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REGIONAL INTEGRATION AND FIRM LOCATION CHOICES: A LONG RUN APPROACH TO THE CORK INDUSTRY IN THE IBERIAN PENINSULA

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Abstract. The cork sector is a relevant case study given the economic importance of this industry for some regions (value added, employment and rural development). This industry is also important because of its contribution to environmental sustainability as it uses a natural renewable raw material. Portugal and Spain are the most important producers of cork and exporters of manufactured cork products (stoppers and agglomerates). The main purpose of this paper is to study the economic integration and the historical changes of cork business location choices in the Iberian Peninsula. We start by studying the historical roots, motivations and economic consequences of the delocalization of Catalonian firms to Portugal during the first quarter of the 20th century. Then a comparison is made with the recent process of delocalization of an anchor firm of Aveiro industrial district (Corticeira Amorim) to Spain. The theoretical framework of this study is the industry and cluster life cycles as well as the recent insights from the evolutionary economic geography.

Keywords: Regional integration; firm location choices; cork industry; Iberian Peninsula JEL classification: R32; F23

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1. Introduction

This paper is about the location and relocation decisions of cork companies, both national and international, over a long term horizon of more than a century, that is, along all the life cycle of this industry.

The cork industry is an interesting and relevant case study, for several reasons. First of all, because of its contribution to environmental sustainability as it uses a natural renewable raw material. Secondly, because it gives an important economic and social contribution to some Portuguese and Spanish regions, in terms of employment, value added and rural development. Last, but not least, because it is appropriate to study the locational dimension of productive activity. In fact, the raw material of this industry and its tree of origin, the cork oak, are confined to a delimited geographical area around the Mediterranean see, and mainly in the Iberian Peninsula.

This is the main reason behind the "iberisation" of the cork business since the beginning of the twentieth century, making it one of the most integrated sectors in this area of the European Union, as a result of successive and in some cases (but not all) successful location strategies of the larger cork firms of Portugal and Spain.

In this paper, a historical analysis is made of the cork industry life cycle, identifying four different phases according to the relative or absolute domination of several regions or countries. Although Portugal and Spain have had a strong competitive advantage in the cork industry, based on the factor endowments of these countries, namely low wages and the almost exclusive production of its raw material as we saw, until the second half of the last century cork manufactures – agglomerates and stoppers – were also present in some industrial countries without cork but having the important advantage of being large markets. Today, the industry exists almost exclusively in the Iberian Peninsula, with a strong concentration in *Santa Maria da Feira*, a municipality of Portugal. However, in the first decades of the cork industry life cycle, and more or less until the 1930s, Catalonia was the dominant region.

The empirical assessment of the factors of location explaining each of these historical phases is one of the main purposes of the paper. The main research questions can be put in a macro and micro level. The first question is where the cork business was/will be located? And how could we explain the location/relocation of the cork business? A push-pull schema is used in order to answer these questions, based on the traditional location theory of Weber (1909) and many others, as well as the findings of many studies of relocation decisions of firms.

At a different level, particular attention will be paid to the crucial role of two large Iberian companies that marked the cork business history in the twentieth century, *Mundet* and *Corticeira Amorim*. Mundet, a Catalonian company, was one of the first movers in the process

of international integration of the cork business, starting in the beginning of the twentieth century. Many years later, the history of hegemonic position of Portugal in the cork industry would come to be confused with the history of *Corticeira Amorim* and the dominant position acquired by this group in the business: 26% of market share worldwide; 65% of market share in cork stoppers; 55% of market share in the composite agglomerated and 80% in expanded agglomerated (Amorim, 2011). Although acting in the same time span, these companies developed different product strategies with dramatically opposed outcomes: Mundet failed and went bankrupt; Amorim has become the world leader in the cork business. But both companies were leaders at different moments in the development path of the cork industry and strong determinants of the changes in its spatial location, with a history that deserves to be told.

The paper is organized as follow. It starts with the literature review about location theory and relocation decisions of firms (section 2). In section 3, the historical roots, motivations and economic consequences of the spatial and international changes in the cork sector are described, with a chronological push-pull analysis of the main location factors characterizing the four phases of this industry life cycle. Section 4 briefly describes and compares the product strategies and location decisions of two dominant Iberian companies: Mundet and Corticeira Amorim. Finally, in section 5 some concluding remarks are made.

2. Factors of industrial location: A theoretical framework

In the last decades, there have appeared new lines of research that have complemented the classic theory of industrial location enunciated by Alfred Weber at the beginning of the 20th century (Weber, 1929). This theory assumes neoclassical assumptions of perfect competition, economic rationality and perfect information of agents, stating that the location decisions of firms are the result of the evaluation and selection process in search of that rational location that minimizes production costs. According to this, companies tend to be in locations near the raw material supply or consumption centers, seeking precisely that location that minimizes transportation costs.

Decades earlier, the economist Alfred Marshall had coined the concept of agglomeration economies, which he defined external to the company, but internal to the agglomeration (Marshall, 1890). After that, these economies have acquired great importance in the models that explain industrial location (Fujita and Thisse, 2002), being able to differ between urban and industrial agglomerations. In the first case, urban systems theory developed by Hoover (Hoover, 1936 and 1948), on one hand, and the contributions of J. Jacobs

on the urban economies of cities (Jacobs, 1969), on the other one, show the importance of urban agglomerations in location decisions, as they represent for the companies wide consumer markets, abundant labor, proximity to the power and decision centers, greater opportunities for innovation and better access to auxiliary services. In the case of industrial agglomerations, the resulting advantages are based on access to a set of shared resources for agglomerated companies, in addition to cooperation relations established between them (Pike, Becattini and Sengenberger, 1990; Stam, 2007). Its theoretical basis is in the industrial districts theory, originally stated by Marshall and developed later by the Italian school of industrial districts (Marshall, 1890; Beccatini, 2004 and 2005), not forgetting the theoretical approach of clusters (Porter, 1991). Without doubt, the consideration of agglomeration economies means accepting that location patterns of firms contain aspects not included in the price system (or cost system) defined by the classical theory of industrial location (Guenzi, 2006; Catalan, Miranda and Ramon-Muñoz, 2011; Soler, 2008). Stated another way, it supposes admitting that, often, companies are willing to sacrifice transport economies to get other economies or advantages, as has been widely demonstrated empirically.

Escribá and Murgui (2008) have pointed the importance of skilled labor and agglomeration economies in industrial location decisions. According to the authors, these aspects are especially present in regions with a long industrial tradition. Therefore, industrial or handicraft tradition (and by extension, commercial and financial ones) can be another factor to consider when choosing the location of firms. In fact, it seems reasonable that regions with big industrial tradition exert an attractive force for companies greater than those that lack it. As stated Belussi and Sedita (2009), the existence of ancient guild traditions in a territory is an endogenous factor decisive for the birth and formation of industrial agglomerations (Marshall, 1890; Elola et al., 2012), so we can conclude that the "historic preconditions" of territories are considered by firms in their location decisions.

In a critical line with the classic theory of industrial location have been the contributions from institutional and behavioral approaches. In the first case, the criticism has focused on identifying the existence of an imperfect market of monopolistic competition where location decisions are not dependent only on external factors, but also on internal factors such as relationships with other companies or with institutions (Martin, 2002). Regarding the behavioral approach on industrial location, the first contributions appeared in the 1960s directly attacking two basic assumptions of the classical industrial location theories: the existence of perfect information in markets and the rationality of economic agents (Cyert and March 1963). In this field, Simon (1965, cited in Bustos, 1993) argues that economic agents do not have a fully rational behavior in economic terms, while others such as Pred (1967)

allude to the existence of imperfect information for firms, introducing biases in their location decisions. In addition, publications such as Berry (1979) emphasize location decision is based on a subjective view of aspects like sales potential of a given location or the valuation of the physical and economic conditions of the environment around it. In this respect, Aydalot (1985) divides the decision process in several stages in which the firm, subjectively, is discarding possible locations basing on factors such as labor features, environmental conditions, availability of infrastructure or other purely economic criteria, being the final decision strictly personal and subjective. In sum, behavioral approaches introduce a subjective component in the location decisions of firms, away from the objective conditions for the optimal location derived from the Weberian theory. To the extent that some works like Cuadrado and Aurioles (1989) distinguish different locational behaviors of firms, which are based on the information available and on the sujective perception of the location alternatives considered¹.

