
3003	Medicaments (excluding goods of heading 3002, 3005 or 3006) consisting of two or more constituents which have been mixed together for therapeutic or prophylactic uses, not put up in measured doses or in forms or packings for retail sale:
3003 10 00	- Containing penicillins or derivatives thereof, with a penicillanic acid structure, or streptomycins or their derivatives
3003 20 00	- Other, containing antibiotics: - Other, containing hormones or other products of heading 2937
3003 31 00	o Containing insulin
3003 39 00	o Other
	- Other, containing alkaloids or derivatives thereof:
3003 41 00	o Containing ephedrine or its salts
3003 42 00	o Containing pseudoephedrine (INN) or its salts
3003 43 00	o Containing norephedrine or its salts

3003 49 00	o Other
3003 60 00	- Other, containing antimalarial active principles described in Subheading Note 2 to this Chapter
3003 90 00	- Other
3004	Medicaments (excluding goods of heading 3002, 3005 or 3006) consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems) or in forms or packings for retail sale:
3004 10 00	- Containing penicillins or derivatives thereof, with a penicillanic acid structure, or streptomycins or their derivatives
3004 20 00	- Other, containing antibiotics - Other, containing hormones or other products of heading 2937:
3004 31 00	o Containing insulin
3004 32 00	o Containing corticosteroid hormones, their derivatives or structural analogues
3004 39 00	o Other
	- Other, containing alkaloids or derivatives thereof:
3004 41 00	o Containing ephedrine or its salts
3004 42 00	o Containing pseudoephedrine (INN) or its salts
3004 43 00	o Containing norephedrine or its salts
3004 49 00	o Other
3004 50 00	- Other, containing vitamins or other products of heading 2936
3004 60 00	- Other, containing antimalarial active principles described in Subheading Note 2 to the Chapter 30
3004 90 00	- Other

Adapted from (European Comission, 2017)

APPENDIX II - WEB SURVEY QUESTIONS IN ENGLISH

Q1 From a general perspective, what kind of international activities apply to your company? Instructions: - You can choose more than one option.

☐ Distribution (own brand) in foreign countries | ☐ Licensing out of your products/technologies in foreign countries | ☐ Manufacturing sites located in foreign countries | ☐ Joint Venture with companies from foreign countries | ☐ Co-development of products | ☐ Sales office in a foreign country| ☐ Import of raw materials (including active pharmaceutical ingredients) | ☐ No international business activity

Other _____

Skip To: Q8 If From a general perspective, what kind of international activities apply to your company? Instru... = No international business activity

Q2 From all the markets your company currently has international activities, please fulfil the table below for the 5 countries you consider as the most important for your company. Instructions: - Please fulfil the 5 most important countries to your company from left (most important) to right (5th moslt important). - Please complete the country name in the box, and select the activities that you have on the market on the list below (you can choose more than one activity for each market). - In case you have activities in less than 5 countries, please answer for the countries where you have activity. And type N/A in the box of the country name and select Not Applicable on the list of activities.

	Distribution (own brand)	Licensing out of your products/technologies	Manufacturing site	Joint venture with local company	Co-development of products	Sales office	Import from this country	Other	Not applicable
Country 1	☐	☐	☐	☐	☐	☐	☐	☐	☐
Country 2	☐	☐	☐	☐	☐	☐	☐	☐	☐
Country 3	☐	☐	☐	☐	☐	☐	☐	☐	☐
Country 4	☐	☐	☐	☐	☐	☐	☐	☐	☐
Country 5	☐	☐	☐	☐	☐	☐	☐	☐	☐

Q3 For the 2 most important international markets for your company, please mark which activities you had in the below years. Instructions: - You can choose more than one option for each market. - The country name was automatically fulfilled from the previous answer.   - In case you have activities in less than 2 countries, please answer for the country where you have activity.

	Country1: ${Q2/ChoiceTextEntryValue/1}					Country2: ${Q2/ChoiceTextEntryValue/2}				
	2000	2005	2010	2015	2017	2000	2005	2010	2015	2017
Distribution (own brand)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Licensing out of your products/technologies	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Manufacturing site	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Joint venture with local company	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Co-development of products	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Sales office	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Import from this country	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Q4 For the below countries/regions, please indicate in which ones you have any international activity. And which is the main business model followed in those countries/regions: Instructions: - For all regions/countries, please select YES/NO - For all regions/countries you selected YES, please select the main activity from the dropdown list.

