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## CEEC Exports to the EC: Country Differentiation and Commodity Diversification

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## RÉSUMÉ

Bien que peu d'années se soient écoulées depuis la fin du CAEM et la signature des accords d'Association entre la Communauté européenne et les pays d'Europe centrale et orientale, le commerce entre l'Est et l'Ouest de l'Europe a profondément changé. L'évolution des exportations des pays d'Europe centrale et orientale vers la Communauté européenne de 1988 à 1993 et les tendances structurelles qui s'en dégagent apportent des éléments de réponse à la question de leurs modes d'insertion dans l'économie mondiale.

Depuis 1989, les pays d'Europe centrale et orientale (PECO) ont rapidement redéployé leurs échanges extérieurs vers les pays de la Communauté, suivant là une évolution présentée comme naturelle par les modèles de gravitation, et favorisée par les politiques de libéralisation institutionnelle des échanges. L'évolution de la composition sectorielle de leurs exportations vers la Communauté au cours de cette période montre que les secteurs d'exportations traditionnels (textiles et habillement, sidérurgie) ont continué à jouer un rôle décisif mais que de nouvelles capacités d'exportation se sont mises en place dans des industries jusque là peu orientées vers les marchés occidentaux : machines et équipement, matériel de transport, machines et matériel électrique. Cette diversification des exportations industrielles a lieu dans les pays d'Europe centrale (Hongrie, Pologne, République Tchèque) alors que les pays balkaniques (Bulgarie et Roumanie) demeurent très dépendants des industries de main d'oeuvre. Les écarts de salaires qui existent entre ces pays devraient accélérer ces différences de spécialisation. Les perspectives d'exportation des PECO vers l'Europe s'en trouvent améliorées : d'une part, le développement de nouvelles industries compétitives dans les pays d'Europe centrale rend leurs exportations moins vulnérables aux mesures de protection des secteurs sensibles ; d'autre part, cette diversification est de nature à terme à alléger la concurrence entre PECO et entre ceux-ci et les pays en développement sur ces marchés protégés. La concurrence exercée par les économies d'Europe centrale sur les producteurs ouest-européens en sera aussi modifiée et déplacée. Des comparaisons internationales confirment que les structures d'échanges des pays balkaniques se rapprochent de celles des pays d'Afrique du Nord et sont basées sur des complémentarités intersectorielles, alors que les pays d'Europe centrale tendent à développer avec la Communauté des échanges intra-industriels. L'analyse montre aussi que l'expansion des exportations dans les principaux secteurs est allée de pair avec une augmentation de la valeur unitaire des produits, ce qui traduit soit une amélioration de la qualité des produits, soit des augmentations de prix liées à la réappréciation des monnaies. En fin, cette étude met en évidence le rôle que les firmes occidentales jouent dans la montée et la restructuration des capacités d'exportation des PECO, à travers leurs opérations de sous-traitance et d'investissements directs dans ces pays.



## SUMMARY

Only a few years have elapsed since the CMEA officially came to an end and since the first Association Agreements were signed between the Central and Eastern European Countries (CEEC) and the European Union. But the trade between these two parts of Europe has evolved rapidly, and an assessment of the CEEC exports to the European Community from 1989 to 1993 already provides some answers to the questions raised five years ago about the pattern of their future integration into the world economy. Since 1989 the CEEC have redirected their foreign trade away from CMEA and have strongly expanded their trade flows with the EC countries. This was a natural trend, predicted by the "gravity models" and favoured by policies aimed at removing the institutional restrictions to trade. The commodity trends that supported the expansion of EC exports during this period provide evidence that their most traditional export sectors continued to have a decisive role (textile industries, iron and steel) but also that new export capacities are emerging in engineering industries (electrical machinery, transport equipment). This diversification of industrial exports is taking place in the countries of Central Europe and mainly in Hungary, the Czech Republic and Poland, whereas in the Balkan countries (Bulgaria, Romania) exports still rely more heavily on the labour intensive sectors (textile, furniture). The differences in wage levels across the region should foster these diverging specialisations. This raises new prospects for CEEC exports to EC. First if the Central European countries develop new competitive industries, their exports will gain strength and enter more promising markets than the traditionally "sensitive" sectors. Second, this diversification would alleviate the competition between the CEEC and the less developed countries in these protected markets. The competition pressures exerted by Central European exporters on EC producers would change accordingly. The international comparisons confirm that the Balkan countries are developing a pattern of trade similar to that of the North African countries and based on inter-sectoral complementarities, whereas the Central European countries seem to follow a model of intra-industry trade. The analysis also puts forward the view that in the sectors that were the engine of their export growth, the CEEC obtained increased unit values for their exports, which suggest either that they succeeded in upgrading the quality of their products or that the reappreciation of their real exchange rates was being felt. Lastly, it stresses that the development of productive links with Western firms has played a decisive role in the restructuring of their exports through the intensification of sub-contracting relationships, and through foreign direct investments.



## **CEEC EXPORTS TO THE EC (1988-1993): COUNTRY DIFFERENTIATION AND COMMODITY DIVERSIFICATION**

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### **INTRODUCTION**

This paper considers CEEC-EC trade from 1989 to 1993, focusing on the CEEC export side. Examining the commodity and country export trends, it aims at providing some evidence of the CEECs' industrial restructuring, of their evolving specialisations and thus of their future place in the European economy. The first part deals with the general features of CEEC exports since 1989: the collapse of CMEA trade and the reorientation of CEEC trade to Western Europe, especially to the European Community; during this period the CEEC clearly outperformed other exporters to the EC and enlarged their shares of the EC manufactured imports. The paper points out that although there was an across-the-board increase in CEEC exports, some industries took the lead. The second part presents an in-depth analysis of the sectoral changes that supported the export drive of each of the CEEC. It puts forward the view of a growing differentiation in the export structures of the Central European countries and of the Balkan countries. The former -Hungary, the Czech Republic, and to a lesser extent Poland- succeeded in diversifying their industrial exports to the EC and in expanding their sales in new sectors (machinery and equipment); their trade with the EC is also characterised by the growing share of intra-industry trade. In contrast, the Balkan country exports still rely heavily on labour intensive sectors and follow export specialisations more and more similar to that of the less-developed countries. Among the factors that lie behind these diverging trends, the paper stresses the role of the Western firms: their policies of relocation and of foreign direct investment have enhanced the export performance of the Central European Countries.