A new impulse for the location theory has been the emergence of the so-called "New Economic Geography" in the early 1990s (Krugman, 1992; Fujita, Krugman and Venables, 1999; Fujita and Thisse, 2002). Using a monopolistic competition framework, the NEG builds a model that links geographic disparities with economic disparities, according to which the spatial distribution of economic activity (agglomeration or dispersion) results from equilibrium of centripetal and centrifugal forces. The first ones favor the firms' agglomeration and operate in developed regions, which have a large market size. These regions are those that offer greater real wages, and therefore they are also the main areas in attracting surrounding workers, feeding back the demand power. In the same way, the existence of technological spillovers and the integration of processes in the firms' agglomeration also act as centripetal forces. In turn, the centrifugal forces are responsible for the economic disparities, and therefore, they are the main cause of the industrial location in the peripheral (less developed) areas. For instance, these forces are due to the rising cost of living in developed regions, or because of labor tends to be cheaper in the less developed regions, which may be a factor for attracting industries, added to the less competition in these, compared to developed regions. All this, in addition to pollution and other negative externalities associated with developed areas, which act as factors that discourage firms to locate in them.

Some critiques of the model proposed by the NGE, regardless of methodological matters (excessive mathematical formulation and simplicity of the model assumptions, which does not to consider aspects such as the historical antecedents or the path dependance), have

¹ In the same way is Stam (2007), which is an interesting study about the locational behavior of entrepreneurial firms.

focused in not to take into account properly some aspects such as the role of institutions, the technical change and the skilled labor, leaving out some potential industrial location factors (Cuadrado, 2012).

Recent theoretical contributions tend to frame the location decisions of firms within the broader framework involving the overall decision of investing (Artus and Muet, 1984; Wheeler and Moody, 1992; Escribá and Murgui, 2008). So, apart from the already mentioned factors (proximity to consumer markets and sources of supply of raw materials, quantity and quality of labor, and industrial agglomerations, etc..), location decision would be also conditioned by the existing life quality; the uncertainty associated with the location to choose; the political, social and institutional frameworks existing in the different location alternatives; and the tradition and other cultural aspects such as language, type of entrepreneurs, etc. (Sedita and Belusi 2009; Elola et al, 2012); or chance factors, increasingly identified as location factor in many empirical studies². Without neglecting aspects of business structure and technological intensity, labor intensity, or product and industry life cycles (Menzel y Fornahl, 2009).

Finally, we think that the study of location decisions of firms is enriched with the analysis of mobility decisions of firms (the so-called industrial relocation) (Pellenbarg, van Wissen and go Dijk1, 2002 and 2008)³. From this point of view ("migration of industries"), many methodological resources used in the migration of labor analysis may be useful for the industrial location analysis. This is the case of puh-pull theories, widely used to explain the mobility of labor. In this respect, industrial location decisions respond basically to pull factors that occur in a given location compared to other alternatives. Instead, mobility decisions of firms (relocation decisions) firstly contemplate push factors, decisive for the firms to consider the change of location. In short, in the location or relocation decisions should also be considered other aspects such as relocation costs, differentials of productivity (between the old and new location alternatives) or the growth prospects of the firm in one and another location⁴. This is precisely the approach that we will use in the next section to explain the changes happened in cork industry location, in which will be also contemplated as pull-push

² Gómez and García (2001) consider that chance factor was relevant in the origins of the Vigo automotive cluster, being one of the main determinant location factors.

³ For an empirical study on the behavior of firms in terms of industrial relocation for 21 countries, see Brouwer, Mariotti y van Ommeren (2003).

⁴ Canals (2006) gives an overview of the factors that favor the manufacturing and services offshoring and relocation of firms in the United States and Spain, focusing on these aspects.

investment factors: legislative aspects; economic policies⁵; political, social and labor stability (unionization level, labor movements, business organization, etc..); and the cultural aspects that have been able to help or hinder the establishment of industries in a particular location or the relocation of them. It will be also considered the economic, political (wars or political instability periods) and social (social and/or labor movements that affect the development of the business) conjuncture aspects.

3. Changes in the cork industry location: some explaining factors

Since its origin in France in the mid seventeenth century (Medir, 1953), cork manufacturing was conditioned by two facts that remain intact today: on the one hand, the concentration of the raw material in a few countries of the Mediterranean shore, unique place in the world where cork oak grows (Figure 3.1.); and on the other one, the wide geographical spread of demand for manufactured cork, linked largely to the dispersed world wine and other spirits drinks production, traditionally closed with cork. This has meant that cork business has always had an international character, based on the growing importance of raw material imports (made by countries that do not produce cork but that began to manufacture it in the late nineteenth century) and also on the increase of the international trade of cork manufactures, in which many exporter and importer countries of the five continents were implied (Zapata, 2002; Zapata and others, 2009; Parejo, 2009; Parejo, 2010).





Source: Natividade (1950: 35)

⁵ Recent studies related to industrial location, as Belussi and Sedita (2009) and Elola et al (2012), which analyze the birth of industrial agglomerations, emphasize the importance of institutions and national and local policies to attract firms.

This situation gives transport costs considerable importance in the cost structure of the cork industry (Sampaio, 1977; Mira, 1998), behind the raw material acquisition cost and the labor costs. So, some classic industrial location factors such as proximity to raw materials and proximity to consumer markets for manufactures seem determining in the historical evolution of this industry (Voth, 2009). Therefore, it is not casual that the world cork industry is currently concentrated in some Southern Europe countries, especially in the Iberian Peninsula, where the largest cork oak areas of the earth are. Nor that the same countries have today the control of the world cork manufactures market. See Table 3.1, which does not require comments.

	1962-1964	1982-1984	2002-2004
Spain	17.1	12.7	13.3
Portugal	56.4	73.7	66.9
Spain + Portugal	73.5	86.4	80.2
France	1.5	2.8	4.3
Italy	5.4	1.4	3.9
Germany	1.2	3.3	2.7
United Kingdom	4.6	2.4	0.3
Europe (a)	95.5	97.6	94.8
USA	4.1	1.4	3.3
Others	0.4	1.0	1.9

 Table 3.1. Share of different countries in the world exports of cork manufactures

 (Calculations in current U. S. dollars) (%)

(a) Besides the European countries mentioned in the table, it includes Austria, Belgium, the Netherlands and Switzerland.

Source: Parejo (2009: 347).

But cork industry location has not always been the same. It has changed a lot over the past centuries, being able to distinguish, according to Zapata (1996 and 2002), 4 stages: (1) Original development stage of the cork manufacture (1680s-1730s); (2) Stage of absolute hegemony of the Catalonia industry (1730s-1900); (3) Stage of relative hegemony of the Catalonia industry (1900-1936); (4) Stage of the Portuguese hegemony in cork manufacturing (1936-2010s). We begin by analyzing the factors that led to the original phase (stage 1), and then analyze the reasons behind the transition from the first to the second stage (reasons we collect in Table 3.2.); from the second the third one (Table 3.3.); and from the third to the fourth one (Table 3.4.). In all cases we will mention the most important factors in our criteria, taking into account that sometimes they respond more to a hypothetical approach than to empirical results.