	Do you have international activities in this region/country		IF YES, please chose the main model you associate with this region:
	Yes	No	
Portuguese speaking African countries	☐	☐	▼ If yes, drop down
Brazil	☐	☐	▼ If yes, drop down
Spain	☐	☐	▼ If yes, drop down
Middle East and Africa	☐	☐	▼ If yes, drop down
Europe and Australia	☐	☐	▼ If yes, drop down
North America	☐	☐	▼ If yes, drop down
Latin America	☐	☐	▼ If yes, drop down
Asia	☐	☐	▼ If yes, drop down
Other	☐	☐	▼ If yes, drop down

▼Drop down options: Distribution (own brand), Licensing out, Manufacturing site, Joint venture, Sales office, Import from this country, Other, No activity, Co-development.

Q5 Which of the following statements describes your company the best? Instructions:- Please select one of the two options

☐ We concentrate our resources on carefully selected target countries. | ☐ Our purpose is to do business in as many countries as possible.

Q6 Do you agree that the following influenced your **decision to internationalise**? Instructions: - Please select for each sentence if you agree or disagree (use the scale). - Please answer only regarding your decision to internationalise or not.

	Strongly	Agree	Somewhat	Neither agree nor	Somewhat	Disag	Strongly

	agree		agree	disagree	disagree	ree	disagree
Successful experience from other companies in the internationalisation process	☐	☐	☐	☐	☐	☐	☐
To reduce the exposure to the national market	☐	☐	☐	☐	☐	☐	☐
Explore new markets to grow	☐	☐	☐	☐	☐	☐	☐
Governmental measures (inc. national or EU programs)	☐	☐	☐	☐	☐	☐	☐
Contacts received from foreign companies	☐	☐	☐	☐	☐	☐	☐
Reduction of the transaction costs (commissions, taxes, etc.)	☐	☐	☐	☐	☐	☐	☐
Increase the lifecycle of established products in the current markets	☐	☐	☐	☐	☐	☐	☐
Possibility of explore a superior competitive position of rival domestic companies	☐	☐	☐	☐	☐	☐	☐
Take advantage of the location of the destination country	☐	☐	☐	☐	☐	☐	☐
Avoid the knowledge to be shared with third parties (traders, agents, etc.)	☐	☐	☐	☐	☐	☐	☐
Exhibition and networking events	☐	☐	☐	☐	☐	☐	☐

Q7 Which of the following most influenced your decision about the **destination** of the international activities? Instructions: - You can select more than one option (up to a maximum of 3) - Please select all situations that somehow affected your decision of the country of destination of your internationalisation (example, if you have decided to internationalise to Spain because there was another company that had a good experience there, please select "Successful experience from other companies in the same country of destination").

☐ Successful experience from other companies in the same country of destination | ☐ Established network in the country of destination | ☐ Similar business culture and/or language in the country of destination| ☐ Country of destination belongs to the European Union | ☐ Market size of the country of destination | ☐ Regulatory and legal environment in the country of destination | ☐ International business activities in geographically close countries to the country of destination | ☐ Country of destination openness to international trade (with little barriers to entrance) | ☐ Exhibition and networking events | ☐ Access to finance (namely credit) in the destination country | ☐ None of the above | ☐ Other (please specify) _____

Q8 In your opinion, how have the financial crisis (from 2008 – 2013) influenced your willing to internationalise? Instructions: - Please select one of the three options.
☐ Increased my will to internationalise | ☐ Didn't affected at all my will to internationalise | ☐ Reduced my will to internationalise

Q9 In your opinion, what will happen to the importance of international business activity for your enterprise within the next 3 years? Instructions: - Please select one of the five options.

☐ Increases a lot | ☐ Increases somewhat | ☐ Stays the same | ☐ Decreases somewhat | ☐ Decreases a lot

Q10 What is your perception about the impact of the international business activities to your company? Instructions: - Please select one of the 6 options.

☐ Very positive | ☐ Positive | ☐ Neutral | ☐ Negative | ☐ Very negative | ☐ The company does not have any experience with internationalisation

Q11 Does the senior management of your company has international experience? Instructions: - You can select more than one option.

☐ No international experience | ☐ International working experience abroad | ☐ Work experience in international companies in Portugal | ☐ Studied abroad | ☐ Other international experience. Please refer what: _____

Q12 What is the main core business of your company? Instructions: - You can select more than one option (up to a maximum of 3)

☐ Innovative medicines (including value added medicines) | ☐ Generic medicines | ☐ Over the counter medicines | ☐ Cosmetics | ☐ Active Pharmaceutical Ingredients or raw materials | ☐ Services (including clinical trials, analytical and/or R&D) | ☐ Fast moving consumer goods (such as food supplements, nutraceuticals, medical devices and others) | ☐ Medicinal Gases | ☐ Veterinary Products | ☐ Other, please refer which _____

Q13 How many employees you company has? Instructions: - You can select just one option. - In case of a group of companies, please refer to the whole group.

