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# Trade Similarities between Eastern and Southern Europe: Opportunities or Competition?

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Using only transition period data, this paper analyses revealed comparative advantages (RCAs) and specialisations to identify the 3-digit SITC (Standard International Trade Classification) sectors in which the EU's trade liberalisation with Eastern European applicants may represent opportunities or competition between them and EU South. First, during the transition period potential competition occurs in labour-intensive sectors. Over one-third of Eastern European and EU South exports overlap both in the labour-intensive factor content and in the destination market (EU North). Second, the clothing and footwear export unit values of Visegrad countries are very close to those of EU South, indicating similar quality levels. Third, the greatest potential opportunities for Eastern Europe lie in R&D-intensive sectors. Finally, the benefits for EU South of trade liberalisation with Eastern Europe, if any, lie in obtaining cheaper imports rather than in exporting to the Eastern European market.

Keywords: Eastern Europe, EU enlargement, Southern Europe, trade, transition.

## Introduction

The EU's Eastern enlargement will constitute a profound qualitative change in the composition of the EU, as the accession of transition economies will bring a whole new set of economic, financial and political problems. In 1993 membership was offered to those CEECs (Central and Eastern European Countries)[1] that fulfilled certain political, economic and administrative criteria defined at the Copenhagen summit.[2] Among these, accession negotiations started in March 1998 for the Czech Republic, Estonia, Hungary, Poland and Slovenia ("first wave") and in December 1999 for Bulgaria, Latvia, Lithuania, Romania and Slovakia ("second wave").

Even before membership, each of the CEECs already benefits from a bilateral free trade area in industrial products with the EU under the so-called Europe Agreements. The first Europe Agreements were signed in 1991 with Poland, Hungary and Czechoslovakia, and others followed: Bulgaria and Romania in 1993, the Baltic States in 1995 and Slovenia in 1996.[3] These free trade agreements provided the CEECs with the status of EU associates, guaranteeing them access to free trade in manufactures, with the exception of quotas imposed by the EU on the so-called sensitive sectors (textiles, clothing, leather and footwear, chemicals, coal, iron and steel, motor vehicles, and furniture).[4, 5]

The enforcement of the Europe Agreements has given rise to trade expansion for the EU as a whole, though unequally distributed both among and within EU members. It is a consensual conclusion in the literature (see, for example, Corado, 1994; Martin and Gual, 1994; Dimelis and Gatsios, 1995; Cadot et al., 1995; Cadot and Melo, 1996; Schumacher, 1997; Brulhart and Kelly, 1999; Paas, 2000) that higher gains accrue to central countries or regions, reflecting basically geographical proximity: neighbouring countries trade with each other independently of economic similarity. Accordingly, EU North[6] is the main trading partner of both EU South[7] and Eastern Europe.[8] In turn, EU South is likely to compete most directly with the CEECs in the EU North markets, especially for labour-intensive goods, those in which EU South has the strongest comparative advantages and of which EU North is a net importer.

The degree of competition between EU South and the CEECs thus depends on the overlapping of comparative advantages in labour-intensive sectors. In this respect two visions have arisen in the literature. The first, a long-run vision based on factor endowments, concludes that the CEECs have a revealed comparative advantage (RCA) in human-capital-intensive sectors and thus are closer to EU North (see, for example, Hamilton and Winters, 1992). This may tend to confer a comparative

advantage in sophisticated high-tech industries rather than in more standardised labour-intensive production. Hence, in the long run the relatively high endowment of human capital may result in an increased specialisation in human-capital-intensive products, and EU South has nothing to fear from the Eastern enlargement. The second vision, a short-run perspective based on trade flows, concludes that the CEECs have RCAs in capital- and labour-intensive sectors, and hence are closer to EU South (see, for example, Neven, 1995). This provides evidence to support the Southern European concern of an unfavourable distribution of the gains from the Eastern enlargement due to increased competition from Eastern Europe. As a consequence, the Hamilton-Winters view that there are no strong grounds to fear that Southern producers of sensitive sectors such as clothing and footwear will lose from the Eastern enlargement may be questioned in favour of Neven's competition argument.

These latter findings constitute the main motivation for this paper. The evidence provided by the "competition vision" points towards some degree of substitutability between the Southern EU's and the CEECs' production and underlying comparative advantages. If such similarity allows for reallocation effects unfavourable to the South, the latter may have a reason to oppose the enlargement. This paper contributes to the clarification of whether and to what extent such fears are justified using a data set that refers exclusively to the transition period and includes all ten potential new members. In addition, an entropic indicator of specialisation is applied to Europe's East-West trade.