### **I. THE COLLAPSE OF EASTERN MARKETS AND THE GEOGRAPHIC REORIENTATION OF CEEC TRADE TO WESTERN EUROPE**

#### **1.1. The Collapse of CMEA Trade**

Since 1989, the trade geography of the five Central and Eastern European countries has changed radically, as their export flows have been reoriented away from CMEA area (**Table 1**). This redirection is due as much to the collapse of Eastern markets as it is due to the increase in exports to the West. The dismemberment of CMEA and the economic collapse of the ex-USSR have deprived these countries of protected markets on which they based their economic strategies for over 40 years. The fall in sales to the USSR has been a decisive element in the restructuring of export markets. This fall was the result of changes both in prices and in volumes: the relative prices of CEEC exports to the USSR (mainly machinery and capital goods) dropped, and the sharp depreciation of the rouble to the dollar that accompanied the introduction of currency convertibility in CEEC further reduced the relative value of their export flows to the USSR. At the same time the volume of their exports also fell due to increased transaction costs of this trade and to the limited payment

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capacities of Soviet enterprises. Trade between the five CEEC has undergone a similar contraction. It can also be explained by the devaluation of the rouble (the common currency used for mutual settlements up to 1990-1991), by the disruption of the CMEA organisation, by the general economic recession in the region, and by a deliberate move to break with the past, as well by a "preference for the West" shown by consumers. As a result, the share of former CMEA partners in CEEC exports has dwindled. On the import side, the move away from CMEA has been less marked due to CEEC dependence on energy and raw materials coming from the former USSR. Yet the CEEC have redirected their trade toward the West to ranging degrees. It should be noted that Bulgarian trade, and to a lesser extent Slovakian trade, were the most dependant on former CMEA in 1993.

**Table 1**  
**The Redirection of CEEC Trade Away for Former CMEA Countries**  
**Share of Former CMEA in CEEC Foreign Trade**  
**(in % of Total Trade)**

**EXPORTS**

	Hungary	Poland	ex.CSFR	Czech Rep.	Slovak Rep.	Bulgaria	Romania
1989	36	31	48	...	...	77	33
1991	19	18	31	...	...	52	18
1993	23	13	...	17	16	35	11 <sup>(1)</sup>

**IMPORTS**

	Hungary	Poland	Ex.CSFR	Czech Rep.	Slovak Rep.	Bulgaria	Romania
1989	33	28	47	...	...	67	46
1991	22	31	39	...	...	47	21
1993	28	21	...	20	36	43	18 <sup>(1)</sup>

Source : National Statistics.

(1) Estimated.

## 1.2. The Brutal Lurch to Trade with Western Europe

The expanding share of Western countries in CEEC trade was not just the mechanical result of shrinking eastern markets; exports to developed market economies progressed strongly from 1989 to 1992 as shown by their enlarged market shares (**Table 2**). Nevertheless the trading importance of these countries is still minimal for the West. In 1992, exports to OECD of the five countries taken together were worth \$32 billion, over half of Spanish exports (\$53 billion), and slightly more than those of Austria. Exports from the CSFR and of Hungary (\$9.2 and 7.3 billion respectively) stood at about half of Portugal's. On average, per capita exports to OECD stood at \$375 for the CEEC in 1992, or about a quarter the level of southern Europe (Spain, Greece, Portugal) which stood at \$1313.

**Table 2**  
**Share of the CEEC in the Imports of Developed Market Economies**

(in %)	1988	1989	1990	1991	1992
Total Products	0.93	0.91	0.94	1.05	1.19
Manufactured Products	0.80	0.78	0.84	1.00	1.19

Source : Cepii, Chelem Data Base.

From 1989 to 1992 the CEEC (Romania excepted), succeeded in expanding their exports to Western industrialised countries rapidly. Enlarging their sales in Western markets helped them to compensate more or less for the loss of CMEA outlets. From 1988 to 1992, CEEC exports to OECD increased by 73% (their imports from OECD rose by 130%) (**Table 3**). Their export drive to western markets proved to be the most successful in EC markets. Their total exports to the EC nearly doubled, whereas their exports to the non-EC European countries (EFTA), increased only by 37%. By comparison, their exports to the non-European OECD countries fell by 25%, due to the plummeting Romanian exports, and due to slow growth in other CEEC exports (+9%) to this area.

**Table 3**  
**Increase in CEEC Exports to the West From 1988 to 1992**  
**1988 = 100**

Change in Exports to OECD		Exports to the EC	
	1992/1988		1992/1988
Hungary	179	Hungary	202
Poland	195	Poland	226
Former CSFR	241	Former CSFR	273
Central Europe	203	Central Europe	233
Bulgaria	219	Bulgaria	202
Romania	60	Romania	68
CEEC	173	CEEC	196

Source : OECD.

As a result, the CEEC foreign trade pattern was already highly concentrated on the EC by 1993. The EC accounted for more than half of Polish and Czech exports and imports, which means that their trade intensity with the EC was already similar to that of western European countries: EFTA countries send between half and two thirds of their exports to the EC, and EC members concentrate about 60% of their trade within the Community (**Table 4**).

**Table 4**  
**Share of Western Europe in CEEC Trade in 1993**  
**(as % of Their Total Trade)**

<b>EXPORTS</b>				
	World	EC	EFTA	Western Europe
Hungary	100.0	46.5	13.8	60.3
Poland	100.0	63.2	7.9	71.1
Czech Rep.	100.0	54.6	10.8	65.4
Slovak Rep.	100.0	41.8	10.8	52.6
Bulgaria	100.0	28.1	3.0	31.0
Romania	100.0	39.3	4.7	44.0

<b>IMPORTS</b>				
	World	EC	EFTA	Western Europe
Hungary	100.0	40.1	17.3	57.4
Poland	100.0	57.2	11.2	68.4
Czech Rep.	100.0	51.4	14.7	66.1
Slovak Rep.	100.0	32.4	14.0	46.4
Bulgaria	100.0	30.2	5.7	35.8
Romania	100.0	42.1	5.8	47.8

Source : National Statistics.

### 1.3. The Trade Liberalisation and the Rise of Exports to the EC

Since the fall of communist power in Central and Eastern Europe the EC followed a policy of trade liberalisation with these countries in order to help their economic and commercial recovery.

In 1990, the EC provided them better market access through extending the General System of Preferences to them, which implied substantial reductions in customs duties. In the framework of the PHARE programme the EC also suspended (up to the end of 1991) most quantitative restrictions (except on textiles, iron and steel, and agricultural products). These measures stimulated CEEC exports which that rose by 11% in 1990 and by 27% in 1991. (A. Inotai and J. Stankovski, 1993).

