

“REGIONAL INTEGRATION AND BUSINESS LOCALIZATIONS: A LONG RUN APPROACH TO THE CORK INDUSTRY IN THE IBERIAN PENINSULA”

(Draft version, please do not quote)

1. Introduction

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 localization in the Iberian Peninsula. We start by studying the historical roots, motivations and economic consequences of the delocalization of Catalanian 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. It starts with a brief analysis of the factors of industrial location, considering the traditional determinants framed by location theories. Part 3 is dedicated to a historical approach considering the changes in the cork industry location. With this result in mind, part 4 and 5 described the strategic decisions of two important companies in the history of the cork business, Mundet and Corticiera Amorim, in order to understand the most strategic factors in the location decision of these companies. Finally, part 6 ends the paper with the main conclusions.

2. Factors of industrial location: A theoretical framework

The analysis of industrial location has become very complex in recent decades as a result of the appearance of new lines of research that have complemented (criticized, and even improved) the known classical theory of industrial location, basically collected in the Alfred Weber work published over a century ago (Weber, 1909). In this work, it is assumed that in a perfectly competitive environment, the main objective of entrepreneurs when choosing their optimal location is to minimize production costs, especially those of transportation. This leads them to be in locations near either of the sources of supply of raw materials or consumer centers of manufactures. In the cork business, such decisions would link the industrial location with the proximity to the exclusive cork oak areas on the planet, in the Mediterranean countries, or otherwise, in the vicinity of the consumption centers of manufactures, in Central and North Europe,

and from 1900 also in the United States and other developed countries (Zapata, 1996; Voth, 2009).

According to the above, the most influential factors in location decisions would be the transport costs (which in the Weber logic are the most important and are in proportion to the weight and volume of the raw materials), the labor costs and the forces of agglomeration (Burgos, 1993). For cork, the importance of transport costs in the cost structure of the industry has already been emphasized in Mira (1998) and Sampaio (1977). This factor holds the third in such structure, behind the acquisition cost of the raw material (50-60% of cost structure, approximately) and labor costs (20-30 per 100, approximately), reaching between 4% and 10% of the total costs of cork manufacturing (Sampaio, 1977; Sala, 2003; Parejo, 2009). Although reduction of these costs depends largely on the physical distance to the raw materials and/or the sale centers, is also conditioned by the existence or not (in the chosen location) of competitive transports and communications in terms of cost. We refer to the access or proximity to the railway or to a commercial port, factors that, for instance, have influenced, in various periods of history, the location of the cork industry in Portugal (Branco and Parejo, 2011).

The same work has placed labor costs as one of the factors that could determine the location of the cork industry in the administrative district of Aveiro in Portugal (Branco and Parejo, 2011). In this sense, the wage gap existing between north, center and south Portuguese regions, in favor of the former, and the availability of labor, could be some of the factors that have allowed the relocation of the Portuguese cork industry from the central and southern regions to the north of the country. And something similar could have gone to the relocation process of the industry in the second half of the twentieth century, since the increase in labor costs is noted as one of the possible causes of the abandonment of cork manufacturing in countries that do not producer cork (Sampaio, 1977).

Along with the labor cost, some authors have emphasized in the location decisions the importance of skilled labor. This must have been a key factor in the artisanal stage of the cork business, when the main barrier to entry into the business was not the financial capital, but the craftsman's expertise in developing the cork stoppers (Escribá and Murgui, 2008; Sala, 1998; Alvarado, 2002, 2005 and 2006). In fact, the origins of cork manufacturing in the Spanish Southwest regions, and perhaps also in Portugal, were linked to the arrival of Catalan cork workers, carriers of this know-how, to these

regions in the second half of the nineteenth century (Sala and Nadal, 2012; Fonseca and Guimarães, 2012; Parejo, Faísca and Rangel, 2013).