The paper is organised as follows. Section 2 lists the most important stylised facts of Eastern European trade during the transition period. Section 3 compares Eastern and Southern European sectoral trade patterns using both Neven's RCAs (corrected for intra-industry trade) and a sectoral version of Krugman's (1991) K index of country specialisation, with a view to identifying the overlapping 3-digit SITC (Standard International Trade Classification) sectors in Eastern and Southern European trade. The sectoral version of Krugman's index, of which a fuller explanation is given in the technical annex, is computed as the difference between the share of sector *i* in the total exports of a country and the average share of sector *i* in the total exports of all other countries in the sample. Section 4 concludes.

## Stylised Facts of Eastern European Trade in Transition

Eastern European trade has suffered major modifications since the collapse of the Council for Mutual Economic Assistance (CMEA)[9] and the beginning of the

process of trade liberalisation with the EU. It is possible to identify the following stylised facts of Eastern European trade during the transition period:

1) The average CEEC is a small, open economy. Even though Eastern Europe is still subject to trade restrictions with the EU, it is already more open than EU South: from 1994 onwards the CEECs' foreign trade has represented around 80 percent of GDP, whereas that of EU South has been no higher than 40 percent of GDP.
2) A very significant reorientation of Eastern European trade from CMEA towards the EU has taken place since the former collapsed in 1989 (Kaminski et al., 1996; Kaminski, 2000). However, trade expanded faster with Western countries that are historically and geographically the CEECs' natural trading partners, particularly Germany, which became the CEECs' most important trading partner. In addition, some regional partners assumed great importance, such as Austria for the Czech Republic, Hungary and Slovakia, Sweden and Finland for the Baltic States, and Italy for Bulgaria and Romania. EU North has exploited most of its trade potential with Eastern Europe, while that of Southern countries has remained mostly unexploited (Baldwin, 1995; Baldwin et al., 1997; Vittas and Mauro, 1997). As a result, EU South and Eastern Europe trade very little with each other but both sell 30 to 40 percent of their exports to the same core markets in EU North (Germany, Italy, the UK, and to a lesser extent France).
3) Each of the CEECs is running a trade deficit towards the EU, with EU's exports to the CEECs increasing faster than imports. Though the Europe Agreements are based on the principle of asymmetry,[10] the EU granted concessions on products that are barely exported by the CEECs but kept barriers towards sensitive products, those in which the CEECs are supposed to have a comparative advantage.
4) Intra-industry trade represents 40 to 70 percent of EU-CEEC trade. With EU North this trade is of the vertical type:[11] it happens mostly in products of different quality, the CEECs selling low quality goods and the EU selling high quality goods (Hoekman and Djankov, 1996; Aturupane et al., 1997; Fontagne et al., 1998; Fidrmuc et al., 1999). With EU South it is of the horizontal type (Neven, 1995). Since horizontal intra-industry trade is

seen as an indicator of spatial concentration and similarity in factor endowments, this would seem to confirm that Eastern European factor endowments are closer to those of EU South than to those of EU North.

5) The 1990s redirection of Eastern European trade was accompanied by a change in its product composition, namely a shift away from machinery and equipment towards labour-intensive goods. According to 1998 export shares, 30 to 40 percent of European Eastern and Southern exports were concentrated in a few labour-intensive and sensitive sectors: textiles and clothing, furniture, non-metallic minerals, iron and steel, electric machinery, and road vehicles.[12] Inspection of historical trends prior to the socialist period shows strength in labour-intensive goods (CEPR, 1990). Hence transition brought a return to the exploitation of an old comparative advantage rather than the creation of a new one.

6) The CEECs followed a strategy of upgrading and differentiating "traditional"[13] exports, relying on the EU for inputs (Hoekman and Djankov, 1996; Kaminski, 1999). This strategy translates into an increase in the unit value of exports[14] of about 15 percent in the period 1990 to 1996. Even though Eastern Europe started out from a very low quality level, there has been some catching up with EU South, as the unit value of Southern European exports has not on average increased in the 1990s (on the contrary, in 1996 it was about 5 percent below its 1990 level).