The EC signed Association Agreements with Hungary, Poland and the CSFR in December 1991, and with Bulgaria and Romania in December 1992. The trade package of the Association Agreements came into force in March 1992 for the CSFR, Hungary and Poland, in May 1993 for Romania, and in February 1994 for Bulgaria. The agreements aim at establishing free trade for industrial products within a period of ten years. They leave agricultural and food products outside this objective and provide only tariff reductions as well as increased quotas for agricultural and food products; but the Agreement do not envisage the elimination of trade barriers in this sector. For industrial products, the general principle is that trade liberalisation is to proceed faster on the EC side, than on the partners side (asymmetry). The general regime provides for an immediate liberalisation of trade

(suppression of tariffs and of quotas as soon as the Agreements came into force). But there are major exceptions for: 1) textile products and 2) iron and steel products, for which two separate protocols have been signed, 3) "sensitive" and "semi-sensitive products" listed in an annex and that includes metal products, footwear, glassware, motor vehicles and furniture. Tariffs are to be progressively eliminated for these three categories of industrial products, while existing quotas are to be progressively enlarged during transition period. In June 1993, at Copenhagen, the European Council decided to shorten these transition periods in order to accelerate liberalisation. As a result, for the four Central European countries (Hungary, Poland, the Czech and the Slovak Republic), tariffs on sensitive products will be eliminated at the beginning of 1995, for steel products at the beginning of 1996, and at the beginning of 1998 for textile products. (*D. Neven, 1994*).

The attraction of EC markets has been all the stronger, that CEEC already had relatively intense commercial relations with the other non-EC European countries (EFTA), during the 80s, and because they did not have the capacity to develop massively their exports to OECD areas outside Europe due to transaction costs. Trade with the EC has thus been, up to now, at the core of the commercial redeployment of the CEEC.

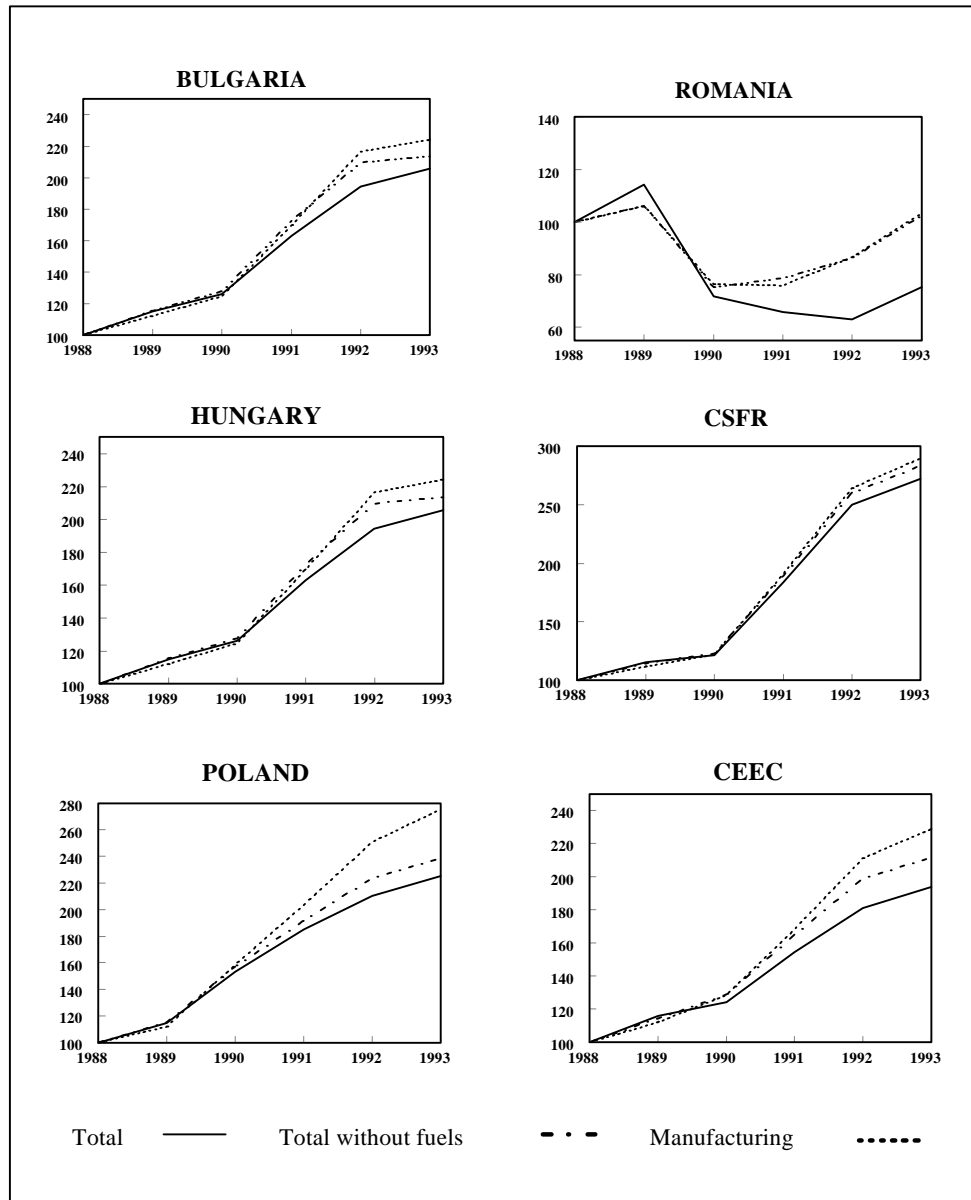
From 1988 to 1992, the CEEC achieved a remarkable export performance in the EC market. According to Eurostat data (growth rates calculated at nominal terms in ECUs), CEEC exports to the EC increased by 16% in 1989, 7% in 1990, 24% in 1991 and 17% in 1992. This export drive slowed down in 1993 (+6%). The export performances has relied exclusively on the manufacturing sector, since energy exports declined by 25%, due to the fact that the fuel exports were previously dependent on Soviet supplies which have come to a halt. From 1988 to 1993, the value of CEEC manufactured exports more than doubled (multiplied by 2.3). The share of the CEEC in EC imports of manufactured products went up from 2.6% to 4.4%, while their share in EC exports rose from 2.7% to 3.9%. The manufacturing exports of Poland and of the ex-CSFR nearly trebled; Hungarian and Bulgarian manufacturing exports doubled; only Romania failed to increase its exports (**Graph 1 and Table A in Statistical Appendix**).

