

MASTER
INTERNATIONAL BUSINESS

Does the Portuguese Economy Benefit from Foreign Direct Investment? Evidence from the Presence of Spanish Multinational Enterprises

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M

2022





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Dissertation
Master in International Business

Supervised by
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2022

Bibliographic note

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Acknowledgments

Firstly, I would like to express my gratitude to my supervisor, Professor Rosa Forte, for all her advice and guidance, time and suggestions that allowed me to execute this work in the best way possible.

To my family, particularly my parents and my brother, for always being by my side, always supporting me and allowing me to accomplish my goals .

To my closest friends, I am grateful for all the encouragement words and always believing in me. In particular, I would like to thank my partner in crime, Catarina, for sharing this journey with me and encouraging one another through it all.

Finally, to Pedro, for his unconditional support and companionship.

To everyone that was part of my journey, on one way or another, my most sincere thanks.

Abstract

According to many sources, Portugal has become one of the most attractive destinations for foreign direct investment (FDI) in the European region, and even though FDI by multinational corporations is one of the most studied topics in international business, the case of Portugal is relatively underexplored. In addition, there has been no consensus in past research on the overall impact of FDI on host countries and, compared to macroeconomic approaches, FDI research based on evidence of the presence of multinational enterprises (MNEs) is scarce.

Considering that Spain is one of the largest investors in Portugal, the objective of this work is to analyze the presence of Spanish MNEs in Portugal, in order to evaluate whether their presence is beneficial to the country's economy, and how the potential benefits are translated into. In order to comprehend to what extent the presence of Spanish MNEs impacts the Portuguese economy, this work focused on a quantitative data analysis. Utilizing firm-level information for the period 2010 to 2020, six variables are studied: number of employees, purchases of raw materials, sales of goods, exports of goods, sales of services and corporate income tax.

While the employment, exports and corporate income tax paid by Spanish firms have showed a positive evolution and, consequently, the impact of these measures have become more accentuated, three of the six variables revealed that the positive impacts have decreased over time which means that their influence has become less significant. Overall, this research concluded that there is a positive impact from the presence of Spanish MNEs in the economy, even though some of the impacts are becoming less significant overtime.

Keywords: Foreign Direct Investment; Multinational Enterprises; Host Country

Resumo

Portugal tornou-se um dos destinos mais atrativos para o investimento direto estrangeiro (IDE) na região europeia e, embora o IDE proveniente de multinacionais seja um dos tópicos mais abordados no comércio internacional, o caso português ainda se encontra relativamente pouco explorado. Para além disso, na literatura existente não existe um consenso no que diz respeito ao impacto geral do IDE nos países recetores e, em comparação com as abordagens macroeconómicas, o estudo de IDE baseada em evidências da presença de empresas multinacionais (MNEs) é relativamente escassa.

Tendo em consideração que Espanha é um dos maiores investidores em Portugal, o objetivo deste trabalho é analisar a presença de MNEs espanholas em Portugal, de forma a avaliar se a sua presença é realmente benéfica para a economia do país, e de que forma os potenciais benefícios se traduzem. Com o objetivo de compreender em que medida a presença de MNEs espanholas impacta a economia portuguesa, o estudo concentra-se numa análise de dados quantitativos. Recorrendo a dados ao nível da empresa para o período de 2010 a 2020, foram analisadas seis variáveis: número de empregados, compras de matérias-primas, vendas de mercadorias, exportações de mercadorias, serviços prestados e imposto sobre o rendimento de pessoas coletivas (IRC).

Embora o emprego, as exportações de mercadorias e o IRC pago pelas MNEs espanholas tenham apresentado uma evolução positiva e, conseqüentemente, o impacto destes indicadores seja mais acentuado nos últimos anos, três das seis variáveis revelaram que os impactos positivos diminuíram ao longo do tempo, o que significa que a sua influência foi-se tornando menos significativa. Em geral, este estudo concluiu que se verifica um impacto positivo da presença das MNEs espanholas na economia portuguesa, embora alguns dos impactos estejam a tornar-se menos significativos ao longo do tempo.

Palavras-chave: Investimento Direto Estrangeiro; Empresas Multinacionais; País Recetor

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Acronyms

CEEC: Central and Eastern European countries

CAE-Rev. 3: Economic Activities Classification System, Revision 3

FDI: Foreign Direct Investment

GDP: Gross Domestic Product

M&As: Mergers and Acquisitions

MNCs: Multinational Corporations

MNEs: Multinational Enterprises

NUTS: Nomenclature of Territorial Units for Statistical Purposes

OECD: Organization for Economic Co-operation and Development

UNCTAD: United Nations Conference on Trade and Development

1. Introduction

Foreign Direct Investment (FDI) is considered one of the main factors in the economic structure of several economies worldwide, having an impact on the host country at different levels, such as economic growth and development. When it comes to analyzing FDI carried out by multinational enterprises (MNEs), it is often assumed almost as a guarantee that the presence of foreign enterprises generates positive effects to the host country and domestic firms, due to the fact that foreign-owned firms usually have higher performance levels (Narula & Pineli, 2019). However, there are also negative impacts that need to be recognized.

Even though FDI is considered one of the most studied topics in international business (Paul & Feliciano-Cestero, 2021), there have been no consensus when it comes to FDI's overall effects on host countries. For example, Blomström (1986), Amighini and Sanfilippo (2014) and Zhang (2017) concluded that FDI's impacts on the host country are positive. Authors such as Haddad and Harrison (1993) and Jin et al. (2017) say the contrary, while others were not able to reach a conclusion. For instance, Damijan et al. (2013) findings suggested that the FDI's overall effects are uncertain as spillovers from foreign firms substantially depend on the absorptive capacity and productivity level of local firms. Moreover, Pandya and Sisombat (2017) affirmed the absence of direct effects of FDI on economic indicators, so there was no clear evidence to either a positive or negative impact on host country economy overall. These different conclusions, not only show the lack of consensus in the previous literature but also that even though there are several potential benefits from foreign-owned firms' activity on the recipient country, there are also potential costs.

In addition, analysis of FDI's impacts adopting a microeconomic approach, more specifically, based on evidence concerning the presence of MNEs, is relatively under-explored, when compared to a macroeconomic approach based on global FDI flows. In the case of Portugal, the lack of research is even more accentuated. In fact, when it comes to the Portuguese economy, over the last few decades, Portugal has become increasingly attractive to foreign investment and the presence of MNEs has become more and more noticeable. As reported by the EY Attractiveness Survey Portugal 2021, in 2020 Portugal rose to the tenth position of Europe's Top 10 countries for foreign investment (Ernst & Young, 2021). In the same survey, when analyzing the geographic origin of this investment,

Spain was placed in the second and third positions as one of the largest investors in the Portuguese economy, depending on the region analyzed. In addition, according to SABI - Bureau van Dijk, a database that provides firm-level information of Portuguese and Spanish companies, the number of Spanish affiliates in Portugal rose from 802 in 2010 to 1 483 in 2020, representing a growth of 85% of the presence of Spanish MNE in only 10 years.

In this sense, and considering the growing importance of the subject, in particular for the Portuguese economy, it is relevant to deepen the analysis of the impacts of the presence of foreign firms on the recipient country. Since Spain is one of the largest investors in Portugal, the objective of this work is to analyze the presence of Spanish MNEs in the Portuguese economy, evaluating whether this presence is beneficial to the country's economy, and how the potential benefits are translated into. In other words, this paper intends to understand how the Spanish multinationals operating in Portugal impact the national and regional economy in which they operate.

MNEs may impact the host country economy through several channels, such as impact on employment, trade flows (exports and imports), and knowledge transfer (Apostolov, 2016). In this way, we perform a quantitative analysis that takes these channels into consideration, studying how the activity of Spanish MNEs impacts the Portuguese economy and what are their potential impacts, in order to conclude if Portugal truly benefits from their presence and to what extent. Considering that the number of Spanish MNEs keeps growing consistently, and that the Portuguese government keeps making a priority to maintain the commercial relationship between the two countries (Ribeiro, 2019), we expect to conclude that the impacts resulted by the activity of the Spanish MNEs are mainly positive, which would suggest that Portugal ultimately benefits from this investment.

This dissertation is structured in the following way. In chapter 2, we review the relevant literature dividing it into two distinctive parts: main concepts and the impacts of FDI on the host country. In chapter 3, we perform an analysis on the evolution of FDI in Portugal. In chapter 4, we present the methodology of the study, as well as the characterization of the sample, followed by the presentation and discussion of the results obtained in chapter 5. Finally, in chapter 6 we present the main conclusions of this work, as well as its limitations and suggestions for future research.

2. Literature Review

In this chapter, we begin by clarifying the main concepts considered relevant to comprehend the subject of this work, such as the concept of FDI, including modes of establishment, components of FDI, types of foreign subsidiaries, MNEs and its characteristics (Section 2.1). Then, we focus the literature review specifically on what previous authors have concluded on FDI's impacts and effects that result of the presence of MNEs in the host country's economy, and its mechanisms, theoretically and empirically (Section 2.2).

2.1 Main Concepts

An international capital transaction can take the form of foreign direct investment, portfolio investment and economic grants and loans (Chayawisan, 2015), in which the first is considered the most important (Moghadam et al., 2019). According to the Organization for Economic Co-operation and Development (OECD), "Foreign Direct Investment reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor." (OECD, 2008, p.10). The lasting interest indicates the existence of a long-term commitment between the investor and the enterprise, while maintaining a significant level of influence on the management, which requires an ownership of at least 10% of the voting power (OECD, 2008). Furthermore, it is important to underline that foreign investment can be carried out by both individuals and business entities.

According to the United Nations Conference on Trade and Development (UNCTAD), FDI comprises three components: equity capital, reinvested earnings, and intra-company loans (UNCTAD, 2005). Firstly, equity capital is the foreign direct investor's acquisition of shares of a company placed in another country than his own. Reinvested earnings contemplate the direct investor's share of profits, not distributed as dividend by the affiliates or remitted to the direct investor, that is reinvested. Finally, intra-company loans refer to short- or long-term borrowing and lending of funds between the parent enterprises and the affiliates.

When a firm performs FDI it becomes a multinational enterprise, also known as MNEs or multinational corporations (MNCs). MNEs can be defined as enterprises that produce or

deliver services in more than one country (Eurostat, 2019). Additionally, “a multinational enterprise has its management headquarters in one (or rarely more than one) country, the home country, while also operating in other countries, the host countries.” (Eurostat, 2019, p. 272). MNEs are composed by the parent enterprises (the headquarters) and their foreign affiliates. On one hand, a parent enterprise is defined as “the firm that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital stake” (UNCTAD, 2005, p. 297). On the other hand, a foreign affiliate is a firm in which an investor, residing in another economy, owns an equity stake that establishes a lasting interest in the management of that enterprise (an equity stake of at least 10%) (UNCTAD, 2005). When referring to foreign affiliates, we can be referring to subsidiary enterprises, associate enterprises, and branches. Briefly, a subsidiary implicates an ownership of more than a half of the shareholder’s voting power, an associate when the foreign investor owns a total of at least 10%, but not more than half, of the shareholders’ voting power, and a branch is a wholly or jointly owned unincorporated enterprise in the host country (UNCTAD, 2005).

As reported above, foreign affiliates can be categorized in terms of control (and voting power). Both methods of establishing the foreign venture, mergers and acquisitions (M&As) and greenfield investments defined below, can be used by firms to create a wholly owned subsidiary or a joint venture with a partner that typically contributes with complementary resources and skills (Dikova & Brouthers, 2016). The decision between the two is made on whether the entity is willing to share the ownership of such an affiliate with one or more parties, creating an equity joint venture, or to maintain full ownership by a wholly owned subsidiary (López-Duarte & Vidal-Suárez, 2013). A joint venture is characterized by the share of all resources between the parties involved, which includes advantages such as the share of operational costs, and investment as well as share of management decisions, information, and knowledge in order to create value, which may expose the firms to disadvantages such as partners conflict and opportunism (Lu & Keung, 2019), for instance. In contrast, in a wholly owned subsidiary the firm has the maximum level of control and the most potential to provide above-average returns (John-Mariadoss, 2018). However, besides being a more complex and costly process, in a wholly owned subsidiary, the firm assumes all the risks, which includes different risks categories such as financial, currency, economic, and political (John-Mariadoss, 2018).

As mentioned above a multinational firm can establish an equity interest in a foreign entity in two distinctive modes: i) by acquiring that interest in an already existing organization, which represents a change in the organization's ownership, usually called M&As, or ii) by establishment a new greenfield venture, which implicates the creation of a new business entity (Dikova & Brouthers, 2016). "Both M&As and greenfield investments are high-control, high-commitment and high-risk strategies for entering new markets" (Alon et al., 2020, p. 2), that are costly to reverse (Dikova & Brouthers, 2016). The choice between the two methods of establishment is not only one of the most important decisions in the foreign direct investor's strategy (Alon et al., 2020), since this choice impacts the subsidiary's performance, but also crucial to the host country since the effects on the country's economic growth varies depending on the mode of establishment (Zhuang, 2012). For instance, Eren and Zhuang (2015, p. 17) findings indicate that "M&As and greenfield investment have different effects on the country's economic growth and that these growth effects depend on the availability of absorptive capacities of the recipient countries". We will dive into more detail about this subject in the following section.

2.2 Impacts of MNEs presence on the host country

2.2.1 Theoretical Review

FDI has an impact in the host country, as well as in the home country (Baldwin & Lipsey, 2002). Nevertheless, in this work the focus is on the impact on the host country. As stated by Apostolov (2016), the most notable changes in the host country's development resulting from the increased presence of foreign-owned enterprises are related to "transfer of technology to domestic companies, knowledge transfer, increased labor force productivity and decreased unemployment, increased exports due to rectified competitive characteristics of companies" (Apostolov, 2016, p.2).