## Sectoral Issues[15]

The main drawbacks of the earlier studies on Eastern European RCAs lie in the lack of a periphery versus periphery (European East versus European South) analysis and in the use of pre-transition data. Since the socialist period had led to a substantial misallocation of resources, the trade patterns of the late 1980s offered little guidance about the CEECs' comparative advantage. By this time, the distortions introduced by the planning system had led Eastern Europe to specialise in capital-intensive goods. In the 1990s, transition switched specialisation to labour-intensive goods and created a gap between factor endowments and factor content of exports.

With respect to the latter, both the European East and the European South are exporting labour- and raw-material-intensive products, while the North exports mostly capital- and human-capital-intensive products. Hence while the North would profit the

most from trade liberalisation, the South would be expected to face increasing competition from the East and would thus have reason to oppose the enlargement. On the contrary, if factor endowments provided a good indication of the patterns of trade, the East would export more human-capital-intensive goods than the South. Hence Eastern European RCAs in manufactures would lie higher up the ladder than those of the South. This implies that EU South would have little to fear from the Eastern enlargement and that the growth of imports into the EU North would be less in sensitive labour-intensive goods (clothing, footwear) than in more sophisticated goods.

In this section the European East-South comparison is made explicit and it is investigated to what extent the suggested similarity between Eastern and Southern specialisation and comparative advantage holds. The goal is to identify the product categories in which the European East and South are potential competitors or potential trading partners, starting with an analysis at the 2-digit level of SITC groupings and going up to the 3-digit SITC level. This is done by using both a sectoral version of Krugman's specialisation index (Hallet, 2000; Midelfart-Knarvik et al., 2000) and Balassa's RCA index (Balassa, 1965; 1977) as corrected for intra-industry trade by Neven (1995). These indicators, as well as the data set used, are described in the technical annex.

## *2-digit SITC Analysis*

Two possibilities could be found: (i) potential competition (sectors in which both the European South and East have RCA) and (ii) potential opportunities for the East (sectors in which Eastern Europe has RCA but not the South). The opposite case, that is, sectors in which the South has an advantage but the East has a disadvantage, was not found. As a consequence, if opportunities exist for the South at the non-intra-industry trade level, they lie in obtaining cheaper Eastern European imports and not in gaining the Eastern European market. Types (i) and (ii) are listed in table 1. Overall, the CEECs are better positioned than EU South in capital- and technology-intensive sectors, but both compete in the traditional manufactures. In addition, Eastern European RCAs are on average higher in type (i) than in type (ii) sectors.

**Table 1** 2-digit SITC Sectors where at Least One of the East and South Groups is Competitive According to RCAs (1990-98 Average)

| RCAs in both East and South | RCAs in East but not in South |
|---|---|
| 53 dyeing products | 51 organic chemicals |
| 55 perfume and cleaning | 52 inorganic chemicals |
| 562 fertilisers | 541 pharmaceuticals |
| 61 leather and fur | 58 plastic materials |
| 62 rubber manuf. | 71 power generators |
| 63 wood and cork manuf. | 74 general industrial mach. |
| 64 paper and paperboard | 87 precision instruments |
| 65 textile yarn and fabrics | 88 photo and opticals |
| 66 non-metallic minerals | 89 misc. manuf. |
| 67 iron and steel | |
| 68 non-ferrous metals | |
| 69 metal manuf. | |
| 73 metalworking machinery | |
| 77 electric machinery | |
| 78 road vehicles | |
| 79 other transport equipment | |
| 812 plumb./heat./light. equip. | |
| 821 furniture | |
| 84 clothing | |
| 851 footwear | |

Note: Author's own calculations from the *International Trade Statistics Yearbook* (United Nations). All 3-digit sectors replace nonexistent 2-digit ones.

Export shares, RCAs and specialisations were computed both in levels and in growth rates. The latter indicate the most dynamic sectors, those that may not yet have developed a significant importance or competitiveness, but that may develop it in the future. This aspect is particularly relevant in transition economies, where specialisation and competitiveness are still being built up. The three measures overlap to some extent, placing traditional manufactures (textiles and clothing, wood and furniture), and transport equipment (road vehicles) in the top five. These results are in accordance with previous studies, such as Hoekman and Djankov (1996), Aturupane et al. (1997), and Vittas and Mauro (1997), which found the greatest Eastern European RCAs in traditional labour-intensive sectors. Moreover, the top five sectors are also among the most dynamic. The rankings of traditional manufactures (textiles and clothing, wood and furniture), and transport equipment (road vehicles) are fairly robust to the change of indicator. These sectors account for about one-third of total

exports for both the European South and the European East. Further, the RCA analysis indicates that both groups are relative net exporters of clothing and footwear as well as wood and furniture.