During these four years, Central and Eastern Europe was among the most dynamic trade partners of the EC outside OECD. The CEEC expanded their exports faster than the less developed countries as a whole, and faster than most of countries from Asia and North Africa. Exports of manufactured products by the countries of North Africa (Algeria, Morocco, Tunisia) grew by 69% from 1988 to 1992, but slowed in 1991-1992 as the CEEC gained momentum. During this period the emerging industrial countries in Asia<sup>2</sup>, selected in this paper as a reference, registered a relative decline in EC markets, so that in 1992 the CEEC share of EC manufactured imports (4.4%) had come closed to that of these Asian countries (5.5%), whereas five years earlier their respective shares were 2.6% and 7.0% (**Table 5**). The major part of the gains in market shares were made by the countries of the Visegrad group (Czech and Slovak Republics, Hungary and Poland). They accounted for 75% of CEEC exports to EC in 1988 and 87% in 1992 (1.9% of EC imports in 1988 and 3.7 in 1992).

### Graph 1

<sup>2</sup> South Korea, Taiwan, Malaysia, Philippines, Indonesia.

**Trends in EC Imports From CEEC  
(Index 1988 = 100)**



Source : Eurostat.COMEXT.  
Calculated on Ecu value basis.

**Table 5**  
**Share in EC Imports (in %)\***  
 (Fuels Included)

**CEEC5**

	1988	1992
Manufactured Products	2.6	4.3
Total	2.7	3.9

**North Africa (1)**

	1998	1992
Manufactured Products	0.9	1.2
Total	2.2	2.6

**Asian Countries (2)**

	1988	1992
Manufactured Products	7.0	5.5
Total	5.5	4.4

Source : Eurostat.COMEXT.

\* Without intra-EC Trade.

(1) Algeria, Morocco, Tunisia.

(2) South Korea, Taiwan, Malaysia, Philippines, Indonesia.

#### 1.4. Structural Changes in CEEC Exports to the EC

From 1988 to 1993, this surge in CEEC exports was characterised by changes in the commodity composition of trade as well as the rise in market shares. The four sectors that made the bulk of CEEC exports in 1993 were: machinery and capital equipment (21.8% of total exports); clothing, leather and shoes (21.6 %); metallurgy (13.1%); agricultural and food products (10.7%) (**Table 6**).

Among these, the **agricultural** sector was the least dynamic. The CEEC barely increased their share in EC imports (**Table 7**). This slow growth was the result of both supply and demand factors. CEEC agricultural output declined steeply during these years; but for some products the restrictive access to EC markets, and more specifically the measures taken against imports of animal products from CEEC in 1993 (see Appendix), have also been at play. Agricultural and food exports dropped by 11% in 1993 (**Table 8 and Table B in Statistical Appendix**).

**Table 6**  
**Commodity Structure of EC Imports From CEEC**  
**(in %)**

(Excluding Fuels)	1988	1989	1990	1991	1992	1993	Changes from 1988 to 1993*
Agricultural Products	14.2	16.1	14.6	12.1	9.1	7.6	-6.6
Food	4.0	4.1	4.4	4.6	3.7	3.1	-0.9
Raw Materials	2.4	1.9	1.9	2.3	2.2	2.3	-0.1
Chemicals	11.1	10.7	11.2	11.5	10.1	9.1	-2.1
Leather Products	3.6	3.3	3.7	4.0	4.6	4.6	1.0
Textile Products	3.2	2.9	2.8	2.4	2.4	2.2	-0.9
Clothing	12.1	11.8	12.6	13.5	14.8	17.0	4.8
Wood and Paper	7.4	7.0	6.8	5.9	6.2	5.7	-1.8
Building Materials	0.9	0.8	0.9	1.0	1.3	1.5	0.6
Glass	2.2	2.0	2.1	2.2	1.9	1.8	-0.4
Iron and Steel	9.6	10.8	11.4	10.1	11.0	9.3	-0.3
Non-Ferrous Metal	5.8	5.4	4.9	5.1	5.4	3.8	-1.9
Engineering Products	5.9	6.1	7.0	7.6	7.1	7.6	1.7
Transport Equipment	4.9	4.0	3.2	4.7	6.0	7.7	2.9
Electrical Machinery	3.5	3.8	4.4	4.3	4.8	6.5	2.9
NEC	8.4	8.2	7.2	7.6	8.4	9.6	1.1
Manufactured Products	82.7	81.0	82.5	84.4	87.8	89.4	6.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>

Source : Eurostat.COMEXT.

\* In percent point.

**Table 7**  
**Shares of CEEC in EC Imports\***  
**(in %)**

(Fuels Included)	1988	1992	1993	Share of the Sectors in % of EC Total Imports
				1993
Agricultural Products	5.0	5.8	5.4	7.2
Food	2.4	3.9	3.4	2.9
Raw Materials & Fuels	2.7	1.6	1.9	6.6
Chemicals	3.1	4.3	4.0	8.7
Leather Products	3.7	8.0	8.2	4.4
Textile Products	2.2	3.4	3.6	2.1
Clothing	7.1	10.1	11.4	16.2
Wood and Paper	2.5	3.7	3.8	5.4
Building Materials	6.1	10.8	13.2	1.4
Glass	16.3	20.3	19.8	1.7
Iron and Steel	8.3	15.3	14.7	8.9
Non-Ferrous Metal	4.1	7.7	6.6	3.7
Engineering Products	0.9	1.6	1.8	7.2
Transport Equipment	1.8	2.7	3.8	7.4
Electrical Machinery	0.9	1.8	2.4	6.2
NEC	2.5	4.4	3.7	9.2
Manufactured Products	2.6	4.3	4.4	85.5
<b>Total</b>	<b>2.7</b>	<b>3.9</b>	<b>4.2</b>	<b>100.0</b>

Source : Eurostat.COMEXT.

\* Without intra-EC Trade.

**Metallurgical products**, mainly iron and steel, displayed rapid growth from 1988 to 1992. The CEEC considerably enlarged their share of EC imports, and held relatively strong positions among the suppliers from outside EEC, in this sensitive sector (**Table 7**). But the impact of restrictive measures taken by the EC against iron and steel exports from CEEC (see Appendix) was strongly felt in 1993, and their sales declined by more than 10% (**Table 8 and Table B in Statistical Appendix**)



**Table 8**  
**Trends in EC Imports From CEEC by Sectors**

Sectors	Index	
	1992/1988 1988 =100	1993/1992 1992=100
Agricultural Products	127	89
Food	185	88
Raw Material & Fuels	76	115
Chemicals	181	95
Leather Products	250	107
Textile Products	152	98
Clothing	243	122
Wood and Paper	166	97
Building Materials	277	126
Glass	176	99
Iron and Steel	227	90
Non-Ferrous Metal	185	76
Engineering Products	241	113
Transport Equipment	247	137
Electrical Machinery	271	143
NEC	199	121
Manufactured Products	211	108
<b>Total</b>	<b>181</b>	<b>107</b>

Source : Eurostat.COMEXT.