Often, in some industries, companies are willing to sacrifice transport and labor costs economies for acceding to agglomeration economies. That aspect, which has been analyzed by Alley (1997) and Trueba and Lozano (2001), among other works, leads us to consider the competitive advantage of companies that organize their production in the form of industrial districts or clusters. There is large empirical evidence about it, both generic (Marshall, 1890; Becattini, 2005), as in the specific case of the cork industry (Del Bono, 1993; Ruivo, 1995; Branco and Parejo, 2011; Rangel, 2013; Branco and Lopes, 2013). This competitive advantage come from the access to a set of resources (financial, informational or institutional ones) which are shared by all the companies of the district, as well as having access to a skilled labor market and taking advantages of the cooperative relations existing between the companies in the district, that ultimately improve their efficiency (Otatti Dei, 2006; Soler, 2008).

Precisely, Escribá and Murgui (2008) have stressed the importance of skilled labor and agglomeration in location decisions of industries. These aspects are present, according to the authors, especially in regions with a long industrial tradition. The industrial tradition (and by extension, commercial and financial tradition) is, therefore, another factor to consider when choosing the optimum location. As noted Ruju (2000), the origins of Italian cork industry occurred in mainland Italy, away from the Sardinian cork oaks, and next to the most industrialized Italian areas. Something similar happened in Germany, where cork manufacturing began in Delmenhosrt, near to Bremen, one of the major trading regions of Europe at the time (Voth, 2009). The importance of this commercial tradition as location factor is also evident in the beginning of the Catalan cork industry, as demonstrated in Ros (2002) and Sala (1998). Therefore, it seems reasonable to consider the hypothesis that regions (or countries) with robust industrial and/or commercial traditions exert higher attractive forces for companies than those that do not. In fact, Belussi and Sedita (2012) designated as an endogenous factor for the birth and formation of an industrial district the existence of "ancient craft traditions." In short, the "historical preconditions" are location factors to consider, presents even in the origins of the industrial district theory (Marshall, 1890; Elola et al. 2012).

The classical theory of industrial location has been completed since the 1970th with some works addressing the human condition of entrepreneurs over their rational behaviors as economic agents. In this area is the classical work of Berry (1979), within

the so-called “behavioral approach”, which states that the location decision is a personal decision based on the entrepreneur's subjective view of aspects like the sales potential of a specific location, or the valuation of the physical and economic conditions of the environment. Another contribution in this line is Aydalot (1985), which divides the industrial location decision at various stages in which the entrepreneur, subjectively, goes discarding possible locations based on factors such as the labor features, environmental conditions, availability of infrastructures, other purely economic criteria (like existence of suppliers or subsidiaries companies), etc., being the final decision strictly personal and subjective.

In our view, this aspect of the location theory, based on entrepreneurs' personal decisions (and thus, not in purely economic factors), is related to the chance factor (Krugman, 1992), which is already considered in the contributions that have appeared in the so-called "new economic geography" (Krugman, 1991, Fujita, Krugman and Venables, 2000, Fujita and Thisse, 2002). This framework seeks to link geographical disparities to economic disparities to establish that the spatial distribution of economic activity (agglomeration or dispersion) results from the balance of centripetal and centrifugal forces (which are, after all, attraction and expulsion factors of industries). The first ones, which favor the agglomeration of firms, operate in regions with great size market (demand). They are based in that the developed regions, as being the areas that offer higher real wages, are also the most workers attracting areas, feeding back the mentioned demand. They also act as centripetal forces the existence of technological and knowledge spillovers, and the integration of processes in the agglomeration of firms. In turn, the centrifugal forces are responsible for the economic disparities, and therefore for the productive dispersion. They act, for instance, through the increases of land rents in developed regions, or due to labor tends to be cheaper in less developed regions, which may be an attracting industries factor, added to the lower competition in them, compared to developed regions. All this things, in addition to pollution and other negative externalities associated with developed areas, act as factors that discourage the location.

Within this new theoretical framework we have to situate the access to the technique, as location factor, since the existence of knowledge spillovers acts as a centripetal force in Krugman's model. In the cork business, this aspect was central in the last decades of the nineteenth century, with the emergence of the first machines producing cork stoppers (Espadalé and Marti, 2002), and in the first decades of the twentieth century,

with the invention and development of agglomerated cork, radical innovation that drastically changed the business conditions and the cost structure of the industry (Sala, 2003; Zapata, 2002), making more intensive in capital the production process. Since this moment, presumably, transportation costs began to be less important face to the scale and diversification economies associated to the Chandlerian firms (Chandler, 1996). In this question could be based the change in industrial location from the Catalan regions to the American, English and German industrial cities in the early decades of the twentieth century.