☐ 0 to 25 | ☐ 26 to 50 | ☐ 51 to 100 | ☐ 101 to 250 | ☐ 251 to 500 | ☐ More than 500

Q14 What is the annual turnover of your company? Instructions: - You can select just one option. - In case of a group of companies, please refer to the whole group.

☐ < 1 Million € | ☐ 1 to 5 Million € | ☐ 6 to 10 Million € | ☐ 11 to 25 Million € | ☐ 26 to 50 Million € | ☐ 51 to 100 Million € | ☐ > 100 Million €

Q15 What percentage of the annual turnover referred on the previous question comes from international sales? Instructions: - You can select just one option. - In case of a group of companies, please refer to the whole group.

☐ 0% | ☐ 0% to 10% | ☐ 11% to 25% | ☐ 26% to 50% | ☐ 51% to 75% | ☐ 76% to 100

Q16 Is your company part of a multinational group with headquarters outside Portugal?

☐ Yes | ☐ No | ☐ I don't know or I don't want to answer

Q17 Here are a few background questions regarding you or the company you represent.

In which year your company started to have international business activity? _____

Year of foundation of your company: _____

Your position within the company _____

Q18 Here are a few background questions regarding you or the company you represent. Please note that the below questions won't be used for statistic analysis, the only purpose of those are to validate the data, so we appreciate all information you can provide. ALL answers will always remain anonymous.

Name of the company (optional): _____

Your name (optional) _____

Q19 Would you be interested in receiving the conclusions of this survey? If so, please provide your email address. _____

End of Survey.

APPENDIX III - WEB SURVEY QUESTIONS IN PORTUGUESE

Q1 De uma maneira geral, qual ou quais das↘seguintes atividades se aplicam à sua empresa a nível internacional?

☐ Distribuição das marcas próprias no estrangeiro | ☐ Licenciamento de produtos e/ou tecnologias para outros países | ☐ Fábrica de produção em países estrangeiros | ☐ Joint Venture com empresas estrangeiras | ☐ Co-desenvolvimento de produtos | ☐ Força de vendas (com escritórios e trabalhadores) no estrangeir | ☐ Importação de matérias-primas (incluíndo princípios ativos, API) | ☐ Não temos actividades internacionais | ☐ Outras _____

Skip To: Q8 If From a general perspective, what kind of international activities apply to your company? Instru... = No international business activity

Q2 Considerando todos os países onde a empresa tenha atividade internacional, preencha a tabela seguinte com informação relativamente aos 5 países que considera mais importantes para a sua empresa. Instruções de preenchimento - Por favor coloque os 5 países mais importantes para a sua empresa da esquerda (mais importante) para a direita (o quinto mais importante). - Por favor escreva o nome do país na caixa de texto e selecione as actividades que tem naquele país (pode selecionar mais de uma opção). - No caso de ter atividade em menos de 5↘países, por favor responda para os países onde tem atividade e selecione "não aplicável" para os restantes.

	Distribuição das marcas próprias	Licenciamento de produtos e/ou tecnologias	Fábrica de produção	Joint venture com empresa local	Co-desenvolvimento de produtos	Estrutura de vendas	Importação proveniente deste país	Outros	Não Aplic´vel
País 1	☐	☐	☐	☐	☐	☐	☐	☐	☐
País 2	☐	☐	☐	☐	☐	☐	☐	☐	☐
País 3	☐	☐	☐	☐	☐	☐	☐	☐	☐
País 4	☐	☐	☐	☐	☐	☐	☐	☐	☐

Q3 Para os dois países mais importantes para a sua empresa, por favor indique quais das seguintes atividades tinha em cada um dos anos. - Pode selecionar mais de uma opção para cada país. - O nome do país é automaticamente preenchido de acordo com a sua resposta à questão anterior. No caso de não ter atividade em 2 países, por favor responda para o país onde tem atividade.