Ghoshal and Bartlett (1990) stated that a foreign-owned enterprise consists in an interorganizational structure that establishes relationships with its external network, including the economic agents such as customers, distributors, suppliers, government, among others. In other words, by establishing operations in a foreign economy, multinational firms are integrating themselves into the host economy network by the creation of linkages. These linkages can be either, horizontal – linkages created with fellow competitors and/or alliance partners – and vertical – linkages formed with economic agents at different levels of the

value chain (Giroud & Scott-Kennel, 2009). Furthermore, vertical linkages can be divided into backward and forward linkages. On the one hand, backward linkages are the relationships established by the firm and its suppliers; on the other hand, the relationships between the firm and its buyers and distributors are defined as forward linkages (Giroud & Scott-Kennel, 2009).

As a matter of fact, the activity of MNEs can impact the recipient country both in a direct and/or indirect manner through several mechanisms (Pelinescu & Radulescu, 2009). Firstly, by establishing its operations in the host country, the MNEs will interact with the domestic market through the production facilities created, as well as by hiring national workers, for instance. Secondly, since the foreign affiliate is part of the MNE's value chain, which includes the global value chain of the parent firm and the value chain in the host economy, the firm will establish both backward and forward - vertical - linkages, as mentioned above. These linkages are one of the most valuable mechanisms through which the foreign affiliates can impact the host economy. Regarding backward linkages, the foreign-owned firm can stimulate and improve the supplier's production with higher demand of products and/or services (Pelinescu & Radulescu, 2009). On the other hand, by establishing forward linkages the firm provides more efficient and higher quality products and/or services, which also constitutes a channel for technology and knowledge transfers, for instance (Pelinescu & Radulescu, 2009).

Additionally, there are other indirect effects to consider. First, the spillovers effects registered on domestic firms can be either positive or negative. Positive since domestic firms can benefit from the pressure that arises with the higher efficiency of the foreign-owned firms in the sense that it can encourage domestic firms to operate more efficiently and introduce new technologies earlier than they would otherwise (Pelinescu & Radulescu, 2009). Consequently, a higher efficiency and the introducing of new technologies will improve their performance and productivity. However, the presence of MNEs can result in a negative effect on domestic firms due to the fact that it can also cause a loss of market share on the local firm's behalf since, generally, foreign firms have wider access to superior techniques and higher performance levels (Narula & Pineli, 2019). Second, due to the entry of capital and the potential increase in employment and income, the presence of MNEs may have a multiplier effect on the recipient country's economy, while simultaneously, the potential

crowding out¹ of domestic firms might have the reversed effect (Pelinescu & Radulescu, 2009).

Third, another indicator that provides evidence when it comes to indirect effects from horizontal linkages are exports. Both domestic and foreign-owned firms can be exporting firms, however since foreign subsidiaries usually have a better understanding of foreign markets, due to their higher experience on operating in such markets, and are integrated into the parent-firm network, the costs that an exporting behavior implicates are usually lower in foreign-owned firms when compared to the local firm's costs in exporting (Greenaway et al., 2004). These costs include transports, marketing, and infrastructures costs, along with costs in studying external markets in order to determine the demand and preferences of foreign customers and also formulating an exporting plan, for example. In this sense, foreign affiliates have an easier access to this type of information through their global value chain, while local firms must work a little bit harder while supporting higher costs to access this information. In this context, it is expected that foreign owned firms are more export-oriented than domestic firms. However, export spillovers are considered a mechanism through which domestic firms can learn from the export behavior of foreign affiliates in the recipient country and take advantage of this spillovers to boost their activity in foreign markets through their integration in such markets (Greenaway et al., 2004).

Moreover, as mentioned in the previous section, the mode of establishment chosen by the multinational firm is one of the various factors that will have an impact on the significance of the direct/indirect and positive/negative effects of FDI/foreign presence on the host country. The decision between M&As or greenfield investment will highly influence the level of impact transmitted to the host country economy, not only on the performance of the enterprise itself, but most importantly in indicators such as the employment and income inequality (Alon et al., 2020; Jude & Silaghi, 2016; Zhuang & Griffith, 2013). In fact, the effect of foreign direct investment on host country's employment strongly varies according to the mode of establishment chosen. As reported by Jude and Silaghi (2016), when foreign enterprises choose to enter the host country through M&As, this mode of establishment usually comes hand in hand with a restructuring of the firm. This phenomenon comes from the fact that foreign-owned firms are associated with higher

¹ The transfer of market share from less productive to more productive firms is named the crowding-out effect (Pham, 2016).

efficiency and automated production lines when compared to domestic firms, which often result in job losses (Jude & Silaghi, 2016). In the same study, it became clear that greenfield investments may also lead to some job losses in domestic firms, due to the competition effect. However, in the long run, while a M&A stabilizes its effects on the employment, it is anticipated that a greenfield investment will continue its process of job creation “by extending its activities and by nourishing linkages with domestic companies” (Jude & Silaghi, 2016, p. 13).

According to Simões et al. (2002), the level of integration of linkages within the host countries' value chain is highly correlated to characteristics of the organizational framework of the foreign affiliate such as the level of control and autonomy from the headquarters. In fact, “when subsidiaries have a strong local anchoring, both in terms of inputs and outputs, they may be able to increase their autonomy” (Simões et al., 2002, p. 15). Autonomy in a foreign subsidiary context is connected to the headquarters-subsidiary relationship, more specifically is to what extent the strategic decision-making process is made without the interference of the headquarters (Geleilate et al., 2020; Young & Tavares, 2004). That being said, according to Young and Tavares (2004, p. 12), “MNE strategies of global or regional integration will constrain autonomy in subsidiaries; conversely, national responsiveness is associated with greater autonomy”, which means that these characteristics will highly influence the degree of transmission of the effects that result of the linkages between the MNEs and the domestic firms, including competitors, alliance partners, suppliers, customers and distributors.

The effects of the activity of MNEs will highly depend on their integration in the local economy and, obviously, also on the performance of the subsidiary. According to Geleilate et al. (2020, p. 2), subsidiary autonomy enables the firms “to develop, deploy, and revise capabilities and strategies that support the creation of competitive advantages”. The previous research mentioned consisted in reviewing and analyzing a large portion of previous literature about the subsidiary autonomy correlation to subsidiary performance. Thus, when a subsidiary can execute the strategic decision-making process autonomously - in order to identify essential environmental local determinants such as market demand or local business practices - it establishes and deploys resource allocation and capabilities adequately to deal with these determinants and maximize its performance (Geleilate et al., 2020). These authors argued that a significant number of previous studies, concluded that the autonomy of the

subsidiary will impact positively the foreign-owned affiliate performance. For example, on one hand, there were studies that concluded that autonomy has a positive effect on performance (Geleilate et al., 2020), and on the other hand, others confirmed that the autonomy of the subsidiary also results in a positive impact on profit and growth (Geleilate et al., 2020). When associating subsidiary autonomy with subsidiary performance, and since subsidiary performance is correlated to the company's profits and growth, we can suggest that subsidiary performance will influence the effect on the host country economy by variables such as taxes. This indicates that when subsidiaries have higher levels of profit, it can result in higher revenue for the host government by the higher amount of taxes paid, if there is not any shifting² or repatriation of these profits (Amendolagine et al., 2021; Cooper & Nguyen 2020). In this sense, foreign-owned firms' characteristics, such as how autonomous the decision-making process is, can indirectly impact the influence that the firm has in the host economy.

Hanousek et al. (2011) stressed that transitioning European markets began to benefit from FDI not only by the inflow of capital but also the international experience and know-how that FDI brought, and the integration into international production and trade networks that the FDI has stimulated. This study analyzed 21 papers that looked over direct effects as well as spillovers in transition European markets. It was observed that most of the empirical research on direct impact of FDI concluded that the presence of foreign affiliates is associated with better host country performance. Even though the authors considered the timing of FDI a factor that should be taken into consideration, when time effects of FDI were analyzed, they were able to observe a dissipation of the initial effect of the foreign firms over time, since studies with a longer time interval of data tend to present significantly smaller effects of foreign presence and spillovers. In the same study, Hanousek et al. (2011) findings suggested a significant but negative forward spillovers effects while backward spillovers effects were positive and significant. These findings were extremely important, since they imply that domestic local firms in transition economies "experience efficiency gains if they supply industries with a higher share of foreign firms or if foreign firms sell to them" (Hanousek et al., 2011, p. 20).

In addition, it is important to highlight that the impact of FDI on export growth of the

² MNEs can shift their profits or income from a country with a higher tax fee to countries that have a lower tax fee in order to minimize these costs (Cooper & Nguyen, 2020).

host country may take place directly and indirectly. The fact that MNEs contribute to the national production through the production of their affiliates in the host country and export the final products to foreign markets constitutes the direct effects of FDI on export growth (Goswami & Saikia, 2012; Zhang, 2005). Goswami and Saikia (2012) examined the relationship between FDI and exports in India. The authors suggest that there is bi-directional causality between the two variables, FDI and export growth, in the host economy. Their findings indicate that FDI led to export growth and, consequently, export-led growth further encouraged the flows of FDI. Moreover, Zhang (2005) examined the relationship of FDI and export performance but in China. The author findings suggested that FDI has had a positive impact on China's export performance, and the export-promoting effect was much greater than that of domestic capital.

On a different note, Forte and Moura (2013) study aimed to analyze the existing theoretical and empirical literature that focus on analyzing FDI's impacts on the host country's economic growth, specifically. The authors begin to mention that FDI can impact the economic growth in a positive and/or negative manner, through mechanisms such as "the transfer of new technologies and know-how, formation of the human resources, integration into the global economy, increased competition in the host country, and firms' development and restructuring" (Forte & Moura, 2013, p. 6). After analyzing a significant number of previous studies to identify if the impact of FDI on this economic indicator is in some way correlated to the domestic conditions, including the absorptive capacity of domestic firms, and characteristics such as development degree, or the political system, the authors suggest that even though these impacts can be positive, they are dependent on the conditions of the domestic market and the investment itself. In addition, it is mentioned that local institutions and authorities can act and play a significant role in creating the desirable conditions to maximize and take advantage of the benefits of the presence of FDI, while minimizing the costs.

In this sense, it is important to highlight that there are several conditions and decisions that will impact the level of effects on the host country. In fact, Zhang (2001) affirmed that FDI impacts are highly dependent on country-specific characteristic since in countries with a liberalized trade system, that focus on improving educational and human capital conditions, simultaneously maintaining economic stability are more likely to receive FDI that ultimately contributes to economic growth and development.

To sum up, the studies analyzed allow to conclude that the impact of the presence of MNEs on a host economy occur through different mechanisms, including both direct and indirect mechanisms, as represented in Table 1. This work highlights the capital inflow as well as the employment when it comes to mechanisms that allow direct impacts in the recipient economy, since we consider that these are the two main variables easily observed when comparing data at firm-level in a period of time. Regarding the indirect impacts, we can highlight the linkages created within the foreign affiliates value chain and their industry, as the mechanisms that provide a channel through which MNEs can influence the local industry.

Table 1: Impact of MNE's presence on host country's economy - main mechanisms

	Type of effect	Mechanism	Possible effects	
Multinational Enterprises	Direct	Capital Inflow	Improved performance; Higher profits lead to higher revenue of government taxes; Export growth	
		Employment	Creation/destruction of jobs	
	Indirect	Horizontal Linkages	Improved performance and productivity; Loss of market share by domestic firms; Export growth	
		Vertical Linkages	Forward	Technology and knowledge transfers
			Backward	Production stimulation

Source: Own elaboration

2.2.2 Review of empirical studies

After reviewing the theoretical studies, it is also important to review the empirical literature on the subject. In order to identify and analyze previous studies, we resorted to bibliographic databases, such as Science Direct, Scopus and Web of Science, as our main literature sources. To find literature of interest to our topic of research, the keywords used were mainly: foreign direct investment, FDI, multinational enterprises, MNEs, direct and indirect effects, impact on host country, employment, exports, and linkages. Resorting to these keywords, we were able to identify a large number of studies on direct and indirect impacts of foreign investment. However, most of the studies had a macroeconomic nature, focusing on macroeconomic variables and global FDI data. The number of studies following a microeconomic approach and resorting to quantitative data analysis as the methodology is much scarcer.

In this sense, initially we were looking for literature that analyze the effects of FDI based on firm-level data. Moreover, taking the findings mentioned above into consideration, the empirical studies that are discussed were selected based on the variables analyzed in the study, such as the creation of linkages in the host country and employment for instance, since these are variables that are analyzed in this work. In this way, we will discuss five studies that analyzed the presence of MNEs on the host country and its impacts, resorting to two different methodologies in order to process firm-level data. In Table 2, we present the studies selected and their main characteristics.

Table 2: Synthesis of empirical studies on the presence of MNEs on host country

Study (year)	Period	Sample	Region	Methodology	Observations
McDermott (1979)	1974	51 firms	Scotland	Survey	Focus on one single industry, Electronics; Different short- and long-term effects
Djankov and Hoekman (2000)	1992 - 1996	513 firms	Czech Republic	Econometric estimation functions	The study divided the analysis between wholly owned subsidiaries and joint ventures firms
Damijan et al (2013)	1995 - 2005	90.000 firms	10 Emerging European countries	Econometric estimation model	The results highly depend on local firms' heterogeneity factors, such as absorptive capacity, size, productivity, and technology levels
Brancu and Bibu (2014)	—	62 firms	Romania	Survey	The survey reached specifically French companies located in Romania
Jude and Silaghi (2016)	1995 - 2012	20 countries	Central and Eastern Europe	Econometric estimation model	Different short- and long-term effects

Source: Own elaboration

McDermott (1979) argued that the short- and long-term effects of foreign investment are fairly different and can also be measured differently. In the short-term, it can be measured in terms of job creation, so for instance, when a multinational enterprise enters a foreign economy through capital inflow, the effects can be measured by the number of new job places it creates and/or destroys. On the other hand, in the long-term it can be assessed first by looking at the nature of local foreign affiliates, particularly by their relationship with and similarity to the domestic firms (McDermott, 1979). In this context, the effects that arise from the linkages created with the local and regional economy by the foreign-owned firms, are more evident when measured in the long run. The author highlights that when the presence of MNEs has a positive impact on the host economy, it is anticipated that their presence will contribute to the development and, consequently, growth of the domestic firms in factors such as the introduction of technological innovations, superior know-how, among other factors.