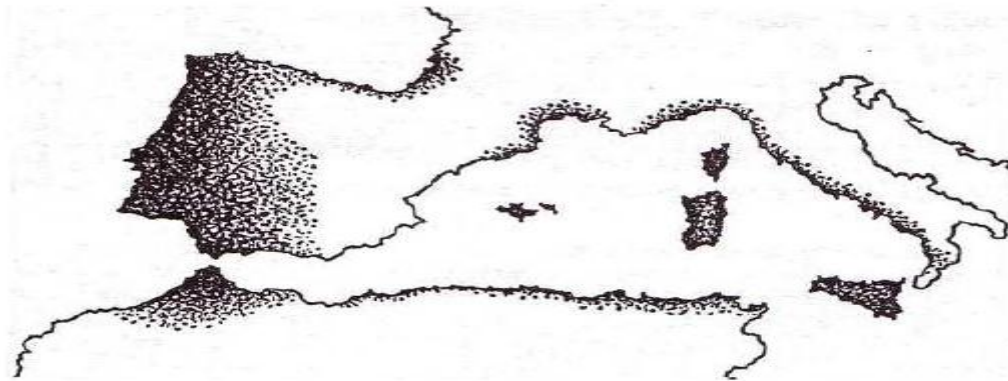
Before closing this theoretical section, it seems appropriate to mention the role of institutions as a attracting or expulsing factor for investments, understood broadly, including legislative aspects (labor, commercial and industrial legislation), economic policy (customs policy, industrial policy, exchange rate policy, etc.), political, social and labor stability (level of unionization, labor movement, business management, etc.), and even cultural aspects that may help or hinder the implementation of industries in a particular location. Also included in this section the conjuncture aspects of economic ones (economic crises or periods of economic growth), political ones (wars or periods of temporary political instability) or social ones (social or labor movements that affect the development of the business).

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 extreme concentration of the raw material in a few countries of the Mediterranean shore, unique place in the world where the 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 the cork business has always had an international character, based on the growing importance of import flows of raw material, made by countries that do not produce cork but that began to manufacture cork 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).

Figure 3.1.

The *subericola* world. Cork oak área distribution in the world



Source: Natividade (1950: 35)

This gives, presumably, transport costs considerable importance in the cost structure of the cork industry (Sampaio, 1977; Mira, 1998), with the acquisition cost of the raw material 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. 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.

Table 3.1.

Share of different countries in the world exports of cork manufactures

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

	1962-1964	1972-1974	1982-1984	1992-1994	2002-2004
Spain	17.1	18.3	12.7	11.6	13.3
Portugal	56.4	64.5	73.7	68.4	66.9
Spain + Portugal	73.5	82.8	86.4	80.0	80.2
France	1.5	1.7	2.8	2.4	4.3
Italy	5.4	3.2	1.4	3.1	3.9
Germany	1.2	2.8	3.3	4.7	2.7
United Kingdom	4.6	3.0	2.4	0.7	0.3
EUROPE (a)	95.5	95.9	97.6	95.3	94.8
USA	4.1	2.5	1.4	3.8	3.3
Others	0.4	1.6	1.0	0.9	1.9

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

Source: Parejo (2009: 347).

But the location of the cork industry has not always been the same. On the contrary, it has changed a lot over the past centuries, being able to distinguish, according to the literature (Zapata, 1996; Zapata, 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 were 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, since cork had some physical and functional properties that allow the oxygenation of the wine and its optimum preservation. Given the presence of cork oaks in the Gallic country, the spread of the sparkling wine consumption induced the birth of an incipient cork industry in southern France, 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) the French industry developed near the cork oaks, in the south of the country, this is close to the raw material; (b) the French industry arose near the large markets of cork manufactures at the time, as was the case of 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 Languedoc, near the location of the cork industry in the region of Provence (Medir, 1953; Ros, 2002).

