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Patterns of vertical specialisation and European Outward Processing Trade (OPT): a Comparative Analysis between Mediterranean Countries and CEEC's. Is the real Competition?

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Patterns of vertical specialisation and European Outward Processing Trade (OPT): a comparative analysis between Mediterranean countries and CEECs. Is there real competition?*

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1. Introduction

The economies have become increasingly integrated during the last 20 years. The stylised fact is the growing importance of trade in terms of GDP experienced at world level. In addition to trade in final goods, a major component of the increasing interrelatedness among countries is the trade in intermediate goods, which proves to be a more interesting phenomenon since it can result from a number of internationalisation processes involving, among others, vertical specialisation and foreign direct investments (FDI).

This paper deals with a particular form of international involvement, the so-called Outward Processing Trade (OPT), that can be considered a subcontracting arrangement. This study analyses European activities in OPT with the rest of the world, with a particular focus on the neighbouring countries involved in the currently undergoing enlargement and integration process, notably the Central and Eastern Europe Countries (CEECs) that are candidates for EU membership, and the Mediterranean countries, that participate in looser agreements.

The process of enlargement and integration of CEE and Mediterranean countries with the EU raises many questions about the degree of complementarity or competition among the two areas.

The issue of economic competition allows to evaluate the consequences of the "political" competition that occurred by the end of the eighties between the two regions, both willing to occupy the leading role in the European preferences first and then in the list of future members joining the EU. From a political perspective, the path has been clearly traced by the EU Agreements and the Conference of Barcelona. On the economic front, the issue of trade competition and the economic performance of the two regions has been explored in depth by recent empirical literature (see for example Hoekman and Djankov, 1996 and Chevallier and Freudenberg, 1999). However, OPT has always astonishingly been neglected by the "internationalisation literature" and this despite the fact that it is a source of mutual advantage for both the contracting parties and has a considerable economic relevance for third countries.

On the one hand, we believe that OPT can play an important role in integrating third countries with Europe both from an economic and a political perspective. It has been observed that trade in intermediate goods, as implied generically by international delocalisation of production, not only can redefine the export structure of the trading partners in a way that magnifies their trade potential (see Hoekman and Djankov, 1997), but also can be considered a means of "learning by doing" through the transfer of technology, know–how, qualitative standards and managerial skills, which can accelerate the transformation of third-world economies into market-based systems. Besides, OPT seems a logical starting point for attracting foreign direct investments in third countries since it allows foreign firms to know the host market and gain confidence on its potentialities with limited sunk costs.

On the other hand, OPT has become an instrument of trade policy for EU countries, allowing mature European industries like textile and clothing (TC), footwear and mechanical appliances, to improve their competitiveness and face strong competition from low-cost economies like East-Asian countries both abroad and at home. Moreover, OPT provides significant sets of data able to capture the wider dynamics of the rising integration of countries through international trade in intermediate products.

In this paper we focus on the issue of competition in the case of OPT practices and provide a desegregated analysis of geographical competition (OPT with different European countries), sector and product competition (OPT of different goods) and quality competition (OPT in different range of prices).

The work will be organised as follows. Section 2 defines the phenomenon of OPT and collocates it within the internationalisation literature. Section 3 describes briefly the European pattern of OP traffic with the rest of the world, while section 4 focuses on European OPT with the CEE and Mediterranean regions. Section 5 analyses the commodity composition of total shipments of both regions in the OP traffic with Europe and section 6 provides some indicators of the competition existing between the two regions and pairs of countries. Section 7 focuses on the market segments where the two regions are positioned in order to investigate if the degree of competition spreads to price/quality ranges offered in the EU market. Finally, some conclusions and policy implications are drawn in the last section.

2. Internationalisation of production, vertical specialisation and OPT

Outward processing trade makes it possible to export goods temporarily for processing and to import the compensating products with a full or partial exemption from duties and levies. In other words, it consists of a temporary transaction implying the shifting of a production phase of the contractor's manufacturing activities to a foreign subcontractor, as a part of a vertically linked production system. The resulting product, once re-imported, will be sold by the contractor.

OPT encompasses a number of different ways to fragmentize internationally the production process. The aspect that characterises OPT is the formal status granted to it within the EU trade legislation. Being based on a system of licences granted by EU Member states, OPT, as any other regulated regime, imposes administrative and economic constraints, both on firms and national authorities.¹ Only firms endowed with a licence and respecting some parameters (which include that the goods sent abroad for processing should originate in the EU), can temporarily export goods of Community origin outside the EU customs territory. Precisely its juridical status, by implying the recording of the transactions made within this regime, allows to capture at least a part of the forms of internationalisation that would otherwise be hidden under normal exports and imports of intermediate goods². Moreover, while not capturing the entire phenomenon, OPT statistics are a useful starting point for the analysis of a much currently debated issue like the effects of the internationalisation of the production on the domestic unemployment rate. The OPT regime itself contains provisions revealing the concern for the effects of the delocalisation on EU employment, since, from 1994, OPT quantities have been kept constant only if firms maintained their production constant (but also their occupational level) during the previous year; otherwise, the quantities are reduced proportionally. In alternative to OPT statistics, the study of this issue implies relying on input-output tables or on interviews made on a sample of multinationals or firms going international (see for example Barba Navaretti, Falzoni, Turrini, 1999).

It is therefore important to define OPT with respect to the underlying phenomena that it proxies and also to the alternative forms of internationalisation of production. OPT concerns goods whose production process can be split into different phases that can be performed in

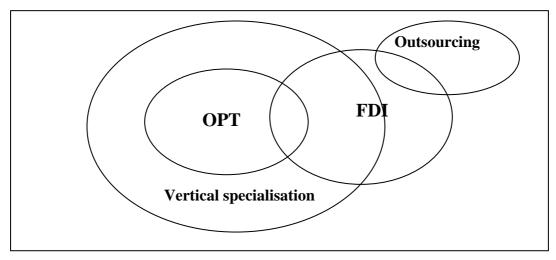
¹ The administrative burden imposing licenses, border controls, recognition of the merchandise and recording the temporary nature of the transaction, allows the exhaustive statistical recording in the European trade statistics of this kind of operations. Until 1994, the authorisation fixed the maximum quantities of goods to be admitted to OPT on the basis of the assigned national quotas. After then, regulation 3036/94 implemented more restrictive rules; in particular, the quotas were fixed at the Community level, and attributed on the principle "first come, first served" imposing that firms entering OPT need to produce at least 50% of their production in the EU (in the previous legislation no limits were fixed), to be operating in the EU for at least 3 years. This rule favours the firms already operating in the market and discourage new firms from entering the OPT regime.

 $^{^{2}}$ For normal imports and exports we refer to goods exported definitively (in the definitive regime) and released into free circulation.

different locations. It can therefore be classified as a subset of vertical specialisation defined as in Hummels, Rapoport and Yi (1998), since at least one stage implies a double crossing of an international border.

The definition of vertical specialisation does not imply any kind of relationship linking the contractor and the subcontractor, the issues of control and ownership being immaterial. Therefore OPT, like vertical specialisation, can involve FDIs in the case that the products processed abroad, using input from the parent company, are re-exported³. When OPT is realised through market relationships, no matter if continuous or spot, without any participation of the contractor in the subcontractor's business activity, the transaction will be classified simply as vertical specialisation (not implying FDI). OPT can not be considered as a form of outsourcing, since the latter differs from vertical specialisation due to the fact that the intermediate goods cross international borders only once (see Figure 1). As an example, a transaction made by a cotton fabric importing firm to manufacture shirts that will be sold on the domestic market is classified as outsourcing independently of the contractual relationship linking the two counterparts⁴. Alternatively, if final products are sold abroad this transaction enters again the domain of vertical specialisation, like the delocalisation of one or more production phases abroad (sewing for example) with consequent re-export. Therefore, although OPT is a kind of juridical label, it is able to proxy the underlying economic phenomenon of vertical specialisation.

Figure 1 – Relationship among different form of internationalisation of production



As a form of vertical specialisation, OPT shares the same economic motivations driving firms international; in particular, OPT is a way for the contractor to face the economic cycle, and/or to exploit the specialisation of the subcontractor and/or to benefit from production cost reduction. Furthermore, if OPT is realised without involving FDI it allows to enter a new market with limited costs, thus enhancing the possibility for the establishment of future deeper economic relationships like FDI. The first move of foreign firms delocalising production is then likely to be OPT without FDI, even if this way of proceeding does not imply zero sunk costs. The latter could be related to transaction costs deriving from the

³ However, re-exports must respect EU regulation on OPT that sets out strict rules concerning the circulation of the processed goods. In particular, the triangular exchange, that is the possibility of releasing the goods in OPT regime in a country different from that of the contractor, is allowed, but only in case of EU Member states.

⁴ Therefore, outsourcing could refer also to transactions involving direct control (FDI).

transfer of production blueprints, the search of a suitable partner in the host country, the introduction of quality controls and the management of the logistical aspects of the system.

The special regime regulating OPT grants a preferential treatment with respect to normal trade not only in terms of quotas⁵, but also in terms of total or partial relief of import duties, since the tariff is applied only on the value added generated by the delocalisation process and not on the gross value⁶.

The tax effect, which is a kind of "liquidity premium" implied by the payment of TVA, adds an additional benefit to OPT with respect to generic vertical specialisation. Indeed, as in the case of import duties, the TVA on temporary export has to be paid on the value added originated in the double transaction, whereas in the case of normal trade, it has to be paid on the total value of imports. The final net exposure towards the fiscal authorities in terms of TVA is necessarily the same for both OPT and normal trade. However, the former allows a temporary liquidity advantage, since the payment will be delayed over time with respect to normal trade, taking place at the fiscal periodical date of payment⁷.

The process of progressive liberalisation implied by the EU enlargement and integration process reduces the tariff advantages for EU firms to enter the OPT regime, while they still have to meet the burden of the special administrative requirements. Therefore, the removal of tariff barriers will, on the one hand, progressively imply a decreasing recourse to OPT, thus reducing the ability of OPT to proxy the vertical specialisation dynamics. On the other hand, it would result in an increased vertical specialisation trade-based flows, due to the reduction of the multiple custom duty costs (see Hummels, Rapoport and Yi, 1998).

Our analysis is limited to the period of 1988-1998⁸: the phenomenon described above could be observed to some extent only starting from 1994, when the CEECs were granted zero-duty access to the EU market for the TC sector.

3. The EU OPT with the rest of the world^{θ}

The dynamics of the geographical distribution of EU OPT identifies a well-defined pattern of delocalisation of the production. Given that more than 40% of European OPT takes place with the CEECs - neighbouring countries with low labour costs - the prevailing reason driving the delocalisation process seems to be externalising labour-intensive phases of production in order to obtain cost reductions. The increasing emphasis on efficiency shared by EU firms and orienting their internationalisation strategies has been fostered not only by the rising competition coming from low-cost economies but also by the progressive completion of the European single market, resulting in an enhanced competition also among EU firms.

The second reason by order of importance has to be related to the know-how of the sub-contractor, since a large remaining part of EU OPT flows is directed to highly industrialised areas of the world, like the US or the EFTA (see Table 1).

The CEECs' involvement in the EU OPT is not new since their share has always been relevant even before their opening to Western Europe and the disruption of COMECON, and this quota has been increasing during time. However, a decreasing trend has started in 1997 and we expect it will persist in the future due to the application of the Association

⁵ Actually, the quotas have never been binding neither for the CEECs nor for the Mediterranean countries.