The growth of the multinational firms has a significant multiplier effect on the recipient country that is expected to forge connections with local economic agents, particularly for the purchase of services, components, and raw materials (McDermott, 1979). With the intention of studying the influence of foreign-owned firms in one single industry, the electronics industry in Scotland, McDermott (1979) formulated some hypotheses correlated to the vertical linkages, namely sales and purchasing linkages.

The author begins by claiming that the transactions made by the enterprise to the domestic or external markets reveals their degree of integration within the local industry, the stability of their operations as well as their contribution to the host economy (McDermott, 1979). In this regard, the results observed related to purchases confirmed low levels of integration of the foreign enterprises in the local economy, since the majority of the direct input by MNEs came from economies outside of Scotland. In contrast, the sales linkages confirmed that local firms tend to resort to multinational firms, with more than two-thirds of the total output by MNEs going towards British customers. These findings lead to believe that when it comes to sales and purchases of components and services, the effect of the presence of foreign-owned firms on the recipient economy is not very significant.

Additionally, it was considered that “input and output linkages indicate that overseas firms operate more or less independently of the local supply and sales environments, although this independence is by no means complete” (McDermott, 1979, p. 18). Although the higher dependency of local enterprises and the local networks being more unstable, there is some evidence of sales and purchases that can be taken from these linkages. Despite being significantly less integrated into the Scottish industrial economy, MNEs are expected to outlast and outperform the domestic counterparts in the long run, since domestic firms have an apparent incapacity to create strong market networks beyond Scotland.

In sum, the results obtained by McDermott (1979) indicated that in the Scottish electronics industry, the positive effects transmitted through vertical linkages on the host economy development were minor. There were no significant purchasing ties between multinationals and Scottish suppliers, even though domestic firms were highly dependent on local market opportunities, which lead to conclude that “while the multinationals were an important element in the environment of indigenous firms, the converse was apparently not true” (McDermott, 1979, p.19). In other words, the research indicates that while regarding the direct inputs, multinationals do not rely on the local economy firms, domestic players tend to fall back on MNEs. Since most of the foreign outputs were purchased by local firms, it can lead to believe that there is some dependency of domestic firms on foreign players, which could represent a potential mechanism of knowledge and technological transfer through forward linkages. This represents a great example that even though it is expected that a multinational firm integrates its business in the local economy, that is not always the case, and the effects obtained by forward and backward linkages can reveal themselves irrelevant to the development and growth of the host economy as a whole.

Djankov and Hoekman (2000) focused on investigating the impact on the productivity of firms in Czech Republic, concentrating the study on foreign affiliates that received FDI from the headquarters, wholly owned subsidiaries, and joint ventures firms. The findings of these authors revealed a positive impact on the productivity growth of foreign affiliates that receive FDI, while also supporting the fact that foreign investors tend to invest in companies with above-average productivity, and transfer technology and know-how to foreign affiliates. There was a greater positive impact verified on total factor productivity in affiliate firms in the Czech Republic than in joint ventures, suggesting that parent firms transferred more know-how to wholly owned subsidiaries than joint-venture firms got from their partners. In

fact, when comparing the benefits from joint ventures and wholly owned subsidiaries, it was observed that the benefits were higher when the investment resulted on a wholly owned subsidiary, which contributes to reinforce the fact that the degree of foreign influence on the management (control and voting power) will influence the degree of the impact on the host country economy.

Damijan et al. (2013) presented a comparative study over the importance of direct technology transfer and spillovers via FDI, by controlling firm heterogeneity. This paper was able to control various sources of firm heterogeneity when accounting for different effects of FDI on firm performance, which allowed to conclude that variables such as absorptive capacity, size, productivity and technology levels, variables that contribute to firm heterogeneity, affect the results. Analyzing firm-level information, including more than 90 000 firms in ten transition countries (Bulgaria, Czech Republic, Croatia, Estonia, Latvia, Lithuania, Poland, Romania, Slovenia and Ukraine), the findings suggested that direct effects of FDI on firm performance are positive, even though, they were only positive effects in four out of the ten economies considered and there are no horizontal spillovers unless the absorptive capacity of the firm was controlled. In addition, positive horizontal spillover effects were evenly distributed across firm size categories (small, medium and large), while negative horizontal spillovers effects tended to affect more frequently the smaller firms. Furthermore, positive horizontal spillovers were more frequently observed in firms with moderate or high productivity and high absorptive capacity, while negative horizontal spillovers were more likely to affect firms with low to moderate productivity.

In addition, Damijan et al. (2013) also observed that even though vertical spillovers were less frequent than horizontal spillovers, when observed, smaller and more productive firms were more likely to benefit from positive vertical spillovers, while larger and less productive firms were more likely to suffer from negative vertical spillovers. In this sense, the authors suggested that the importance of horizontal spillovers had become higher over the decade of 1995-2005 and predicted that this importance could continue to grow overcoming the importance of vertical spillovers over time. These results show that both the direct effects of foreign ownership and the spillovers effects of foreign firms are significantly dependent on the absorptive capacity and productivity levels of domestic firms. Moreover, these results suggest that foreign presence may also have greater effects on small firms than on large firms.

Jude and Silaghi (2016) focused on host country's employment effect of FDI, more specifically considering Central and Eastern European countries (CEEC) as host countries. The authors argued that foreign investment may contribute to creative destruction in that region. More specifically, they concluded that even though there is an initial negative impact on employment, the gradual vertical integration of foreign subsidiaries into the local economy tends to induce a positive impact in the long run. The initial negative impact registered came from the fact that half of the FDI flows registered in CEEC during the 90s were the result of M&As. In resemblance, Brancu and Bibu (2014) intended to analyze the impact of MNEs on employment focusing on only one economy, Romania. With a sample of 62 French multinationals in Romania, through a survey it was confirmed that there was both a creation and destruction of jobs: 67,7% of the firms stated they contributed to creation of employment since their establishment in Romanian territory, against 14,5% that affirmed that they had reduced the number of employees.

As mentioned previously, the impacts, especially when regarding employment, are influenced by factors such as the establishment mode chosen by the multinational enterprise to implement its activity in the recipient country. Brancu and Bibu (2014) included three variables in their research: mode of establishment, strategy and size of the company, and analyzed how these variables can impact the host country employment. Focusing on the mode of establishment, and comparing firms established by greenfield investment and M&As, it was possible to confirm that the entry through greenfield investment has a higher and positive impact on the host country employment than the entry through a M&A: 76,3% of firms established through greenfield investment created jobs against 68,4% of firms established by M&As. Moreover, while only 7,9% of greenfield investments destroyed jobs positions, 31,5% of M&As contributed to the reduction of employees (Brancu & Bibu, 2014). Furthermore, the short-term effect was the same as the one stated by Jude and Silaghi (2016): 40% of the French multinationals that entered Romania by acquiring a pre-existing enterprise thought privatization, reduced their number of employees. This means that, initially, M&As have a negative impact on employment contributing to job destruction due to the fact that MNEs tend to restructure the organization of the firm in order to improve their efficiency and revenue.

To sum up, the empirical studies analyzed confirm the lack of consensus in the existent literature on the impacts from FDI and the presence of foreign-owned firms on the

host economy. When there is a positive impact on the host economy, it is anticipated that the presence of MNEs will contribute to the development and, consequently, growth of domestic firms through factors such as the introduction of technological processes, superior know-how and others. However, as showed in some of the studies, the impacts are not always significant and can reveal themselves irrelevant to the development and growth of the host country's economy.

3. FDI in Portugal

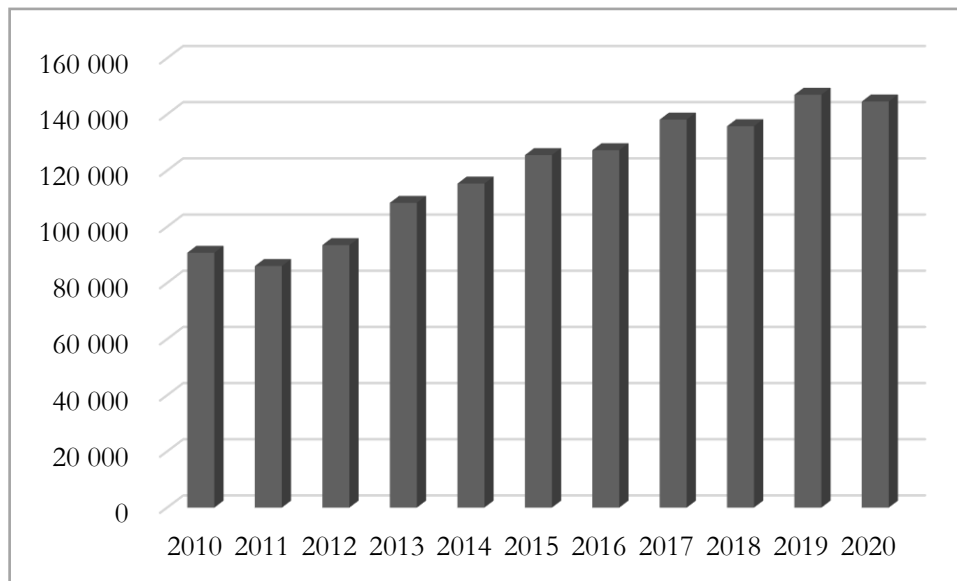
In this chapter, we start by discussing the evolution of inward FDI (stocks and inflows) in Portugal as a whole (Section 3.1) and then we focus particularly on the Spanish FDI throughout the years (Section 3.2).

3.1 Evolution of FDI in Portugal

Portugal has been a target of foreign investment for many years and in the recent years it has become attractive to investors since it represents an opportunity of potential growth for foreign enterprises. To analyze data regarding FDI, we resorted to the statistics database of Bank of Portugal, BPstat, a database that provides statistical information on the Portuguese economy and the euro zone. This database provides inward FDI statistics in different dimensions, which includes FDI stocks and FDI inflows. FDI stocks refer to the amounts of assets or liabilities held by economic agents at a given moment in time, which in this case will quantify the assets or liabilities held by a foreign economic agent at a given moment in time in Portugal. On the other hand, FDI inflows corresponds to values resulting from transactions carried out between economic agents during a determined period of time, which in this case, will be the values resulted from FDI inflows in Portugal (BPstat, 2022).

To analyze the total FDI throughout the years and understand the amount and influence of foreign capital in Portugal at a given point in time, we will be considering FDI stocks. Figure 1 represents Portugal's FDI stocks evolution between 2010 and 2020. In 2010 Portugal registered an FDI stock of 90 734 million euros and in 2020 this indicator grew almost 60%, registering a total FDI stock of 144 584 million euros. As evidenced in the figure, the growth of FDI stocks in Portugal has been relatively consistent. In some years there is a slight decrease however, overall, the growth has been consistent.

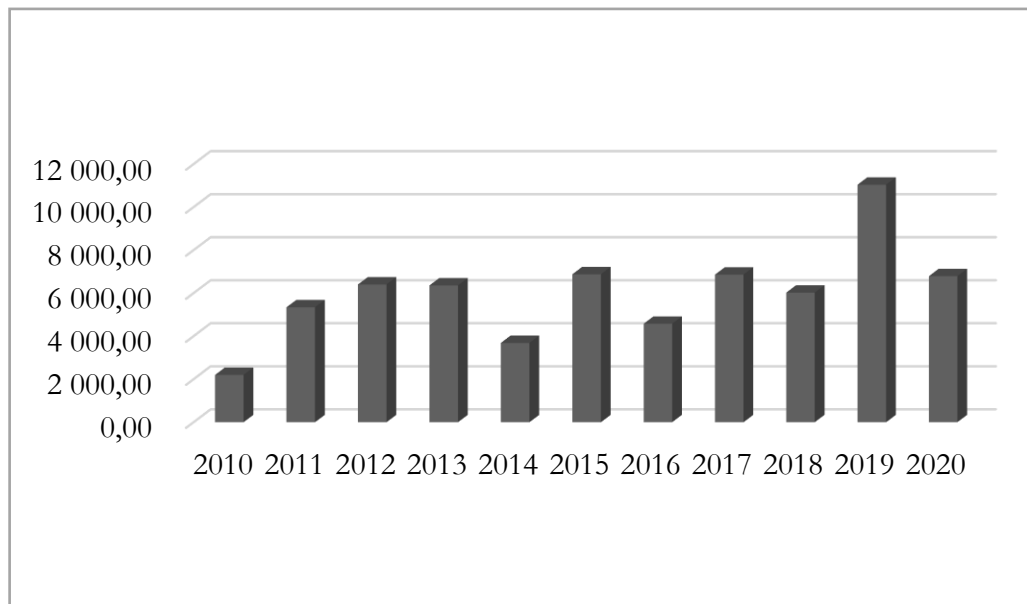
Figure 1: Evolution of FDI stocks (million euros)



Source: Own elaboration based on data from BPstat

To analyze the total FDI throughout the years and understand the amount and influence of transactions carried out between Portugal and foreign markets, we will be considering FDI inflows. Figure 2 represents the evolution of FDI inflows in Portugal in the last decade. As evidenced in Figure 2, Portugal received approximately 2 200 million euros of FDI in 2010 and 6 790 million euros in 2020, thus revealing a marked growth of 200%, approximately. However, this growth has not been consistent or stable, since through the years it is possible to identify a fluctuation in these values. For instance, in 2014 there was a significant drop of 42% of FDI inflows. According to UNCTAD (2015), global FDI inflows declined in 2014, mainly due to the fragility of the global economy, policy uncertainty for investors and higher geopolitical risks. This fact may also explain the drop of FDI inflows in Portugal in that year. In addition, in 2020 the total of FDI inflows in Portugal decrease almost 40%, which matches what happened in the global economy. According to UNCTAD (2021), the global inflows of FDI decreased significantly, which may be explained by the health crisis experienced in 2020. In fact, in the beginning of 2020, the world was severely hit by the COVID-19 pandemic, which impacted every economic agent and consequently may have impacted the investment decisions of investors explaining the variations in the FDI inflows. Portugal was not an exception and it is estimated that the Portuguese economy suffered extensive damage in its economic activity, which may justify the sudden and significant decreased in the FDI inflows.