**Clothing, leather and shoes** represent a leading sector for CEEC exports. Their market share nearly doubled. The limitations to market access through quota and customs duties does not seem to have hampered the textile and leather exports. This can be explained by the rapid development of subcontracting by EC firms with CEEC producers. The importance of this outward processing traffic is analysed in point 2.6. It is worth noting that from 1988 to 1992 in clothing exports the CEEC have caught up and overpassed the group of Asian countries which in 1988 hold a market share twice larger. In this sector the CEEC, and to a lesser extent the countries of North Africa, achieved good performances in the competition with other producers from low labour cost areas (**Tables C and D in Statistical Appendix**). This may result from a combination of factors: price competitiveness, geographic proximity that favours relocation from Western Europe, and preferential market access granted by EC to their neighbour countries.

The **machinery and equipment** represent the other leading sector. Its global share in EC imports more than doubled, and this represents a major change in the trends displayed by EC exports in the 70 and 80s. These industries that have been losing ground for 20 years, and have now begun to recover and to adapt to international competition and foreign

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demand. It is remarkable that these exports did not suffer from the slowing down of CEEC exports in 1993 and achieved high growth rates (**Table 8 and Table B in Statistical Appendix**). The most rapidly expanding exports were: engines, road vehicles, and electrical machinery. These exporting sectors have benefited from the relocation of production and foreign direct investments from Western firms, which have helped to modernise obsolete production capacities. These new emerging export capacities tend to prove that the industrial restructuring is well under way in some CEEC industries. It also gives new insight into the medium and long term prospects of CEEC exports: if CEEC become less and less dependant on exports of sensitive products, then competition in protected European markets will be alleviated. Furthermore, this diversification of their exports will allow the CEEC to enter international competition in more promising markets than the traditional sensitive sectors.

In the **chemical sector**, the CEEC enlarged their shares in EC imports, though the exports of chemical products grew slower than average. In 1993, their value declined by 5% since they were probably affected by the restrictive actions taken by EC (**Table 8**).

The weight of other industrial products in the commodity structure of exports is limited, but the CEEC happen to hold some very strong positions in EC imports due to their traditional specialisation (glass and glassware) and to their geographic proximity of EC markets, which is a decisive advantage in sectors where the transport costs are high relative to the value of the products (building materials) (**Table 7**).

Several conclusions can be drawn from these trends. First, the best export performances were achieved in industries with different factor intensities: labour intensive industries like clothing, capital and raw material intensive ones (iron and steel), as well as more "modern" industries, incorporating different proportion of skilled labour, capital and technology (mechanical and electromechanical products, transport equipment). These trends confirm the intermediate position of the CEEC in international trade, between the traditional specialisation pattern of "southern" countries dominated by low value-added exports and that of the "northern" countries, based on high-skilled labour and R&D. Second, increased exports of machinery and equipment point to emerging new competitive industries in the CEEC, that break up with their past inertia. This tends to confirm the fact that new specialisations may develop in the CEEC in the future, and that in the medium term their comparative advantages might follow a pattern different from the past ones.

Third, despite these initial changes, the CEEC exports still display severe weaknesses. The CEEC are still responsible for a marginal share of EC overall imports from third countries, and they achieved relatively strong positions only in the most traditional sectors. In 1993, their largest shares in EC imports were in the following sectors: glass, iron and steel, clothing, leather, non-ferrous metallurgy, raw materials and agricultural products. Furthermore their exports are still heavily dependant on "sensitive" and protected sectors in the EC. A recent study (*D. Neven, 1994*), that used a detailed commodity classification, estimates that the share of sensitive products in the EC manufactured imports from CEEC increased from 35% to 39% from 1988 to 1992. In these sectors trade liberalisation is lagging, and the CEEC export performances are vulnerable and dependant on EC trade policy, as well as on the strategy of EC producers. The table 8 provides

evidence that the decline of their exports in 1993 took place in sensitive sectors, clothing excepted.

## **II. EMERGING NEW TRADE PATTERNS**

From 1988 to 1993, the former-CSFR achieved the biggest increase in total exports to the EC (+172%)<sup>3</sup>, and thus overtook Hungary as the second exporter to the EC, after Poland. Total Polish exports were multiplied by 2.2, while Bulgarian and Hungarian exports increased by about 100%. Only Romanian exports plummeted. Nevertheless, The export trends in the year 1993 brought some difference to the picture: the CEEC exports as a whole increased by only 7%, but Romania performed the best and increased its exports by 20%. In contrast, Hungary recorded no growth in exports to EC, while Bulgaria, Poland and the ex-CSFR increased their exports respectively by 6%, 7% and 9%. This trend must be appreciated in the context of the economic recession that characterised Western European countries in 1993: their overall imports slowed down, so that all the CEEC managed at least to maintain their shares of EC imports or to slightly increase them.

How did the different countries took part into the structural changes in CEEC exports that were set out above? The analysis of the commodity structure of exports from 1988 to 1993 shows that the engines of export growth were not the same in the different countries.

### **2.1. Structural Changes in Country Exports**

In Hungary and in the former-CSFR, the most powerful engine of the export expansion was the machinery and capital equipment. Electrical machinery took the lead in both countries, transport equipment in the former CSFR, and engineering products in Hungary. In both countries these three industries accounted in 1993 for more than a quarter of the total exports (excluding fuels) and formed the first exporting sector. Their share in EC imports remained narrow in 1993 but is rapidly increasing. The textile and clothing industry ranked second both according to its share in exports in 1993, and according to its contribution to the export growth from 1988 to 1993 (**Tables 9 and 10**).

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<sup>3</sup> This figure, as the following ones are based on values in ECU.