However, the specialisation index shows a high share of clothing and road vehicles. There is really no contradiction here, since two different aspects are being measured. The most competitive sectors may not necessarily be those in which a country is relatively more specialised. In this case, traditional manufactures are the most competitive, with an export share much higher than the import share. Yet, some countries (Portugal and Spain in the South, Slovenia and Slovakia in the East) show an export share in the automobile sector that is much above the average. Since the RCA index used here discounts intra-industry trade, it is fair to say that this type of trade accompanies the specialisation in the transport sector.

In sum, potential European East-South competition presently lies mainly in traditional capital- and labour-intensive manufactures (non-ferrous metals and clothing for Greece, clothing and footwear for Portugal, road vehicles for Spain). In the future more R&D- and technology-intensive sectors, such as some chemicals (pharmaceuticals, perfume, cleaning and dyeing products) may be added to these, as well as telecommunications and sound equipment, which have registered high export growth but are still developing competitiveness. Potential opportunities for the East lie in capital- and R&D-intensive sectors (precision instruments, photo and opticals, chemicals, industrial machinery). Potential opportunities for the South lie in obtaining cheaper imports from the East rather than in gaining the Eastern market.

Finally, the degree of progress in transition is on the whole proportional to the degree of foreign trade stability (table 2). This result is due to the greater volatility shown by the "second wave" group in RCAs and especially in markets. Two important explanatory factors of market volatility are the maintenance of a strong connection with Russia, in particular for the Baltic States and Bulgaria, and a higher macroeconomic instability, resulting in higher real exchange rate volatility. In contrast, "first wave" countries, more advanced in transition, have well-established markets. In addition, the smaller countries in the group, though showing a more volatile set of specialisations, are able to maintain a core of high RCA products.

**Table 2** Volatility of Market and Product Export Shares, Specialisations and RCAs

| | 1st wave | 2nd wave | South |
|---|---|---|---|
| (1) Export share (%) | **5.4** | 5.0 | 5.0 |
| (2) Krugman's K | **7.6** | 5.0 | 6.0 |
| (3) RCAs | 5.6 | **6.0** | 5.0 |
| (4) = (1) + (2) + (3) Product volatility index | **17.0** | 16.0 | 16.0 |
| (5) Market volatility index | 3.8 | **5.8** | 3.7 |
| (6) = (4) + (5) Joint volatility index | 20.8 | **21.8** | 19.7 |

Note: Author's own calculations from the *International Trade Statistics Yearbook* (United Nations). The procedure of construction of the volatility indexes was based on the number of products and markets in the 1990-98 top three. For each year in the 1990-98 period and each country in the sample the three highest export shares, Krugman's Ks or RCAs were listed. The number of different products or markets in the list gave the index value for each country. Its group average is given in the table.

Advances in transition reoriented Eastern European trade to the EU and changed the composition of exports from capital-intensive (CEPR, 1990) to labour-intensive sectors.[16] These features gained permanence as transition proceeded and an overlap of Southern and Eastern European trade arose in sensitive sectors (e.g., textiles and clothing, road vehicles, chemicals, and iron and steel). Sensitive products constitute a significant fraction of economic activity in both the East and EU South and account for a very high proportion of Eastern European exports. In the beginning of transition they were not among the East's most competitive sectors, not because of lack of underlying competitiveness, but due to high levels of EU protection (Rollo and Smith, 1993). The progressive liberalisation of trade was thus an important factor in the spurring of those specialisations. Thus it is not surprising that the "first wave" group, which has benefited from the liberalisation process for a longer period, has changed specialisations more and redirected them towards its competitive sectors.

