

Location of the Productive Activity in Portugal and Spain: a Research Note

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Resumo

Os fluxos comerciais e de investimento directo entre os dois países Ibéricos subiram exponencialmente após a adesão dos dois países à Comunidade Europeia, em 1986, tornando a Espanha no principal parceiro económico de Portugal. Contudo, a relação entre os dois países não é simétrica. O défice comercial de Portugal frente a Espanha é muito elevado e a Espanha mantém-se como a localização preferencial da actividade produtiva das empresas multinacionais. Esta assimetria pode ser atribuída à natureza da relação centro-periferia existente entre os dois países, uma vez que a Espanha representa um mercado maior, tem níveis superiores de desenvolvimento e está mais perto, do que Portugal, do centro do mercado Europeu. Contudo, esta não é a única razão para explicar porque é que Portugal é também periférico face aos outros membros da União Europeia (com excepção da Grécia) e a desvantagem comercial com eles é muito menor. A explicação parece resultar da combinação de dois factores. Em primeiro lugar, as vantagens comparativas de Portugal relativamente a Espanha parecem modestas quando comparadas com as vantagens que apresenta face às especializações produtivas dos outros membros da UE e os níveis salariais estão mais próximos dos de Espanha. Em segundo lugar, a quebra dos custos de comércio em resultado da integração Europeia foi mais drástica entre os países Ibéricos do que entre Portugal e os outros países da UE, devido à proximidade geográfica, à semelhança linguística e ao facto de o proteccionismo entre os dois países Ibéricos ser mais severo. No

espírito da abordagem da “Nova Geografia Económica”, utiliza-se um exemplo numérico para sistematizar esta apresentação.

Palavras-chave: Portugal, Espanha, integração económica, localização.

Resumé

Les fluxs de commerce et d'investissement direct entre les deux pays Ibériques ont monté d'une façon spectaculaire après l'adhésion des deux pays à la Communauté Européenne, en 1986. En ce moment l' Espagne est le principal partenaire économique du Portugal. Pourtant, la relation entre les deux pays est assymétrique. Le déficit commercial du Portugal face à l'Espagne est très élevé et l'Espagne se maintient la localisation préférée pour l'activité productive des entreprises multinationales. Cette assymétrie peut être attribué à la nature centre – périphérie de la relation entre les deux pays, car l'Espagne est un marché plus grand, plus développé et plus près que le Portugal du centre du marché Européen. Pourtant cette-ci n'est pas la seule explication car le Portugal est aussi périphérique face aux autres membres de l' Union Européenne (à l'exception de la Grèce) et la désavantage commercial est beaucoup moins importante avec eux. L'explication parait résulter de la combinaison de deux facteurs. Premier, les avantages comparatives du Portugal face à l'Espagne semblent modestes face aux avantages qu'il présente relativement aux spécialisations productives des autres membres de l'UE et les niveaux salariaux sont plus semblables à ceux de l'Espagne. Deuxième, la chute des coûts commerciaux en résultat de l'intégration Européenne a été plus radical entre les pays Ibériques qu'entre le Portugal et les autres pays de l'UE à cause de la proximité géographique, de la similarité linguistique et au fait que le proteccionisme entre les deux pays Ibériques était plus sévère. Dans l'esprit de l'approche de la « Nouvelle Géographie Économique » un exemple numérique est présenté pour faire cette présentation plus systématique.

Mots – clé: Portugal, Espagne, intégration européenne, localisation.

Abstract

Trade and direct investment flows between the two Iberian countries have risen dramatically after the adhesion of both countries to the European Community in 1986 so that Spain is currently the main economic partner of Portugal. However

the relation between the two countries is asymmetrical. The trade deficit of Portugal towards Spain is very high and Spain remains a most preferred location for the productive activity of multinational firms. This asymmetry can be assigned to the core-periphery nature of the relation between the two countries, because Spain is a larger market, it is more developed and is nearer than Portugal to the core of the European market. However this is not the unique explanation because Portugal is also peripheral with relation to the other members of the European Union (with the exception of Greece) and the trade disadvantage is much smaller with them. The explanation seems to follow from the combination of two factors. First, the comparative advantages of Portugal with relation to Spain seem modest in comparison to the advantages that it enjoys with other members of the EU. Productive specializations and wage levels are more similar with Spain. Second, the decline of trade costs following the European integration was more drastic between the Iberian countries than between Portugal and the other countries of the EU due to geographic proximity, to linguistic similarity and to the fact that protectionism between the two Iberian countries was more severe. A numerical example in the spirit of the "New Economic Geography" approach is used to make this explanation more systematic.

Keywords: Portugal, Spain, economic integration, location.

1. Introduction

In the context of the Iberian Peninsula, Portugal appears as a peripheral economy with relation to the Spanish economy, which plays the role of a core. Spain is a larger market as it has four times the population of Portugal. It is more developed as it has a higher density of firms and therefore of business interactions. The Spanish market is evaluated as accounting around 5.2 times the Portuguese market (ALVES, 2001). The Spanish territory is closer to the core of the European market in terms of transport (especially land transport).