Due to the sustained increase in wine consumption across Europe, and its growing bottling, the demand for cork stoppers became widespread. The 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). The 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
Proximity to manufactures markets		Germany England Catalonia
Industrial, commercial and/or financial traditions		Germany England Catalonia
Availability of know-how		England Catalonia ¿Germany?
Institutional framework	¿France?	¿England? ¿Catalonia? ¿Germany?
Economic, politic and social conjunctures	¿France?	¿England? ¿Catalonia? ¿Germany?
Industrial Agglomeration		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 demand for cork manufactures. This must have caused problems in French manufacturing, forcing many operators to undertake the manufacturing in other *suberícolas* areas. This would be precisely one of the pull factors for 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 manufacture cork (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 the 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, the Catalan cork industry soon led the world business of the cork manufacturing, enjoying a hegemonic position almost complete 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 reasons similar 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, the Catalan 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 migrating 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 on 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 since 1840 (Parejo, Faísca and Rangel, 2013; Serrano, 2008). Another one was the arrival of Catalonia workers in Extremadura, where often associated with English capital, which in 1838 had begun to manufacture the cork in the town of Alburquerque (Parejo, Faísca and Rangel, 2013). And finally, the Catalonian emigration to Portugal; firstly, to some areas of the Algarve, and then to the Alentejo districts, where the Catalonian Andreu Camps started the cork industry in the town of Azaruja (Évora), in 1845 (Sala and Nadal, 2012).

One can perceive a second wave of Catalonians who emigrated seeking a better future in the late nineteenth century. In this wave must be placed 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 location changes mentioned, 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
Proximity to raw materials	France Catalonia	Extremadura (SPA) Andalusia (SPA) Italy Algarve (PORT) Alentejo (PORT) Estremadura (PORT) ¿Maghreb?
Proximity to manufactures markets		Italy Estremadura (PORT) United States Other countries
Industrial, commercial and/or financial traditions		Italy United States Other countries
Availability of know-how		Extremadura (SPA) Andalusia (SPA) Italy Algarve (PORT) Alentejo (PORT) Estremadura (PORT) ¿Maghreb?
Institucional framework	¿Catalonia?	¿Italy? ¿Algarve (PORT)? ¿Alentejo (PORT)? ¿Estremadura (PORT)? ¿Maghreb?
Economic, politic and social conjunctures	Catalonia	¿Italy? ¿Algarve (PORT)? ¿Alentejo (PORT)? ¿Estremadura (PORT)?
Industrial Agglomeration		Italy Algarve (PORT) Alentejo (PORT) Estremadura (PORT)
Access to technique	Catalonia	Italy ¿Estremadura (PORT)? United States Other countries
Presence 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, they began to be exploited the large *dehesas* and *montados* of the Iberian southwestern. Therefore, this was a pull factor of the 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). With the cork agglomerate drastically changed

the characteristics of the cork industry, and by extension, of the business. Having 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 able to mount large companies in the terminology of Chandler (1996), expanded 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 this technical change, even when it did so with speed and reliability. For it, it can maintain at least 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 locations of the cork industry in the developed countries.

With the expansion of the cork agglomerate manufacturing and its many applications, since the early twentieth century, the business spread diversified and the world market of cork manufactures 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.

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, those 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 direct 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. And very prosperous too. The business reached unprecedented proportions in countries with cork industry, especially in Spain, where the sector's 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 began in 1929, thirdly, eventually led to changes in the business that ended up giving an end to thirty years of thriving 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 we will try to synthesize in Table 3.4., and explain from it, the cork industry of non-producing countries began to disappear, in a process that was explained brilliantly by Sampaio (1977), and that led to what Zapata (2002) called the *iberization* of the world cork industry. This process, as the name suggests, has led to the concentration in the Iberian Peninsula of the cork industry, but by switching the roles about what happened before. Portugal is now 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, to supply it the raw materials or semi-manufactures those need to work (Zapata, 2002; Branco and Parejo, 2008; Parejo, 2009 and 2010).

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

Table 3.4.

Push and Pull factors explaining the pass from the “Stage of relative hegemony of Catalonia” to the “Stage of Portuguese hegemony”

Factor	<i>Push</i>	<i>Pull</i>
	Country / Region	Country / Region
Proximity to raw materials	United States Germany England Other countries	Portugal Spain ¿Italy? ¿France? ¿Maghreb?
Proximity to manufactures markets	United States Germany England Other countries	Portugal
Institutional framework		Portugal
Industrial agglomeration		Aveiro (PORT) ¿Extremadura (SPA)?
Presence of a leader firm		Aveiro (PORT)
Chance factors		¿Aveiro (PORT)?