⁶ The Community legislation differentiates Fiscal OPT from Economic OPT, the former being regulated by the Custom Code and referring to all kind of commodities, the latter by the Council Regulation n. 2473/86 which concerns only textile and clothing.

⁷ As an example, TVA payments in Italy are due quarterly.

⁸ Trade statistics demand on average a couple of years to become definitive. Therefore, at the moment, the last reliable data on trade cover until 1998.

⁹ The data used come from a data-base originally assembled and managed by the authors, starting from the Comext EUROSTAT data-base of EU Member states' trade.

Agreements. Indeed, the removal of all import duties starting from 01/01/1997 for all goods coming from the CEECs satisfying the Agreement's rules of origin (see Najouks and Schmidt, 1994) implies that the OPT regime for firms delocalising in the CEECs no longer fully assures the benefits granted in the past by the special tariff regime characterising the OPT. A reduction in the rate of growth of OPT in the CEECs is the likely result, while we expect that vertical integration process led by EU firms in this region will continue to develop. Indeed, the difference in the cost of labour between the CEECs and EU countries is so wide that even considering their lower productivity and an expected increase in the level of prices and wages due to the integration process with the EU, the likely re-direction of OPT flows towards other regions will take some time.

Other regions' performance differ sharply from that of CEECs. In particular, the potentially direct competitors of the CEECs, that is the Mediterranean countries, both for distance from Europe and reduced labour costs, apparently lacked the capacity of attracting foreign firms, performing, with few exceptions, quite deceiving results during the last ten years and even negative growth rates.

4. The evolution of OP Traffic in the CEE and Mediterranean regions.

The parallel analysis of the economic performance of the CEECs and that of the Mediterranean region is interesting because of both their structural characteristics and the common wisdom that they are not direct competitors, at least from an economic perspective. The different factor endowments, showing a prevalence of unskilled labour and raw materials for the Mediterranean area and skilled labour and a quite developed industrial structure for the CEECs, seems to imply divergent productive specialisation and therefore, divergent trade patterns. At the same time, there is a large consensus upon the fact that, for some time, the two areas have been competitors vis-à-vis the EU from a political perspective. The Association Agreements first, followed by the decision to open negotiations for the accession of five CEECs to the EU, together with the Euro-Mediterranean Conference of Barcelona, clarified the relative position of the two groups of countries in the new political design of the EU^{10} .

A number of economic questions remain, nevertheless, still opened. In particular, the literature devoted little attention to the investigation of the vertical disintegration process of production directed towards the two regions. In this domain, competition appears far from being low, since the two areas possess similar characteristics, both in terms of proximity to the EU market and also low labour costs, allowing for a profitable delocalisation of labourintensive phases of EU production. This paper explores whether the two regions compete in quality of preferred locations in the process of international fragmentation of production followed by European firms.

A preliminary analysis of OPT data reveals that CEECs' volume of trade is much higher than that generated by the Mediterranean countries during the entire period, although the gap starts to widen in 1994 due to both CEECs' boosting and Mediterranean region's falling of performance¹¹ (see Table 2 and 3). Both areas experienced a decline in the rate of growth of OPT in the period of 1993-98. However, in the case of CEECs, the decrease should be attributed to the diffusion of other forms of internalisation of production following the

¹⁰ It became then clear that CEE countries as a group had an option of becoming members of the EU, option that has instead been excluded for the Mediterranean countries as a group. Indeed, they were offered only the possibility to participate in the EU Free Trade Area, due within 2010. ¹¹ This result is partially influenced by the Malta's peculiar trend, that recorded a considerable increase of OPT

at the beginning of the '90s followed by a strong reduction in 1996-97.

integration process in the EU¹², as confirmed by the decreasing importance of OP traffic both in absolute value (see Table 3) and with respect to normal trade in 1998 (see Table 2). With the exception of 1998, CEECs' OPT flows with the EU continued to increase during the period under analysis. This implies that the normal trade's rate of growth has been higher than the corresponding one for OPT, supporting the view that European firms are progressively switching to different juridical forms of delocalisation of production, rather than changing their specialisation pattern.

On the contrary, in the case of the Mediterranean countries, after a first period of relative satisfying rate of growth, their performance shows a downward trend just starting from 1995, despite the improved political climate generated by the modification in the EU Mediterranean policy implemented during the same year¹³. This could suggest that instead of benefiting of the changing European economic and political scenarios and of the growing demand of delocalisation of production by European firms¹⁴, the Mediterranean countries have lagged behind with respect to CEECs.

During the whole period considered, goods entering the EU after processing amounted on average to only 2% of EU normal imports. The phenomenon takes a greater magnitude for third countries and particularly for the CEECs, assuring them trade volumes comparable to 13% of total export flows toward the EU, against 3% in the case of the Mediterranean countries (see Table 4). On the whole the performance of the Mediterranean region has been less satisfying than that of the CEECs, however it can not be ignored that the former is a more heterogeneous area, showing highly differentiated performance by country. Tunisia, Morocco, and to some extent Malta (but with an irregular trend) are not only the main subcontractors in the area, but also quite the unique ones since the remaining countries in the region are involved in OPT only to a limited extent, frequently recording irregular and very reduced flows despite their trade potential. The case of Israel and Turkey, which are the least performing countries among those offering OPT, provides an example in this sense.

With respect to the other regional partners, Tunisia and Morocco seem to follow a quite divergent pattern. They appear not only able to face the competition coming from CEECs without loosing significant EU market shares, but also to recover, particularly in the last two years, from the stagnant situation shared by the entire area during the nineties (see Table 3). When looking at the weight of OPT with respect to total trade on country basis the ratios are not so dissimilar, at least for the largest recipient countries in both regions. During the period considered, OPT as a ratio of total trade amounts on average to about 12% for Poland against 10% for Tunisia, and this despite the different size of their economies. Other comparisons between pairs of countries of different regions fail to be meaningful. Whereas Hungary and Morocco, like Tunisia and Poland, grant a similar contribution to the respective regional OPT with the EU, it has to be stressed that the more reduced importance of OPT with respect to total trade for Morocco is influenced by the greater weight of raw materials in its export structure, that notably are not a source of delocalisation activities. Furthermore, Romania, whose processing activities assure a considerable share of its total trade flows,

¹² With respect to other interpretations (see for example Corado, 1994), we believe that the process of substitution of OPT with normal imports and exports of intermediate goods it is not directly connected to the evolution of FDI. In particular, FDI will increase due to the lower country-risk perceived by the investors (Corado's thesis), whereas the transformation of OPT in normal trade will occur due to the progressive removal of trade barriers. However, as explained before, the two phenomena can coexist.

¹³ The Conference of Barcelona marked an important change in the EU-Med relationships, since it has transformed the original transitory Association agreements of bilateral nature, mainly financially oriented, into preferential and permanent commercial and financial agreements of multilateral nature. In addition, for the first time, financial aids were subordinated to the respect of democracy and the reaching of minimum social standards.

¹⁴ Trade in capital goods and in intermediate inputs represents a substantial share of total trade at world level (see Feenstra 1998).

amounting on average to 20% of its total imports and even more in terms of exports to the EU, has to be considered a sort of outlier. Indeed, OPT appears to be for Romania a precise choice of a specialisation pattern through which to pursue a development strategy. If we exclude this case where OPT represents a precise economic policy choice, the existence of some objective limits in absorbing increasing shares of such activities with respect to total trade flows should be taken into account. This seems the case of Morocco and Tunisia, showing modestly increasing capacities of absorption that partly explain their lower responsiveness faced to the growing demand of delocalisation coming from EU firms.

On the contrary, the CEECs show a higher degree of homogeneity as a group, as confirmed by the lower concentration of OPT between countries. Outward processing can therefore be intended as a kind of integration strategy with Europe shared at the regional level. The same can not be said for the Mediterranean area as a whole when considering that countries like Algeria, Egypt and also Turkey seem to have adopted patterns of development and integration with the EU different from OPT. Nevertheless, this choice may also be the result of other factors orienting EU firms strategies, such as higher transport costs and lower control of international processing activities.

As far as the EU Member states are concerned, a feature common to the majority of countries is the growing share of intermediate goods in total trade flows, as shown by the increasing importance of OPT with respect to total trade¹⁵ (Table 6). Nevertheless, European countries show a clear difference in the propensity to recur to the OPT economic practice. The OPT traffic involves only few countries for both historical and administrative reasons.

In the CEECs, Austria, France, Germany, Italy and the Netherlands account for about 90% of total flows generated by European Member states. Germany plays the leading role performing by far the largest share of European OPT (more than 70% on average), both in relative terms and in absolute values. The German position can be explained, on the one side, by referring to its pioneer attitude toward the process of international delocalisation of production; on the other side, to the more liberal attribution of licences with respect to other EU countries¹⁶. However, its exposure to the CEECs should also be explained by their greater ability to respond to the increasing demand of deverticalisation by German firms. The high reactivity of CEECs originates by both the higher rate of growth they experience with respect to the Mediterranean countries and also to the fact that historically, they "moved first" adopting the vertical specialisation pattern even before the end of the COMECON. Starting from 1996, a limited but progressive reorientation of the outward processing activities strategy has taken place for Germany, involving an increasing OP traffic in the Mediterranean region, particularly in the best performers Tunisia and Morocco, at the expense of the CEECs (with the exception of Romania). However, we do not believe that this apparent change in delocalisation strategy will entail a diminishing German vertical specialisation activities in the latter region. It is rather to be interpreted as a redirection of OPT towards the most convenient places that does not involve any modification of the industrial policy strategy¹⁷.

A reinforced position of Italy in the CEECs came on the contrary reducing its involvement in the Mediterranean basin. However, a limited recovery in the latter region seems to start in 1998. While France seems to progressively loose its dominance in favour of the upward involvement of Germany - granting on average, during the last four years, higher

¹⁵ This measure has been calculated as a ratio of OPT flows to total trade flows generated with non-Member countries, thus excluding intra-EU trade of final goods.

¹⁶ Austria is another country which implemented in a quite liberal way the EU regulation on OPT; indeed in the last few years it experienced a sensible increase of OPT with CEECs. On the contrary, countries like France and Italy have adopted a stricter interpretation of the regulation, granting authorisations only to manufacturing firms operating in the same sector than that of OPT. However, due to the need of relocalising some national industries, during the last years, they became more permissive. See Sanguigni (1995).

¹⁷ See par. 3.

shares of OP traffic with respect to France - the United Kingdom has increased its presence in the last period.

5. Sectorial concentration of EU OPT in the CEE and Mediterranean countries

The intensity of economic relations between EU countries and their Eastern and Southern partners needs to be carried on at a more desegregated level in order to understand the patterns of commodity composition. In this section, we analyse the sectorial composition (resulting in the two-digit classification of the Combined Nomenclature CN) of EU reimports¹⁸ from CEECs and Mediterranean countries in order to identify the more active industries specialising in the process of vertical fragmentation of EU production. Table 7 and Table 8 show the evolution of the first ten merchandise-groupings and their contribution to total OPT performed by the two regions during the period of 1988-1997. Outward shipments from CEECs to Europe are mostly concentrated in semi-finished goods, as shown by the importance of chapters 61-62. Chapter 62 (articles of apparel and clothing accessories - not knitted or crocheted) is by far the most affected by vertical specialisation as proxied by OPT, accounting, on average, for more than 50% of total OPT directed to the EU. While in CEECs its importance was slowly declining through time, in the Mediterranean countries the phase of decline is followed, starting from 1994, by a growing trend. Chapter 61 (articles of apparel and clothing accessories - knitted or crocheted) became the core of CEECs' OPT traffic with Europe since 1991, although the gap with the volume of chapter 62 is apparent. The emerging role that the CEECs seemed to be playing in the footwear industry at the beginning of the nineties is not confirmed by the downward trend recorded by chapter 64 (footwear, gaiters and the like), having slipped from second to fourth position.