The contemporary origins of the cork industry are in France, linked to the discovery of the sparkling wine in the region of Champagne, in the second third of the seventeenth century.

Its discoverer, the Benedictine monk Dom Pierre Perignon, met the cork because of his frequent trips to Catalonia, realizing quickly that the best way to preserve the famous champagne was locked in a glass bottle sealed with a cork stopper. Given the presence of cork oaks in the France, the spread of the sparkling wine consumption induced the birth of an incipient cork industry in this country, where those were most abundant, particularly in some regions like Aquitaine and Provence, and in some points of the Eastern Pyrenees. Thus, the classic location factors acted on the origins of the business because: (a) French industry developed near the cork oaks, in the south of the country, close to the raw material; (b) French industry arose near the big markets of cork manufactures at the time, as the famous *Feria de Beaucaire* (the largest market in the world for the cork stoppers until the 1830s). Beaucaire is located in the department of Llanguedoc, near the location of the cork industry in the region of Provence (Medir, 1953; Ros, 2002).

Due to the increase in wine consumption across Europe, and its growing bottling, demand for cork stoppers became widespread. French cork oaks soon ceased to be sufficient to attend the manufacturing. Maybe this was the reason why industry made the leap outside of France, led by French workers (they were the first transmitters of the know-how of making artisanal cork stoppers), then starting the cork manufacturing in Catalonia (where there were new cork to be manufactured), probably in the town of Tossa de Mar in 1739 (Julia, 1983). Cork industry also began in Germany in early dates, near 1730 (Voth, 2009), particularly in Delmenhorst; and also in England, at least there are enough indications on the start of cork manufacturing over 1730 (Alvarado, 2002).

Table 3.2. Push and Pull factors explaining the pass from the "Original development stage" to the "stage of absolute hegemony of Catalonia"

Factor	Push	Pull
	Country / Region	Country / Region
Proximity to raw materials	France	Catalonia
		Germany
Proximity to manufactures markets		England
		Catalonia
		Germany
Industrial, commercial and/or financial traditions		England
		Catalonia
		England
Availability of know-how		Catalonia
		¿Germany?
		¿England?
Institutional framework	¿France?	¿Catalonia?
		¿Germany?
		¿England?
Economic, politic and social conjunctures	¿France?	¿Catalonia?
		¿Germany?
Industrial Agglomoration		Germany
		Catalonia

In Table 3.2 we have tried to summarize the factors that led to these changes in the cork industry location, using, for this purpose, the well-known push-pull scheme, which includes the push factors, which act in the original location, and the pull ones, which do it in the new locations.

Broadly speaking, the main push factor that acts in France is the inability of its raw materials to attend the growth in the cork manufactures demand. It must have caused problems in French manufacturing, forcing many cork workers to undertake the manufacturing in other subericolas regions. This would be precisely one of the pull factors explaining the beginning of the cork manufacturing in Catalonia, where had a lot of cork to be elaborated. Catalonia, Germany and England also had a significant commercial tradition, with gateways to the main markets in Central and Northern Europe, aspects undoubtedly that acted as catalysts for the cork manufacture (Ros, 2002). As we also know, the origins of the cork industry in Catalonia fed on the French workers know-how, although the capital of the first experiences was autochthonous (Sala, 1998; Medir, 1953). Surely, institutional aspects (economic and juridical framework) and other economic and social circumstances could act as a push factor in France or as a pull factor in Catalonia, Germany and England, including the commercial boom lived in Catalonia in the eighteenth century (Feliu, 2012), which must have contributed to the rapid rise of Catalonia up to the hegemonic position in the business. What does seem clear is that cork industry agglomeration could act as a pull factor for the addition of new firms in Delmenhorst (Germany) (Voth, 2009) and in the Alto Ampurdam counties, in the province of Girona (Catalonia) (Sala, 1998). Whatever the case, Catalonian cork industry soon lead the world cork business, having a hegemonic position until the late nineteenth century (Zapata, 1996; Zapata, 2002).

However, the economic and industrial situation in the world cork business had already begun to change long before. For similar reasons to those discussed above, the growth in the world demand for cork manufactures made the Catalonia cork oaks were insufficient to attend the manufacturing near the 1830s. At that time, Catalonian factories had some problems to work every day of the week due to the scarce of raw materials (Medir, 1953). This is the reason why Catalonian cork workers began to migrate to the southwest of the Iberian Peninsula, beginning to work the cork of Extremadura, Andalusia and Portugal. This process took several waves. The first one started in the 1830s, and had several routes. One of them was the migration of Catalonian cork workers to several areas of Andalusia, mainly to Seville, where alone or associated with Andalusian capital opened the first Andalusian cork factory near 1840 (Parejo, Faísca and Rangel, 2013; Serrano, 2008). Another one was the arrival of Catalonian workers in Extremadura, often associated with English capital, having begun the cork manufacturing in Alburquerque in 1838 (Parejo, Faísca and Rangel, 2013). And the last one was the Catalonian emigration to Portugal; firstly, to some areas of the Algarve, and then to the Alentejo districts, where Catalonian people as Andreu Camps started the cork industry in Azaruja (Évora) in 1845 (Sala and Nadal, 2010).

One can perceive a second wave of Catalonian emigrates seeking a better future in the late nineteenth century. In this wave must be considered Lorenzo Mundet and his sons, who, for reasons that will be discussed later, will be launched to the opening of overseas markets (in North America, mainly) and to the start of the cork manufacturing in Seixal, in the Portuguese district of Setúbal.

We have to note that, apart from the Catalonian cork expansion in the southwest Iberian, manufacturing had already started in many other countries. Sandro Ruju dates the beginning of the Italian cork industry near 1830, very close to the Iberian southwestern one, involving some French workers (Ruju, 2000). In addition, since the mid-nineteenth century the business was no longer concentrated in the cork producing countries to spread throughout the world, especially from the 1880s. By 1900 there was a significant cork industry, among other countries (and apart from those already mentioned above) in the United States and Russia (Parejo, 2009). In Table 3.3., we tried to synthesize the push and pull factors behind the mentioned location changes, which we shall discuss.

Table 3.3. Push and Pull factors explaining the pass from the

"Stage of absolute hegemony of Catalonia" to the "Stage of relative hegemony of Catalonia"

Factor	Push	Pull
	Country / Region	Country / Region
		Extremadura (SPA)
		Andalusia (SPA)
	Franco	Italy
Proximity to raw materials	Catalonia	Algarve (PORT)
	CatalOllia	Alentejo (PORT)
		Estremadura (PORT)
		¿Maghreb?
		Italy
Brovinity to manufactures markets		Estremadura (PORT)
Proximity to manufactures markets		United States
		Other countries
		Italy
Industrial, commercial and/or financial traditions		United States
		Other countries
		Extremadura (SPA)
		Andalusia (SPA)
		Italy
Availability of know-how		Algarve (PORT)
		Alentejo (PORT)
		Estremadura (PORT)
		¿Maghreb?
		¿Italy?
		¿Algarve (PORT)?
Institutional framework	¿Catalonia?	¿Alentejo (PORT)?
		¿Estremadura (PORT)?
		¿Maghreb?
		¿Italy?
Feenemie politic and cosial conjunctures	Catalonia	¿Algarve (PORT)?
Economic, politic and social conjunctures	Catalonia	¿Alentejo (PORT)?
		¿Estremadura (PORT)?
		Italy
Industrial Agglemoration		Algarve (PORT)
		Alentejo (PORT)
		Estremadura (PORT)
		Italy
Access to technique	Catalonia	¿Estremadura (PORT)?
Access to technique	Catalonia	United States
		Other countries
Procence of a leader firm		¿Estremadura (PORT)?
		United States
Chance Factor		¿Estremadura (PORT)?