This last fact explains why, if the metropolitan areas of the capital cities (Madrid and Lisbon) are excepted, the level of economic development in the Peninsula is inversely correlated with the distance to the Pirineus (that is to say, to the core of the European market). This fact was expressed by DRAIN in 1962 :

"There are still today remarkable differences among the standard levels of Spain and Portugal; the gross national per capita income was about 300 dollars in Portugal and 400 dollars in Spain; but inside the Peninsula the

deepest contrast distinguished Catalunya and the Basque Country towards the remainder - per capita income in these two regions already overpasses 500 dollars and the economic, social and even demographic structures begin to become similar to the developed countries. Then it happens that the levels of development decrease towards South and West from the point of connection of the Peninsula with industrial Europe, exactly as it occurs in Italy, with a difference - this northern region has not the same economic weight as its Italian counterpart, it is farther away from the main centers of development in Northern Europe and does not play for the Peninsula a similar role of leading force." (DRAIN, 1975: 22 and 23).

Paradoxically, Portugal is more open than Spain. A main feature of the Iberian Peninsula according to DRAIN (1975) is isolation that follows not only from its geographic position but also from the fact the way inward from the coastal areas to the hinterland is made difficult by the fact that mountainous chains run parallel to the coast almost everywhere ¹. Portugal is an exception as the main rivers of the Iberian Peninsula (Douro, Tejo, and Guadiana) have their mouth there. This gives Portugal an advantage in water transportation from which it has benefited along its history. This advantage was highest before the coming of railways. VON THUNEN (1966) estimated that then the cost of water transportation was about one-tenth the cost of land transportation, but this advantage has been decreased ever since.

Traditionally the trade and investment flows between the two countries were very limited on account of restrictive national trade regimês. With the accomplishment of a trade agreement between Spain and EFTA in 1980, in a first moment, and then the adhesion of both countries to European Community in 1986, trade costs ² declined steadily. The deepening of European integration extended this decline.

The decline of trade costs between Portugal and Spain was much higher between Portugal and Spain in relative terms than among Portugal and the remaining countries of the EU. This difference has several reasons.

First, the trade costs before the adhesion were much higher between Portugal and Spain than between Portugal and other members of the EU. This followed from the trade policies of the two countries.

¹ Therefore, according to Maurice Legender, the Iberia should not be named a "Peninsula" (an "Almost an Island") but rather a "Plus qu' une île" (a "More than an Island").

² By "trade costs" it is meant all kinds of obstacles to trade between two countries (transport costs, communication costs, tariff and nontariff barriers and cultural and linguistic differences).

Second, when tariff and nontariff barriers are eliminated, trade costs consist mainly of transport costs which are much lower between the two Iberian countries than between Portugal and the other European countries on account of geographic proximity. This possibility was deepened by the Portuguese Transport Policy that gave priority of land over water transportation. Six transversal fast roadways with an East - West orientation ("Itinerários Principais") were planned and built.

Third, the linguistic similarity between Portuguese and Castillian is larger than the similarity with other European languages. Portuguese and Spaniards can communicate both at the verbal and the written levels in their native languages.

2. Evolution of the Iberian economies in the period following the adhesion to the European Union.

After 1986 there was a fast economic growth with both countries converging to the European average. Portugal grew relatively more than Spain, so that there was convergence between the two countries (See Table 1).

Per capita income (in purchasing power parity) as a % of the EU-15			
Years	Portugal	Spain	Difference
1983	55.1	70.5	-15.4
1999	72.0	80.0	-8.0

Source: ALVES (2001).

Bilateral trade and investment flows have been intensified so that Spain became the main economic partner of Portugal. According to CAETANO (2001), from 1985 to 2000 the share of the Spanish market in Portuguese exports progressed from 3.9% to 19.1%. The share of Spain as a supplier of Portuguese imports developed from 7.2% to 25.1%. Spain is now the first supplier and the second customer in the Portuguese foreign trade.

The bilateral flows of direct investment have been increasing steadily in both directions, the Spanish investments being always higher than the Portuguese, with the exception of two years (1992 and 1998).

The trade balance has a deficit against Portugal, the rate Exports/Imports being 45% (an approximately constant value). With the increase of the trade flows, the trade deficit with Spain attained more than 35% of the total trade deficit of Portugal. The trade deficit with Spain is now higher than the joint deficit with the other members of the EU.

The investment by Spanish firms strengthens this asymmetric pattern. According to CAETANO (2001), 45% of the firms with Spanish capital just distribute Spanish products or products that are imported through Spain. Only 15% of the Spanish investments are addressed to manufacturing. It is estimated that about 65% of the imports from Spain are made through the Portuguese subsidiaries of Spanish exporting firms. As it was studied by CHANDLER (1977), foreign direct investment aims the vertical integration of production and distribution so that manufacturing is coordinated with specific market needs. The Spanish firms have no incentive to invest in production in Portugal, because they can supply the Portuguese market from productive locations in Spain. Transport costs are low and unit production costs in Portugal are not lower than in Spain.