	Páis 1: ${Q2/ChoiceTextEntryValue/1}					Páis 2: ${Q2/ChoiceTextEntryValue/2}				
	2000	2005	2010	2015	2017	2000	2005	2010	2015	2017
Distribuição das marcas próprias	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Licenciamento de produtos e/ou tecnologias	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Fábrica de produção	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Joint venture com empresa local	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Co-desenvolvimento de produtos	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Estrutura de vendas	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Importação	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Outros	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Q4 Para cada uma das regiões (em baixo), por favor indique em quais tem algum tipo de actividade internacional e qual é o principal tipo de atividade que tem. Instruções de preenchimento: - Para todos os países/regiões por favor selecione SIM/NÃO; - Para todos os países/regiões em que selecionou SIM, por favor selecione da lista qual o tipo de atividade mais relevante.

	Tem algum tipo de atividade na região/país?		Se SIM, por favor selecione o modelo que associa a esta região:
	Sim	Não	
PALOPS	☐	☐	▼ If "sim", drop down
Brasil	☐	☐	▼ If "sim", drop down
Espanha	☐	☐	▼ If "sim", drop down
Médio Oriente e África	☐	☐	▼ If "sim", drop down
Europa e Austrália	☐	☐	▼ If "sim", drop down
América do Norte	☐	☐	▼ If "sim", drop down
América Latina	☐	☐	▼ If "sim", drop down
Ásia	☐	☐	▼ If "sim", drop down
Outras	☐	☐	▼ If "sim", drop down

▼ Drop down options: Distribuição (marca própria), Licenciamento, Fábrica de produção, Joint Venture, Estrutura de vendas, Importação, Outro, Qual?, Sem atividade, Co-desenvolvimento de produtos

Q5 Qual das seguintes frase melhor descreve o comportamento da sua empresa? Instruções de preenchimento: - Por favor escolha uma das duas opções disponíveis:

☐ Concentramos os nossos esforços em alguns países selecionados.

☐ Tentamos encontrar possibilidades para expansão do nosso negócio em tantos países quanto possível.

Q6 Considera que as seguintes situações influenciaram a sua **decisão de internacionalizar**? Instruções de preenchimento: - Por favor selecione para cada uma das frases se concorda ou discorda (usando a escala); - Por favor responda apenas relativamente à sua decisão de internacionalizar ou não.

	Concordo totalmente	Concordo	Concordo ligeiramente	Nem concordo nem discordo	Discordo ligeiramente	Discordo	Discordo totalmente
Sucesso de outras empresas no processo de internacionalização	☐	☐	☐	☐	☐	☐	☐
Reduzir a exposição ao mercado nacional	☐	☐	☐	☐	☐	☐	☐
Explorar novos mercados para crescer	☐	☐	☐	☐	☐	☐	☐
Medidas	☐	☐	☐	☐	☐	☐	☐

governamentais (incluíndo programas de apoio nacionais e Europeus)							
Contacto recebido por parte de empresas estrangeiras	☐	☐	☐	☐	☐	☐	☐
Reduzir os custos de transação (como comissões, impostos, etc)	☐	☐	☐	☐	☐	☐	☐
Aumentar o ciclo de vida de produtos estabelecidos em novos mercados	☐	☐	☐	☐	☐	☐	☐
Possibilidade de tirar vantagem de uma posição favorável comparando com empresas locais	☐	☐	☐	☐	☐	☐	☐
Tirar vantagem da localização geográfica do país	☐	☐	☐	☐	☐	☐	☐
Evitar partilha de conhecimento (com traders, agentes, etc).	☐	☐	☐	☐	☐	☐	☐
Feiras e eventos de networking	☐	☐	☐	☐	☐	☐	☐

Q7 Quais das seguintes situações mais influenciaram a sua decisão sobre o **destino para internacionalização da sua empresa**? Instruções de preenchimento: - Pode selecionar mais de uma opção (até um máximo de 3). Por favor selecione todas as situações que de alguma maneira influenciaram a sua decisão sobre a escolha do país de destino para internacionalização da sua empresa (exemplo, se decidiu internacionalizar para Espanha porque uma outra empresa teve uma boa experiência lá, por favor selecione "Sucesso de outras empresas no mesmo país de destino").

☐ Sucesso de outras empresas no mesmo país de destino | ☐ Contactos existentes no país de destino | ☐ Cultura de negócio e/ou linguagem semelhante no país de destino | ☐ O facto do país de destino pertencer à União Europeia | ☐ Dimensão do mercado do país de destino | ☐ O ambiente regulamentar e legal do país de destino | ☐ Atividades em países geograficamente próximos ao país de destino | ☐ A abertura do país de destino a negócios internacionais (com baixas barreiras à entrada) | ☐ Feiras e eventos de networking | ☐ Acesso a financiamento (nomeadamente crédito) no país de destino | ☐ Nenhuma das anteriores | ☐ Outra (por favor diga qual/quais)_ _____

Q8 Na sua opinião, de que forma a crise financeira (2008 - 2013) influenciou a sua vontade para internacionalizar? Instruções de preenchimento: - Por favor escolha uma das 3 opções possíveis.