**Table 9**  
**Commodity Structure of EC Imports From Hungary**  
**(in %)**

(Excluding Fuels)	1988	1992	1993	Changes from 1988 to 1993*
Agricultural Products	23.7	15.4	13.9	-9.9
Food	5.9	5.8	4.6	-1.3
Raw Materials	0.6	0.2	0.1	-0.5
Chemicals	12.3	11.8	10.9	-1.4
Leather Products	4.9	6.3	5.9	1.0
Textile Products	3.3	2.0	1.7	-1.6
Clothing	13.1	14.8	16.3	3.2
Wood and Paper	4.0	4.0	3.3	-0.7
Building Materials	0.8	0.9	1.0	0.2
Glass	1.3	1.4	1.5	0.2
Iron and Steel	7.8	6.6	5.9	-1.9
Non-Ferrous Metal	3.9	3.4	3.4	-0.6
Engineering Products	7.4	10.0	11.1	3.8
Transport Equipment	1.0	3.3	3.2	2.2
Electrical Machinery	5.1	8.2	11.2	6.1
NEC	5.1	5.8	5.7	0.6
Manufactured Products	75.7	84.4	85.6	9.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>

Source : Eurostat.COMEXT.

\* In percent point.

**Table 9.1.**  
**Hungary Share in EC Imports (in %)**  
**(Without Intra Trade)**

(Fuels Included)	1988	1992	1993
Agricultural Products	1.9	2.1	2.0
Food	0.8	1.3	1.0
Raw Material & Fuels	0.1	0.1	0.1
Chemicals	0.8	1.1	1.0
Leather Products	1.1	2.4	2.1
Textile Products	0.5	0.6	0.5
Clothing	1.8	2.2	2.2
Wood and Paper	0.3	0.5	0.4
Building Materials	1.2	1.7	1.8
Glass	2.1	3.2	3.3
Iron and Steel	1.5	2.0	1.9
Non-Ferrous Metal	0.6	1.0	1.2
Engineering Products	0.2	0.5	0.5
Transport Equipment	0.1	0.3	0.3
Electrical Machinery	0.3	0.7	0.8
NEC	0.3	0.7	0.4
Manufactured Products	0.5	0.9	0.8
<b>Total</b>	<b>0.6</b>	<b>0.8</b>	<b>0.8</b>

Source : Eurostat.COMEXT.

**Table 10**  
**Commodity Structure of EC Imports From CSFR**  
**(in %)**

(Excluding Fuels)	1988	1992	1993	Changes from 1988 to 1993*
Agricultural Products	5.8	3.3	3.0	-2.8
Food	1.7	1.9	1.5	-0.2
Raw Materials	2.1	3.4	3.1	1.1
Chemicals	15.0	11.3	10.8	-4.3
Leather Products	2.7	4.0	3.9	1.1
Textile Products	5.3	3.9	3.7	-1.6
Clothing	6.4	8.5	9.5	3.1
Wood and Paper	14.4	7.6	6.5	-7.9
Building Materials	1.6	2.2	2.6	1.0
Glass	5.1	3.4	3.3	-1.8
Iron and Steel	15.1	15.7	13.9	-1.2
Non-Ferrous Metal	0.4	2.5	2.2	1.8
Engineering Products	7.2	8.4	9.6	2.4
Transport Equipment	5.9	9.7	9.0	3.1
Electrical Machinery	3.1	5.0	7.0	3.9
NEC	7.2	8.4	9.7	2.5
Manufactured Products	91.1	92.5	93.1	2.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>

Source : Eurostat.COMEXT.

\* In percent point.

**Table 10.1**  
**CSFR Share in EC Imports (in %)**  
**(Without Intra Trade)**

(Fuels Included)	1988	1992	1993
Agricultural Products	0.5	0.6	0.7
Food	0.2	0.6	0.5
Raw Material & Fuels	0.3	0.5	0.5
Chemicals	1.0	1.4	1.4
Leather Products	0.6	2.1	2.1
Textile Products	0.8	1.6	1.8
Clothing	0.8	1.7	1.9
Wood and Paper	1.1	1.4	1.3
Building Materials	2.3	5.6	6.8
Glass	8.5	10.6	11.0
Iron and Steel	3.0	6.5	6.6
Non-Ferrous Metal	0.1	1.1	1.2
Engineering Products	0.2	0.5	0.7
Transport Equipment	0.5	1.3	1.3
Electrical Machinery	0.2	0.6	0.8
NEC	0.5	1.3	1.1
Manufactured Products	0.6	1.3	1.4
<b>Total</b>	<b>0.6</b>	<b>1.1</b>	<b>1.2</b>

Source : Eurostat.COMEXT.

**Table 10.2.**  
**Commodity Structure of EC Imports From the Czech**  
**and the Slovak Republics 1993 (in %)**

(Excluding Fuels)	Czech Republic	Slovak Republic
Agricultural Products	3.0	2.8
Food	1.7	0.6
Raw Materials	2.8	4.4
Chemicals	10.7	11.1
Leather Products	3.9	4.1
Textile Products	3.7	3.8
Clothing	8.3	14.4
Wood and Paper	6.0	8.6
Building Materials	2.6	2.7
Glass	3.4	3.1
Iron and Steel	12.6	19.4
Non-Ferrous Metal	2.3	2.2
Engineering Products	10.4	6.6
Transport Equipment	9.6	6.3
Electrical Machinery	7.8	3.5
NEC	10.6	6.0
Manufactured Products	93.4	92.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Source : Eurostat.COMEXT.



**Table 10.3.**  
**Share in EC Imports 1993**  
**(in %)**

(Fuels Included)	Czech Republic	Slovak Republic
Agricultural Products	0.5	0.1
Food	0.5	0.0
Raw Material & Fuels	0.4	0.1
Chemicals	1.2	0.3
Leather Products	1.7	0.4
Textile Products	1.5	0.4
Clothing	1.4	0.6
Wood and Paper	1.0	0.3
Building Materials	5.5	1.4
Glass	9.0	2.0
Iron and Steel	4.8	1.8
Non-Ferrous Metal	0.9	0.2
Engineering Products	0.6	0.1
Transport Equipment	1.2	0.2
Electrical Machinery	0.7	0.1
NEC	1.0	0.1
Manufactured Products	1.1	0.3
<b>Total</b>	<b>1.0</b>	<b>0.2</b>

Source : Eurostat.COMEXT.

For two other countries, Bulgaria and Romania, exports have relied more and more on the clothing and leather industries. In Bulgaria this shift toward labour intensive products took place in a context of expanding exports. The share of clothing and leather products doubled in Bulgarian exports (reaching 32.3% in 1993), and at the same time they enlarged their share of the EC market. Despite good results in the exports of electrical products, the sector of machinery and equipment as a whole did not display above average performances. Romania is even much more dependant on clothing and leather exports, which encompassed nearly 50% of its total exports in 1993 and its exports in other sectors, including machinery and equipment remained marginal (Tables 11 and 12).