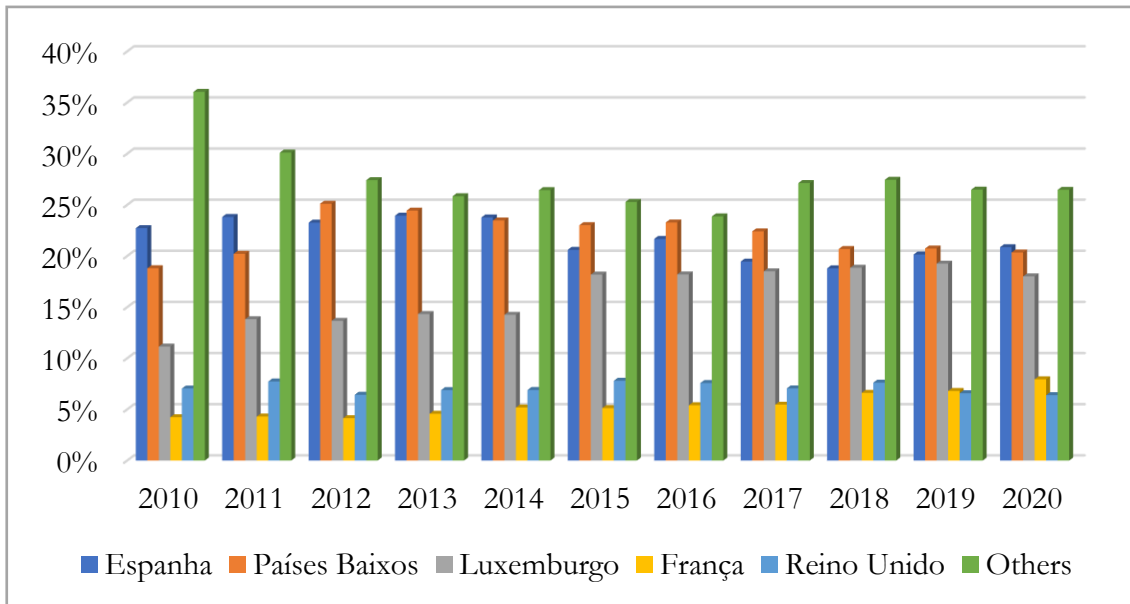
Figure 2: Evolution of FDI inflows (million euros)



Source: Own elaboration based on data from BPstat

When analyzing the evolution of FDI in Portugal, it is also important to identify which countries are predominant when it comes to the origin of the investment. As of March of 2022, date where the data was extracted from the BPstat database, the top five investors in Portugal during 2010 and 2020, considering FDI stocks, did not alter overtime and is constituted by Spain, The Netherlands, Luxembourg, France, and The United Kingdom. As represented in Figure 3, these five countries remain the top five investors throughout 2010 and 2020, and the only change verified was between Spain and The Netherlands that alternate between the first and second positions. In 2010, these countries accounted for, approximately, 64% of the total assets and liabilities in Portugal. By contrast, in 2020, they accounted for, approximately, 73% of the foreign assets and liabilities in Portugal of that year. These numbers represent and suggest that foreign assets and liabilities in Portugal are concentrated in a small number of countries and the concentration is increasing overtime. In this way, given the strong concentration of inward FDI in a small number of investor countries, a significant change in the investment by one of these countries will also have a greater impact on the Portuguese economy.

Figure 3: Evolution of the Top 5 investors in Portugal (% of the total FDI stocks)



Source: Own elaboration based on data from BPstat

3.2 Evolution of Spanish FDI in Portugal

As mentioned above, one of the countries that contributed to the increased foreign investment verified over the years in Portugal, in fact the country that has contributed the most, is Spain. According to the Portuguese Ministry of Foreign Affairs, the two countries have established bilateral relations based on the geographical proximity between them, which contributed to deepen the relationship, resulting in Spain being Portugal's main trading partner (Ministry of Foreign Affairs, 2022).

Spain leads the top foreign investors in Portugal, and investment from Spanish investors represented 23% of the total FDI stocks of Portugal in 2010. Throughout the years Spain continued to represent around 19% to 24% of the total FDI stocks in Portugal, maintaining a stable contribution to this measure. Looking at the last year of our analysis, 2020, the percentage decreased to 21% (see Table 3). However, when looking at the total amount of assets and liabilities held by a Spanish agent in the time period as a whole, we can see that the total amount of assets and liabilities actually rose around 46% between 2010 and 2020. This evolution is presented in Table 3.

Table 3: Evolution and representativeness of Spanish FDI stocks (million euros) in Portugal

Year	Total FDI stocks	Spanish FDI stocks	%
2010	90 734	20 619	23%
2011	86 013	20 485	24%
2012	93 451	21 740	23%
2013	108 512	25 976	24%
2014	115 366	27 419	24%
2015	125 515	25 861	21%
2016	127 260	27 579	22%
2017	138 152	26 871	19%
2018	135 806	25 516	19%
2019	146 993	29 612	20%
2020	144 584	30 163	21%

Source: Own elaboration based on data from BPstat

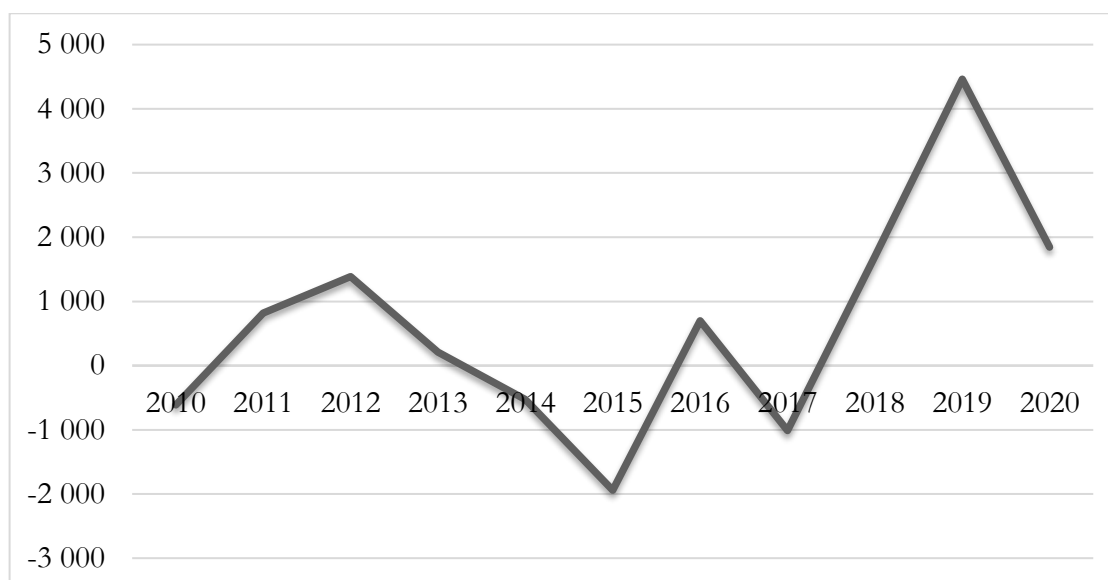
In contrast, analyzing the total FDI inflows in Figure 4, in 2010 it was registered a negative FDI coming from Spain of 615 million euros, which means that in that year the Spanish affiliates withdrew capital to their home country. The withdraw of capital to the home country may be explained by the fact that at that period, the countries were still recovering from the economic crises of 2008 and 2009. However, that was not an isolate event since the same was verified in 2014, 2015 and 2017. In the three years prior to 2014, the Portuguese economy continued to feel the effects of the economic crisis of 2008, contracting again due to the sovereign debt crisis in the Eurozone. As a member of the Eurozone, Portugal resorted to foreign aid, that lead to the entry of troika³ in Portugal. 2014 was the year of exit of the troika, and although the recovery initiated in that year, the recovery started in an extremely slow pace and only in 2018 the economy started to show a significant recovery, overcoming the two consecutive crises it faced (Varzim & Leão, 2021). On one hand, these events can explain the negative FDI registered in 2014, 2015 and 2017 and why Spain withdrew capital to the home country. On the other hand, the negative FDI can also

³Troika represents the alliance between the International Monetary Fund, the European Central Bank, and the European Commission, who come together to manage an entity or to complete a mission. In Portugal, troika was responsible for the negotiation and control of the commitments assumed by the government in order to receive the international financial aid requested in April 2011 (Economias, 2016).

be related to the repatriation of profits. As mentioned in the literature review, FDI can be divided in three components. One of these components is the reinvestment of earnings, where an investor reinvests the profits on the affiliate placed in the host country and accounts for FDI. However, the investor may not reinvest the profit of the subsidiary and instead transfer the foreign-earned profits or financial assets back to its home country which is considered repatriation of profits.

Looking at the most recent year of our study, namely 2020, the Bank of Portugal registered a total FDI inflows from Spain of 1 844 million euros, representing 27% out of all transactions that took place between Portugal and foreign markets. However, the FDI inflows registered in 2019 were a total of 4 462 million euros and represented 40% of the total FDI inflows in that year. This represents a clear decrease of the FDI inflows between Portugal and Spain between 2019 and 2020, more specifically, a decrease of 60% in that period. The decrease of 60% of the inflows is no surprise since the total FDI inflows in Portugal decreased approximately 40% in the same period. As mentioned above, the contraction of foreign investment in 2020 may have happened due to the COVID-19 health crises that affected all the economies worldwide.

Figure 4: Evolution of FDI inflows from Spain (million euros)



Source: Own elaboration based on data from BPstat

4. Methodology

In the present chapter, we present and define the methodology utilized, as well the variables and source of the data collected to the analysis performed (Section 4.1). In addition, we perform a brief characterization of the sample considering different dimensions (Section 4.2).

4.1 Definition of methodology, variables, and source of data

For the propose of understanding to what extent the presence of Spanish MNEs impact the Portuguese economy, this work focuses on a quantitative data analysis. A quantitative data analysis can be defined as the analysis of a sample of numerical data (Jansen & Warren, 2020). Through this type of analysis is possible to observe the relationship among different variables, while simultaneously observe their evolution. In this sense, “quantitative methods involve the processes of collecting, analyzing, interpreting, and writing the results of a study.” (Creswell, 2008, p. 17).

Based on the literature review, we conclude that MNEs’ impact on host economy occurs, for instance, through the creation of horizontal and vertical linkages (Damijan et al., 2013; McDermott, 1979) as well as the creation/destruction of jobs (Alon et al., 2020; Jude & Silaghi, 2016). In this way, our aim is to analyze variables that provide an accurate evaluation on the creation of employment and integration in the local economy regarding purchases of raw materials, in the case of manufacturing firms, and external services, in services firms, for example. Thus, the present work analyzes the following key variables: number of employees, purchases in the host economy, purchases in foreign markets (imports), sales in the host country and sales to foreign markets (exports). We also compare the panel data to national data in order to comprehend the representation and influence of Spanish MNEs in the domestic economy. Lastly, we analyze the amount of corporate income tax paid by the Spanish enterprises at the end of each civil year, to deepen our analysis when it comes to the direct impact by the payment of taxes. Although these variables are extracted for each company in the sample, they are analyzed as a whole.

All firm-data was retrieved from SABI - Bureau van Dijk, a database that provides firm-level information of Portuguese and Spanish companies with a history of collection financial measures up to 25 years. Taking into consideration that this database allows the selection of

firm-level information including the ownership of each firm, more specifically the percentage and nationality of the main shareholder, we limited the data regarding these criteria. In other words, to select Spanish affiliates in Portugal, we limited the results of the search regarding foreign firms that operate in Portugal with, at least, a 50% ownership from Spanish shareholders. Even though the definition of FDI suggests that when there is at least a 10% foreign ownership in the voting power it is considered that there is a lasting interest between the investor and the enterprise, during the collection of data, we adopted the 50% threshold of ownership. We applied that criteria since we consider that to be a significant share of the firm to comprehend more accurately the Spanish influence on the subsidiary management, and consequently, its influence in the host economy. Considering the small number of Spanish affiliates in Portugal and several missing values of the variables extracted during the earliest years, the time period analyzed was restricted between 2010 and 2020.

4.2 Characterization of the sample

The data was retrieved from SABI in July of 2022 and as mentioned previously, was limited to Spanish MNEs that operate in Portugal with, at least, a 50% ownership of the affiliate firm. This search allowed to obtain a panel data of 1 495 private Spanish companies. However, 12 companies were founded in 2021 and considering that the period of time observed is 2010-2020, these companies were not included in the analysis. In this sense, the panel data considered in the analysis comprises 1 483 companies. It is important to highlight that this is the number of firms registered in this specific database, which means that the number can fluctuate between different data sources. The sample can be categorized by different dimensions, such as the year of firm's foundation, firm's size, activity sector, region located, percentage of ownership and its status, active or inactive.

As demonstrated in Table 4, the earliest registry of a Spanish subsidiary in Portugal is in 1864. However, between that year and the first half of the 20th century, only 14 new Spanish subsidiaries were created in Portugal. After 1950, the entrance of Spanish firms started to be more noticeable with 327 companies being constituted until 1999, which represent around 22% of the sample. Between 2000 and 2009, 429 Spanish subsidiaries were constituted in Portugal, which represents 29% of the sample. This indicates that almost half of the sample, more specifically 48%, was founded in the last decade, which matches the period that is considered in the analysis (2010-2020).