It can be concluded that Portugal does not enjoy significant comparative advantages in its trade relations with Spain because the productive systems of the two countries do not complete each other³. As remarks CAETANO :

“...The domains of greatest dependency of the Spanish economy (mechanics and electronics) did not agree with the sectors where the Portuguese economy was specialized (forest products and textile-leather clusters) and, inversely, the sectors where the former economy was specialized (transportation equipment and food industries) were coincident with the fields of Portuguese dependence.” (CAETANO, 2001: 32).

It seems that the Portuguese economy is a more direct complement of the economies of other countries in the EU. The trade balance with these countries is negative but smaller in size than the trade deficit with Spain.

3. A formal attempt of explanation of the asymmetry between Portugal and Spain

The asymmetry between the two Iberian countries, as revealed by the bilateral trade deficit, can be ascribed to the attraction that the more developed regions in the Peninsula exert upon the location of productive firms. This applies mainly to firms that take locational decisions, namely multinational firms. These firms locate the productive activity in order to get near to the more central and dense markets of the Peninsula. From these central locations they supply the peripheral markets

³ A country benefits from a “comparative advantage” in the trade of a given good with another country if it has lower relative unit production cost.

(such as the Portuguese) using distribution subsidiaries for that purpose. A simple numerical example in the spirit of KRUGMAN and VENABLES (1990) illustrates this situation.

Assume that a multinational firm has three choices for the location of the productive activity: to locate a plant in Spain, to locate a plant in Portugal and to locate a plant in each country. The demand in each market is fixed, so that the firm sells the same amount irrespective of its location choice.

Neither country has a comparative advantage so that production cost is the same (10 monetary units).⁴ If the firm locates a plant in each market, economies of scale are lost and the production cost is raised to 12 m.u.

Concerning trade costs, only those that are relevant for trade between countries are considered. Transport costs inside each country are abstracted. Therefore if a firm locates in Portugal its transport costs are higher than they would be if it located in Spain because most consumers live in the latter country and the product must be transported between the plant and the consumer's address. If the firm has two plants transport costs are zero because each plant is close to its consumers.

Three levels of commercial integration are considered. Trade costs are halved in each round of trade liberalization. The following table is illustrative.

	Production costs	Trade costs					
Countries		High		Intermediate		Low	
Spain	10	6	(16)	3	(13)	1.5	(11.5)*
Portugal	10	8	(18)	4	(14)	2	(12)
Both	12	0	(12)*	0	(12)*	0	(12)

In the table, the columns in the right hand side of the trade cost shows the total cost (production+trade cost) in parenthesis. The asterisk indicates the locational pattern that is cost minimizing for each level of trade costs. If trade costs are high or intermediate, the multinational firm has a plant supplying each local market. If they are low, the firm concentrates the productive activity in a plant near the largest market in order to save transport costs to the majority of the consumers.

The different nature of the trade between Portugal and Spain with relation to the trade among Portugal and the other countries of the EU (the latter is less

⁴ This assumption means that lower wages in Portugal are compensated by a higher labour productivity in Spain. According to FRASQUILHO (2000), in 2000 labour productivity in Portugal was about 42% of European average, while in Spain amounted to 78%.

asymmetric than the former) can be ascribed to the deeper degree of commercial integration with Spain. In terms of the table, trade costs with Spain have reached a "low" level while they have attained only an "intermediate" level with the other countries of the EU.

This analysis has the assumption that Portugal does not benefit from a comparative advantage in its trade with Spain. As a counterexample, assume that this kind of advantage exists so that the production cost of a plant in Portugal is lower than in Spain.

Then, if the decline of trade costs is high enough, it pays off to concentrate production in the low cost country and export the product to the larger market, so that the comparative advantage of the small country is made clear by trade liberalization. The following table illustrates this case.

	Production Cost	Trade Cost					
Countries		High		Intermediate		Low	
Spain	10	6	(16)	3	(13)	1.5	(11.5)
Portugal	9	8	(17)	4	(13)	2	2(11)*
Both	12	0	(12)*	0	(12)*	0	0(12)

If the decline of trade costs is intermediate, the outcome does not change. However, if it is drastic (as we assume it is in the Portugal-Spain relation), the comparative advantage of Portugal would entail the attraction of the single plant of the firm.

4. Conclusion

The economic relations between Portugal and Spain are characterized by asymmetry as measured by data on trade and direct investment. This asymmetry follows from the peripheral nature of the Portuguese market in the context of the Iberian Peninsula, but this is not the single explanation as the peripheral condition also holds in the relation of Portugal with the other members of EU. Asymmetry seems to follow from the absence of comparative advantages of Portugal in the Iberian trade on account of the fact that Portugal and Spain do not complete each other and the fact that the decline of trade costs between the two countries has been faster due to geographical proximity.

In spite of the asymmetry, the relations with the Spanish market seem unavoidable for the Portuguese firms. Economic integration of the two countries is irreversible. On the other hand, as road transportation becomes more competitive with relation to water transportation, the accessibility of the Spanish market is enhanced with relation to other European markets.

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