The main push factors which acted in Catalonia in the second half of the nineteenth century were basically three. The first one, which had been a pull factor in a century earlier, was the availability of raw material. As mentioned, in 1830 the Catalonian cork oaks ran out. The cork in this region was not able to attend the needs of manufacturing. Thus, large *dehesas* and *montados* of the Iberian southwestern began to be exploited. Therefore, this was a pull factor for industry in such regions (Extremadura and Andalusia in Spain, and Algarve and Alentejo in Portugal). Also in Italy (which had a strong presence of cork oaks in Sardinia) and in

Maghreb countries, whose cork began to be exploited by the French industry (Puyó, 1999 and 2009).

The second factor that acted as a push factor in Catalonia was the crisis of the artisanal cork stopper industry, manifested in the late nineteenth and early twentieth centuries, as a result of the emergence of the agglomerated cork and other closures, as cork discs (Medir, 1953; Parejo, 2009). Cork agglomerate drastically changed the characteristics of the cork business. To get the know-how past to be few important compared to have a technical and industrial tradition, since cork agglomerate manufacturing was much more intensive in capital than the old cork stopper industry. Countries like the U.S., Germany and England were able to mount large companies in the terminology of Chandler (1996), expanding its position as cork transformers, being the first to incorporate the technical improvements which involved the production of agglomerates. Catalonia, as documented, was among the last countries to access to this technical change, even when it did so with speed and reliability. This is the reason why it could maintain a relative hegemony in the world cork business (Sala, 2003; Zapata, 1996, Medir, 1953; Espadalé and Marti, 2002). However, we believe that this was a push factor that acted in Catalonia. We refer to the technical disadvantage of this region face to the new cork industry locations in the developed countries.

With the expansion of the cork agglomerate and its many applications since the early twentieth century, cork business spread diversified and world cork market expanded. Countries like the U.S., England and Germany, and many other high-income countries, became also more important in the cork manufacturing. It was due to the protectionist policies pursued by these countries since the late nineteenth century.

We do not go to assess the performance of other factors linked to the economic or institutional framework, although several studies have found that, during the First World War, cork industries oriented to the European market (such as the Catalonian one) suffered severely the effects of conflict (Alvarado, 2008). Meanwhile, those which managed to diversify their production (making cork agglomerate manufactures, for instance), and which could send its output to overseas markets such as the U.S., had better results (Sala, 2003; Parejo, 2009). As will be seen, this was one of the reasons for the rapid advancement of L. Mundet and Sons, a company originally from Catalonia, which installed in Seixal (Setubal, Portugal) in 1905. In this case, chance factor may have been one of the reasons that gave the industrial success to this firm.

The first third of the twentieth century, with Catalonian relative hegemony, was very turbulent in the world cork business; but very prosperous too. Cork industry reached unprecedented dimensions in many countries, especially in Spain, where cork exports came to

reach over 6% of the country's exports (Parejo, 2009; Sala, 2003). The First World War, firstly (Alvarado, 2008), the struggle of the world corporations for control of the raw material in the 1920s (Sala, 2003), secondly, and the Great Depression of 1929, finally, led to changes in the business that put the end to thirty thriving years of cork manufacturing. The Spanish Civil War of 1936 was the straw that broke the camel, and the event that led Portugal to the first world power in the business (Zapata, 2002). Since then, due to some factor that we will try to synthesize in Table 3.4., cork industry in cork not-producing countries began to disappear. This process has been explained in Sampaio (1977), and has led to what Zapata (2002) called the iberization of the world cork industry. As the name suggests, iberization represents the concentration of the cork industry in the Iberian Peninsula, but in different way as what happened until 1900. Now, Portugal is exercising the leadership in business (specifically the Portuguese industry located in the district of Aveiro, in the north of de country) and Spain, traditionally specialized in manufacturing, has tempered its specialization, being now largely subsidiary of the Portuguese industry, supplying to Portuguese factories the raw materials or semi-manufactures necessary to work (Zapata, 2002; Branco and Parejo, 2008; Parejo, 2009 and 2010).

The narrated situation is related to the rapid rise of the Portuguese firm Amorim & Irmãos, as discussed in section 5. This firm has become the largest world's industrial cork company, a position that it has holds until today. But, then, which were the factors that drove to the abandonment of the cork industry in not- producing countries? And what pull factors worked in the Iberian Peninsula, ie in Portugal? (Table 3.4.).

Table	e 3.4. Push and P	ull factors e	xplaining	the pass from	the	
'Stage of relat	ive hegemony of	Catalonia"	to the "St	age of Portug	uese hegemo	ony"

Factor	Push	Pull
	Country / Region	Country / Region
		Portugal
	United States	Spain
Proximity to raw materials	Germany	italy?
	England	¿France?
	Other countries	¿Maghreb?
	United States	
Drovinity to manufacturos markets	Germany	Dortugal
	England	Portugar
	Other countries	
Institutional framework		Portugal
Industrial agglemenation		Aveiro (PORT)
		¿Extremadura (SPA)?
Presence of a leader firm		Aveiro (PORT)
Chance factors		¿Aveiro (PORT)?

A priori, but it is a process that requires a more detailed research, the main push (hypothetical) factors that should act in not-producing countries were three. Firstly, the higher transport costs, which recommended locations close to raw materials (Sampaio, 1977). Secondly, the strong growth of the real wages occurred in many of these countries during the golden age of capitalism (from 1950s to 1970s), which made the manufacture cork in them cease to be competitive, especially because, in Portugal, measures implemented by the Estado Novo were in the other direction. That is, in this Iberian country, the authorities tried to control the wages in the north of the country to facilitate the industrial location there (Branco and Parejo, 2011). The third factor was the proliferation of cork substitutes in many applications for the agglomerated cork (note that the cork industry in not-producing countries was largely based in agglomerates). The latter factor also prompted many factories in these countries to stop using cork as raw material, launching to manufacture substitutes without leaving the market where they worked (Zapata, 2002).

In this stage, in the Iberian Peninsula (and so, in southern Europe) it is possible to distinguish several pull factors. The first one, already mentioned, is the proximity to the raw materials, due to the relative increase of the transport costs. The second one, which we have situated into the institutional framework, is linked to the economic policies adopted by the Portuguese Estado Novo, which favored cork industry and the location of it in the north of the country, in concret in the country of Feira (García Pereda, 2009; Branco and Parejo, 2008 and 2011). There had been installed Amorim & Irmãos in the early twentieth century, for reasons to be discussed. There it also developed its business strategy, which has led it to be the

company that controls the world cork market, dragging Portugal (or who knows if the reverse) to world power in the business of making cork articles.

4. The crucial role of two dominant Iberian companies: Mundet and Corticeira Amorim.

In this section, we analyse the most relevant facts in the development of the spatial organisation of two cork companies throughout their life course and their contribution to the "Iberianisation" of the cork business. The decisions of these two companies – Mundet and Amorim - to locate/relocate in the Iberian Peninsula are examined taking into account the history of the companies and using other supporting documents, such as magazine articles and the Annual Reports of each company.

Mundet underwent a complete relocation, moving the establishment that it had in Catalonia to Portugal, while also changing its specialisation in regard to the main cork products (moving from natural cork stoppers to agglomerated cork). Corticeira Amorim went through a process of partial relocation from the 1970s onwards, but maintained the production of natural stoppers as its main area of specialisation. This partial relocation meant that the company established several new units, but nonetheless retained its pre-existing unit, i.e. it became a multi-plant company that differentiated its production in spatial terms. This form of relocation does not necessarily affect the whole production process, but instead only one branch, and it can arise from different types of agreements between the firms involved, ranging from joint ventures to subcontracting, or even the acquisition of a small part of the capital.