Table 4: Sample divided by foundation date period

Foundation date	Number of firms	%
1864-1899	5	0,3%
1900-1949	9	0,6%
1950-1999	327	22,0%
2000-2009	429	28,9%
2010-2020	713	48,1%
Total	1483	100,0%

Source: Own elaboration based on data from SABI

When it comes to firm's size, enterprises can be categorized as micro, small, medium, or large enterprises. According to Statistics Portugal, one of the criteria that allows this characterization is the number of employees. An enterprise with ten or less employees is considered a micro enterprise, with more than ten but less than fifty employees is considered a small enterprise, with at least fifty but less than two hundred and fifty employees is considered a medium enterprise (Statistics Portugal, 2022). On the other hand, an enterprise that has at least two hundred and fifty employees is considered a large enterprise. As the number of firms and their number of employees varies overtime, we performed the analysis of firm's size in 2010 and 2020 in order to compare the evolution in this dimension (see Table 5).

As reported below in chapter 5, there are several missing values regarding the variables considered in the analysis. Despite that, in 2010, 51% of the sample did provide information regarding the number of employees which accounts for 756 firms. There were 478 microenterprises that represent 32% of the Spanish MNEs, 175 small enterprises that represent 12% of the firms, and 78 medium enterprises and 25 large enterprises, which represent 5% and 2% of the firms, respectively. By contrast, in 2020, we had information for 1 294 firms and there were 906 micro enterprises with a representation of 61% of the sample, 247 small enterprises that account for 17% of the firms, and 108 medium enterprises and 33 large enterprises, which represent 7% and 2% of the firms, respectively. In sum, there was an increase in the number of firms in all categories, however, there is a clear growth in the number of micro enterprises.

Table 5: Sample divided by firm's size

Firm's size	Number of firms in 2010	%	Number of firms in 2020	%
Micro	478	32%	906	61%
Small	175	12%	247	17%
Medium	78	5%	108	7%
Large	25	2%	33	2%
N.A	727	49%	189	13%
Total	1483	100%	1483	100%

Source: Own elaboration based on data from SABI

Relating to the activity sector, we performed an analysis resorting to the Portuguese Economic Activities Classification System, Revision 3, abbreviated as CAE-Rev. 3, with two digits, elaborated by Statistics Portugal. The two-digit CAE-Rev. 3 divides the Portuguese economic activities based on 4 different criteria: the technological process, the nature of the raw material, the output and the service provided (Statistics Portugal, 2007). The division based on these criteria results in 88 different economic activities, in which companies can be categorized in.

The Spanish affiliates included in the sample are distributed among 68 different economic activities out of the 88 existing ones in the system. Considering that the firms are extremely scattered regarding this dimension, it is important to highlight the top five economic activities where the Spanish affiliates in Portugal are operating in. As presented in Table 6, about 19% of the firms in the sample operate in sector 46 (Wholesale (includes agents), except of motor vehicles and motorcycles), being the sector that leads the ranking. This sector is followed by sector 68 (Real estate activities) with a representation of 10%, sector 01 (Agriculture, animal production, hunting and related service activities) with 8%, and sectors 35 and 47 (Electricity, gas, steam, hot and cold water and cold air, and the retail trade, except of motor vehicles and motorcycles, respectively) with 5% of the sample each.

Table 6: Sample divided by economic activity

Two-digit CAE Rev. 3	Number of firms	%
46 - Wholesale (includes agents), except of motor vehicles and motorcycles	281	19%
68 – Real estate activities	147	10%
01 - Agriculture, animal production, hunting and related service activities	116	8%
35 - Electricity, gas, steam, hot and cold water and cold air	73	5%
47 - Retail trade, except of motor vehicles and motorcycles	71	5%
Others	795	53%
Total	1483	100%

Source: Own elaboration based on data from SABI

When it comes to the fourth dimension, we performed an analysis based on the hierarchical system that divides a territory into regions, the Nomenclature of Territorial Units for Statistical Purposes (NUTS). NUTS was created by Eurostat in the 1970s, with the aim of harmonizing statistics from different countries in terms of collecting, compiling, and disseminating regional statistics (PORDATA, 2022). The nomenclature is divided into 3 levels (NUTS I, NUTS II, NUTS III), according to population, administrative and geographical criteria, and in Portugal there are 25 NUTS III, 7 NUTS II and 3 NUTS I (PORDATA, 2022). Taking the NUTS II into consideration and looking at Table 7, it is clear that the Spanish firms are concentrated in two regions: Lisbon and the Tejo Valley and the North of Portugal. There are 753 companies in Lisbon and Tejo Valley and 377 in the North of Portugal, which represent 51% and 25% of the sample, respectively. Together these two regions account for 76% of all the Spanish subsidiaries in Portugal. The remaining 24% are located throughout the center of Portugal (8%), Alentejo (11%), Algarve (2%), and the autonomous regions of Madeira and Azores (2% and 1%, respectively).

Table 7: Sample divided by NUTS II

NUTS II	Number of firms	%
Alentejo	166	11%
Algarve	35	2%
Centre of Portugal	115	8%
Lisbon and Tejo Valley	753	51%
North of Portugal	377	25%
Autonomous Region of Madeira	29	2%
Autonomous Region of Azores	8	1%
Total	1483	100%

Source: Own elaboration based on data from SABI

All firms in the sample present an ownership percentage of Spanish shareholders of at least 50% since that was the criteria used for extracting the data, which means that all firms present a foreign ownership between 50% and 100%. Despite that, we intended to characterize the sample in more detail regarding this dimension, however, over 50% of the firms did not provide this information. The left 45% of the sample presented an ownership of 100%. In this way, the lack of information does not allow us to comprehend in full extent the dimension of ownership percentage and its influence on the results obtained, which means that it will not be considered in the analysis.

Regarding the firm's status, the analysis lays on how many companies are currently active and the ones that are currently inactive. Briefly, an active firm can be defined as a firm in which activity and transactions take place, generating a return, and on the other hand, an inactive firm is defined as a firm that is completely inoperative, so there are no transaction or activities occurring (Craig, 2013). As represented in Table 8, with 2% of the companies (35 companies) present in the sample being inactive and 17% (248 companies) being temporally inactive, a total of 81% of the companies (1200 companies) are currently active in terms of operations. Even though there is a considerable number of companies within the sample inactive and temporally inactive, they will be considered in the study since at a given point in time they may have had a contribution to the variables analyzed, which means that they may have contributed to the effects of FDI in the host economy.

Table 8: Sample divided by status

Status	Number of firms	%
Active	1200	81%
Inactive	35	2%
Temporarily inactive	248	17%
Total	1483	100%

Source: Own elaboration based on data from SABI

Finally, in Table 9 we present the representation of the sample when compared to the number of enterprises operating in Portugal. After extracting the data from Statistic Portugal, we decided to look into more detail when it comes to the representation by economic activity, focusing on the top five economic activities of the Spanish firms. In 2020, there were a total of 1 301 000 firms operating in Portugal. Since the sample in our study comprises only 1 483 of these firms, the sample accounts for a very small part of the firms operating in Portugal, since, as a whole, it comprises only 0,11% of the firms.

Table 9: Representativeness of the sample in Portugal by economic activity

Two-digit CAE Rev. 3	Number of Spanish MNEs	Number of Firms in Portugal	%
46 - Wholesale (includes agents), except of motor vehicles and motorcycles	281	59 047	0,48%
68 – Real estate activities	147	51 940	0,28%
01 - Agriculture, animal production, hunting and related service activities	116	114 343	0,10%
35 - Electricity, gas, steam, hot and cold water and cold air	73	4 890	1,49%
47 - Retail trade, except of motor vehicles and motorcycles	71	124 427	0,06%
Others	795	946 353	0,08%
Total	1483	1 301 000	0,11%

Source: Own elaboration based on data from SABI and Statistics Portugal

However, according to Statistics Portugal, in 2020 there were 9 530 firms operating in Portugal which ownership is at least 50% from foreign investors, and Spain accounted for 20% of the total foreign presence (Statistics Portugal, 2021). Now looking at the sample, there are 1 483 Spanish firms which account for 16% of the total foreign presence in Portugal. This difference may be related to the fact that we are comparing data from two different sources and also related to the criteria utilized on the extracting of the data. We were not able to analyze the representation by economic activity as done above since Statistics Portugal provided the information of the foreign affiliates with a different dimension. Thus, we can conclude that, in the present work, the sample has a significant representation of the Spanish presence in Portugal that allows the analysis of how the Spanish MNEs impact the Portuguese economy.

5. Results and Discussion

In the following sections, the results are presented, analyzed, and discussed.

5.1 Results

The aim of this work lays on understanding if the Spanish enterprises ultimately have an impact on the Portuguese economy and how the impact is reflected on the host economy. In order to analyze the impact on the host economy we analyzed six variables related to direct and indirect impacts of foreign presence: number of employees, purchases of raw materials, sales of goods, exports of goods, sales of services and corporate income tax. When it comes to purchases of raw materials, sales of goods and sales of services, in order to comprehend the integration of the Spanish subsidiaries into the local economy, namely the vertical - forward and backward – linkages, and their influence in the host economy, we analyze the distribution of these variables between the domestic and foreign markets. This distribution emphasizes the amount of imports (purchases made in foreign markets) and exports (sales to the foreign markets).

Mainly due to the fact that almost half of the firms present in the sample were established in Portugal during the period of time selected (2010-2020), there is a lot of data not available in the beginning of the time period and overtime the data available increases significantly. Since there are several values not available in the data extracted relating to the six variables for the 1 483 Spanish firms, we present the number of missing values by year in Table 10. Even though this can lead to overestimate the results, is important to highlight that this does not bias the results since when there is not a value it simply is not quantified and does not contribute to the results and conclusions.

Table 10: Number of missing values by year

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of employees	727	697	659	629	576	511	447	387	307	243	189
Purchases of raw materials	748	709	677	646	589	532	462	414	336	268	217
Sales and exports of goods	748	709	677	646	589	532	462	414	336	268	217
Sales of services	748	710	678	647	589	534	462	414	336	268	217
Corporate income tax	726	696	661	629	575	513	447	387	307	243	189

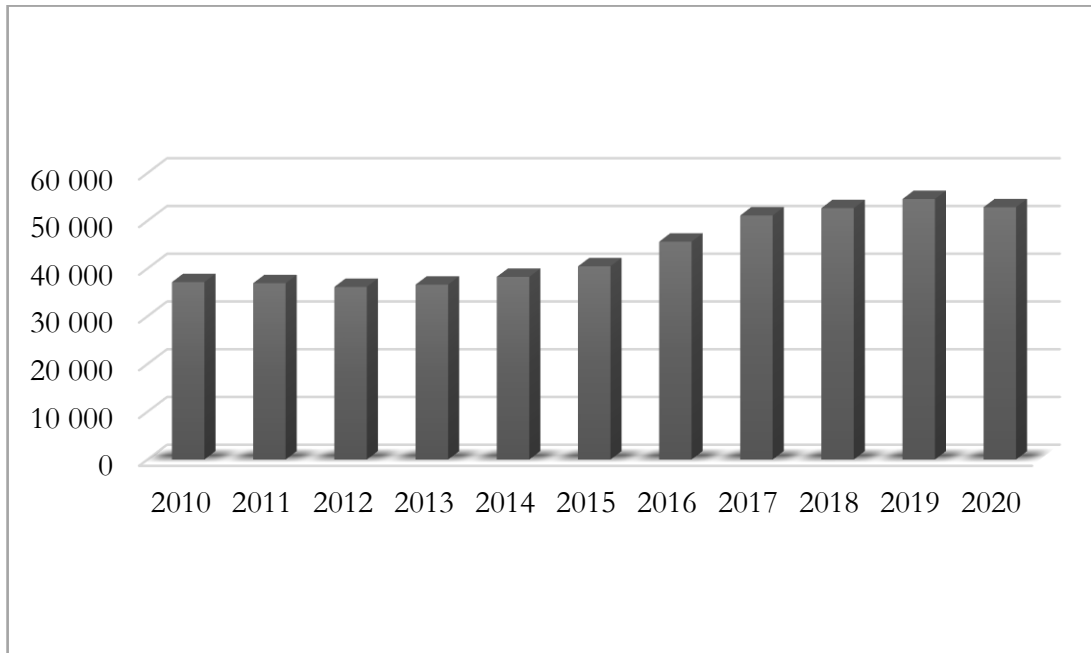
Source: Own elaboration

5.1.1 Employment

One of the variables that can be directly affected by the creation of new subsidiaries in the host economy is the employment. As discussed in the literature review, when a foreign enterprise enters the host economy it can lead to the creation and/or destruction of jobs. The creation and/or destruction of jobs can vary according to the mode of establishment chosen (Jude & Silaghi, 2016). However, SABI does not provide this type of information regarding the Spanish subsidiaries in Portugal, which means that our analysis will lay on the employment of Spanish MNEs as a whole and will not take into consideration the mode of establishment chosen by them.

Looking at Figure 5, we can observe that the number of employees of Spanish MNEs has been growing consistently. The number of employees in 2010 was 37 143, and this number grew significantly between 2010 and 2020, reaching a total of 52 818 employees in 2020, which represents a growth of, approximately, 42% in the last decade. Even though, this variable had been growing consistently, in 2011 and 2012 where there was a slight decrease of 0,7% and 2%, respectively. In addition, the highest number of employees by Spanish subsidiaries in Portugal was registered in 2019 when there was a total of 54 540 employees. This means, that between 2019 and 2020 there was a slight decrease of 3%, which may be due to the COVID-19 global pandemic that may have led to the dismissal of personnel.