A priori, but is a process that requires a more detailed research, the main push (hypothetical) factors that should act in the not-producing countries was three. First, the higher costs for transport, which recommended a location closer to the raw material (Sampaio, 1977). Second, the strong growth of the real wage 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 the measures implemented by the Estado Novo were in the other direction. That is, in the Portuguese country authorities sought wage restraint in the north of the country to facilitate the location of industries (Branco and Parejo, 2011). The third factor was the proliferation of cork substitutes in many applications which until then had had 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 stop using cork as a raw material to manufacture and launch its substitutes, without leaving the market to attending (Zapata, 2002).

As for the factors that helped the industry to focus, again, in the Iberian Peninsula (and so, in southern Europe), one might distinguish several aspects. 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 existing evidence in that the economic policies adopted by the Estado Novo Portuguese favored the cork manufacturing and the industrial location in the north of the country, in concret in the county of Feira (Pereda García, 2009; Branco and Parejo, 2008 and 2011). There had been installed Amorim & Irmãos early twentieth century, for reasons to be discussed (among which was probably the chance factor). There also developed its business strategy that 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 articles from cork.

4. L. Mundet & Sons: Successful 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 Catalan 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 same in the first decades of the twentieth century, we must go back several generations back¹. 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 lineage of industrial cork. In addition, his wife, Teresa Carbó i Saguer, was the daughter of a small Catalan industrial cork, with which 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 the business from then until the late nineteenth century was remarkable, according to the "golden age" lived 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 reasons that already mentioned before associated to the emergence of agglomerated cork and other kind of closures, as cork discs, screw caps, etc., resulting an unprecedented crisis in the Catalonian cork industry, parallel to the rise of the cork manufacturing in not-producing countries (Parejo, 2009).

The grey clouds protruded in the Catalan cork industry were gloomy about the future of the children of Lorenzo Mundet. The greatest of them, José Mundet i Carbó, knowing the difficult situation that hung over the family business in Catalonia, took the decision to emigrate to the United States. The reasons why he chose the United States aren't clear, but not seem to be linked to the cork business. Maybe it responded to the general trend of the migration process in this period, when European people tended to go to the American continent. So, over 1890 he moved to New York to try to carve out a future away from his father's orders. Quickly, he perceived the big development of the nascent manufactures of agglomerate in the United States market, what led him to open a little cork factory in Brooklyn (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 was opened in Palamós (Catalonia), few kilometers to San Antonio de Calonge, in 1898. Therefore, in this year L. Mundet and Sons was already set with 3 factories, one of them for preparation of 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 traveled to New York, firstly; the push factor that supposed the crisis of the traditional cork stopper industry, secondly; the fact of having have the know-how

¹ 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).

necessary for the manufacturing, thirdly; and finally, the proximity to the main consumption centers of cork manufactures, were determinants in the initial development of the new empire Mundet.

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 great that José Mundet required 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 export 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 establishments 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 establishments 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 (Setúbal, Portugal) in 1922, dedicated 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). 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 getting the cork of this Spanish region. Finally, a commercial warehouse in Croydon (England) in 1926 (Filipe and Afonso, 2010), completing a business strategy based, beyond the proximity to sources of supply of raw materials, in the knowledge of consumer centres and in the proximity to them. About how a small Catalonian cork workshop became the world's largest cork company had much to see the chance factor, in addition to a successful production strategy based on the scale and diversification economies, normally associated to the Chandlerian firms (Chandler, 1996).

5. Corticeira Amorim S.G.P.S., SA: pushing the internationalisation of the cork business (1930s -2010s)

Portugal is the largest producer and exporter in the world of manufactures cork products, being responsible for more than 60% of the worldwide value exported of cork, followed by Spain with 16,6%. Cork Stoppers lead Portuguese exports (70% of the total), following by the cork building material (21%). The main export destinations are the wine-producing countries, notably France, E.U.A., Spain, Germany and Italy. (APCOR 2012).