**Table 3** 3-digit SITC Sectors where at Least One of the East and South Groups is Competitive According to RCAs (1990-98 average)

| RCAs in both East and South | RCAs in East but not in South | RCAs in South but not in East |
|---|---|---|
| 533 pigments and paints | 511 hydrocarbons | 598 miscellaneous chemical products |
| 562 fertilisers | 512 alcohols and phenols | 659 floor coverings |
| 625 rubber tires and tubes | 514 nitrogen compounds | 667 pearls/prec./semi-prec. stones |
| 641 paper and paperboard | 515 organic-inorg compounds | 714 engines and motors |
| 651 textile yarn | 522 inorg elements/oxides | 761 television receivers |
| 652 cotton fabrics, woven | 523 other inorg chemicals | 848 headgear/nontextile clothing |
| 657 special textile fabrics | 541 pharmaceuticals | |
| 658 textile articles | 553 perfumery and cosmetics | |
| 662 refractory clay | 582 products of condensation | |
| 664 glass | 583 polymerisation products | |
| 673 iron and steel shapes | 592 starch/insulin/gluten | |
| 674 iron and steel plates/sheets | 611 leather | |
| 678 iron and steel tubes/pipes | 612 leather manufactures | |
| 682 copper | 613 fur skins tanned/dressed | |
| 684 aluminum | 621 materials of rubber | |
| 691 metal structures and parts | 628 rubber articles | |
| 695 tools | 634 veneers and plywood | |
| 697 base metal househ. equip. | 635 wood manufactures | |
| 699 base metal | 642 paper products | |
| 736 metalworking mach. tools | 653 woven man-made fibers | |
| 771 electric power machines | 654 other woven textile fabrics | |
| 773 electric distributing equip. | 655 knitted fabrics | |
| 775 household-type equip. | 661 lime and cement | |
| 781 pass. vehicles excl. buses | 663 mineral manuf. | |
| 782 lorries | 665 glassware | |
| 783 road vehicles | 666 pottery | |
| 792 aircraft | 671 pig iron | |
| 812 plumb./heat./light. equip. | 672 iron/steel primary forms | |
| 821 furniture | 692 metal tanks and boxes | |
| 842 men outwear not knit | 694 nails and nuts | |
| 843 women outwear not knit | 716 rotating electric plant | |
| 845 outwear knit non-elastic | 718 other power-generating machines | |
| 846 undergarments knitted | 737 metalworking machinery | |
| 851 footwear | 744 mechanical handling equip. | |
| | 764 telecom. equip. | |
| | 772 switchgear | |
| | 776 transistors and valves | |
| | 778 electrical machinery | |
| | 784 motor vehicle parts | |
| | 785 motorcycles | |
| | 786 trailers and non-motor vehicles | |
| | 791 railway vehicles | |
| | 793 ships and boats | |
| | 844 under garments not knit | |
| | 873 meters and counters | |

892 printed matter
894 toys and sporting goods
896 works of art
898 musical instruments

Note: Author's own calculations from the *International Trade Statistics Yearbook* (United Nations).

### *3-digit SITC Analysis*

The results presented so far refer to more or less broad aggregates. However, to build up a more detailed picture of the relative potential for opportunities and competition between Europe's East and South, it is important to disaggregate the analysis further. On one hand, it is possible that within each 2-digit sector there are both competitive and non-competitive products. On the other hand, the degree of overlapping at the 2-digit level may well be decreased at a higher level of disaggregation. Though the initial goal was to reach the 4-digit SITC level, an analysis at the 3-digit level had to be used due to lack of consistently more detailed data for Eastern European countries, leading to a disaggregation/harmonisation trade-off. The sectors considered are all those listed in table 1 plus chemical materials (SITC 59) and telecommunications and sound equipment (SITC 76). These two sectors, though not important in the present, have registered high growth rates in export share and RCA. Thus they may become part of a future top five.

The relevant 3-digit sectors are listed in table 3. As expected, the RCAs shown at the 2-digit level are due to some 3-digit categories within the broader aggregates. Three possibilities arise in the 3-digit analysis: (i) potential competition (sectors in which both Europe's South and East show RCA); (ii) potential opportunities for the East (sectors in which only the CEECs have RCA); (iii) potential opportunities for the South (sectors in which only EU South has RCA). The last case did not occur at the 2-digit level, but can now be identified for a few products. These are textile floor coverings, engines and motors, headgear and non-textile clothing for Greece, miscellaneous chemical products and cut diamonds for Portugal, and TV receivers for Spain. Nevertheless, type (ii) sectors predominate relative to type (iii). From this new group of sectors, "miscellaneous chemical products" and "TV receivers" arise from the introduction of the dynamic sectors; "floor coverings", "diamonds" and "non-textile clothing" arise from the disaggregation at the 3-digit level of potentially competitive sectors in which Eastern Europe lost the 2-digit RCA; "engines and

motors" arises from the disaggregation of a 2-digit sector in which EU South was non-competitive overall.