The rising importance of products of the electromechanical industry (chapter 85: electrical machinery and equipment and parts, telecommunications equipment, sound recorders, television recorders) leaping from the eighth to the third position, illustrates the process of diversification of OP traffic undergoing in this area. Chapter 94 (furniture; bedding, cushions; lamps and lighting fittings nesoi; illuminated signs, nameplates and the like, prefabricated buildings) followed an opposite pattern, recording a declining trend starting from 1993.

For most of the period under analysis, the Mediterranean countries are characterised by a static ranking of sectors, but show a higher degree of diversification with respect to CEECs. Mediterranean countries realise the major share of OPT traffic with Europe in the traditional textile and clothing (TC) industry, with semi-finished goods of chapter 62 and 61 comprising between 1/2 and 2/3 of their total shipments during the last ten years. However, although with large swings¹⁹, the electromechanical sector (chapter 85) is more significantly involved in outward processing than in the CEECs, providing a higher share of total reimports for Europe. The footwear industry (chapter 64), and the mechanical sector (chapter 84: nuclear reactors, boilers, machinery and mechanical appliances, computers) play a limited but increasingly relevant role in OP traffic.

¹⁸ In the following sections we confine the analysis to re-import flows of OPT coming from CEECs and Mediterranean countries since they are more informative about the country specialisation in the process of international delocalisation of production. Indeed, re-import after processing are already inclusive of the value-added by third countries in the process, representing the "final product" they are able to perform.

¹⁹ The large decline of the value and quota of chapter 85 in 1996 and 1997 is mainly due to the fall in semiconductors revenues to be supplied within the OPT regime by Malta.

In terms of concentration, Figure 2 draws the share of the first three, five and ten sectors on total OPT for each region. The Mediterranean countries show a high and increasing concentration for the three cumulated measures concerned with the first three sectors representing 90% of total shipments towards Europe. CEE countries demonstrate a lower and slightly declining concentration (the first three sectors provide less than 80% of total OP traffic with Europe). Several preliminary conclusions could then be drawn: on the one hand, the commodity composition of outward processing trade for the two regions seems to show different patterns of specialisation, although outward processing, in its own nature, is concentrated in the same industries. The analysis that follows will thus be focused on the five sectors (61, 62, 64, 84 and 85) which, for both regions, represent the bulk of outward shipments towards Europe. On the other hand, the productive structure of the CEECs seems to be more solid than that of the Mediterranean countries with their higher diversification resulting in a lower vulnerability to unfavourable single sector market swings.

6. Competition between Mediterranean countries and CEECs

In order to evaluate the real degree of competition existing between the two regions, the extent of competition has been examined in both its characterising dimensions: geographical - referring to the direction of shipments toward the different national European markets - and of product - referring instead to the types of products re-exported toward the EU independently from the national market they are conveyed to. Two countries should be considered as direct competitors only when the pattern records high values for both dimensions.

A set of indicators of competition is then developed and calculated first at an aggregate level (considering all the 99 Chapters of the HS Classification of products) and then for the five sectors that record the bulk of OPT activities identified in the former paragraph (61, 62, 64, 84 and 85). Furthermore, the analysis will be carried on not only on a regional basis, but it will also aim at estimating the degree of competition among pairs of competing countries belonging to different regions.

6.1 A first look at the geographical and sectorial competition

We would expect *a priori* a low level of competition in similar EU markets given the historical high geographical specialisation of some EU countries towards these two regions. However, due to the progressive re-orientation of the German position in the Mediterranean basin, we suppose to observe an increasing trend of the same indicator through time. Concerning the product dimension, we expect *a priori* a convergence on the supply of similar intermediate goods. Indeed, we believe that the divergent specialisation pattern originating from quite different regional factor endowments is counterbalanced by the fact that both regions offer low transport and labour costs.

We therefore anticipate a low level of direct competition between the two areas in the European market.

At the aggregate level, two different indicators are used. The first indicator evaluates the market similarity of the direction of OPT flows and measures the extent to which the Mediterranean and CEE countries' re-exports of all kind of goods are concentrated in the same European markets. of Market similarity (MS) has been calculated as follows:

$$MS_{XY}^{t} = \sum_{j=1}^{14} \min \frac{\sum_{i=1}^{99} X_{ij}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} X_{ji}^{t}}; \frac{\sum_{i=1}^{99} Y_{ij}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} Y_{ji}^{t}}$$
(1)

where: $X^{t} = CEECs$ re-exports at period t $Y^{t} = Mediterranean$ countries re-exports at period t i = two-digit HS classification of products (99 categories) j = European countries markets²⁰

Therefore, each ratio is the percentage share of EU market j (for example France) in total OP traffic of each region with Europe (the denominator represents total EU re-imports from each region).

This indicator can take on values between zero and one hundred. Zero represents a full geographical differentiation, suggesting that CEECs and Mediterranean OPT flows are directed to different EU markets, whereas one hundred indicates identical export structure, i.e. the entire production of both regions is directed towards the same EU markets²¹. This index, although at an aggregate level, gives an initial idea to what extent the major European export markets coincide for the two regions under analysis.

The second index evaluates sectorial similarity (SS) between the two regions and measures the extent of competition existing considering their whole range of products (i.e. the 99 chapters of the two-digit HS classification of products). It has been calculated as follows:

$$SS_{XY}^{t} = \sum_{i=1}^{99} \min \frac{\sum_{j=1}^{14} X_{ji}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} X_{ji}^{t}}; \frac{\sum_{j=1}^{14} Y_{ji}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} Y_{ji}^{t}}$$
(2)

where:

 X^{t} = CEECs re-exports at period *t* Y^{t} = Mediterranean countries' re-exports at period *t i* = two-digit HS classification of products (99 categories) *j* = European countries markets²²

As before, the indicator ranges between zero and one hundred. Zero represents perfect differentiation, meaning that the two regions are exporting radically different goods to the EU market; hence, the two regions are operating in different two-digit sectors. One hundred indicates perfect similarity of sectorial patterns, that is the processing activity of the two regions is concentrated in the same sectors (but not necessarily on the same EU markets).

²⁰ Belgium and Luxembourg are taken together.

²¹ For example, low values of the indicator can be associated to a situation where CEECs re-export are directed to Germany and Austria, whereas Mediterranean OPT flows go to France and Italy. On the contrary, high values of the index could indicate a situation where a significant share of total re-export of both regions go to Germany and Italy.

²² Belgium and Luxembourg are taken together.

Figure 3 tracks the evolution of the two indicators during the period under analysis and show that the degree of sectorial competition (SS) is always higher than that measured in geographical terms (MS), even though the gap is shrinking during the period²³. While the trend of SS appears quite regular except for a strong increase recorded in the last two years, MS shows a strong upward trend through time (exception made for the decline recorded in 1997²⁴). The upward trend of SS starting from in 1998 is mainly due to a higher degree of competition between the two regions in the TC industry (chapters 61, 62) and, to a lesser extent, in the electromechanical sector (chapter 85). The increase in MS can be explained by the growing importance of German market for OP total shipments of the Mediterranean countries and of Italian and French markets for CEE countries.

6.2 Competition among pairs of countries

In this section the level of competition observed at regional level is tested at country level, calculating the same indicators for pairs of countries belonging to different regions. The analysis will be limited to the subset of countries that absorb the major share of OP traffic for each region. The selected countries are: Morocco, Tunisia and Turkey for the Mediterranean region and Czech Republic, Hungary, Poland and Romania for CEECs²⁶.

Figure 4 shows that the highest degree of competition at the sectorial level (SS) has been registered by Morocco, Tunisia and Turkey with Romania and Poland, meaning that they are operating in the same two-digit sectors. In the case of Czech Republic, there is a systematic lower level of SS due to a lower importance of textile sector (especially sector 62) for this country with respect to other CEE and Mediterranean countries.

As far as market similarity (MS) is concerned, Tunisia and Morocco show a growing convergence of markets with respect to all CEE countries considered, while Turkey presents a regular higher level of geographical competition compared to the former countries, particularly with Czech Republic and Poland. These is due to the fact that Germany, the most important market for CEECs, has gained large shares in Morocco and Tunisia, while always remaining very important for Turkey.

The case of Malta is particular as the sector 85 huge increase in 1989, followed by the large decrease in 1996 and 1997 has determined a peculiar pattern for both SS and MS. Due

²³ However, this conclusion should be taken with attention, considering the way in which indicators are constructed. In principle, MS should be higher than SS as the number of partitions (the number of parts in which total trade is subdivided in order to calculate the two indicators of competition) is larger when calculating the sectorial dimension of competition (99) than when calculating the geographical one (14 EU countries). In our case, however, the contribution to the value of SS is almost totally given by six sectors (61, 62, 64, 84, 85 and 94), while, in the case of MS five countries (France, Germany, Italy, Netherlands and to some extent Austria) absorb essentially the entire OP traffic for both CEE and Mediterranean regions. Therefore, the number of significant partitions being not so different, the constant higher value of SS with respect to MS should indicate that the two regions' processing activities are more similar than the markets towards which their OPT flows are directed.

²⁴ This phenomenon could be caused by the particular behaviour of Malta.

²⁵ However, this conclusion should be taken with attention, considering the way in which indicators are constructed. In principle, MS should be higher than SS as the number of partitions (the number of parts in which total trade is subdivided in order to calculate the two indicators of competition) is larger when calculating the sectorial dimension of competition (99) than when calculating the geographical one (14 EU countries). In our case, however, the contribution to the value of SS is almost totally given by six sectors (61, 62, 64, 84, 85 and 94), while, in the case of MS five countries (France, Germany, Italy, Netherlands and to some extent Austria) absorb essentially the entire OP traffic for both CEE and Mediterranean regions. Therefore, the number of significant partitions being not so different, the constant higher value of SS with respect to MS should indicate that the two regions' processing activities are more similar than the markets towards which their OPT flows are directed.

²⁶ For the years 88-92 we consider the data for Czechoslovakia.

to the difficulty to disentangle the reasons underlying the trend observed, Malta will be dropped by further analysis.

6.3 Total trade trade basis indicators

The indexes (1) and (2) can be improved, obtaining a more correct measure of real competition, through the use of a more detailed partition of trade flows (for example from two-digit sectors to four-digit subsectors), at least until the further desegregation does not conflict with the economic significance²⁷. In this new set of indicators, we mix geographical and product considerations and perform a more detailed analysis of OPT flows, focussing on the five sectors singled out in paragraph 5 as those regrouping the bulk of OPT activities for the two regions (61, 62, 64, 84 and 85). Each indicator is calculated for each of these five sectors.