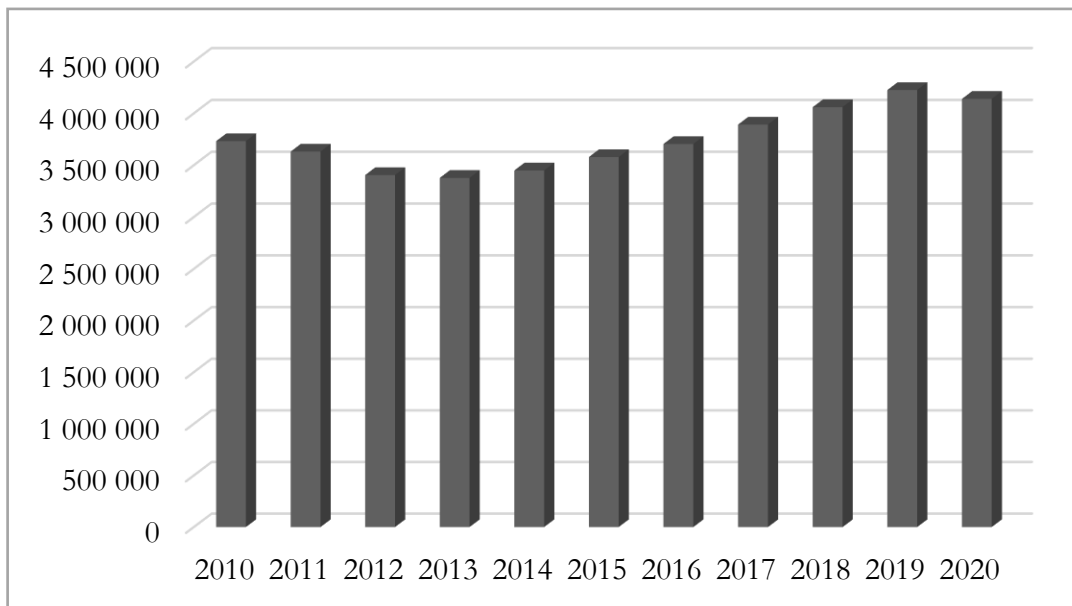
Figure 5: Evolution of the number of employees of Spanish MNEs



Source: Own elaboration based on data from SABI

To compare and analyzed the evolution of the employment by the Spanish MNEs we also take into consideration the evolution of the employment in the Portuguese economy. As presented in Figure 6, the number of employees in Portugal registered a slight decrease in 2011, 2012 and 2013. However, since then it only decreased again in 2020, which may be due to the COVID-19 global pandemic, which means that the number of employees had been growing consistently. Comparing Figure 5 and Figure 6, it is clear that the employment by Spanish MNEs presents an evolution very similar to the one verified for the employment in Portugal . The highest number of employees in Portugal was registered in 2019 when there was a total of 4 225 538 employees. However, the total growth of the number of employees by Spanish MNEs was a lot more significant since the number of employees in Portugal between 2010 and 2020 grew 11% whereas the number of employees by Spanish MNEs in Portugal grew 42%.

Figure 6: Evolution of the number of employees in Portugal



Source: Own elaboration based on data from Statistics Portugal

Since it is important to analyze the contribution of the Spanish MNEs to the employment in Portugal, we present the representativeness of the employment by Spanish MNEs in the employment in Portugal (see Table 11). As we can observe, the representativeness remained extremely constant throughout the period of time analyzed. The employment of Spanish MNEs accounted for approximately 1% of the employment in Portugal, which means they represent a small part of the employment in the host economy. However, taking the small representation of the sample in the total number of firms in Portugal, we can suggest that the fact that the Spanish MNEs comprises 1% of the employment in Portugal while they represent only 0,11% of all firms operating in Portugal shows a great influence and contribution of the Spanish firms on the host country employment.

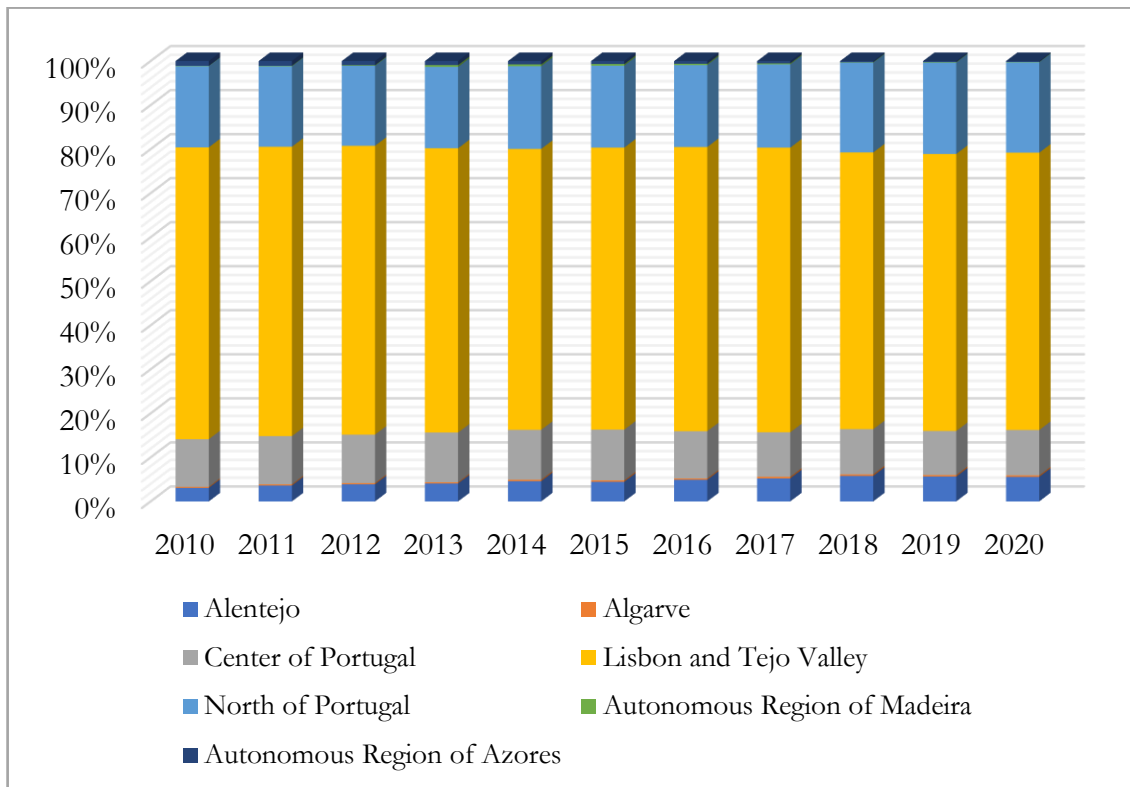
Table 11: Representativeness of Employees by Spanish MNEs in Portugal by year

Year	Nr. Of Employees by Spanish MNEs	Nr. Of Employees in Portugal	%
2010	37 143	3 732 512	1,0%
2011	36 897	3 631 747	1,0%
2012	36 139	3 405 269	1,1%
2013	36 609	3 377 598	1,1%
2014	38 242	3 449 428	1,1%
2015	40 451	3 578 913	1,1%
2016	45 610	3 704 740	1,2%
2017	51 106	3 892 218	1,3%
2018	52 629	4 060 451	1,3%
2019	54 540	4 225 538	1,3%
2020	52 818	4 140 136	1,3%

Source: Own elaboration based on data from SABI and Statistics Portugal

When analyzing the number of employees by NUTS II regions, demonstrated in Figure 7, it is possible to observe that there is a significant concentration of the employment by Spanish MNEs in Lisbon and the Tejo Valley. Throughout 2010 and 2020, this region represented between 63% and 66% of the employment by Spanish MNEs in Portugal, which represents an extremely large part of this indicator. The fact that 51% of the Spanish firms are located in this region, explains the high representation of employees in Lisbon and the Tejo Valley. After this region, the North and Center of Portugal, as well as Alentejo have the highest numbers of employees by Spanish MNEs. More specially, between 2010 and 2020, the North of Portugal had between 18% and 21% of the employees of Spanish firms, the Center of Portugal had between 10% and 12% and Alentejo, 3 % to 6%. In this period of time, employment lost representation in Lisbon and the Tejo Valley and the Center of Portugal, while the North of Portugal and Alentejo gained some ground. However, these variations were very insignificant since there were of 1% or 2%, which means that the influence of the employment by Spanish MNEs in each NUTS II regions did not alter.

Figure 7: Evolution of the number of employees of Spanish MNEs by NUTS II regions



Source: Own elaboration based on data from SABI

5.1.2 Purchases of raw materials

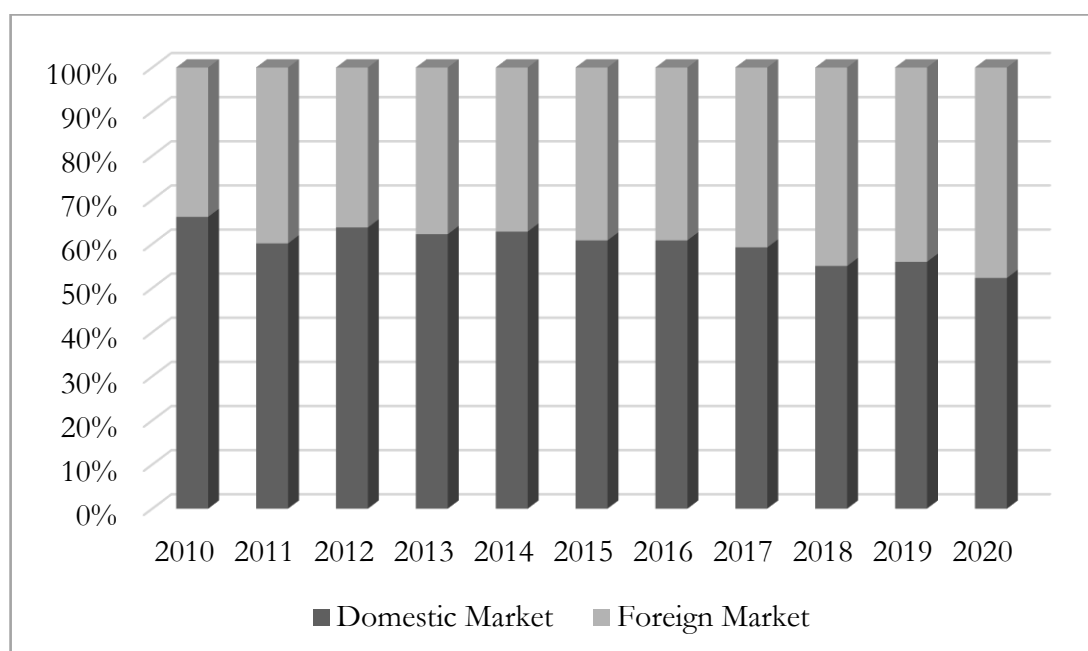
As reported in the literature review, the foreign affiliates can establish vertical – forward and backward - linkages within their value chain. Through the purchases of raw materials, firms establish backward linkages with their suppliers that can be located in the domestic or foreign markets. When these purchases are acquired to domestic firms, it can constitute one of the most valuable indirect mechanisms through which the foreign affiliates can impact the host economy. More specially, through backward linkages, the MNEs can stimulate and improve the local supplier’s production with higher demand of products and/or services (Pelinescu & Radulescu, 2009).

As presented in Figure 8, 66% of the purchases made by Spanish MNEs in the sample in 2010 were made in the domestic market and only 34% occurred in foreign markets (imports), which means that the vertical linkages between domestic economic agents, namely, suppliers, were predominant. However, throughout the period of 2010 and 2020 purchases

made domestically started to represent less and less of the total purchases made by the Spanish subsidiaries and, consequently, the amount of imports by the Spanish MNEs started to represent a larger share of their total purchases. In fact, in 2020, 52% of the purchases made by the sample of Spanish MNEs were made in the domestic market and 48% were made in foreign markets.

In this sense, the distribution between domestic and foreign markets has become more balanced, Spanish firms resort less to domestic markets when it comes to purchases and resort more to foreign markets, importing a larger share of their inputs.

Figure 8: Distribution of purchases of raw materials



Source: Own elaboration based on data from SABI

5.1.3 Sales of goods

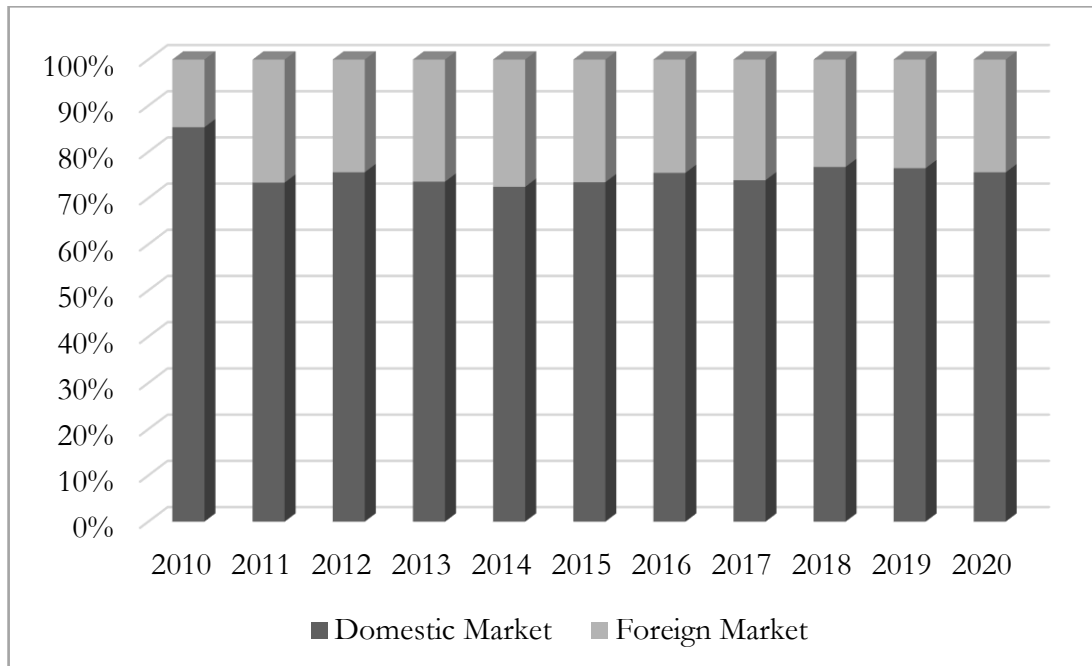
As mentioned previously, we will analyze the evolution of the amount of sales of goods by Spanish MNEs established in Portugal by observing the distribution between the domestic and foreign markets. When it comes to sales to the domestic market, they can constitute an indirect mechanism to the impact of foreign MNEs to the host country. In fact, when a subsidiary establishes forward linkages with buyers and distributors, it constitutes a potential channel for technology and knowledge transfer since usually foreign

firms provide more efficient and higher quality products and/or services (Pelinescu & Radulescu, 2009).