Eastern Europe's opportunities concentrate more strongly in the chemical sector, in some traditional manufactures (leather and furs, rubber, wood and paper products, knitted and woven man-made textiles, cement, and glass and pottery) and in the most primary iron and steel products. At the 3-digit level there are also products that appear in group (ii) but that belonged to group (i) at the 2-digit level. The difference is due to the uncompetitiveness of the South in such 3-digit sub-sectors, even if it was competitive overall in the 2-digit sector. These 3-digit sub-sectors within the 2-digit sectors are the following:

- "perfume and cleaning" (perfumery and cosmetics);
- "leather and fur" (leather, leather manufactures, fur skins);
- "rubber" (materials and articles);
- "wood and cork" (veneers and plywood, wood manufactures);
- "paper and paperboard" (paper products);
- "textiles" (woven man-made fibres, other woven textile fabrics, knitted fabrics);
- "non-metallic minerals" (lime and cement, mineral manufactures, glassware, pottery);
- "iron and steel" (pig iron, primary forms);
- "metal manufactures" (tanks and boxes, nails and nuts);
- "metalworking machinery" (metalworking machinery);
- "electric machinery" (switchgear, transistors and valves, electrical machinery);
- "road vehicles" (motor vehicle parts, motorcycles, trailers and non-motor vehicles);
- "other transport equipment" (railway vehicles, ships and boats);
- "clothing" (non-knitted undergarments).

A significant number of products can be found in group (i), that of potentially competing products. Within these, the South is slightly ahead in RCA terms in knitted clothing (Greece), men's outwear and electric machinery (Portugal) and cars and lorries (Spain). Eastern Europe, though facing EU South's potential competition, is better positioned in some chemical products (dyeing products and fertilisers), in some traditional manufactures (rubber tires, paper and paperboard, textile yarn and cotton

fabrics, refractory clay, more sophisticated iron and steel products, copper and aluminum, base metals, furniture, footwear and women's outwear), and in metalworking machinery, household equipment and road vehicles.

According to the classification presented above, similar RCAs mean competition, whereas different RCAs allow for trading opportunities. However, this is not completely true in a world of differentiated products. Even if Europe's East and South export the same product varieties, they may not be competitors if their products are perceived as different, for example, through a different position on the quality ladder. This can be proxied by the unit value of exports: if two countries export to the same market the same product variety, but with significantly different unit values, then probably there are quality differences between their products. While in 1996 the unit value of Southern exports was 5 percent below its 1990 value, that of Eastern European exports was 15 percent higher. Thus, though CEECs started out from a lower quality level than EU South, the "first wave" group is catching up relative to EU South.

**Table 4** Export Unit Values by 3-digit Sector (1990-98 Average)

| | 1st wave | 2nd wave | South | Standard deviation |
|---|---|---|---|---|
| 533 pigments and paints | 2.22 | | 10.03 | 3.91 |
| 652 cotton fabrics, woven | 7.06 | 4.02 | 5.30 | 1.52 |
| 695 tools | 7.43 | | 13.91 | 3.24 |
| 697 base metal househ. equip. | 1.88 | 2.07 | 4.83 | 1.65 |
| 699 base metal | 2.09 | | 3.74 | 0.83 |
| 736 metalworking mach.tools | 5.09 | 2.62 | 10.29 | 3.62 |
| 771 electric power machines | | 13.69 | 10.31 | 1.69 |
| 773 electric distributing equip. | 7.13 | 8.14 | 10.79 | 3.71 |
| 781 pass. vehicles excl. buses | 7.57 | | 8.85 | 0.64 |
| 782 lorries | 3.91 | | 7.20 | 1.65 |
| 792 aircraft | 68.48 | | 334.15 | 132.84 |
| 812 plumb./heat./light. equip. | 2.91 | 2.10 | 3.68 | 1.31 |
| 821 furniture | 2.83 | 1.60 | 4.63 | 1.35 |
| 842 men outwear not knit | 33.02 | 11.10 | 30.46 | 11.44 |
| 843 women outwear not knit | 29.71 | 12.77 | 35.63 | 11.01 |
| 845 outwear knit non-elastic | 23.52 | 14.53 | 23.87 | 7.57 |
| 846 undergarments knitted | 23.34 | 13.88 | 24.00 | 7.58 |
| 851 footwear | 15.87 | 8.76 | 21.69 | 6.31 |

Note: Author's own calculations from the *International Trade Statistics Yearbook* (United Nations).