Taking into account the historical course and the features of the location decisions of these two companies, and analysing them in terms of the special location of their production process, it will be possible to identify the push and pull factors that lay behind the decision to relocate. Pull factors are factors that attract a firm to another location and push factors are the reasons for its leaving its present location. A better understanding of the location/relocation processes of these companies may help to improve our understanding of the spatial organisation of the cork sector in different countries, considering that they were at different phases in their life cycle and that the cork industry was also at a different stage in its evolution.

4.1. L. Mundet & Sons: Success and culmination of an industrial location strategy in Portugal (1865-1928)

The "Mundet age" of Portuguese cork business fits chronologically with the third of the four stages referred above. In fact, the Mundet family was one of the numerous Catalonian

families that, due to several reasons (among them the crisis of the artisanal cork stopper industry in Catalonia, in the last years of the nineteenth and early twentieth), abandoned their original locations and migrated looking for a better future. To understand the arrival of the Mundet family to the cork business and its meteoric rise in the first decades of the twentieth century, we must go several generations back⁶. Into the Mundets' history, the main actor in this cork firm that would succeed in Portugal was Lorenzo Mundet i Corominas. Lorenzo came from a long linage of industrials cork. In adittion, his wife, Teresa Carbó i Saguer, was the daughter of a small Catalan industrial cork, for whom Lorenzo began working in 1865, in the town of San Antonio de Calonge, in the province of Girona (Catalonia, Spain) (Sala y Nadal, 2010: 101-103). The expansion of his business since that years until the late nineteenth century was remarkable, according to the "golden age" enjoyed by the artisanal cork stopper industry in Catalonia (and other places) from 1880 (Medir, 1953). However, the things began to change at the turn of the century, for the reasons already mentioned above, mainly related to the coming up of clusters of cork and other kind of closures, such as cork discs, screw caps, etc., resulting in an unprecedented crisis in the Catalonian cork industry, in parallel to the rise of the cork manufacturing in not-producing countries (Parejo, 2009).

Dark clouds were moving in the Catalonian cork industry and over the future of the children of Lorenzo Mundet. The eldest of them, José Mundet i Carbó, being aware of the difficult situation that were moving closer to the family business in Catalonia, made the decision to migrate to the United States. It is not clear why he chose moving on to the United States, however it seems it didn't have to do with the cork business. Maybe it was the consequence of the general trend to migrate in this period, when European people tended to move on to the American continent. So, over 1890 he moved to New York to try to carve out a future far away of his father's service. Quickly, he perceived the big development of the nascent manufactures of agglomerate in the United States market, what led him to open a small cork factory in Brooklin (New York) in 1895. The meteoric growth of this New Yorker business managed by José Mundet, fed with the raw cork sent by his father from Catalonia, derived in the need to open a new factory for cork preparing. This factory was opened in Palamós (Catalonia), a few kilometers from San Antonio de Calonge, in 1898. Therefore, in this year L. Mundet and Sons already owned 3 factories, one of them devoted to manufacture raw cork, in Palamós, and the remaining two, in San Antonio de Calonge and New York, to make cork manufactures. In summary, the chance factor of having travelled to New York, firstly; the

⁶ For it, we recommend to read Sala and Nadal (2010), that makes a journey genealogic by Mundet's family for centuries until its arrival in Seixal (Portugal).

push factor that supposed the crisis of the traditional cork stopper industry, secondly; the fact of having own the know-how necessary for the manufacturing, thirdly; and finally, the proximity to the main consumption centers of cork manufactures, were key elements in the initial development of the new Mundet's empire.

In view of the growing expectations for the cork manufactures market, the youngest of the Lorenzo Mundet's sons, Arturo, also settled in New York in 1902, required by his brother. But seeing the possibilities that began to exist in the Mexican market, one of the fastest growing at the time, next to the Argentinean one, he travelled to Mexico D. F., where immediately opened a new cork factory for the group (Carrasco et al, 2010). The Mexican branch of L. Mundet and Sons was in operation, and also the Argentinean one, because the brother of Lorenzo Mundet, José Mundet, uncle of José and Arturo, had begun to sell cork stoppers in this country just a few years earlier.

According to Sala and Nadal (2010), the volume of demand in 1905 was so high that José Mundet requested his father to open a new cork factory for making manufactures demanded in the world market. He was aware not only of the increase of the world cork market, but also of the big diversification that this market is going to have. Initially, Lorenzo Mundet thought to open this factory in Palamós, next to the cork preparation industry that the group had opened there a few years ago. However, eventually the Mundet opted for buying the lands belonging to an old soap factory in Seixal (Portugal), in the district of Setubal (Portugal), close to the commercial port of Lisbon, on the south bank of the Tagus River, at its mouth. There began to work in 1905. Probably the price of these lands was an important factor in the location decision, along with the proximity to the port of Lisbon, suitable for exporting of goods to the overseas markets.

The opening in Seixal of L. Mundet & Sons is a turning point in the Portuguese cork industrialization. The new establishment, in which were partners José y Arturo Mundet i Carbó, Lorenzo Mundet and Lluís Gubert i Capellà (married to Carolina Mundet i Carbó, daughter of Lorenzo and sister of José y Arturo), quickly became the reference of the world's cork production, and the axis around which pivoted the global expansion strategy of the firm. In fact, as noted by Carrasco et al (2010), the company changed its headquarters from Catalonia to Portugal, opting for a full delocalization strategy from that Spanish region to the district of Setubal (Portugal).

The growth of the firm, marked by its great capacity to open new markets and its product diversification strategy, was quick. This led to open many factories around the Portuguese geography. Specifically, in 1908 L. Mundet and Sons already had 3 facilities for cork preparation in San Antonio de Calonge (Catalonia), Jabugo (Andalusia) and Vendas Novas

(Évora, Portugal); 3 factories for cork manufacturing, in Seixal (Setúbal, Portugal), Brookling (New York) and Palamos (Catalonia), respectively; and 7 more commercial facilities in the United States, Canada, Germany, England, Portugal, Argentina and Mexico (Sala and Nadal, 2010). In 1917 they opened a new cork factory for preparation of raw materials in Mora (Évora, Portugal), which was working until 1963. That same year was opened another factory in Vendas Novas (Évora, Portugal), and another one in Amora, closed to Seixal (1917-1967). The 1920s were exceptionally good for L. Mundet & Sons, whose expansion culminated in the opening of three new factories in Portugal: the first one in Montijo (Setubal, Portugal) in 1922, devoted to the manufacture of agglomerated cork; the second one, also in Montijo, in 1925, dedicated to the manufacture of black agglomerated cork (both factories were working until 1988); and the third one in the town of Ponte de Sor (Portalegre, Portugal), see figure 4.1.1. In the same decade the company opened a factory for preparation in Algeria (1927), and another one in San Vicente de Alcántara (Extremadura in 1928), for extracting the cork of this Spanish region. Finally, a commercial warehouse in Croydon (England) in 1926 (Graça and Afonso, 2010), completing a business strategy based, beyond the proximity to sources of supply of raw materials, in a good knowledge of the demand sources from the consumers and in the proximity to them. But how a small Catalonian cork workshop became the world's largest cork company had much to do with the chance factor, in addition to a successful production strategy based on scale and diversification economies, normally associated to the Chandlerian firms (Chandler, 1996).