**Table 11**  
**Commodity Structure of EC Imports From Bulgaria**  
**(in %)**

(Excluding Fuels)	1988	1992	1993	Changes from 1988 to 1993*
Agricultural Products	13.1	11.4	9.5	-3.6
Food	12.4	9.2	9.8	-2.6
Raw Materials	0.8	0.9	1.1	0.3
Chemicals	20.0	11.2	12.3	-7.7
Leather Products	1.5	6.9	8.1	6.6
Textile Products	3.6	3.3	3.5	-0.1
Clothing	8.7	18.9	20.0	11.2
Wood and Paper	4.2	4.0	3.4	-0.7
Building Materials	0.7	1.3	1.7	1.0
Glass	0.9	0.9	1.1	0.2
Iron and Steel	8.4	7.7	3.5	-4.9
Non-Ferrous Metal	4.7	7.2	7.3	2.6
Engineering Products	8.4	6.9	7.0	-1.4
Transport Equipment	0.4	0.9	0.6	0.2
Electrical Machinery	3.3	3.9	4.5	1.2
NEC	7.4	5.1	5.9	-1.5
Manufactured Products	84.5	87.2	88.7	4.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>

Source : Eurostat.COMEXT.

\* In percent point.

**Table 11.1.**  
**Bulgaria Share in EC Imports (in %)**  
**(Without Intra Trade)**

(Fuels Included)	1988	1992	1993
Agricultural Products	0.2	0.4	0.3
Food	0.3	0.5	0.5
Raw Materials & Fuels	0.1	0.0	0.1
Chemicals	0.3	0.2	0.3
Leather Products	0.1	0.6	0.7
Textile Products	0.1	0.2	0.3
Clothing	0.2	0.6	0.6
Wood and Paper	0.1	0.1	0.1
Building Materials	0.2	0.5	0.7
Glass	0.3	0.4	0.6
Iron and Steel	0.3	0.5	0.3
Non-Ferrous Metal	0.2	0.5	0.6
Engineering Products	0.1	0.1	0.1
Transport Equipment	0.0	0.0	0.0
Electrical Machinery	0.0	0.1	0.1
NEC	0.1	0.1	0.1
Manufactured Products	0.1	0.2	0.2
<b>Total</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>

Source : Eurostat.COMEXT.

**Table 12**  
**Commodity Structure of EC Imports From Romania**  
**(in %)**

(Excluding Fuels)	1988	1992	1993	Changes from 1988 to 1993*
Agricultural Products	5.2	3.8	3.2	-2.0
Food	1.4	1.8	1.8	0.4
Raw Materials	1.3	2.2	2.2	0.9
Chemicals	8.5	6.4	4.8	-3.7
Leather Products	3.6	6.1	9.5	5.9
Textile Products	3.0	2.1	1.9	-1.2
Clothing	22.1	33.4	37.2	15.1
Wood and Paper	6.2	3.2	2.5	-3.7
Building Materials	1.2	1.2	1.1	-0.1
Glass	1.8	1.9	1.6	-0.1
Iron and Steel	8.6	9.8	7.0	-1.6
Non-Ferrous Metal	8.2	0.8	0.7	-7.5
Engineering Products	4.1	4.3	4.0	-0.1
Transport Equipment	3.3	2.5	2.5	-0.8
Electrical Machinery	2.4	2.3	2.8	0.4
NEC	18.5	17.6	16.1	-2.4
Manufactured Products	93.0	93.3	93.5	0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>

Source : Eurostat.COMEXT.

\* In percent point.

**Table 12.1.**  
**Romania Share in EC Imports (in %)**  
**(Without Intra Trade)**

(Fuels Included)	1988	1992	1993
Agricultural Products	0.3	0.2	0.2
Food	0.1	0.1	0.2
Raw Materials & Fuels	1.2	0.1	0.1
Chemicals	0.4	0.2	0.2
Leather Products	0.6	0.8	1.4
Textile Products	0.4	0.2	0.3
Clothing	2.3	1.7	2.1
Wood and Paper	0.4	0.1	0.1
Building Materials	1.4	0.8	0.8
Glass	2.3	1.5	1.5
Iron and Steel	1.3	1.0	1.0
Non-Ferrous Metal	1.0	0.1	0.1
Engineering Products	0.1	0.1	0.1
Transport Equipment	0.2	0.1	0.1
Electrical Machinery	0.1	0.1	0.1
NEC	1.0	0.7	0.5
Manufactured Products	0.5	0.3	0.4
<b>Total</b>	<b>0.6</b>	<b>0.3</b>	<b>0.3</b>

Source : Eurostat.COMEXT.

Poland stands in an intermediate position from this point of view, since its export growth relied for its largest part on clothing exports, but also on electrical machinery and transport equipment. From 1992 to 1993, Poland managed to double its share in EC imports of transport equipment and it stood by far the first CEEC exporter to the EC (Table 13).

**Table 13**  
**Commodity Structure of EC Imports From Poland (in %)**

(Excluding Fuels)	1988	1992	1993	Changes from 1988 to 1993*
Agricultural Products	18.4	10.8	8.6	-9.7
Food	4.5	3.7	3.0	-1.5
Raw Materials	4.7	2.6	3.0	-1.7
Chemicals	7.7	8.8	7.2	-0.5
Leather Products	3.7	3.3	2.8	-0.8
Textile Products	1.6	1.4	1.2	-0.3
Clothing	10.6	15.5	18.5	7.9
Wood and Paper	6.2	7.3	7.4	1.2
Building Materials	0.4	0.7	1.0	0.5
Glass	1.2	1.2	0.9	-0.4
Iron and Steel	7.8	10.4	8.6	0.9
Non-Ferrous Metal	9.7	9.6	5.7	-3.9
Engineering Products	4.5	5.0	4.7	0.2
Transport Equipment	8.4	6.2	11.4	3.0
Electrical Machinery	3.3	3.2	4.5	1.2
NEC	6.3	8.6	10.6	4.3
Manufactured Products	75.8	85.0	87.5	11.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>

Source : Eurostat.COMEXT.

\* In percent point.