As presented in Figure 9, 85% of the sales of goods made by the Spanish MNEs in the sample in 2010 were made to the domestic market and only 15% were made to foreign markets, which means most of the production of the Spanish firms is acquired by domestic buyers. However, throughout the period of 2010 and 2020 the sales of goods made to the domestic market decreased overtime and represent less and less of the total of sales of goods made by the Spanish subsidiaries and, consequently, sales of goods made to foreign markets represent a larger share of the total sales of goods. In fact, in 2020, 76% of the sales of goods made by the sample of Spanish MNEs were made to the domestic market and 24% were made to the foreign markets.

In this way, the domestic market is the predominant buyer of the production of Spanish MNEs. This shows that there might be some dependency of domestic firms on foreign players which could represent, a potential mechanism of knowledge and technological transfer through forward linkages (McDermott, 1979). However, the preference of the domestic market has decreased approximately 9%, which can lead to conclude that the potential transmission of knowledge and technological transfers are less likely.

Figure 9: Distribution of sales of goods



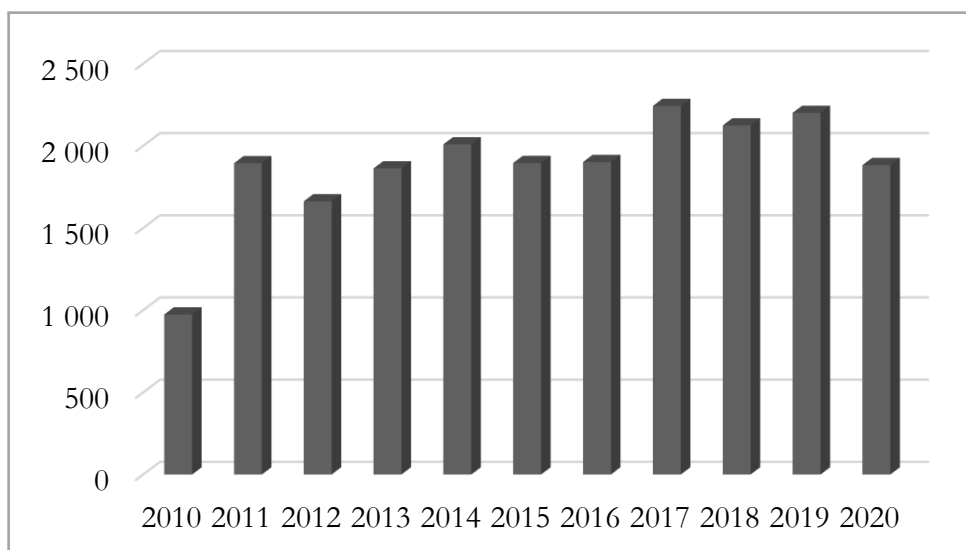
Source: Own elaboration based on data from SABI

5.1.4 Exports of goods

Regarding exports (sales made to foreign markets), it can be considered an indirect impact when we are referring to the spillover effects on the exports of the domestic firms that can occur due to the fact that domestic firms can absorb the exporting behavior of foreign-owned firms (Greenaway et al., 2004). However, sales can also constitute a direct impact in the host county economy since the exports of the foreign firms contribute to the host county export performance (Goswami & Saikia, 2012; Zhang, 2005). Even though we have already touched the subject of sales of goods to the foreign markets (exports) in the previous subsection, it is important to analyze this variable in more detail.

As demonstrated in Figure 10, exports of goods by Spanish MNEs present a significant growth between 2010 and 2020. In 2010, it was registered a total of 973 million euros of exports by the Spanish MNEs located in Portugal, whereas in 2020 there was a total of 1 883 million euros of exports. This represents a growth of 93% in the last decade. As mentioned before, in 2020 there was a decrease in all the variables due to the COVID-19 world pandemic. Exports are not an exception, and when comparing 2010 with 2019, the growth of this variable is even more accentuated. In 2019, Spanish firms accounted for a total of 2 200 million euros of exports, which constitutes a growth of 126%. Besides the fact that there are some years that the amount of exports decreased (2012, 2015, 2018 and 2020), this variable shows a consistent and significant growth throughout the years.

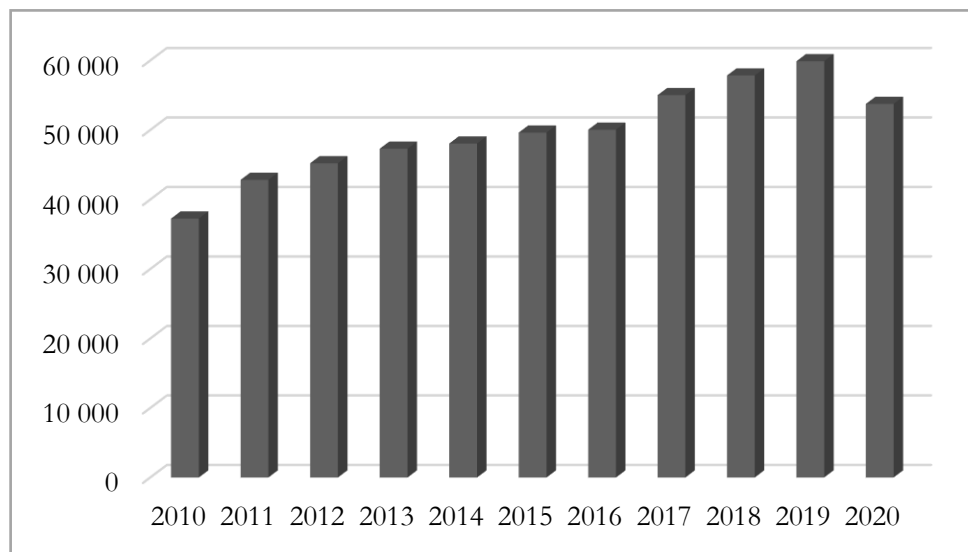
Figure 10: Evolution of exports of goods (million euros) by Spanish MNEs



Source: Own elaboration based on data from SABI

In contrast, we present the evolution of exports of goods in Portugal. As evidenced in Figure 11, the exports of goods in Portugal have also increased consistently and significantly in the last decade. Moreover, in 2010 there was a total amount of 37 268 million euros of exports in Portugal, whereas in 2020 this number rose to 53 757 million euros. In total, the total growth of the exports of goods by Spanish MNEs was a lot more significant since the amount of exports of goods in Portugal between 2010 and 2020 grew 44% whereas the amount of exports of goods by Spanish MNEs in Portugal grew 93%.

Figure 11: Evolution of exports of goods (million euros) in Portugal



Source: Own elaboration based on data from Statistics Portugal

In addition, it is important to analyze the contribution of the exports of goods by the Spanish MNEs in the total exports of goods in Portugal. As represented in Table 12, the representativeness of the exports of goods by Spanish MNEs in the total exports of goods in Portugal has growth. In 2010, the exports by Spanish MNEs only accounted for 2,6% of the total exports. The year where the Spanish MNEs contribute the most for the total exports of goods in Portugal was 2011, where exports by Spanish MNEs accounted for 4,4% of the total exports in Portugal. Even though that was the year where the representativeness was the most significant, over time, it has become more significant since, in 2020, it accounted for 3,5% of the total exports of goods in Portugal. As mentioned above, since the Spanish MNEs comprise 3,5% of the total exports of goods in Portugal while they represent only 0,11% of all firms operating in Portugal, we can suggest that the Spanish firms have a great influence and contribution to the host country's exports.

Table 12: Representativeness of Spanish MNEs exports (million euros) in Portugal by year

Year	Exports by Spanish MNEs	Exports in Portugal	%
2010	973	37 268	2,6%
2011	1 893	42 828	4,4%
2012	1 662	45 213	3,7%
2013	1 862	47 303	3,9%
2014	2 009	48 054	4,2%
2015	1 896	49 634	3,8%
2016	1 901	50 039	3,8%
2017	2 242	55 018	4,1%
2018	2 124	57 850	3,7%
2019	2 200	59 903	3,7%
2020	1 883	53 757	3,5%

Source: Own elaboration based on data from SABI and Statistics Portugal

5.1.5 Sales of services

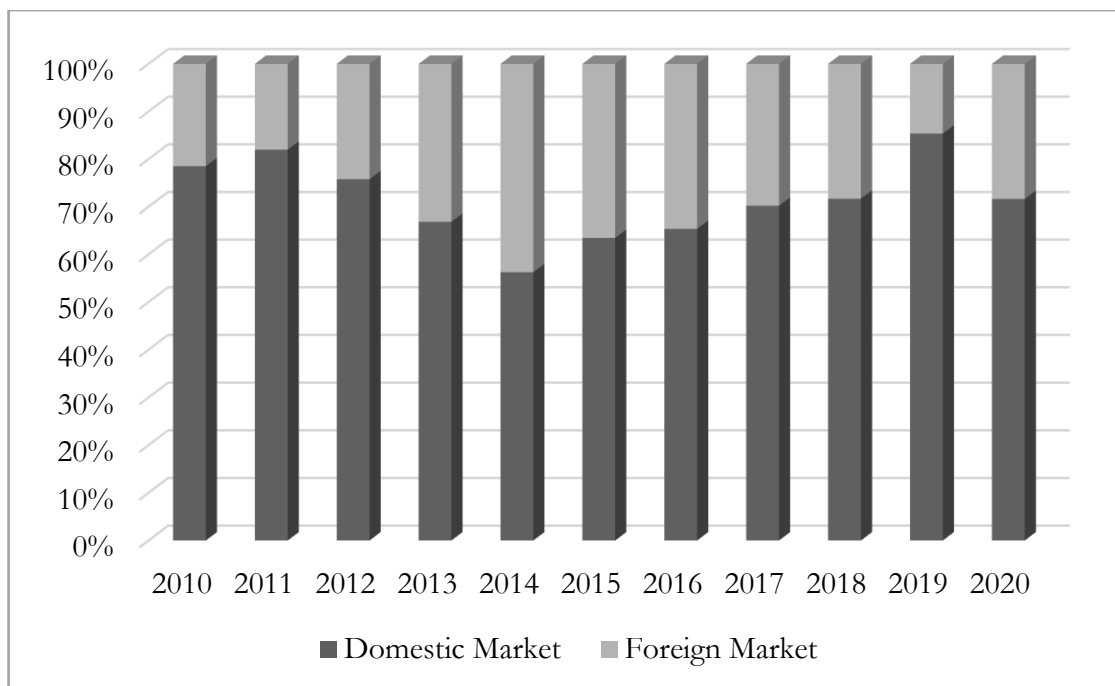
In similarity to what is reported in the sales of goods, sales of services lead to the creation of linkages. A subsidiary establishes forward linkages with buyers and distributors, and though the services provided it constitutes a potential channel for technology and knowledge transfer since usually foreign firms provide more efficient and higher quality products and/or services (Pelinescu & Radulescu, 2009).

As presented in Figure 12, 79% of the sales of services made by the Spanish MNEs in the sample in 2010 were made to the domestic market and only 21% were made to foreign markets. The fact that the majority of services are provided to local firms is expected due to the fact that services are less tradable than goods, which means that firms tend to resort to local firms when looking for a determined service. Throughout the period of 2010 and 2020, the sales of services made domestically decreased overtime and represent less and less of the total of sales of services made by the Spanish subsidiaries, however this decrease was not very significant. In consequence, the sales of services made to companies in foreign markets represent a slightly larger share of the total sales of services. More specially, in 2020,

72% of the sales of services made by the sample of Spanish MNEs were made to the domestic market and 28% were made to foreign markets.

In this sense, the domestic market still is the predominant buyer of the services provided by the Spanish MNEs. However, the services provided to the domestic market has decreased slightly which can lead to conclude that, as seen above in the purchases of raw materials and sales of goods, the integration of the Spanish MNEs in the local economy has decreased in some degree, and the influence of the vertical linkages has become less significant.

Figure 12: Distribution of sales of services



Source: Own elaboration based on data from SABI

5.1.6 Corporate Income Tax

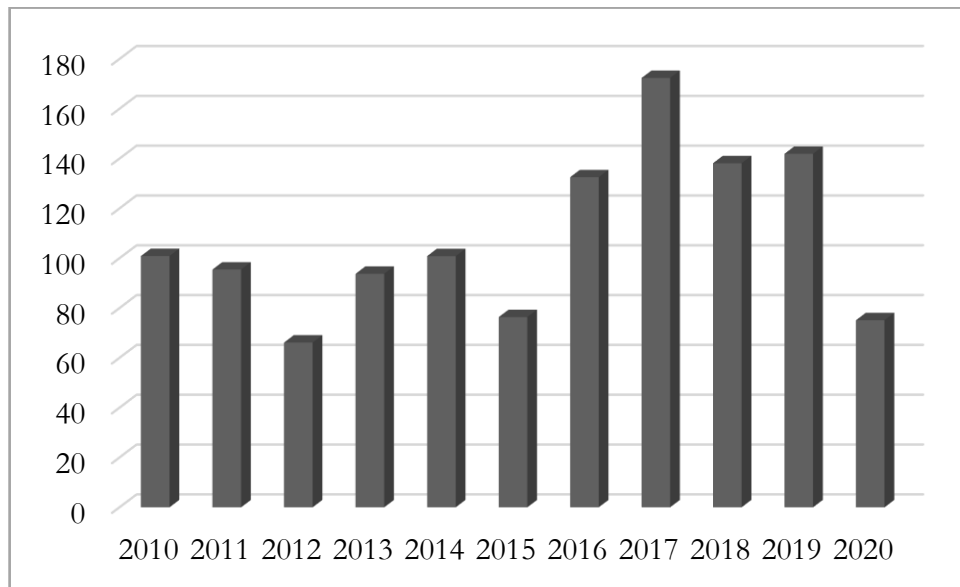
The amount of corporate income tax paid by foreign firms is the revenue that the government earns from the performance of foreign firms and is also a variable that can be directly affected by the creation of new subsidiaries in the host economy. The corporate income tax is directly correlated to the subsidiary performance since it can be calculated based on the profit or income of the subsidiary, whose main activity is subject to the deduction of any losses or benefits from tax advantages (ePortugal, 2022).