This position is due to the almost 600 firms belonging to the cork sector and more than 8.000 workers, producing about 40 million corks per day, of which 35 million are produced in Santa Maria da Feira, a county in the North of Portugal, belonging to the

district of Aveiro, although the bulk of raw material (natural cork) is produced in the Southern regions of Alentejo and Ribatejo.

The history of hegemonic position of Portugal in cork business is often confused with the history of Corticeira Amorim and the almost monopoly position acquire by the group in the cork business: 26% of market share in the world wide of cork; 65% of market share in the cork stoppers and 55% of market share in the composite agglomerated and 80% of expanded agglomerated (Amorim 2011).

The Corticeira Amorim was founded in 1963 but the history of this company started in the nineteenth century, with a small family business, producing stoppers for Oporto wine.

In 1922, the second generation founded the first factory, Amorim&Irmãos, Lda, in a small County of Portugal, Santa Maria da Feira, dedicated to the production of cork stoppers and benefiting from the proximity of Oporto wine region. In the 1930s, Amorim was already the largest manufacturer of cork stoppers in the North of Portugal. The location of the business is due to chance factor, namely the fact that the wife's family of António Alves Amorim was from Lamas (Santa Maria da Feira) and in 1908 the family decided to construct there a shed to produce stoppers. This was the origin of an international company with more than a century of live.

But it was the third generation the largely responsible for the first major step for the company abroad and the foundation of the Corticeira Amorim marks the beginning of a diversification strategy, in markets and products, busting the company to the position of worldwide leader in the business. Américo Amorim transformed the company into the largest Portuguese exporter to Eastern Europe, a result from a journey of this entrepreneur through the countries of Eastern Europe.

The Corticeira Amorim started to produce agglomerates and crushed cork products, using the wastes of cork from Amorim & Irmãos. During the 1970s and 1980s, this company begin is presence as producer and trader in several countries in the world, consolidating the Portuguese leadership in the cork business.

Being Spain the second most important producer of cork and also with an important position in the cork business in all its facets, it was expectable that this Country also competed for the hegemony in the cork business.

What we can learn from history? In the past Catalonia – that has an insignificant position in the production of cork - lost its hegemonic position by facing the menace of Portugal and its lower wages in the cork industry and also the menace of the cork

agglomerates. The displacement of several workers and entrepreneurs from Catalonia to Portugal took place, as it was the case of Mundet, a small family business.

In the context of “push” and “pull” factors, Corticeira Amorim also look for new locations for its business, establishing international operations, namely near the raw material, in Spain, noticing the absence of forestall property by this company. The first presence of Corticeira Amorim in this country took place in 1976 with the acquisition of SAMEC, S.A., located in Seville and one of the major Spanish cork companies, also near a rich zone in terms of cork. At that time, Portugal already exported more than 50 per cent of industrial cork products, rather than raw cork.

In 1988 the Corticeira Amoirm, the Champcork (founded in 1982 and produces cork stoppers for sparkling wines and champagne), the Ipcork (created in 1978 and now Amorim Revestimentos, S.A) and Amorim&Irmãos (cork stoppers) were in the stock market. In 1991, Corticeira Amorim become Corticeira Amorim S.G.P.S, S.A. (for now on Corticeira Amorim) a sub-holding company of Amorim Investimentos e Participações, S.G.P.S., S.A., grouping all the firms connected to the transformation and trade of cork.

The consolidation of a product diversification strategy was also accompanied by the presence of Corticeira Amorim in more than 30 countries, with the buying up several cork producers and distributors.

In the 1990s the fight against TCA was the most important fight waged by the company. Corticeira Amorim was facing a highly competitive sealing bottles but natural cork continued to be use in the majority of high-end wines and champagne.

In 2001 the fourth generation of Amorim enters the cork business: António Rios de Amorim succeeds his uncle, Américo Amorim, as chairman of Corticeira Amorim. This change is also connected with a new turning point in the life of the company with the total vertical integration of the cork stoppers production process.

The group become organised in five business areas: Raw Material (purchase, storage and initial preparation), Stoppers in Natural Cork; Composite Cork; Floor&Wall Covering and Insulation Cork. Witch business area contemplates transformation and trade.