☐ Aumentou a minha vontade para internacionalizar | ☐ Não afetou a minha vontade para internacionalizar | ☐ Reduziu a minha vontade para internacionalizar

Q9 Na sua opinião, como vai variar a importância do negócio internacional para a sua empresa nos próximos 3 anos? Instruções de preenchimento: - Por favor escolha uma das 5 opções possíveis.

☐ Vai aumentar muito | ☐ Vai aumentar | ☐ Vai manter-se igual | ☐ Vai diminuir | ☐ Vai diminuir muito

Q10 Como classifica o impacto que as atividades de negócio internacional tiveram para a sua empresa? Instruções de preenchimento: Por favor escolha uma das 6 opções possíveis.

☐ Muito positivo | ☐ Positivo | ☐ Neutro | ☐ Negativo | ☐ Muito negativo | ☐ A empresa não tem atividades de negócio internacional

Q11 Os quadros superiores da sua empresa têm algum tipo de experiência internacional? Instruções de preenchimento:
- Pode selecionar mais de uma opção.

☐ Não têm experiência internacional | ☐ Têm experiência de trabalho internacional no estrangeiro | ☐ Têm experiência de trabalho em empresas internacionais em Portugal | ☐ Estudaram no estrangeiro | ☐ Outra experiência internacional. Por favor refira qual: _____

Q12 Qual considera ser o principal "core business" da empresa? Instruções de preenchimento – Pode selecionar mais de uma opção (até um máximo de 3):

☐ Medicamentos inovadores (incluindo value added medicines, VAM) | ☐ Medicamentos genéricos | ☐ Produtos de OTC (MNSRM e MNSRM-EF) | ☐ Cosméticos | ☐ Princípio ativo e matérias-primas | ☐ Serviços (incluíndo ensaios clínicos, analíticos e/ou I&D). | ☐ Produtos de grande consumo (incluíndo suplementos alimentares, nutracêuticos, dispositivos médicos e outros) | ☐ Outros, por favor refira quais. | ☐ Gases Medicinais | ☐ Produtos Veterinários | ☐ Outros, por favor refira quais _____

Q13 Quantos funcionários tem a sua empresa? Instruções de preenchimento: Apenas pode selecionar uma opção. - No caso de se tratar de um grupo, por favor refira-se ao total do grupo.

☐ 0 a 25 | ☐ 26 a 50 | ☐ 51 a 100 | ☐ 101 a 250 | ☐ 251 a 500 | ☐ Mais de than 500

Q14 Qual é a faturação anual da sua empresa? Instruções de preenchimento - Apenas pode selecionar uma opção. - No caso de se tratar de um grupo, por favour refira-se ao total do grupo.

☐ < de 1 milhão € | ☐ Entre 1 e 5 milhões € | ☐ Entre 6 e 10 milhões € | ☐ Entre 11 e 25 milhões € | ☐ Entre 26 e 50 milhões € | ☐ Entre 51 e 100 milhões € | ☐ > de 100 milhões €

Q15 Que percentagem da faturação que referiu no ponto anterior tem origem no negócio internacional Instruções de preenchimento - Apenas pode selecionar uma opção. - No caso de se tratar de um grupo, por favor refira-se ao total do grupo.

☐ 0% | ☐ 0% a 10% | ☐ 11% a 25% | ☐ 26% a 50% | ☐ 51% a 75% | ☐ 76% a 100

Q16 A sua empresa faz parte de um grupo multinacional com sede fora de Portugal?

☐ Sim | ☐ Não | ☐ Não sei ou prefiro não responder

Q17 Por último, por favor responda relativamente à sua empresa e a si:

Em que ano a empresa iniciou as atividades de negócio internacional?_____

Em que ano a empresa foi fundada? _____

O seu cargo na empresa _____

Q18 Por último, gostaríamos de pedir informação sobre a sua empresa. Esta informação não será usada para tratamento estatístico, tem como único objetivo permitir a validação dos dados. TODA a informação permanecerá sempre anónima.

Nome da empresa (opcional):_____

O seu nome (opcional): _____

Q19 Está interessado(a) em receber as conclusões deste questionário? Se sim, por favor indique o seu e-mail.

_____

End of Survey.