The extent to which the catching-up argument may hold can be verified by looking at the export unit values of potentially competing products according to the RCA criterion (table 4). The dispersion of a certain product's export unit value across countries, as given by the standard deviation, proxies for vertical differentiation among source countries.[17] The latter is especially relevant in consumer goods that are important for both groups, such as clothing and transport equipment. In this sense, the greatest possibilities of trade in vertically differentiated varieties of similar products arise in footwear and clothing. Within these, higher unit values proxy for higher quality. Accordingly, the "first wave" countries show higher export unit values, very close to those of the South, in clothing and footwear. The unit values of "second wave" countries are substantially lower. Hence there seems to be a case for competition for the Northern European market between Southern Europe and at least "first wave" Eastern Europe in clothing and footwear. For other sectors (pigments and paints, tools, metalworking machinery, electric distributing equipment and aircraft), the disparity is also large, but with Eastern unit values falling far short of Southern ones.

## Conclusions

This paper contributes to the clarification of whether and to what extent the Southern European fears of Eastern European competition are justified. A tentative analysis of specialisation and comparative advantage in both EU South and Eastern European candidate countries was conducted. Applying an intra-industry-corrected RCA index to 3-digit SITC sectors, these can be grouped as follows: (i) potential competition (sectors in which both South and East show RCA); (ii) potential opportunities for the East (sectors in which only the East has RCA); and (iii) potential opportunities for the South (sectors in which only the South has RCA).

First, Europe's East and South share similar competitiveness and specialisations in traditional manufactures and in road vehicles. Specific sectors assume a particular importance for each Southern country, such as non-ferrous metals for Greece, footwear for Portugal and road vehicles for Spain. Overall the East is more competitive in the competing sectors. Moreover, the most competitive sectors are also among the most dynamic, meaning that the present patterns are likely to hold in the future. A few R&D- and technology-intensive sectors have registered high export growth though they are still developing competitiveness.

Second, Eastern Europe's opportunities concentrate more strongly in chemicals, in some traditional manufactures and in the most primary iron and steel products. Whereas the East's opportunities arise in a large number of sectors, the South's opportunities are detectable in only a few: textile floor coverings, engines and motors, headgear and non-textile clothing (Greece), miscellaneous chemical products and cut diamonds (Portugal), and TV receivers (Spain). This means that, if trade opportunities exist for the South, they lie more in obtaining cheaper Eastern imports than in gaining the Eastern market.

Third, among potentially competing sectors footwear and clothing register the highest dispersion of export unit values across countries, indicating significant quality differences among source countries, with higher unit values proxying for higher quality. Accordingly, the "first wave" countries show higher export unit values, very close to those of the South, in clothing and footwear. The unit values of "second wave" countries are substantially lower. Hence not only are Southern Europe and "first wave" Eastern Europe specialised and competitive in clothing and footwear, selling to the same markets in EU North, but also they achieve similar levels of quality as proxied by unit values.

Fourth, the degree of progress in transition is on the whole proportional to the degree of foreign trade stability. Two important explanatory factors of market volatility are the maintenance of a strong connection with Russia, in particular for the Baltic states and Bulgaria, and greater macroeconomic instability, especially in real exchange rates. In addition, the "first wave" group, which has benefited from the liberalisation process for a longer period, has changed specialisations more and redirected them towards its more competitive sectors.

The findings just presented seem to lend support to the competition vision, at least in the short run, but also leave the door open to more opportunities in the longer run. This is possible because there is presently a gap between Eastern Europe's factor endowments (relative abundance of human capital) and the factor content of its exports (relatively labour-intensive). Though in the short term Eastern Europe may compete with EU South in labour-intensive sectors due to low real wages and outdated capital, in the long run the abundance of human capital may allow specialisation in more sophisticated sectors as long as the transition is successful enough in providing both human capital with marketable characteristics and a renewal of the outdated physical capital stock. In the last respect the role of FDI (foreign direct investment) will be crucial.

Thus there is some potential for the Eastern enlargement to have a significant impact by creating a tension between short-term competition and long-term opportunities for trade. Which of these forces will predominate will depend greatly on the relative importance of comparative advantage, market size and trade costs as determinants of trade between the three blocs of Northern, Southern and Eastern Europe.