In the first decade of the 21th century, the Corticeira Amorim is one of the most internationalized companies in Portugal with 30 industrial units, 84 firms and 296 agents around the world. In Spain, the group as 14 firms, 8 plants and 44 agents (see. Figure 5.1.).

Figure 5.1.1.– Organisational Chart of Corticeira Amorim

AMORIM NATURAL CORK	
MATÉRIAS-PRIMAS	ROLHAS
Amorim Florestal, S.A.	Amorim & Irmãos, S.G.P.S., S.A.
Aprovisionamento	Produção
Amorim Florestal, S.A. Ponte de Sôr – Portugal	Amorim & Irmãos, S.A. Santa Maria de Lamas – Portugal
Amorim Florestal, S.A. Coruche – Portugal	Amorim & Irmãos, S.A. Unid. Ind. Raro Vergada – Portugal
Amorim Florestal, S.A. Abrantes – Portugal	Amorim & Irmãos, S.A. Unid. Ind. Valada Valada – Portugal
Amorim Florestal, S.A. Unid. Ind. Salteiros Ponte de Sôr – Portugal	Amorim & Irmãos, S.A. Unid. Ind. Coruche Coruche – Portugal
Amorim Florestal Espanha, S.L. Algeciras – Espanha	Amorim & Irmãos, S.A. Unid. Ind. Champanhe Santa Maria de Lamas – Portugal
Amorim Florestal Espanha, S.L. San Vicente de Alcántara – Espanha	Amorim & Irmãos, S.A. Unid. Ind. Portocork Santa Maria de Lamas – Portugal
Amorim Florestal Mediterrâneo, S.L. San Vicente de Alcántara – Espanha	Amorim & Irmãos, S.A. Unid. Ind. Salteiros Ponte de Sôr – Portugal
Comatral – Compagnie Marocaine de Transformation du Liège, S.A. Sghirat – Marrocos	Francisco Oller, S.A. Girona – Espanha
S.N.L. – Société Nouvelle du Liège, S.A. Tabarka – Tunísia	Trefinos, S.L. Girona – Espanha
S.I.B.L. – S.A.R.L. Jijel – Argélia	Agglotap S.A. Girona – Espanha
	Augusta Cork, S.L. San Vicente de Alcántara – Espanha
	Distribuição
	Amorim & Irmãos, S.A. Unid. Ind. Distribuição Santa Maria de Lamas – Portugal
	Amorim Australasia Adelaide – Austrália
	Amorim Cork Italia, S.p.A. Conegliano – Itália
	Amorim Cork Deutschland, GmbH Bingen am Rhein – Alemanha
	Amorim Cork Bulgaria, EOOD Sofia – Bulgária
	Amorim Cork America, Inc. Napa Valley, CA – EUA
	Amorim France, S.A.S. Eysines, Bordéus – França
	Amorim France S.A.S. Unid. Ind. Sobefi Cognac – França
	Amorim France S.A.S. Unid. Ind. Champfleury Champfleury – França
	Victor y Amorim, S.L. Navarrete (La Rioja) – Espanha
	Hungarokork Amorim, Rt. Verseggház – Hungria
	Korken Schiesser, GmbH Viena – Áustria
	Amorim Argentina, S.A. Buenos Aires – Argentina
	Portocork America, Inc. Napa Valley, CA – EUA
	Amorim Cork South Africa (PTY) Ltd. Cidade do Cabo – África do Sul
	Industria Corchera, S.A. Santiago – Chile
	Société Nouvelle des Bouchons Trescases, S.A., Le Boulou – França
	I.M. «Moldamorim» S.A. Chisinau – Moldávia
	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

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

Considering the presence of Corticeira Amorim in Spain (table 5.1.), and in terms of raw material, three firms are located in Spain, being San Vicente de Alcántara the most relevant area. In terms of stoppers, four industrial units are located in Spain, three of them in Girona and one in San Vicente de Alcantara (Francisco Oller in Girona; Trefinos, also in Girona; Agglotap, SA in Girona and Augusta Cork, S. L. in San Vicente de Alcantara).