A first improvement in our indexes is given by what we call sectorial market similarity index (SMS), which evaluates the degree of geographical competition existing in each of the five sectors that together assure quite the entire OP traffic for both regions²⁸.

$$SMS_{XY}^{t}(i) = \sum_{j=1}^{14} \min \frac{X_{ji}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} X_{ji}^{t}}; \frac{Y_{ji}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} Y_{ji}^{t}}$$
(3)

where:

 X^{t} = CEECs re-exports at period *t* Y^{t} = Mediterranean countries re-exports at period *t*

i = two-digit HS classification of products (99 categories)

i = 61, 62, 64, 84, 85 (selected sectors)

j = European countries markets

A second improvement is based on a desegregation of each two-digit sector into its four-digit components, ignoring the direction of OPT flows. We call this index product similarity (PS).

Individual SS
$$_{XY}^{t}(i) = \min \frac{\sum_{j=1}^{1} X_{ji}^{t}}{\sum_{j=1}^{19} X_{ji}^{t}}; \frac{\sum_{j=1}^{1} Y_{ji}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} Y_{ji}^{t}}$$

²⁷ If four-digit sub sectors include products (of different six or eight-digit sub sectors) that are substitutes among themselves, then it becomes useless to consider a higher level of detail.

 $^{^{28}}$ This selection process, simply based on the static analysis performed in section 5, is supported by the computation of the individual components of SS index (Individual SS) that evaluates the single weight of each one of the 99 sectors of the two-digit classification, calculated as follows:

The sum of the Individual SS of the five sectors under analysis (61, 62, 64, 84, 85) absorbs quite the whole value of Total SS index (see the first block of Table 9), meaning that the bulk of competition between the two regions occurs in these categories, that is in the TC (61, 62), footwear (64), mechanical (84) and electromechanical (85) industries. By construction, Individual SS index provides the highest value among the set of indicators computed.

$$PS_{XY}^{t}(i) = \sum_{p(i)=1}^{\dots} \min \frac{\sum_{j=1}^{14} X_{jp(i)}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} X_{ji}^{t}}; \frac{\sum_{j=1}^{14} Y_{jp(i)}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} Y_{ji}^{t}}$$
(4)

where:

i = 61, 62, 64, 84, 85

p(i) = four-digit subcategories of i selected sectors

The last indicator, which we call composite index, merges (3) and (4) and represents our deeper level of desegregation, allowing to evaluate the extent of sectorial competition existing between the two regions in every European market.

Composite
$$_{XY}^{t}(i) = \sum_{j=1}^{14} \sum_{p(i)=1}^{m} \min \frac{X_{jp(i)}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} X_{ji}^{t}}; \frac{Y_{jp(i)}^{t}}{\sum_{j=1}^{14} \sum_{i=1}^{99} Y_{ji}^{t}}$$
 (5)

i = 61, 62, 64, 84, 85 $p(\bar{i}) =$ four-digit subcategories of \bar{i} selected sectors

Figure 5 provides the whole set of indicators.

It emerges that the degree of geographical competition at sectorial level (SMS indicator measuring the extent to which 4-digit OP traffic of the two areas converge to similar EU markets) is lower than the rivalry calculated on the basis of the desegregation by products (the PS indicator, except for the first two or three years for sectors 84 and 85).

In general we observe that the patterns of SMS, PS and Composite are usually more regular than those tracked by the more aggregated SS index, the degree of "real" competition changing only gradually through time. Furthermore, the Composite indicator, merging the geographical and product dimensions of competition, shows that the real degree of competition between regions is always lower than indicated by the indexes focusing on one dimension only (paragraphs 5.1). Single sectors however show different patterns.

Sector 62, is by far the most important one since it acts as the major catalyst of competition, explaining more than 60% of total competition existing between the two regions. In particular, it shows a progressive convergence of the two regions towards similar EU markets, so much, that the gap between the two indicators measuring the similarity of markets and products (respectively SMS and PS) has become negligible during the last two years. This result is confirmed by the highest value of Composite index recorded by sector 62 and it is due to the growing trend of SMS caused by a re-orientation of German OP traffic in the TC sector towards Mediterranean countries (as proxied by an increasing share of German OPT re-export from Morocco and Tunisia), the inverse movement recorded by France, the higher exposure of the Netherlands particularly in Morocco, Tunisia and Turkey, and the growing importance of Italy in this sector in both regions.

Sector 61, although to a different extent, is the second major domain of competition, showing increasing values of the Composite index through time. France is redirecting a substantial share of OPT activities toward the CEECs (Romania and Poland), whereas the reverse seems to occur for Germany, increasingly exposed toward Tunisia and Morocco.

Sector 64 shows an increasing similarity in products however not matched by a convergence of markets, thus explaining the low Composite index value recorded. Indeed, with the exception of France, the remaining EU countries considered delocalise footwear

processing activities mainly in the CEECs (in particular in Hungary and Romania for Italy, in Poland and Hungary for Germany).

As far as sector 85 is concerned, the large increase in the degree of competition that emerged looking at the SS indicator is only apparent; although in principle it explains growing shares of competition existing between the two regions (reaching 10% in 1997), the more regular pattern of the Composite index, mainly as a result of divergent EU markets of destination (Italy for the Mediterranean countries Tunisia, Morocco and Turkey but with alternate trends, Germany for Turkey and the CEECs) suggests that the "real" degree of competition is reduced. The same can be said for sector 84, where competition, as proxied by the Composite index, is relatively low. The collapse of Malta occurred in 1994, that was probably the more direct competitor of Romania, Czech Republic, Slowakia and Hungary in the French and Danish markets, should help to explain the trend observed. The residual competition between regions in both sectors has to be attributed to the significant German OP traffic with Turkey.

6.4 Sectorial trade basis indicators

The indicators discussed above measure the degree of competition within each sector, but it can not be ignored that the competition is also affected by the importance of the sector under analysis as a share of total regional OPT and by the trend that the latter follows. Therefore, an indicator scoring high may suggest either that the sector provides a large share of total OPT or that there is a high level of competition within the sector (countries are positioned on similar markets and/or offer similar products) or both. ³⁰ The indicators described above provide a real measure of the evolution of competition in each sector, but they do not allow to compare the degree of competition between sectors. In order to isolate the degree of competition within the sector vithout any interference due to the evolution of the same sector's share of total OPT, the denominator of the ratios of equations (3), (4) and (5) is replaced by OPT performed in the sector for which the index is calculated.

Figure 6 displays the evolution of these last indicators (called sectorial base indicators while the former ones are called total trade base indicators)³¹. In terms of patterns³², there are some differences with the total trade base indicators but they are not so large³³. Again, this set of indexes confirms that there is a higher competition in terms of products than in terms of geographical patterns. Therefore, the view that the two regions tend to differ more in terms of markets than in terms of the nature of the goods they process is supported also when the analysis is conducted at a further significant level of desegregation. In principle then the two regions enjoy a comparative advantage in similar sectors, however they direct their production to different EU markets. The pattern of competition that emerges is traditionally explained by the permanence of historical and political ties between third economies and EU countries. However, this does not explain why the CEECs and the Mediterranean countries, being specialised in similar products, have never adopted a more aggressive strategy to expand to other EU markets "historically" occupied by other suppliers. Such a phenomenon is likely to be explained by the fact that the comparative advantage is imposed by EU firms according to their own specialisation. This would justify the repartition of the EU market from a functional perspective: there has been no competition between regions in the same market because they intervene in quite different phases of production according to the delocalisation needs of EU countries. In particular, Baldone, Sdogati and Tajoli (2000) show that the relationship

²⁹ Given the way in which the indicators are constructed a sector scores high when it is relevant in both regions.

³⁰ Given the way in which the indicators are constructed a sector scores high when it is relevant in both regions.

³¹ SS is always equal to 100% as the fractions in brackets are always 1.

³² The values of indicators in the total trade base and sectorial base cases are not comparable.

³³ Differences may emerge in case of large swings of sector share on total OPT.

between the contractor and the subcontractor for European OPT can be characterised with reference to two models. On the one hand, the Dutch-German model, which results into the delocalisation of a large number of segments of the production process, and send abroad semi-finished products for completion. On the other, the French-Italian model, that deverticalises only the final segments of production, sending abroad products at an advanced stage of production³⁴. In an other paper, the econometric results we obtain broadly confirm the above cited characteristics of the pattern of specialisation.

As far as the degree of competition in the different sectors is concerned, 61 and 62 show the higher level of competition with an average value of Composite indicators for the period of 1988-97 of 39% and 67,7% respectively. Sector 61 and 62 show an upward trend for all the three indexes considered. The level of competition in chapters 64, 84 and 85 is definitely lower (on average equal to 6,5%, 5,6% and 6,1% respectively).

The degree of competition within the sector being higher than that computed comparing to the others suggests that all the five chapters considered, although remaining the most relevant domain of competition between the two regions, are slightly loosing importance through time due to the widening of the specialisation pattern to other sectors.

7. Does quality matter?

High similarity in products, i.e. a similar role played in the vertically linked production system managed by European firms, and increasingly convergent EU markets where their production is directed, do not assure that the CEE and Mediterranean regions compete in the same market segments. The international competitiveness that the two regions have gained on the European market needs to be investigated also in terms of quality offered on the various EU national markets, in order to check if they are positioned in the same price segments. Indeed, to the extent that the analysis is carried out at a sufficient level of desegregation of sectorial data, differences in prices can reasonably proxy differences in quality. This issue is of particular importance in terms of political economy since it affects income distribution: increasing quality of production in the division of labour is the result of technological catching –up and, hence, supports an expected acceleration of the development path.

Price competitiveness has been evaluated at sectorial level using an indicator that is the result of a double weighting method applied to bilateral trade flows as follows:

$$P_{k,j,(\overline{i}),t} = \underline{X}_{kjp(\overline{i})}^{t} \cdot \frac{X_{kjp(\overline{i})}^{t}}{X_{kj(\overline{i})}^{t}}$$
(6)

where:

 $\bar{i} = 61, 62, 64, 84, 85$ HS sectors $p(\bar{i}) =$ four-digit subcategories of \bar{i} selected sector

³⁴ They calculate the ratio between the share of textiles exported in OPT regime with respect to the share of apparels re-imported. For France and Italy such a ratio is lower with respect to the rivalry for Germany and the Netherlands. On the contrary, the ratio between the share of apparel exported in OPT and those re-imported is higher for the former countries.

 $\underline{X}_{kjp(i)}^{t}$ is the unit value of supplier k OPT export flows to EU market j at period t of

four-digit level subcategory p(i) in (i) selected sectors (61, 62, 64, 84, 85) and $\frac{X_{kj p(i)}^{t}}{X_{kj(i)}^{t}}$ is

the contribution of subcategory p(i) to the total turnover granted by sector (i) in EU market j.

By construction, the comparison between indicators calculated in such a way allows the confrontation of the quality offered in the same European market sector in relative terms by single third countries controlling at the same time for price differentiation policies possibly implemented in the different EU national markets. A lower value of the indicator for country k means that on average it is positioned in a lower quality market segment of sector (i) than that characterising the supply of a competitor in the same EU market.

By means of aggregation of countries' weighted indicators of sectorial price competitiveness, it is therefore possible to compare the average quality offered by the two regions on the EU market on the whole.

As far as the TC and footwear industries are concerned, the Mediterranean area improved its position in the EU market as a whole with respect to the CEE region reaching higher quality market segments, due to both its better performance and to the decline of CEECs. Although the comparison of the two regions' price competitiveness should be analysed considering the zero-duty access granted to CEECs since 1994 for the TC sector in the EU market, it appears that the quality catching-up by Mediterranean countries has started before the change in EU trade policy; therefore, the differences in prices can not be attributed only to the different tariff regime applied by the EU to the two regions for some time³⁵. The improvement in quality in sectors 61, 62, and 64 (see figure 7) is attributable respectively to Morocco and Tunisia (61), Turkey and Morocco (62), and Tunisia's (64) catching-up process with the CEECs. In particular, the Eastern competitors providing the highest quality are Hungary and the Czech Republic for sector 61, Poland and Hungary for sector 62 and the Czech Republic for sector 64.