In this sense, the impact of the subsidiary in the host country can also be measured by the amount of tax revenue it provides to the host government. In fact, when subsidiaries have a higher level of profit, it results in a higher revenue for the host government by the higher amount of taxes paid, and on the other hand, a lower level of profits results in lower revenues for the host government. This means that when a subsidiary has high levels of performance and a significant growth when it comes to its profits it is translated into a more significant and positive impact in the recipient economy. However, when the subsidiary registers lower levels of performance or even struggles settling in the foreign economy having negative profits, the impact can be insignificant or negative.

Looking at Figure 13, we can observe the amount of corporate income tax paid in Portugal by Spanish MNEs in the period of time considered in the analysis. In the figure, the fluctuation that this variable suffered throughout the last decade is very evident. In 2010, the Portuguese government receive a total of 101 million euros from the Spanish subsidiaries. In 2011 and 2012 this amount decreased, 5% and 31%, respectively. In 2013 and 2014 the corporate income tax paid recovered, growing 40% and 8%, respectively. However, in 2015 it decreases again, registering a contraction of 24%. In the following two years, there was a significant growth of 73% and 30%, respectively, and the peak of the corporate income tax paid happened in 2017 when there was a tax revenue by the Portuguese government of 172 million euros. However, in 2018 the revenue decreased again, and this decrease was a significant contraction of 20%. On the other hand, in 2019 the corporate income tax recover slightly, a recovery of 3%, but in 2020 there was an ever more significant contraction of 47%.

Looking at the period of time as a whole, in 2020 there was a total of 75 million euros paid of corporate income tax from Spanish firms. When compared to 2010, we can see that these number decreased significantly, more specially there was a decrease of 25%. Since the last year of the study was 2020, a particular abnormal year due to the worldwide health pandemic of COVID-19, we decide to compare 2010 with 2019. In 2019, there was a total of 142 million euros of corporate income tax paid, which means that if we consider that period, we can conclude that the presence of Spanish MNEs has become more significant, since the tax revenue increased 40%. However, comparing the period of time of this work and taking into consideration what is mentioned above, we can conclude that the influence of the Spanish firms in this measured has been extremely volatile.

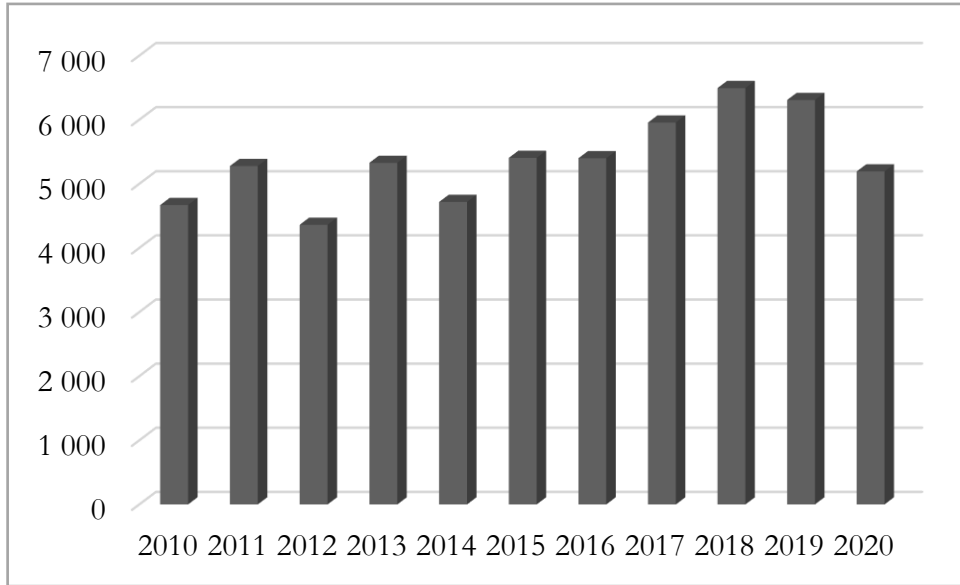
Figure 13: Evolution of Corporate Income Tax (million euros) by Spanish MNEs



Source: Own elaboration based on data from SABI

In contrast, we present the total corporate income tax paid in Portugal between 2010 and 2020. As evidenced in Figure 14, the corporate income tax in Portugal has also experienced fluctuations. Moreover, in 2010 there was a total amount of 4 670 million euros of corporate income tax revenue, whereas in 2020 this revenue was a total of 5 193 million euros. Overall, this variable has increased slightly in the last decade, more specifically a growth of 11%. This growth does not match what was verified in the evolution of corporate income tax paid by Spanish MNEs. However, as seen in the corporate income tax paid by Spanish MNEs, the growth between 2010 and 2019 is more significant, since in 2019 there was a total of 6 308 million euros paid by firms operating in Portugal, which represents a growth of 35%.

Figure 14: Evolution of Corporate Income Tax (million euros) in Portugal



Source: Own elaboration based on data from Statistics Portugal

Additionally, it is important to analyze the contribution of the corporate income tax by the Spanish MNEs in the total corporate income tax in Portugal. As represented in Table 13, the representativeness of the corporate income tax by Spanish MNEs in the total corporate income tax in Portugal has growth. In 2010, taxes paid by Spanish MNEs only accounted for 1,6% of the total corporate income tax revenue. 2012 and 2013 were the years where the Spanish MNEs contribute the most for the total corporate income tax revenue in Portugal, where taxes paid by Spanish MNEs accounted for 3,2% of the total corporate income tax in Portugal. Even though, that were the years where the representativeness was the most significant, over the time period of the study, it has become more significant since, in 2020, it accounted for 1,9% of the total corporate income tax in Portugal. As mentioned previously, the fact that the Spanish MNEs comprise 1,9% of the total corporate income tax in Portugal while they represent only 0,11% of all firms operating in Portugal suggest a great influence and contribution of the Spanish firms on the host country corporate income tax revenue.

Table 13: Representativeness of Spanish MNEs corporate income tax (million euros) in Portugal by year

Year	Corporate Income Tax by Spanish MNEs	Corporate Income Tax in Portugal	%
2010	75	4 670	1,6%
2011	142	5 278	2,7%
2012	138	4 362	3,2%
2013	172	5 327	3,2%
2014	133	4 718	2,8%
2015	76	5 405	1,4%
2016	101	5 399	1,9%
2017	94	5 956	1,6%
2018	66	6 494	1,0%
2019	95	6 308	1,5%
2020	101	5 193	1,9%

Source: Own elaboration based on data from SABI and Statistics Portugal

5.2 Discussion

Starting with the employment by Spanish MNEs, it was verified that there was a significant growth of the number of employees between 2010 and 2020. Nonetheless, taking into consideration that almost half of the sample was established in Portugal between that period, we can deduce that the establishment of Spanish MNEs in Portugal resulted in a significant increase when it comes to the creation of jobs in the host economy. This allowed us to conclude that Spanish Enterprises impacted the host economy in a positive manner, which is in partial agreement with the conclusions of Jude and Silaghi (2016) since the authors concluded that there was a positive contribution of FDI to employment.

The purchases of raw materials can be made either in the domestic market or foreign markets (imports). The distribution between the two markets in the beginning of the time period demonstrated a clear preference of the Spanish firms for acquiring inputs from local firms. As reported by Pelinescu and Radulescu (2009), through backward linkages, the foreign-owned firm can stimulate and improve the supplier's production with higher demand of products and/or services. The distribution between the markets has become more

balanced throughout time. In this way, this fact can lead to conclude that the integration of the Spanish MNEs into the local economy has decreased overtime, and the influence of the backward linkages has become less significant. This means that overtime the stimulating of domestic production through the demand of Spanish MNEs is less significant.

When it comes to the sales of goods, it was verified that the domestic market is the predominant buyer of the production of Spanish firms in Portugal. Nevertheless, the preference of the domestic market has decreased between 2010 and 2020. Our findings suggest that there might be some dependency of domestic firms on MNEs which could represent, as McDermott (1979) mentioned, a potential mechanism of knowledge and technological transfer through forward linkages. The fact that the sales of goods to the domestic markets has decreased overtime and, consequently, the number of sales of goods towards foreign markets has increased leads to conclude that the integration of the Spanish MNEs has decreased overtime. Consequently, the influence of the forward linkages has become less significant which can suggest that the potential knowledge and technological spillovers are less likely to happen or happen on a small scale.

The exports of goods by Spanish MNEs have increased consistently and significantly in the last decade impacting the host economy in a positive manner. This indicates that as reported by Zhang (2005) and Goswami and Saikia (2012), FDI contributes to export growth in the host country. In addition, since the representativeness of exports of goods by Spanish MNEs in the total exports of goods in Portugal has increased over time, it suggests that the direct impact on the host economy's exports is positive and more significant.

Regarding the sale of services, it was verified that the domestic market still is the predominant buyer of the services provided by the Spanish MNEs. However, the services provided to the domestic market have decreased slightly which can lead to conclude that in some degree the integration of the Spanish MNEs in the local economy has decreased and the influence of the vertical linkages has become less significant. However, taking into consideration that most of the Spanish MNEs operate in sector 46 (Wholesale (includes agents), except of motor vehicles and motorcycles) we cannot understand to what extent the behavior of the sales of service of the MNEs have impacted the host economy through vertical spillovers.

Lastly, as regards to the corporate income tax paid by Spanish MNEs, it was verified that this measured decreased significantly, more specially, there was a 25% decrease of the tax revenue from Spanish MNEs between 2010 and 2020. However, with the exception of 2020, this variable showed a positive evolution overtime which means that, apart from the decreased that may have happened due to COVID-19, the impact the Spanish MNEs on the Portuguese economy through the corporate income tax revenue is positive and has increased in the last decade. Considering the positive evolution between 2010 and 2019, our results corroborate the findings of Amendolagine et al. (2021) that suggest FDI increases corporate tax revenues.

Finally, it is important to mention that as verified in many variables, the representativeness of the sample in the total number of firms in Portugal is quite small, which means that we cannot understand to what extent the positive evolution of such variables has contributed to the positive evolution of the variables in Portugal, and consequently, understand their contribution to the development and growth of the Portuguese economy.

6. Conclusion

This research analyzed the impact of the growing presence of Spanish MNEs in Portugal. The main objective laid on evaluating whether this presence is beneficial to the host country's economy, and how the potential benefits are translated into. In other words, this paper intended to understand how the Spanish Enterprises present in Portugal impacted the national and regional economy in which they operate. To achieve this purpose, a quantitative data analysis was performed based on data from 1 483 Spanish firms. This panel data was retrieved from one source, SABI - Bureau van Dijk, for a period time of eleven years, from 2010 to 2020.

To perform the analysis, six variables were studied: number of employees, purchases of raw materials, sales of goods, exports of goods, sales of services and corporate income tax.

Our conclusions suggest that the direct impacts on the host country are more evident and more significant than the indirect impacts. In fact, we verified that the employment and exports by Spanish firms have increased over the years and, consequently, the impact of these measures has become more accentuated. Even though when we compared the corporate income tax paid between 2010 and 2020, this variable decreased, excluding 2020 and analyzing the evolution between 2010 and 2019, the revenue from corporate income tax had in fact a positive evolution. In contrast, the other three variables that focus on the impacts via spillovers revealed that although the impacts remain positive overtime, they have decreased which means that the Spanish MNEs influence on the Portuguese economy through the creation of linkages has become less significant.

In sum, the results obtained were expected. Given the fact that the FDI inflows from Spain have increased, we expected that the impacts of the Spanish MNEs operating in Portugal were positive. All six variables in the study suggest that the presence of Spanish MNEs in Portugal has an overall positive impact in the host economy.

Even though this work contributes for a better understanding of the contribution of the Spanish MNEs for the Portuguese economy, it shows some limitations. The main limitation of this research is related to the data availability. The panel data obtained comprised 1 483 Spanish firms in Portugal. However, when we compare the number of Spanish MNEs to the total number of firms operating in Portugal, we observed that the sample only accounts for 0,11% of the firms. In this regard, the representation of our sample is very small which

means that we cannot conclude to what extent the positive impacts verified have contributed to the economic growth and development of the host economy.

It would be interesting if future research would try to overcome some of this study's limitations. For that purpose, we would suggest resorting to a different data base in order to obtain a larger amount of available data or limit the sample to a type of MNE. For example, since the majority of Spanish MNEs are micro enterprises, it would be interesting to analyze the impact of their presence in particular. In addition, it would be important to study the influence of the Spanish MNEs through a different methodology. For instance, through an econometric estimation model it would be possible to measure the correlation of these variables with the economic growth of the Portuguese economy and determine to what extent the performance of Spanish MNEs impacts the host country. In this study we were also not able to analyze and understand the influence of the mode of establishment in the variables due to lack of data. In future research it would also be recommendable to measure such influence, even though in the present study we did not focus on such factor.

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