Table 5.1. Companies of Amorim Group in Spain

Name	Location	Starting date	Situation	Ownership
AMORIM REVESTIMIENTOS SA	Barcelona (Cataluña)	16/05/1984	Open	Direct (100%)
AMORIN & IRMAOS-IV SA	San Vicente de Alcántara (Extremadura)	19/02/1988	Closed: 10/26/2010	Direct
VICTOR AMORIM SL	Navarrete	03/11/1992	Open	Direct (50%)
DRAUVIL EUROPEA SL	San Vicente de Alcántara (Extremadura)	26/06/1998	Open	Direct (100%)
AMORIM FORESTAL-CATALUNYA SL	Cassa de la Selva (Gerona, Catalonia)	28/02/2001	Closed: 11/15/2010	Direct
AMORIM FLORESTAL MEDITERRANEO SL	San Roque	15/01/2003	Open	Direct(100%)
AMORIM CORK ESPAÑA SL	San Vicente de Alcántara (Extremadura)	26/11/2003	Open	Direct
FRANCISCO OLLER SOCIEDAD ANONIMA	Cassa de la Selva (Gerona, Catalonia)	Acquired	Open	Direct (87,01%)
TREFINOS SL	Palafrugell (Gerona, Cataluña)	Acquired June 2012	Open	Direct (90,91%)
SURODIS SL	San Vicente de Alcántara (Extremadura)		Open	Indirect – filial of Francisco Oller SA
AUGUSTA CORK SL	San Vicente de Alcántara (Extremadura)	Acquired June 2012	Open	Indirect-filial of Trefinos
AGGLOTAP, SA	Gerona, Catalonia	Acquired June 2012	Open	Indirect-filial of Trefinos
CHAPUIS, SL	Gerona, Catalonia		Open	Direct (100%)
OLIMPIADAS BARCELONA SL	Gerona, Catalonia		Open	Direct (100%)

The meaning of the presence in the South of Spain can be found in the goal of the company to dominate the production of raw material and in the North, the stoppers are the target, namely champagne stoppers, eliminating the competition from this region and being near the wine producers' countries in Europe. Two reinforcing strategies of location can be drawn from the above description. The Corticeira Amorim is vertically integrated controlling production from raw material production; transformation into finished products and distribution. During 1970s the company reinforced its position in the producer's countries of cork, namely Spain. Also adopted a product diversification strategy, with the production of cork-based paving and covering products and also in the champagne stoppers category and in the 1980s the company was producing all cork-

related products. The diversification was pushed by the creation of the Central Laboratory, which is transversal to all company activity and specialises in creating new products and implementing innovative processes and technology.

In the 1980s, the company started to acquire other cork producers and distributors all over the world, boosting its position as a worldwide leader, in all the facets and products. Again in the 21st century, the focus is in Spain, considering again the proximity of raw material (in the South) and the production of stoppers (in the North). During the 1990s, the distribution was the target, seeking to be near the client needs, specially of the wine producers, both new and old producers: France, Italy, Spain, Australia, U.S.A., Argentina and Chile.

In the 21st century, the acquisition of several companies in the North of Spain, stand out and the “iberization” of the cork business is now a reality, with the growing importance of trade between Portugal and Spain: Portugal imported natural cork from Spain and Spain occupied the third place in terms of the Portuguese exports of manufactured cork.

But could this mean that the business is dislocated from Santa Maria da Feira (Portugal) to Spain by the hands of this multinational firm? The trend between 2004 and 2010 is the sense of a decay of the Portuguese cork sector, with the employment decay and production diminished in Santa Maria da Feira (Lopes and Branco 2013). Also the exports of manufactured products of cork performed better outside Feira, although being dominant (Lopes and Branco 2013).

6. Conclusions

Together, Portugal and Spain represent more than 50 per cent of all the facets of the cork business in the worldwide. Although, the leadership of the cork exports during the 20th century was shared by these two countries, first with the leadership of Catalonia (Spain) and then with the leadership of Santa Maria da Feira (Portugal), both standing out in the production of corks.

The corporate history of the cork industry is marked by two Iberian companies whose origin can be found in the 19th century but whose success has occurred over the twentieth century: Mundet and Corticeira Amorim.

Many aspects united and the separate both companies. The 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 19th 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 agglomerated 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 put into question the success of Mundet and in 1980s this company closed doors. 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 means that the agglomeration economies in Santa Maria da Feira are exhausted?

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