In the case of the mechanical (84) and electromechanical (85) sectors, the high variability of prices in both regions is due to the substantial differences between unit values of the various subcategories performed by the different third countries. The upward trend experienced by the Mediterranean countries during the period 1989-1994 in sectors 85 is quite uniquely due to Malta's OP activities. Similarly, the subsequent falling down of prices is probably attributable to both the collapse of semiconductors prices that hit the Maltese industry and the diminishing EU OPT in response to the changed tariff regime (see Table 7). In spite of this pattern, Tunisia appears to have found its own higher-than-average quality market segment, with respect to both the Mediterranean partners (with the exception of Israel) and the CEECs.

Israel's leading position mostly explains the Mediterranean good performance in sector 85. However, Tunisia and particularly Morocco are progressively consolidating their positions facing the competition of Poland and Hungary.

The analysis of the prices trend on country basis allows to individuate the contribution of both the single country to the regional quality performance (homogeneity of third countries suppliers), and of four –digit subcategories to the sectorial trend observed in bilateral and

³⁵ In the same way, by construction, the differences in prices can not be interpreted with reference to the higher export flows performed by CEECs in the EU, and thus justified at the light of a possible greater efficiency, since the indicator controls for unit values.

regional flows. From figure 7 it is apparent that the quality catching-up of Mediterranean countries in the European market as a whole mostly origins in France in the TC industry (sectors 61). The Mediterranean TC industry records an increasingly positive contribution coming from the Danish and Italian markets.

As far as the EU countries geographical strategies are concerned, France benefits of the high quality granted in both the TC and footwear sectors (62 and 64) by Morocco, and in the mechanical sector (84) by Tunisia; however the higher price range offered by Hungary in the latter one might partly justify the re-direction of trade flows towards the CEECs observed above. Due to the similarity of price ranges offered by both regions, Germany re-orientation of flows does not seem to be explained by a search of higher quality, but rather by the need of satisfying increasing volumes of delocalisation flows. Italy's strategy appears similar to the German one, since the re-orientation toward the CEEC does not seem motivated by any precise choice of quality, but rather of efficiency.

8. Conclusions

There is a large consensus upon the fact that degree of trade competition between Mediterranean and CEE is quite reduced, due to both their different factors endowments and the strong geographical orientation of some European countries, like Germany and France, in the two regions.

This conclusion seems no longer true when analysing outward processing activities. Indeed, on the one hand, in the OPT domain competition appears far from being low since the two areas possess similar characteristics, both in terms of proximity to the EU market and also low labour costs, allowing for a profitable delocalisation of labour-intensive phases of EU production. European firms deverticalise production mainly in the traditional Textile and Clothing industry, footwear, mechanical and electromechanical sectors, that, by their own nature, can be profitably delocalised in low-cost neighbouring countries. Therefore, competition in OPT between the two regions mainly develops in the above cited sectors. Not astonishingly, the TC industry (chapter 61 and 62) explains the bulk of competition existing between the two regions.

On the other hand, the degree of competition is mostly attributable to similarity in products, rather than of European markets of destination, although the two regions seem increasingly orienting their re-exports to similar EU countries.³⁶ When considering the spatial dimension of competition then, the two regions does not appear as direct competitors. This conclusion is reinforced by the quality catching-up by the Mediterranean region, particularly in the TC and footwear industries, that has made it reach higher prices market segments with respect to the CEECs. In principle then the two regions enjoy a comparative advantage in similar sectors but offer different products in terms of quality, directing in addition their production to different, however increasingly similar, EU markets. This evidence helps to draw some preliminary elements of the competition model regulating the vertical specialisation relationship.

First of all, vertical specialisation, and thus OPT, should be interpreted as a traditional principal (contractor)-agent (subcontractor) relationship consisting in the provision of a service by the agent. This contractual relationship is characterised by both the relevance of informational aspects for its successful conclusion and the fact that the subcontractor's (third countries') comparative advantage originates mainly from the contractor's (EU firms)

³⁶ The re-direction of Germany in the Mediterranean region and of that Italy and France in the CEECs help to explain the rising third countries' convergence of markets. However, even Sector 62 shows a rather low "real" degree of competition between the two regions, due to a reduced geographical competition.

specialisation and delocalisation requirements. Information needed for the successful conclusion of the contract concerns for example the business and institutional environment, the infrastructure, the service sector and the industrial structure of third countries markets. At the beginning, the informational needs have been satisfied through the historical and political ties, that therefore justify the low spatial competition between the two regions, i.e. why the CEECs and the Mediterranean countries did not have adopted for a long time a more aggressive strategy to expand to other EU markets "historically" occupied by other suppliers. Therefore, there has been no competition between regions in the same market because they are "bounded" to intervene in quite different phases of production according to the delocalisation needs of EU countries, that decided to operate where they had the best information. In a later stage, the integration of third economies into the EU and possibly its enlargement process, has not only fostered the reaching of some minimum standards on their side, but also, by reducing trade barriers, has caused more information to circulate. This explains the increasing re-orientation of third countries' re-exports towards similar EU market observed in the last period, also due to the excess demand of delocalisation coming from EU firms. This process should in principle foster competition between the two regions. However, the evidence in terms of quality of the service point to a new differentiation of products between the two regions, following the production up-grading of the Mediterranean countries.

In terms of trade volumes generated, the performance of the Mediterranean region appears less satisfying than that of the CEECs.

The CEECs are characterised by a higher reactivity to the increase of the vertical specialisation process coming from Europe, due to both the higher rate of growth they experience with respect to the Mediterranean countries and also to the fact that historically, they "moved first" adopting the vertical specialisation pattern even before the end of the COMECON. Furthermore, they not only show a higher degree of homogeneity as a group, as confirmed by a more equal distribution of OPT between countries, but share a common view of the outward processing as a kind of integration strategy with Europe.

On the contrary, the Mediterranean area appears more heterogeneous, showing highly differentiated performance by country. In particular, Tunisia and Morocco seem to follow a quite divergent pattern with respect to the other regional partners, being not only able to face competition coming from CEECs without loosing significant EU market shares, but also to recover, particularly Morocco in the last two years, from the stagnant economic situation shared by the entire area during the nineties. Moreover, the objective limits in absorbing increasing shares of OP activities that Morocco and Tunisia have shown through time should be explained considering that OPT does not represent for them a precise economic policy choice as in the case of Romania for example. Their modestly increasing capacities of absorption could partly explain their lower responsiveness faced to the growing demand of delocalisation coming from EU firms, and the EU preference toward the CEECs.

In conclusion, the deepening of the integration process with the CEECs does not seem to have damaged the Mediterranean interests as far as OPT is concerned, at least in the case of the best performers Tunisia and Morocco, since the re-orientation of Italy and France toward the CEECs has, as a counterpart, the recent re-direction of Germany towards the Mediterranean region. Despite the different trade volume generated, the Mediterranean countries increasingly show the ability not only to compete in the traditional sectors, like the TC industry, but also to enter successfully more technologically advanced sectors, like the mechanical and electromechanical ones. In addition, by up-grading their services, the Mediterranean countries seem to have carved their own market segment, realising a product differentiation strategy with respect to the CEECs.

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Tables and Figures

		Regional OPT /	Total EU OPT	EU OPT/TI	t by region ¹
		1988-92	1993-98	1988-92	1993-98
EFTA ²	EU Exports	11.1%	6,2%	0.64%	0,96%
	Re-imports	8,3%	5,0%	0,56%	0,72%
Med12 ³	EU Exports	10.6%	6,5%	2,02%	1,68%
	Re-imports	10,2%	7,5%	2,93%	2,81%
CEEC ⁴	EU Exports	32,9%	38,8%	9,10%	8,77%
	Re-imports	38,5%	46,9%	12,49%	13,44%
North Ame	rica EU Exports	19.4%	14,8%	1,42%	1,56%
	Re-imports	19,2%	15,1%	1,46%	1,57%
NICs ⁵	EU Exports	17,8%	17,4%	3,24%	3,39%
	Re-imports	15,7%	13,6%	2,80%	2,75%
Others	EU Exports	8,3%	8,5%	0,38%	0,57%
	Re-imports	8,0%	11,7%	0,34%	0,70%

Table 1 - European (EU) OPT by area of destination

Table 2 - EU OPT in the Mediterranean countries and in the CEECs

												(thousand	ls of Ecu)	
		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	88-92	93-98
	EU Exports	338.021	587.010	688.279	811.896	910.932	949.326	1.028.097	1.028.247	759.308	711.259	716.277	667.228	865.419
	Exports rate of growth		73.7%	17.3%	18.0%	12.2%	4.2%	8.3%	0.0%	-26.2%	-6.3%	0,7%	30.27%	-3,21%
d12	Exports/ normal exports	1.28%	1.96%	2.05%	2.31%	2.49%	2.19%	2.34%	2.04%	1.34%	1.09%	1,06%	2.02%	1,68%
Med1	Re-imports	365.089	669.482	830.070	879.748	1.027.733	924.124	1.130.120	1.142.958	871.371	796.206	862.493	754.424	954.545
	Re-imports rate of growth		83.4%	24.0%	6.0%	16.8%	-10.1%	22.3%	1.1%	-23.8%	-8.6%	8,3%	32.54%	-1,79%
	Re-imports / normal imports	1.92%	2.82%	3.12%	3.16%	3.64%	3.30%	3.70%	3.42%	2.47%	1.93%	2,04%	2.93%	2,81%
	EU Exports	1.291.113	1.565.835	1.914.766	2.450.906	3.042.325	3.688.113	4.414.483	5.277.221	6.055.495	6.257.618	5.720.232	2.052.989	5.235.527
	Exports rate of growth		21.3%	22.3%	28.0%	24.1%	21.2%	19.7%	19.5%	14.7%	3.3%	-8,6%	23.92%	11,66%
ECs	Exports/ normal exports	7.90%	7.71%	8.89%	10.01%	11.00%	11.09%	10.93%	9.06%	8.55%	7.17%	5,81%	9.10%	8,77%
CEE	Re-imports	1.853.058	2.201.780	2.667.129	3.354.889	3.902.881	4.455.353	5.354.924	6.238.685	6.933.038	7.070.373	6.728.945	2.795.947	6.130.220
	Re-imports rate of growth		18.8%	21.1%	25.8%	16.3%	14.2%	20.2%	16.5%	11.1%	2.0%	-4,8%	20.52%	9,86%
	Re-imports / normal imports	10.41%	10.57%	12.19%	14.17%	15.08%	16.64%	15.80%	13.25%	13.86%	11.70%	9,39%	12.49%	13,44%

¹ In particular, it is the ratio between EU OPT exports and Total EU normal exports, the same for imports. Furthermore, for reasons of homogeneity, the ratio weights OPT flows to total normal trade flows generated with non-Member countries, thus excluding intra-EU trade of normal goods, as in the case of OPT for intermediate goods. It is calculated by region as an average over the period considered. ² Effective EFTA countries.

³ Med12 include the 12 countries involved in the Euro-Med Agreements: Morocco, Algeria, Tunisia, Egypt, Jordan, Gaza and West Bank, Israel, Lebanon, Syria, Turkey, Cyprus, Malta.