Location	Starting and finishing date	Activity
Seixal (Setúbal)	1905 – 1988	Distribution of stoppers
Mora (Évora)	1914 – 1963	Raw material
		(preparation of cork)
Amora (Setúbal)	1917 – 1967	Distribution of stoppers
Vendas Novas (Évora)	1917 opening of a temporary	Raw material
	establishment.	(preparation of cork)
	1949 – 1952	After closing the activity becomes
		in warehouse
Montijo- Bela Vista (Setúbal)	1922 – 1988	Agglomerated cork
Montijo -As Nacentes (Setúbal)	1925 – 1988	Black agglomerated cork
Ponte de Sor (Portoalegre)	1927 – 1963	Raw material
		(preparation of cork)

Figure 4.1.1. Companies of <i>L. Mundet & Son</i> in Portug	al
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Source: Graça y Afonso (2010)

4.2. Corticeira Amorim S.G.P.S., SA: the driving force behind the internationalisation of the cork business (1930s -2010s)

Nowadays, Corticeira Amorim S.G.P.S., S.A. (henceforth referred to as Corticeira Amorim (CA), a name that encompasses all the firms in which CA has shareholdings) is the result of the transformation of Corticeira Amorim, S.A. into a holding company, a move that took place in 1991. CA is a sub-holding of Grupo Amorim, which manages the cork business and is located at Mozelos (in the municipality of Santa Maria da Feira). At the world level, CA's market shares in all cork products are the most relevant: 26% of the cork stopper market; 65% of floor and wall coverings; 55% of compound agglomerates and 80% of expanded agglomerates (Amorim, 2011).

CA was founded in 1963, but its history dates back to the 19th century when it began life as a small family business, producing cork stoppers for Port wine bottles. In 1922, the second generation of the Amorim family founded its first factory – *Amorim & Irmãos, Lda* – in the municipality of Santa Maria da Feira, dedicated to the production of cork stoppers and benefiting from its proximity to the Port wine region. By the 1930s, *Amorim* was already the largest manufacturer of cork stoppers in the north of Portugal.

The choice for the first location of this firm – marking its start-up as a company – can be explained by the chance factor, namely the fact that the wife of António Alves Amorim was from Lamas (Santa Maria da Feira) and, in 1908, her family decided to construct a small plant there for the production of cork stoppers. This was the historical origin of what is now an international company with more than a century of existence.

Both the push factors and the pull factors are directly connected with the entrepreneur's decision: the firm decided to leave Porto because António Alves Amorim had a disagreement with his business partner (a push factor), the new location also resulted in other family reasons for making the move (a pull factor). The type of industry made it possible to use manpower from the family without having to worry about the resources existing in the region. Then came the effects of path dependency: the second generation maintained the business in that place because of the beginning of agglomeration economies (Lopes and Branco, 2013), marking the origin of the cluster of Santa Maria da Feira.

But it was the third generation of the family (in the 1950s and 1960s) that was mainly responsible for taking the first steps to do business abroad and the foundation of CA marked the beginning of a vertical integration strategy, followed by a diversification strategy, soon boosting the company to the position of world leader in the cork business. Américo Amorim transformed the company into the largest Portuguese exporter to Eastern Europe, resulting from a trip that this entrepreneur made to the countries of Eastern Europe. The growth phase displayed clear locational dynamics.

During this first phase, and taking the 1960s and 1970s as benchmarks, CA started to produce agglomerates and crushed cork products, using the waste cork left from the production of stoppers by *Amorim & Irmãos*, and transforming a small family business into a multi-plant business, while still maintaining its location in Santa Maria da Feira. The pull factors were the connection between the two units and the path dependency created with Santa Maria da Feira, which was already in its development phase, a choice that was further strengthened by lower wages and the agglomeration economies.

CA combined its vertical integration strategy with a horizontal integration strategy by acquiring other firms in the cork business. Despite keeping the core business at a home-based level and solidifying the production nationwide – where the pull factor was the proximity to raw material, as well as the other already-mentioned factors – the first attempts were made to internationalise the company, starting with the acquisition of *Comatral* (1972), located in Morocco, and *Samec* (1976), one of the major Spanish cork companies located in Seville. The pull factor emerges from the fact that *Samec* was located close to a rich zone in terms of cork. Also during this first phase, a downward integration process took place, with the creation of several offices abroad in order to dominate the distribution process.

At that time, Portugal already exported more than 50 per cent of its industrial, rather than raw cork products. CA chose to concentrate its business at a regional level (in Portugal), since the company was "embedded" in the environment of Santa Maria da Feira, although, with the simple international integration of the company, it began to establish its presence as a producer and trader in several countries, consolidating the Portuguese world leadership in the cork business.

Throughout the 1980s and 1990s, CA was faced with keen competition in the business of sealing bottles, but nonetheless natural cork continued to be used in the majority of highend wines and champagnes. The company's internationalisation strategy in the production and transformation branch was consolidated by its domination of several of the most important cork producers, with Spain in first place. The capital needed to pursue internationalisation was obtained in the stock market: in 1988, *Corticeira Amorim, Champcork* (founded in 1982 in Portugal, producing cork stoppers for sparkling wines and champagne), *Ipocork* (created in 1978 and now *Amorim Revestimentos, S.A*) and *Amorim & Irmãos* (a producer of cork stoppers, also located in Portugal) joined the stock market.

The second phase was marked by the company's expansion within the home region and by the formation of new national and international branches. The Amorim group acquired

controlling shareholdings in the capital of several companies: *Carl Ed Meyer* (Germany); *Amorim France* (Bordeaux, France); *Corks Associates* (Napa, USA); *Gerhard Schiesser* (Vienna, Austria). Others were not fully controlled by the Amorim Group: *Hungarokork Amorim* (Hungary); *Vitor y Amorim* (Spain) and *Portocork South Africa*. *Wicanders* (1989) also became part of CA's foreign investments. This company was located in Sweden, a country without any raw material, but nonetheless an important consumer of agglomerated cork.

The internationalisation strategy resulted from partnerships and the acquisition of shareholdings in foreign companies, reinforcing CA's international integration and ensuring its own distribution network for corks and floor and wall coverings, turning this company into a multinational company.

In 2001, the fourth generation of the Amorim family entered the cork business: António Rios de Amorim succeeded his uncle, Américo Amorim, as the chairman of CA.

A third phase then began, with the total vertical integration (upwards and downwards) of cork stopper production, thus turning the activity of supplying and preparing the raw material into an entirely autonomous area. In the company's consolidation abroad, Spain emerged as a strategic location in terms of raw material, stopper production and proximity to wine markets.

At the end of 2002, as a result of a report produced by Roland Berger, CA was organised into five business areas: Raw Materials (purchase, storage and initial preparation), Natural Cork Stoppers; Composite Cork; Floor and Wall Coverings and Insulation Cork. The Raw Materials area supplied all the production units, and the geographical range of the business spread across Portugal, Spain, South Africa, Morocco and Italy (Sardinia), thus ensuring the company's presence in all the cork producing countries. The remaining business units produced and traded products that used the cork waste from stopper production, while cork that was not likely to be used in the production of stoppers was integrated into the supply of raw materials.

In 2004, a restructuring process was commenced at the industrial units located in Spain, Portugal and North Africa, with the aim of centralising the production of discs for cork stoppers in the south of Portugal.

In 2006, the main focus became the business unit of cork stopper production, given the specialized demand for this product in different industries.

During 2007, the company embarked on another restructuring process and created two macro areas that integrated the five business units: technical cork and rubber cork were merged into a new "composite cork" unit, while the "natural cork" unit included the raw material and the production of cork stoppers. Finally, research and development were centralised into a single unit.