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## Endnotes

1. Henceforth the term "CEECs" designates the group formed by Bulgaria, Czech Republic, Slovakia, Hungary, Poland, Romania, the Baltic States and Slovenia.
2. The first of these is the stability of institutions guaranteeing democracy, the rule of law, human rights and respect for minorities. The second refers to the existence of a functioning market economy and the ability to cope with competitive pressure and market forces. The third is the ability to take on the obligations of membership, including adherence to the aims of political, economic and monetary union.
3. The enforcement of the Europe Agreements happened with a lag of two to three years: 1994 for Poland and Hungary, 1995 for Bulgaria, Romania and the Czech and Slovak Republics, and 1998 for the Baltic States and Slovenia.
4. In 1998 the EU started the liberalisation of textiles and steel, the former in accordance with the WTO's Agreement on Textiles and Clothing.
5. Agriculture is excluded from the Europe Agreements for a double reason: it is a sensitive sector and its trade is subject to the special regime imposed by CAP.
6. EU North is here defined as all EU member countries except Greece, Portugal and Spain; that is, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Sweden and the United Kingdom.
7. EU South is here defined as Greece, Portugal and Spain. Ireland is not included in the group for two main reasons. First, it is not so poor anymore (its GDP per capita is now higher than that of the UK). Second, its growth has been based on FDI (foreign direct investment) that exploits the existence of a skilled and cheap labour force, whereas the EU South countries are traditionally better endowed in unskilled labour.
8. Eastern Europe is used here as an alternative term to CEECs, corresponding to the group formed by Bulgaria, Czech Republic, Slovakia, Hungary, Poland, Romania, the Baltic States and Slovenia.
9. The CMEA was an international organization active between 1956 and 1991 for the coordination of economic policy among certain nations then under Communist domination, including Albania (which did not participate after 1961), Bulgaria, Cuba, Czechoslovakia, East Germany, Hungary, Mongolia, Poland, Romania and the Soviet Union. Yugoslavia participated in matters of mutual interest. The CMEA had the same international status as the European Economic Community (Common Market), but heads of state controlled the structure. The CMEA undertook large-scale measures for organization of industrial production and coordination of economic development through a series of five-year plans (1956–85), but, despite attempts at integration, most trade was strictly bilateral; planned economies had limited mechanisms for transferring trade surpluses or deficits to third world countries. After increasing 400 percent for its first 15 years, trade among CMEA countries declined. Briefly a coordinating body only (January to

June, 1991), it was disbanded in June, when democratisation, the collapse of trade and the conversion to hard currencies rendered it redundant.

10. The principle of asymmetry means that the most developed partner should reduce barriers faster than the least developed. In this case, the EU reduces barriers within five years, while the East does it in ten years.
11. There are two types of intra-industry trade: horizontal (exchange of similar goods) and vertical (exchange of inputs for more processed outputs). Empirically, the two types are distinguished using the Greenaway et al. (1994) procedure based on the relative unit values of exports and imports.
12. According to Kaminski (2000), in 1998 the export share of skilled-labour-intensive and capital-intensive sectors was 50 percent for the "first wave" group and 30 percent for the "second wave" group. He argues that in the last years of the decade FDI has allowed some shift back to capital- and high-tech-intensive sectors away from labour-intensive sectors. However, labour-intensive sectors still represent 50 to 70 percent of Eastern exports.
13. The term "traditional" refers to mostly unskilled-labour-intensive industries, such as textiles and clothing, leather and footwear, and wood and furniture. These are traditional in opposition to technology-based sectors whose development is fairly recent in industrial history terms.
14. The unit value of exports is the ratio between the value and the volume of exports. In the literature unit values constitute the usual proxy for quality.
15. The figures pertaining to this section's analysis represent group averages for the sake of simplicity and clarity of exposition. However, country data are available from the author upon request.
16. The South exhibits the opposite pattern, decreasing the labour intensity of its productions during the 1990s. Spain, the most advanced of the three countries in the South, had developed a specialisation in transport equipment since the 1980s. Portugal followed the same path only recently, with clothing still the second most important export. Despite a GDP per capita higher than that of Portugal, Greece is less developed industrially, with exports based on clothing and textiles.
17. This concept differs from the Armington (1969) assumption in that according to the latter products are different simply because they come from different countries, whereas here it is not the place of production per se that is important, but the fact that different countries may be producing the same product variety with differing quality standards. It is the quality level that matters.

The technical annex to this paper, pages 219-221, is available as a separate document.