⁴ CEECs include: Poland, Hungary, Romania, Bulgaria, Albania for the whole period considered (1988-1997), DDR (1988-1990), Czechoslovakia (1988-1992) and Czech Republic and Slovakia thereafter (1993-1997), Latvia, Lithuania and Estonia (1992-1997), Yugoslavia (1988-1991 after 1991 we consider the following independent Republics: Slovenia, Croatia, Bosnia (1992-1997), Fyrom (1993-1997)).

⁵ NICs include: South Korea, Hong Kong, Taiwan, Singapore, Thailand, Malaysia, Indonesia and Philippine.

Table 3 - EU OPT with the main CEE and Mediterranean countrie

		1000	1000	1000	1001	1002	1092	1004	1007		isands of Ec	<i>,</i>
		1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	EU exports	172.474	228.077	416.915	617.168	855.732	1.046.538	1.153.575	1.368.822	1.472.538	1.307.849	1.068.330
Poland	Re-imports	270.203	348.014	566.704	838.861	1.122.730	1.406.993	1.685.374	1.881.485	1.933.954	1.671.788	1.400.806
	EU exports	230.107	284.490	358.094	483.401	617.583	681.454	715.485	840.629	980.478	1.006.352	855.837
Hungary	Re-imports	356.982	422.716	492.381	669.343	805.089	800.226	861.935	981.856	1.160.962	1.166.620	1.024.369
Czech	EU exports	-	-	-	-	-	610.626	903.929	1.061.416	1.186.062	1.179.869	922.412
Republic	Re-imports	-	-	-	-	-	601.192	796.790	968.068	1.034.614	995.945	829.418
Slowakia	EU exports	-	-	-	-	-	142.501	197.667	248.388	322.219	340.824	271.120
Siowakia	Re-imports	-	-	-	-	-	156.300	225.432	286.589	346.886	372.239	300.448
Czechoslovakia	EU exports	58.431	68.523	85.583	281.962	558.716	-	-	-	-	-	-
Czecnosiovakia	Re-imports	98.828	128.558	145.759	332.456	595.366	-	-	-	-	-	-
Romania	EU exports	171.651	189.612	189.848	206.486	280.500	422.976	567.699	717.140	849.535	1.007.217	1.023.181
котани	Re-imports	291.897	326.073	302.121	287.669	385.282	502.604	702.540	862.769	1.052.360	1.200.754	1.247.598
CEECs (total)	EU exports	1.291.113	1.565.835	1.914.766	2.450.906	3.042.325	3.688.113	4.414.483	5.277.221	6.055.495	6.257.618	5.720.232
CEECS (lotal)	Re-imports	1.853.058	2.201.780	2.667.129	3.354.889	3.902.881	4.455.353	5.354.924	6.238.685	6.933.038	7.070.373	6.728.945
Morocco	EU exports	66.140	121.842	146.004	144.179	165.832	209.866	208.130	227.543	227.070	240.120	270.615
	Re-imports	89.465	159.525	207.165	192.353	205.447	202.387	226.452	249.901	248.363	275.974	330.382
Tunisia	EU exports	169.785	208.658	232.457	235.196	267.285	290.542	294.403	275.755	300.424	298.959	296.002
<u>i</u> unistu	Re-imports	190.786	223.546	248.801	243.082	280.949	276.335	291.784	283.383	315.240	330.447	361.138
Israel	EU exports	5.484	51.840	13.291	11.743	14.078	11.140	21.932	47.180	27.043	37.875	41.691
Isruei	Re-imports	4.673	30.759	16.279	12.687	11.229	4.160	6.533	9.040	14.932	27.705	22.191
Turkey	EU exports	25.401	46.993	69.882	89.126	94.960	94.450	91.910	115.541	94.252	86.714	59.807
1 11 11 5 9	Re-imports	28.904	66.028	105.740	139.972	126.728	138.872	158.581	180.151	135.653	90.171	85.043
Malta	EU exports	54.581	148.721	217.060	323.850	360.579	333.892	399.785	342.117	93.965	30.816	29.270
munu	Re-imports	40.365	179.904	240.832	283.176	397.265	295.164	436.343	397.873	133.064	47.673	34.625
Mad12 (tatal)	EU exports	338.021	587.010	688.279	811.896	910.932	949.326	1.028.097	1.028.247	759.308	711.259	716.277
Med12 (total)	Re-imports	365.089	669.482	830.070	879.748	1.027.733	924.124	1.130.120	1.142.958	871.371	796.206	862.493

			EU OPT average rate of gro	th		PT/TT	Average coun	try's weight on al OPT ⁶
		88-92	<u>average rate of gro</u> 93-97	<u>98</u>	88-92	ge value 93-98	88-92	<u>93-98</u>
Poland	EU exports	50,4%	9,5%	-18,3%	8,0%	7,8%	20,60%	24,06%
Fotana	Re-imports	43,4%	9,2%	-16,2%	11,5%	14,8%	21,08%	27,59%
	1	,	,	,	,	,	,	,
**	EU exports	28,1%	10,4%	-15,0%	12,2%	9,6%	18,94%	16,31%
Hungary	Re-imports	22,8%	7,9%	-12,2%	17,7%	13,5%	19,50%	16,38%
Czech	EU exports	-	19,2%	-21,8%	-	8,7%	-	18,62%
Republic	Re-imports	-	14,3%	-16,7%	-	10,1%	-	14,20%
	EU exports	-	25,0%	-20,5%	-	8,4%	_	4,76%
Slovakia	Re-imports	-	24,9%	-19,3%	-	10,0%	_	4,51%
	F		_ ,,, ,,					.,
~	EU exports	92,4%	-		5,0%		8,65%	
Czechoslovakia	Re-imports	62,7%	-		6,8%		8,36%	
	EU exports	13,8%	29,7%	1,6%	20,3%	19,0%	10,59%	14,32%
Romania	Re-imports	8,4%	25,8%	3,9%	18,3%	27,3%	12,07%	14,82%
-	EU exports						58,78%	78,06%
$CEECs 5^7$	Re-imports						61,01%	77,51%
	EU exports	23,9%	15,7%	-8,6%	9,1%	8,8%	100%	100%
CEECs total	Re-imports	20,5%	12,8%	-4,8%	12,5%	13,4%	100%	100%
	EU exports	29,5%	8,1%	12,7%	3,7%	4,7%	19,50%	27,65%
Morocco	Re-imports	27,0%	6,3%	19,7%	5,8%	6,0%	23,03%	27,55%
	EU exports	12,3%	2,4%	-1,0%	8,0%	6,7%	35,57%	34,83%
Tunisia	Re-imports	10,4%	3,4%	9,3%	11,3%	9,1%	34,12%	33,34%
	EU exports	194,8%	37,7%	10,1%	0,4%	0,3%	3,08%	3,77%
Israel	Re-imports	119,4%	36,6%	-19,9%	0,5%	0,3%	2,07%	1,60%
	EU exports	41,9%	-0,8%	-31,0%	0,9%	0,6%	9,41%	10,51%
Turkey	Re-imports	52,9%	-4,2%	-5,7%	1,6%	1,5%	11,75%	13,60%
	EU exports	69,7%	-28,4%	-5,0%	16,9%	10,9%	30,50%	21,35%
Malta	Re-imports	109,4%	-23,5%	-27,4%	33,2%	23,7%	27,56%	21,77%
	EU exports						98,06%	98,12%
MED 5 ⁸	Re-imports						98,53%	97,86%
	EU exports	30,3%	-4,0%	0,7%	2,0%	1,7%	100%	100%
Med 12 (total)	Re-imports	30,3 <i>%</i> 32,5%	-3,8%	8,3%	2,0%	2,8%	100%	100%

Table 4 - Evolution of EU OPT with the main CEE and Mediterranean countries

 ⁶ It is calculated as an average of the annual ratios of national OPT on total OPT performed by the region. For example, in the case of Poland, it is calculated as the ratio of Polish OPT on total OPT performed by all CEECs.
 ⁷ Referring to the five CEE countries above.
 ⁸ Referring to the five Mediterranean countries above.

											(thou	sands of Ec	u)
			1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	CEECs	Exports	-	-	-	-	-	-	-	225.814	342.941	358.031	291.778
A	CEECS	Re-imports	-	-	-	-	-	-	-	215.872	378.336	372.783	300.640
Austria	Med12	Exports	-	-	-	-	-	-	-	1.462	954	950	7.115
	Med12	Re-imports	-	-	-	-	-	-	-	593	507	1.137	8.226
	CEEC.	Exports	94.435	132.279	149.621	168.823	172.509	177.007	196.329	239.817	286.064	311.951	313.909
F	CEECs	Re-imports	98.773	134.747	150.010	182.908	218.673	235.162	262.162	318.418	351.325	379.281	354.353
France	M. 110	Exports	147.404	194.957	191.336	158.733	184.287	192.200	200.534	201.878	197.884	234.003	243.128
	Med12	Re-imports	195.266	274.770	314.217	262.390	281.680	275.837	270.982	291.042	269.797	283.287	291.779
	CEEC.	Exports	1.031.697	1.205.244	1.481.800	1.918.306	2.301.740	2.721.781	3.318.835	3.585.714	3.701.112	3.635.479	3.012.184
G	CEECs	Re-imports	1.476.668	1.731.840	2.121.112	2.702.380	2.967.936	3.320.059	3.929.998	4.126.043	4.279.488	4.277.162	3.798.138
Germany	110	Exports	92.712	122.161	157.500	195.724	210.128	242.938	254.345	284.157	248.608	225.121	374.799
	Med12	Re-imports	95.111	131.235	178.771	224.561	219.523	253.144	306.063	328.849	336.171	313.303	615.499
	CEEC.	Exports	21.667	45.066	54.114	87.071	199.924	343.109	435.627	533.481	729.914	784.862	924.900
T4 - 1	CEECs	Re-imports	9.971	27.579	30.896	78.071	168.940	290.757	478.773	576.351	842.766	949.448	1.062.934
Italy	M. 110	Exports	40.964	134.205	208.312	305.413	346.249	325.837	392.639	331.310	93.800	40.956	93.219
	Med12	Re-imports	11.263	156.330	213.305	254.519	375.003	284.157	426.871	361.170	115.028	46.871	100.765
	CEEC.	Exports	87.600	110.282	143.082	156.718	184.797	188.761	119.674	203.811	284.603	226.550	189.603
	CEECs	Re-imports	132.738	162.442	214.244	225.812	288.314	313.380	341.309	398.425	381.974	348.006	230.846
Netherlands	M. 110	Exports	33.897	44.786	53.793	56.322	53.235	65.467	54.783	100.669	127.989	96.747	88.044
	Med12	Re-imports	30.544	32.640	33.359	46.088	52.687	40.318	65.402	80.841	62.777	28.341	28.500
	OFFO	Exports	24.589	24.824	19.589	28.433	55.819	85.919	119.582	110.243	225.307	338.575	269.585
United	CEECs	Re-imports	80.595	83.833	57.205	39.334	72.058	96.218	87.889	130.362	165.660	135.358	204.203
Kingdom	11.110	Exports	1.602	1.638	2.402	1.760	4.291	12.981	40.111	33.827	43.252	58.137	62.676
	Med12	Re-imports	1.478	1.194	1.404	2.199	3.659	9.166	14.457	29.764	38.822	65.997	88.598