Figure 4.2.1. – Organisationa	l Chart of	Corticeira	Amorim
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	AMORIM NATURAL CORK	
RAW MATERIAL	STOPPERS	
Amorim Florestal, S.A.	Amorim & Irmãos, S.G.P.S., S.A	
Purshase	Production	Distribution
Amorim Florestal, S.A. Ponte de Sór – Portugal	Amorim & Irmãos, S.A. Santa Maria de Lamas - Portugal	Amorim & Irmãos, S.A. Unid. Ind. Distribuição Santa Maria de Lamas - Portugal
Amorim Florestal, S.A. Coruche – Portugal	Amorim & Irmãos, S.A Unid. Ind. Raro Vergada – Portugal	Amorim Australasia Adelaide – Austrália
Amorim Florestal, S.A. Abrantes – Portugal	Amorim & Irmãos, S.A Unid. Ind. Valada Valada – Portugal	Amorim Cork Italia, S.p.A. Conegliano – Itália
Amorim Florestal, S.A. Unid.Ind. Salteiros Ponte de Sór – Portugal	Amorim & Irmãos, S.A Unid. Ind. Coruche Coruche - Portugal	Amorim Cork Deutschland, GmbH Bingen am Rhein – Alemanha
Amorim Florestal España, S.L Algeciras – Espanha	Amorim & Irmãos, S.A. Unid. Ind. Champanhe Santa Maria de Lamas - Portugal	Amorim Cork Bulgaria, EOOD Sofia – Bulgária
Amorim Florestal España, S.L. San Vicente de Alcántara – Espanha	Amorim & Irmãos, S.A. Unid. Ind. Portocork Santa Maria de Lamas – Portugal	Amorim Cork America, Inc. Napa Valley, CA – EUA
Amorim Florestal Mediterrâneo, S.L. San Vicente de Alcântara - Espanha	Amorim & Irmãos, S.A. Unid. Ind. Salteiros Ponte de Sór Portugal	Amorim France, S.A.S. Eysines, Bordéus – França
Comatral – Compagnie Marocaine de Transformation du Liège, S.A. Skhirat – Marrocos	Francisco Oller, S.A. Girona – Espanha	Amorim France S.A.S. Unid. Ind. Sobefi Cognac – Franca
S.N.L. – Societé Nouvelle du Liège, S.A. Tabarka – Tunísia	Trefinos, S.L. Girona - Espanha	Amorim France S.A.S. Unid. Ind. Champfleury Champfleury – França
S.I.B.L. – S.A.R.L. Jijel – Argélia	Agglotap S.A. Girona - Espanha	Victor y Amorim, S.L. Navarrete (La Rioja) Espanha
	Augusta Cork, S.L. San Vicente de Alcántara Espanha	Hungarokork Amorim, Rt. Veresegyhäz – Hungria
		Viena – Áustria
		Amorim Argentina, S.A. Buenos Aires – Argentina
		Portocork America, Inc. Napa Valley, CA – EUA
		Ltd. Cidade do Cabo África do Sul
		Industria Corchera, S.A.
		Société Nouvelle des Bouchons
		I.M. «Moldamorim», S.A.
		Amorim Cork Beijing, Ltd. Pequim – China
		S.A. Oller et Cie Reims – França
		Corchos de Argentina, S.A. Mendoza - Argentina
		Sagrera et Cie Reims - França
		Trefinos Italia SRL Treviso – Itália
		Bouchons Prioux S.A.R.L. Epernay - França
		Amorim Cork España S.L. San Vicente de Alcántara - Espanha
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Source: Corticeira Amorim, S.G.P.S., S.A., Annual Report 2012.

Figure 4.2.1. – Organisational Chart (cont.)

AMORIM CORK COMPOSITES					
COMPOSITE CORK	COVERING CORK	INSULATION CORK			
Amorim Cork Composites, S.A.	Amorim Revestimentos, S.A.		Amorim Isolamentos, S.A.		
	Production	Distribution	Distribution		
Amorim Cork Composites, S.A. Mozelos – Portugal	Amorim Revestimentos, S.A. S. Paio de Oleiros – Portugal	Amorim Benelux B.V. Tholen – Holanda	Amorim Isolamentos, S.A. Mozelos – Portugal		
Amorim Cork Composites, S.A. Corroios – Portugal	Amorim Revestimentos, S.A. Lourosa – Portugal	Amorim Deutschland GmbH & Co. KG Delmenhorst – Alemanha	Amorim Isolamentos, S.A. Silves – Portugal		
Drauvil Europea, S.L. San Vicente de Alcántara – Espanha		Amorim Flooring Austria GmbH Viena – Áustria	Amorim Isolamentos, S.A. Vendas Novas – Portugal		
Corticeira Amorim France, S.A.S. Lavardac – França		Amorim Flooring Nordic A/S Greve – Dinamarca			
Chinamate (Xi'an) Natural Products Co. Ltd. Xi'an – China		Amorim Flooring (Switzerland) AG Zug – Suíça			
Amorim Cork Composites, Inc. Trevor, WI – EUA		Amorim Revestimientos, S.A. Barcelona – Espanha			
Amorim (UK) Limited West Sussex – Reino Unido		Dom Korkowy, Sp. Zo.o Cracóvia – Polónia			
Dyn Cork – Technical Industry, Lda. Paços de Brandão – Portugal		Amorim Flooring North America Hanover, MD – EUA			
Amorim Industrial Solutions Imobiliária, S.A. Corroios – Portugal		Cortex Korkvertriebs GmbH Fürth – Alemanha			
		US Floors Inc. Dalton, GA – EUA			
		Timberman Denmark A/S Hadsund – Dinamarca			

Source: Corticeira Amorim, S.G.P.S., S.A., Annual Report 2012.

By the first decade of the 21st century, CA was one of the most internationalised Portuguese companies (*Annual Report 2012*): 296 agents (44 located in Spain); 30 industrial units (8 plants in Spain) and 84 firms (14 firms in Spain).

Figure 4.2.2. shows a list of the main companies, with details about their location, starting date, present situation and kind of ownership.

Figure 4.2.2. Co	ompanies of	Grupo /	Amorim	in S	pain
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Name	Location	Starting date	Situation	Ownership	Activity
AMORIM & IRMAOS-IV	San Vicente de Alcántara	19/02/1988	Closed:	Direct	Raw material
SA	(Extremadura)		10/26/2010 (see		(preparation of cork)
			Amorim Florestal		
			España SL)		
AMORIM FLORESTAL-	San Vicente de Alcántara	19/02/1988	Merged with Amorim	Direct (100%)	Raw material
ESPAÑA SL	(Extremadura)		&		(preparation of cork)
			Irmãos - IV; Amorim		
			Florestal España, SA		
			and Amorim Florestal		
			Catalunya SL		
	/		(2010)		
AMORIM FLORESTAL	San Roque (Cadiz)	1999	Closed (see Amorim		Raw material
ESPANA, SA			Florestal Espana, SL)		(preparation of cork)
AMORIM FLORESTAL-	Cassa de la Selva (Girona,	28/02/2001	Closed:	Direct	Raw material
CATALUNYA SL	Catalonia)		11/15/2010 (see		(preparation of cork)
			Amorim Florestal		
	Can Danua (Cadia)	15/01/2002	España SL)	Direct (100%)	Devu meterial
AIVIORIIVI FLORESTAL	San Roque (Cadiz)	15/01/2003	Open	Direct (100%)	Raw material
	Navarroto (La Pioia)	02/11/1002	Onon	Direct (50%)	Distribution of stonnors
	San Vicente de Alcántara	26/11/2002	Open	Direct (50%)	Distribution of stoppers
SI	(Extremadura)	20/11/2005	Open	Direct	Distribution of stoppers
FRANCISCO OLLER	Cassà de la Selva (Girona	Acquired	Onen	Direct (87 01%)	Stoppers for sparkling
SOCIEDAD ANONIMA	Catalonia)	31/07/2007	open	2.1.000 (07.10270)	wine and champagne
	,	- , - ,			(production)
SURODIS SL	San Vicente de Alcántara	2007	Open	Indirect –	
	(Extremadura)			subsidiary of	
				Francisco Oller SA	
CHAPUIS, SL	Girona (Catalonia)	2007 (Grupo	Open	Direct	
		Francisco Oller		(100%)	
		SA)			
OLIMPIADAS BARCELONA	Girona (Catalonia)	2007 (Grupo	Open	Direct	
92, SL.		Francisco Oller		(100%)	
TREENLOC CL		SA)	•	D: (00.044)	
TREFINOS SL	Palafrugell (Girona,	Acquired June	Open	Direct (90.91%)	Stoppers for sparkling
	Catalonia)	2012			(production and
					(production and distribution)
	San Vicente de Alcántara	Acquired June	Onen	Indirect –	Stonners for snarkling
	(Extremadura)	2012	Open	subsidiary of	wine and champagne
		2012		Trefinos	while and champablie
AGGLOTAP. SA	Girona, (Catalonia)	Acquired June	Open	Indirect –	Stoppers for sparkling
,-	, (,	2012	- F -	subsidiary of	wine and champagne
				Trefinos	
DRAUVIL EUROPEA SL	San Vicente de Alcántara	26/06/1998	Open	Direct	Cork composites
	(Extremadura)			(100%)	production
AMORIM	Barcelona (Catalonia)	16/05/1984	Open	Direct (100%)	Floor and Wall
REVESTIMIENTOS SA					Coverings (Distribution)