Table 5 - EU OPT by selected member states with CEE and Mediterranean regions

				try's weight on	N	ational OPT/1	T	N		Т
			88-92	by region 93-98	88-92	by region 93-97	98		88-92	93-97
		Exports	-	5,2%	-	4,7%	3,5%	Exports		1,54%
ustria	CEECs	Re-imports	-	4,7%	-	7,3%	26,4%	Imports		2,31%
lustin		Exports	-	0,3%	-	0,2%	0,1%			
	Med12	Re-imports	-	0,2%	-	0,1%	1,4%		National OPT/TT with world 88-92 0,48% 0,66% 1,90% 1,90% 1,01% 0,00% 0,00% 0,00% 0,00% 0,00% 0,00% 0,00% 0,00% 1,87% 1,59% 0,02% 0,28% 0,02% 0,28% 0,03% 0,52% 1,20% 1,45% 2,16% 2,66% 0,15% 0,40% 0,40% 0,78%	
		Exports	1,2%	1,5%	2,8%	3,5%	2,5%	Exports	0,48%	1,04%
	CEECs	Re-imports	1,5%	1,6%	5,4%	6,8%	4,9%	Imports	0,66%	0,95%
Belgium		Exports	4,9%	3,3%	1,1%	0,8%	0,6%			
	Med12	Re-imports	4,7%	2,7%	2,2%	1,2%	1,1%			
	0000	Exports	1,9%	3,0%	6,9%	12%	11,1%	Exports	1,90%	2,80%
	CEECs	Re-imports	2%	3,8%	10,8%	22%	75,8%	Imports	1,01%	1,60%
Denmark	N 110	Exports	2,1%	1,1%	3,7%	2,1	0,3%			
	Med12	Re-imports	2,7%	1,5%	12,2%	7,9%	3,9%			
	GEEG	Exports	-	2,4%	-	4,4%	8,3%	Exports	0,00%	0,73%
	CEECs	Re-imports	-	0,8%	-	4,4%	18,5%	Imports	0,00%	0,82%
Finland	N 110	Exports	-	0,1%	-	0,1%	0,0%			
	Med12	Re-imports	-	0,0%	-	0,1%	0,0%			
	OPPO	Exports	7,2%	4,8%	6,3%	5,6%	4,0%	Exports	1,87%	2,44%
-	CEECs	Re-imports	5,6%	5,2%	7,4%	10,3%	3,1%	Imports	1,59%	3,63%
France	14 110	Exports	28,9%	24,2%	2,3	19%	5,1%			
	Med12	Re-imports	37,9%	28,5%	4,8%	3,9%	3,8%			
		Exports	77,6%	64,8%	14%	14%	7,2%	Exports	2,77%	4,44%
~	CEECs	Re-imports	78,9%	65,5%	21,4%	19,3%	34,2%	Imports	1,89%	3,11%
Germany	14 110	Exports	23,7%	30,6%	2%	2,2%	1,1%			
	Med12	Re-imports	22,8%	35,6%	2,9%	3,9%	7,9%			
		Exports	0,1%	0,7%	0,9%	3,5%	3,1%	Exports	0,02%	0,31%
	CEECs	Re-imports	0%	0,6%	0%	2,6%	14,7%	Imports	0,28%	1,28%
Greece M		Exports	0,2%	0,1%	0,3%	0,1%	0,0%			
	Med12	Re-imports	0%	0,0%	0,1%	0%	0,0%			
		Exports	0%	0,0%	0%	0%	0,0%	Exports	0,03%	0,08%
	CEECs	Re-imports	0%	0,0%	0,1%	0%	0,0%	Imports	0,52%	0,63%
Ireland		Exports	0%	0,0%	0%	0 %	0,0%			
	Med12	Re-imports	0%	0,0%	0%	0%	0,0%			
		Exports	3,5%	11,7%	2,1%	6%	6,7%	Exports	1,20%	2,35%
	CEECs	Re-imports	1,9%	11,0%	1,5%	9,8%	12,4%	Imports	1,45%	2,13%
Italy		Exports	28,2%	22,2%	3,1%	2,6%	1,0%			
	Med12	Re-imports	23,5%	21,3%	3,5%	4,3%	1,7%			
		Exports	6,7%	3,9%	9,3%	6,8%	3,9%	Exports	2,16%	1,74%
	CEECs	Re-imports	7,3%	5,6%	15,7%	15,4%	9,4%	Imports		2,88%
Netherlands		Exports	7,6%	10,4%	2,7%	3,3%	2,4%			
	Med12	Re-imports	5,5%	5,1%	2,1%	2,4%	1,5%			
		Exports	0%	0,0%	0,3%	3,6%	0,7%	Exports	0,16%	0,11%
_	CEECs	Re-imports	0%	0,0%	0,1%	1,9%	1,2%	Imports		0,31%
Portugal		Exports	0%	0,0%	0,1%	0,1%	0,0%			
	Med12	Re-imports	0%	0,0%	0%	0,1%	0,0%			
		Exports	0,1%	0,1%	0,7%	0,6%	0,3%	Exports	0,40%	0,17%
	CEECs	Re-imports	0,1%	0,0%	0,5%	0,2%	0,1%	Imports		0,50%
Spain		Exports	4,1%	2,9%	1,7%	0,9%	1,3%			
	Med12	Re-imports	2,5%	0,9%	1,2%	0,5%	0,4%			
		Exports	-	1,4%	-	3,2%	3,0%	Exports		0,65%
	CEECs	Re-imports	-	1,3%	-	6,3%	7,4%	Imports		0,72%
Sweden		Exports	-	0,2%	-	0,1%	0,0%			
	Med12	Re-imports	-	0,0%	-	0,2%	0,1%			
		Exports	1,5%	3,5%	2,2%	5,3%	5,4%	Exports	0,47%	0,79%
	CEEC	-	2,7%	2,2%	4,4%	4,8%	5,2%	Imports	0,85%	1,32%
	CEECs	Re-Imports	2,1/0							
United Kingdom	Med12	Re-imports Exports	0,4%	4,9%	0,1%	0,7%	1,5%	I - ···	,	1,027

Table 6 - Evolution of EU OPT by Member states

	(thousands of Ecu)													
	1988			1989			1990			1991			1992	
Product	Value	% of total OPT	Product	Value	% of total OPT	Product	Value	% of total OPT	Product	Value	% of total OPT	Product	Value	% of total OPT
62	1.135.872	61,6%	62	1.363.649	62,4%	62	1.683.977	63,3%	62	2.094.509	62,4%	62	2.135.648	56,6%
64	213.457	11,6%	64	236.007	10,8%	64	263.701	9,9%	64	300.271	8,9%	61	371.436	9,8%
61	145.619	7,9%	94	163.340	7,5%	61	202.505	7,6%	61	286.172	8,5%	64	306.671	8,1%
94	126.221	6,8%	61	152.318	7%	94	175.840	6,6%	94	141.723	4,2%	85	244.503	6,5%
87	52.079	2,8%	87	52.797	2,4%	42	55.392	2,1%	85	125.529	3,7%	94	146.804	3,9%
42	40.911	2,2%	84	48.547	2,2%	84	55.045	2,1%	84	110.578	3,3%	84	104.597	2,8%
84	37.953	2,1%	42	42.671	1,9%	85	49.051	1,8%	42	47.429	1,4%	87	95.722	2,5%
85	31.087	1,7%	85	40.116	1,8%	87	42.996	1,6%	87	44.802	1,3%	63	46.491	1,2%
73	7.065	0,4%	16	11.175	0,5%	16	26.395	1%	63	30.852	0,9%	42	44.759	1,2%
43	6.635	0,4%	73	9.620	0,4%	63	14.001	0,5%	16	21.795	0,6%	16	38.978	1%
	1993			1994			1995			1996			1997	
Product	Value	% of total OPT	Product	Value	% of total OPT	Product	Value	% of total OPT	Product	Value	% of total OPT	Product	Value	% of total OPT
62	2.606.985	58,5%	62	3.082.066	57,6%	62	3.569.446	57,2%	62	3.806.816	54,9%	62	3.702.959	52,4%
61	457.673	10,3%	61	564.084	10,5%	61	756.819	12,2%	61	887.574	12,8%	61	934.378	13,2%
64	341.761	7,7%	64	380.348	7,1%	85	478.104	7,7%	85	661.073	9,5%	85	829.493	11,7%
85	297.996	6,7%	85	343.244	6,4%	64	300.821	4,8%	64	309.712	4,5%	64	392.419	5,5%
94	179.944	4%	94	218.829	4,1%	94	191.337	3,1%	84	181.045	2,6%	84	207.413	2,9%
84	86.446	1,9%	63	122.653	2,3%	63	172.435	2,8%	94	179.855	2,6%	63	140.053	2%
63	71.866	1,6%	84	103.853	1,9%	84	159.289	2,5%	63	176.414	2,5%	94	120.773	1,7%
87	63.493	1,4%	87	83.646	1,5%	87	64.270	1%	87	85.209	1,2%	87	98.326	1,4%
16	42.888	1%	16	42.263	0,8%	90	40.120	0,6%	39	66.995	1%	39	84.261	1,2%
42	33.992	0,8%	42	36.544	0,7%	39	38.214	0,6%	16	48.829	0,7%	90	52.909	0,7%

Table 7 – Products ranking of EU re-imports from CEECs

Table 8 – Products ranking of EU re-imports from Mediterranean countries

					0	0	1							
	1000		r	1000		1	1000		-	1001		(thous	sands of E	lcu)
	1988	-		1989			1990			1991			1992	
Product	Value	% of total OPT	Product	Value	% of total OPT									
62	224.121	61,4%	62	332.414	49,6%	62	434.481	52,3%	62	457.379	52%	62	478.088	46,5%
61	42.462	11,6%	85	185.491	27,7%	85	250.857	30,2%	85	289.241	329%	85	409.160	39,8%
85	39.085	10,7%	61	58.027	8,7%	61	58.198	7%	61	59.447	6,8%	61	72.640	7,1%
64	15.345	4,2%	88	23.450	3,5%	64	21.108	2,5%	64	23.752	2,7%	64	21.289	2,1%
84	12.120	3,3%	64	16.942	2,5%	84	15.257	1,8%	84	11.076	1,3%	84	11.504	1,1%
91	10.643	2,9%	84	16.935	2,5%	91	12.203	1,5%	88	9.552	1,1%	42	7.108	0,7%
42	4.180	1,1%	91	13.630	2%	88	9.045	1,1%	91	7.200	0,8%	91	6.532	0,6%
63	2.453	0,7%	42	4.033	0,6%	42	7.687	0,9%	42	6.897	0,8%	87	4.067	0,4%
90	1.951	0,5%	90	2.148	0,3%	90	3.573	0,4%	87	3.245	0,4%	88	3.332	0,3%
55	1.422	0,39%	87	1.806	0,3%	87	2.575	0,3%	90	2.941	0,3%	90	2.909	0,3%
	1993			1994			1995			1996			1997	
Product	Value	% of total OPT	Product	Value	% of total OPT									
62	467.510	50,6%	62	501.814	44,4%	62	545.791	47,7%	62	524.911	60,2%	62	519.237	65,2%
85	301.539	32,6%	85	456.484	40,4%	85	440.863	38,6%	85	177.476	20,4%	85	85.787	10,8%
61	73.390	7,9%	61	75.792	6,7%	61	65.088	5,7%	61	70.544	8,1%	61	72.243	9,1%
84	19.031	2,1%	84	22.362	2%	84	20.707	1,8%	84	29.285	3,4%	84	40.582	5,1%
64	18.085	2%	64	19.897	1,8%	64	20.606	1,8%	64	21.531	2,5%	64	27.298	3,4%
42	8.188	0,9%	42	8.721	0,8%	59	7.244	0,6%	90	10.745	1,3%	90	14.595	1,8%
87	6.276	0,7%	63	7.936	0,7%	42	6.294	0,5%	63	5.743	0,7%	88	8.371	1%
91	5.427	0,6%	90	6.780	0,6%	63	5.769	0,5%	87	5.199	0,6%	63	7.003	0,9%
63	4.710	0,5%	91	6.660	0,6%	90	5.199	0,5%	59	4.370	0,5%	42	4.469	0,6%
90	4.615	0,5%	87	3.998	0,3%	91	4.401	0,4%	91	4.242	0,5%	65	3.153	0,4%

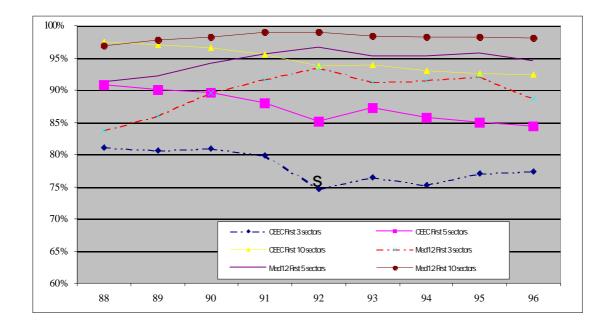
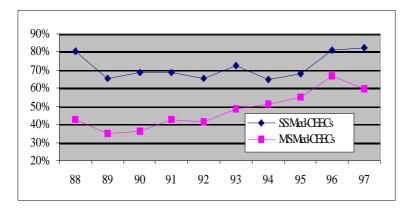


Figure 2 – Evolution of sectorial concentration by region

Figure 3 – Indicators of market and sector similarity of CEE and Med regions



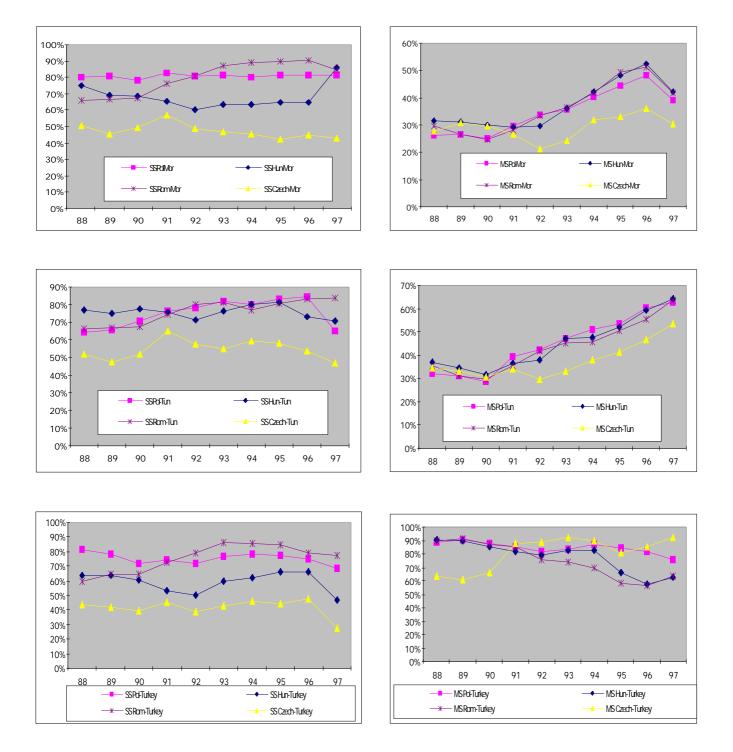
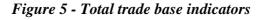
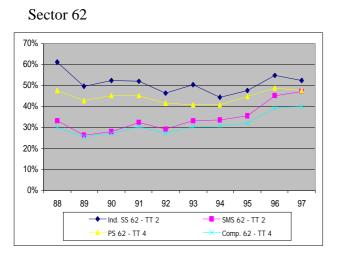
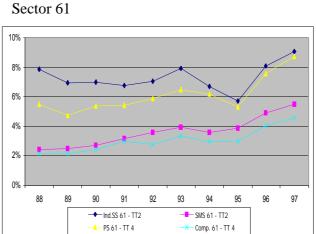


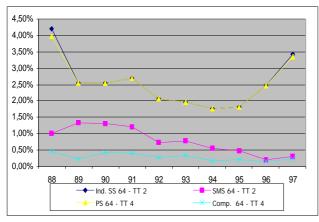
Figure 4 - Sector and market similarity between selected Mediterranean countries and CEECs



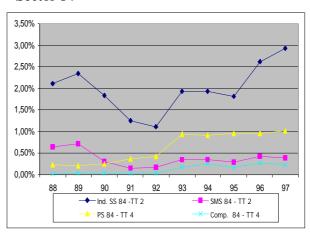




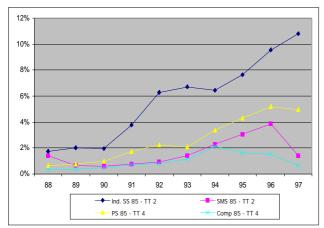




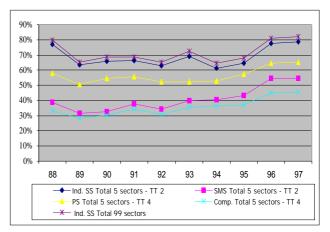


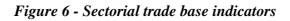


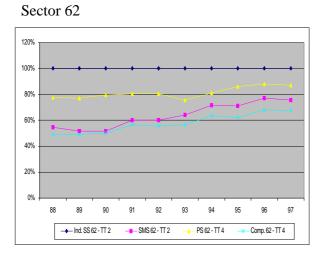


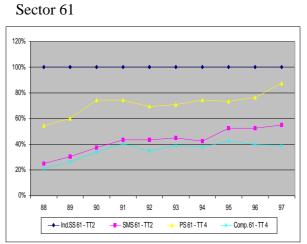


Total sectors 61, 62, 64, 84, 85.

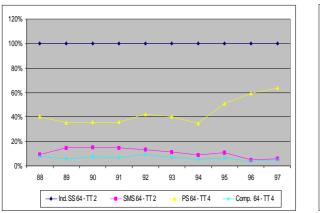




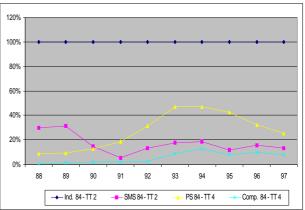














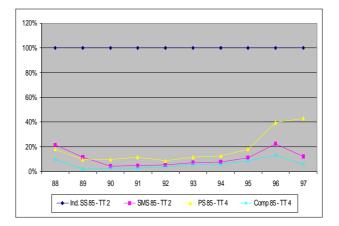
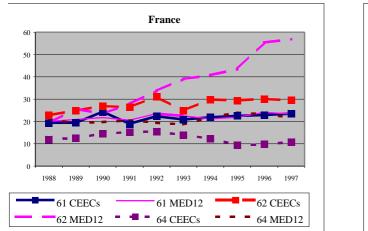
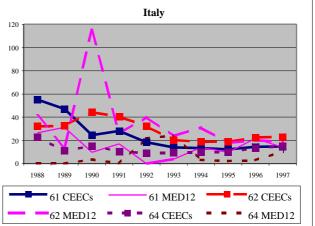
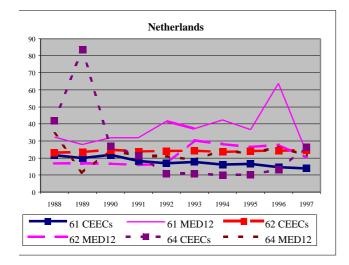
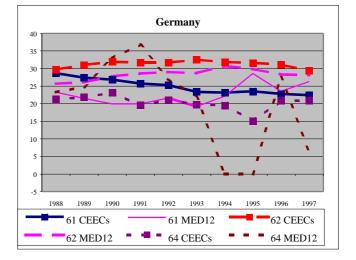


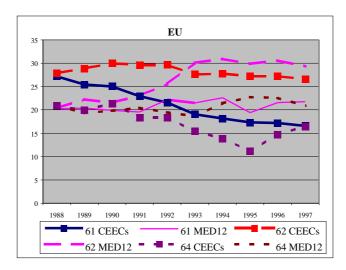
Fig. 7 - Weighted prices for selected sectors and EU markets of Mediterranean and CEE countries











EU	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Sector 84										
CEEC	4,4	4,6	6,1	434,7	14,8	15,2	16,4	10,1	12,0	10,7
MED12	310,1	224,5	128,1	204,8	210,3	63,4	43,3	62,3	106,9	214,2
POLAND	3,5	5,1	8,1	8,3	12,1	13,4	11,2	9,2	12,3	11,1
HUNGARY	6,6	5,1	6,7	7,8	23,8	16,2	16,5	13,3	18,2	13,7
CZECHOSL.	4,0	5,3	6,2	904,5	18,2					
CZECH REP.						17,5	24,6	20,9	20,6	16,2
SLOWAKIA						19,2	8,7	25,2	27,3	39,6
ROMANIA	3,5	2,7	4,1	9,9	8,1	26,7	20,4	16,9	27,2	25,4
MOROCCO	5,0	5,6	18,2	5,3	5,9	7,6	10,2	8,9	10,6	12,8
TUNISIA	37,4	39,4	91,2	68,8	85,5	49,3	32,5	36,0	61,4	162,3
TURKEY	2,7	11,8	13,1	0	0,8	22,8	13,0	12,0	22,4	33,4
ISRAEL	875,3	490,5	361,9	352,5	357,0	348,7	168,2	152,4	304,8	351,1
MALTA	1,5	26,3	0	15,4	492,4	129,2	43,6	60,5	65,5	86,9
Sector 85										
CEEC	12,0	11,7	13,3	41,6	32,0	30,0	24,7	33,5	80,7	53,4
MED12	243,5	4135,8	3729,4	3572,0	5859,0	3629,9	5397,2	2672,0	1104,7	253,6
POLAND	6,9	6,6	8,8	14,6	18,6	17,6	32,7	46,8	30,8	38,1
HUNGARY	16,6	15,7	19,2	19,7	22,1	21,9	31,9	69,2	183,3	79,1
CZECHOSLOV.	4,7	6,0	15,7	143,1	56,9					
CZECH REP.						52,4	25,5	35,1	39,9	57,2
SLOWAKIA						95,2	39,1	39,2	40,6	39,5
ROMANIA	5,3	5,4	4,2	2,4	9,6	22,0	21,4	63,0	63,8	67,4
MOROCCO	58,7	56,8	42,5	45,5	47,6	61,1	57,7	61,9	110,4	164,0
TUNISIA	90,3	68,5	92,1	58,0	75,8	51,0	47,3	53,3	52,8	56,6
TURKEY	4,0	9,4	10,0	0	0	8,4	13,1	15,3	16,2	3,0
ISRAEL	0,0	45,2	15,6	0	0	0	44,8	179,3	423,3	76,1
MALTA	8309,8	6559,8	4863,6	7218,7	8183,3	4350,5	6151,6	3209,5	1914,4	634,8

Table 9 - Weighted prices for selected sectors and EU markets of Mediterranean and CEE countries