Source: SABI database and Amorim Reports

As far as CA's presence in Spain is concerned, and in terms of raw material, San Vicente de Alcántara and Cadiz (Extremadura and Andalusia) are the most relevant areas, considering that CA does not own any cork forests. As was said above, CA concentrated its production of cork discs in the south of Portugal (Ponte de Sôr), along with the preparation of cork (the Coruche unit, acquired in 2001), this being the most relevant area in terms of cork production. These units completed the upward industrial verticalisation process, by being close to the production of cork stoppers and agglomerated cork.

In the case of cork stoppers, Girona and San Vicente de Alcántara (Catalonia and Extremadura) are the most important locations. Several remarks should be made concerning these units. Firstly, about the acquisition of *Grupo Oller*, in 2007: this was a historic moment in both the Catalonian and the European markets, representing the reinforcement of the company's capacity for the production and distribution of champagne stoppers in the Spanish, Italian and French markets. A year after this acquisition, *Champcork* and *Interchampanhe*, two companies located in Portugal, were both dissolved. In 2012, the acquisition of *Trefinos* with six units engaged in the production and distribution of cork stoppers for champagne and sparkling wine was another important mark in the history of CA, again reinforcing the segment of champagne and sparkling wine stoppers, making these kinds of stoppers strategic products in this particular business area. Again, Catalonia's domination of this market is evident, but this time with production units that belong to a Portuguese company.

Also in the south of Portugal, *Equipar* (Coruche) centralised the whole production of a certain kind of stoppers ("Twin Top[®]", agglomerated stoppers, natural stoppers and champagne stoppers).

To sum up, the explanation for the company's presence in the south of Spain can be found in its goal of seeking to dominate the production of raw material. In the north, the production of stoppers, and particularly of champagne stoppers, is the target, by eliminating the competition and being located close to Europe's wine producing countries.

Two reinforcement strategies deriving from location can be identified from the above description. CA is a vertically integrated company, controlling the production from raw material, its transformation into finished products and distribution. Since the 1970s, the company has been strengthening its position in the cork-producing countries, and in Spain in particular. In the 1980s, the company began to acquire other cork producers and distributors from all over the world, boosting its position as a world leader, in all aspects of cork production and distribution.

In the 21st century, the focus has again been on Spain, and once more linked to the proximity of raw material (in the south) and the production of stoppers (in the north). The

acquisition of several companies in the north of Spain has been particularly crucial and the "Iberianisation" of the cork business is now a reality, given the growing importance of trade between Portugal and Spain: Portugal imports natural cork from Spain, and Spain occupies third place in terms of Portuguese exports of manufactured cork.

But could this mean that business has been shifted from Santa Maria da Feira (Portugal) to Spain by this multinational firm? The trend between 2004 and 2010 points to a decline in the Portuguese cork sector, with diminishing employment and a fall in production levels at Santa Maria da Feira (Lopes and Branco, 2013). Exports of manufactured cork products have also performed better outside Feira, despite this area still being the dominant one (Lopes and Branco, 2013).

5. Concluding remarks

The central theme of this paper is the location and relocation decisions of cork firms during all the cork industry life span, a long period of more than a century. Its main contribution is the study of four development phases that, although distinct in many facets, are identified by the region (or country) that leads the cork business worldwide, in relative and/or absolute terms.

Most of the studies of relocation of firms use microeconomic or managerial approaches using large panel data to extract empirical regularities by means of econometric or questionnaire methods. This paper follows a different path, trying to uncover the long run trends of the cork industry with a meso and macroeconomic approach that pays more attention to historical, social and political factors.

In any case, a push (repulsion) and pull (attraction) schema of factors explaining the location decisions of cork firms is the core of the empirical part of the paper, and these factors are mainly of an economic nature. The classical location theory, the new economic geography, the literature on clusters and industrial districts and the studies of relocation companies' decisions, all contribute to the identification of many such factors, as transport and communication costs, raw materials availability, labour costs, proximity to markets, agglomeration economies, local and central government policies and incentives, entrepreneurship, CEOs beliefs, preferences and self-interest, and even chance, etc.

For a composite of reasons well explained in the paper, the leadership of cork business passes sequentially from France, in the original development of the sector, still in the nineteen century, to Catalonia, that had an absolute hegemony first and a relative one after, to Portugal, in the fourth phase that lasts until now.

As it is well documented in this, and many other, papers the cork industry during all the twentieth century and the first decade of the twenty first, is essentially an "Iberian"

business. Together, Portugal and Spain represent an overwhelming proportion of the business (more than three quarters of production and exports). It is worth mention that the corporate history of the cork industry is marked by two Iberian companies with origin in the remote nineteen century, but whose success has occurred over the twentieth century: Mundet and Corticeira Amorim.

Many aspects unite and separate these companies. Mundet started as a small family business based in Catalonia and producing cork stoppers. Corticeira Amorim began also as a small family business, also producing cork stoppers. With the appearance of agglomerated cork at the end of the nineteen century the natural cork stoppers were threatened - among other reasons - and Mundet business was seriously affected. Rather, the business of the then Amorim&Irmãos prospered and in the 1930s this company was already a major producer of corks, benefiting from the proximity of the Oporto wine. In the meanwhile Mundet definitely shifted production to Portugal (Seixal), producing agglomerate cork. This company also sought to be near to the supply raw material in the South of Iberian Peninsula, installing cork planks factories.

After the Second World War the Portuguese leadership in the cork exports was assured. However, competition from synthetic materials put into question the success of Mundet and in the 1980s this company shut down. By contrast, in 1960s the Amorim&Irmãos diversified its business with the production of agglomerated cork, creating another company, Corticeira Amorim, that use the waste from the production of cork stoppers. Low wages, among other factors guaranteed the resilience of this company in the business of stoppers. The disappearance of the main competitors located in the South of Portugal, has allowed this company to survive. Diversification and domination of the supply of raw material in the South of Spain and Portugal are also part of the company strategy. Keeping the production core in Portugal, during the first decade of the 21th century, the Corticeira Amorim started to buy out some producing units of cork stoppers in Catalonia and closing some establishments in Santa Maria da Feira. The "pull factors" to Catalonia can be the proximity to the clients, a more efficient transport net and the domination of the competitors. But can this mean that the agglomeration economies in Santa Maria da Feira are exhausted?

The comparative story of these two important cork companies is another contribute of this paper, deserving further examination in future research.

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