**Table 13.1.**  
**Poland Share in EC Imports (in %)**  
**(Without Intra Trade)**

(Fuels Included)	1988	1992	1993
Agricultural Products	2.1	2.5	2.3
Food	0.9	1.4	1.2
Raw Materials & Fuels	1.0	0.9	1.1
Chemicals	0.7	1.3	1.2
Leather Products	1.2	2.1	1.8
Textile Products	0.4	0.7	0.7
Clothing	2.0	3.8	4.5
Wood and Paper	0.7	1.6	1.8
Building Materials	0.9	2.3	3.1
Glass	3.0	4.5	3.5
Iron and Steel	2.2	5.3	5.0
Non-Ferrous Metal	2.2	5.0	3.6
Engineering Products	0.2	0.4	0.4
Transport Equipment	1.0	1.0	2.1
Electrical Machinery	0.3	0.4	0.6
NEC	0.6	1.6	1.5
Manufactured Products	0.8	1.5	1.6
<b>Total</b>	<b>0.9</b>	<b>1.5</b>	<b>1.6</b>

Source : Eurostat.COMEXT.

## 2.2. Diverging Specialisations in Central Europe and in Balkan Countries

These trends can be summarised by computing specialisation indexes showing the sectors in which different countries tend to concentrate their exports. Two specialisation indexes were computed for each CEEC: one measures their specialisations relatively to the CEEC average, the other measures their specialisations relatively to the world exports to the EC.

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***Trends in National Specialisations Relative to CEEC Average***

The changes in the specialisation indexes of the different countries relative to CEEC average, from 1988 to 1993, point to the fact that the inheritance of the past industrial strategies is still present, but also show that rather deep reorientations are taking place at the country level. Hungarian relative specialisations among CEEC are rather clear-cut: the country keep its traditional specialisation in agricultural products, and in chemicals. In the labour intensive industries its specialisation is disappearing (clothing) or in the decline (leather and shoes). But, at the same time, Hungary has reinforced its specialisation in mechanical and electromechanical industries (**Table 14**). Poland has kept or developed strong specialisations in resource intensive sectors: agriculture, raw materials, wood and paper, non-ferrous metallurgy. In the period 1988-1993, it became relatively specialised in a labor intensive activities, clothing, and managed to maintain its relative specialisation in transport equipment (**Table 15**). The former CSFR also displays a strong specialisation in traditional industries, with high capital and energy intensity (chemicals, glass, iron and steel, textiles) and is strengthening its relative position in machinery and equipment: in 1993, it appears as relatively specialised in engineering products, transport equipment, electrical machinery (**Table 16**). In fact the patterns of specialisation are much more clear-cut if we consider the Czech and the Slovak Republics separately (**Table 16.1**). The export specialisation in machinery and equipment characterises the Czech Republic, which is also specialised in sectors of high energy and natural resource intensities (iron and steel, chemicals, building materials, wood and paper) but to a lower degree than Slovakia. The Slovak specialisations remain centred on intermediate products and heavy industries that used to be the priority of the industrial strategy before 1989, and that keep the Slovak economy dependant on imports of energy and raw materials from the former Soviet Union. From 1988 to 1993, Bulgaria kept some of its traditional specialisations in sectors based on its natural resources (food industry), or on imported raw materials (chemicals). At the same time, the country had to relinquish its relative specialisation in the engineering sector, that was a by-product of its industrial specialisation within the CMEA, and had to develop new specialisations in labor intensive industries, such as clothing and shoes (**Table 17**). The export drive to the EC since 1988 is moving Bulgarian specialisations in a direction that could be regarded as "backward"; this can be at least partially explained by the fact that this country did not benefit from foreign direct investment and subcontracting, which could have updated its production capacities in machinery and equipment (cf point 2.6.). The delay in macroeconomic stabilisation and structural reforms deterred foreign investors, and left the Bulgarian industry with low wages as its only strength. The Romanian specialisations are extremely clear-cut and located on two labor intensive industries: clothing and leather (**Table 18**).



**Table 14**  
**Hungary Exports to EC: Specialisation Indexes\***

(Excluding Fuels)	Relative to CEEC Average		Relative to the World Average	
	1988	1993	1988	1993
Agricultural Products	167.1	183.4	312.0	219.8
Food	146.2	149.4	130.9	111.4
Raw Materials	23.2	4.4	22.1	6.3
Chemicals	110.4	120.5	129.3	106.7
Leather Products	134.7	128.3	186.0	230.4
Textile Products	103.4	74.7	85.1	59.7
Clothing	107.8	95.9	286.1	240.2
Wood and Paper	54.1	58.1	50.4	49.1
Building Materials	85.8	67.7	196.1	196.4
Glass	57.6	82.1	350.1	358.3
Iron and Steel	80.9	63.2	251.4	204.0
Non-Ferrous Metal	68.5	87.8	104.1	126.6
Engineering Products	125.4	147.4	40.1	57.5
Transport Equipment	20.5	41.9	13.4	35.5
Electrical Machinery	144.6	172.8	48.4	91.7
NEC	60.2	59.2	55.4	48.5
Manufactured Products	91.6	95.8	87.9	93.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source : Eurostat.COMEXT.

\* Share of the products in the country exports to the EC/share of the products in the CEEC (or world) exports to the EC, in %.

**Table 15**  
**Poland Exports to EC: Specialisation Indexes\***

(Excluding Fuels)	Relative to CEEC Average		Relative to the World Average	
	1988	1993	1988	1993
Agricultural Products	129.6	114.5	241.9	137.1
Food	112.3	97.1	100.6	72.4
Raw Materials	197.4	130.4	187.9	184.9
Chemicals	69.5	79.5	81.4	70.4
Leather Products	101.4	61.9	139.9	111.2
Textile Products	50.1	55.7	41.2	44.6
Clothing	86.9	108.8	230.6	272.3
Wood and Paper	82.9	129.8	77.1	109.7
Building Materials	46.8	64.0	106.9	185.6
Glass	56.7	48.7	344.9	212.6
Iron and Steel	80.8	92.8	251.2	299.5
Non-Ferrous Metal	167.6	149.1	254.6	215.0
Engineering Products	76.3	62.2	24.4	24.3
Transport Equipment	172.1	146.8	112.9	124.3
Electrical Machinery	95.0	70.2	31.8	37.2
NEC	74.8	110.4	68.8	90.5
Manufactured Products	91.7	97.8	88.0	95.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source : Eurostat.COMEXT.

\* Share of the products in the country exports to the EC/share of the products in the CEEC (or world) exports to the EC, in %.

**Table 16**  
**Former CSFR Exports to EC: Specialisation Indexes\***

(Excluding Fuels)	Relative to CEEC Average		Relative to the Row	
	1988	1993	1988	1993
Agricultural Products	41.1	39.6	76.8	47.4
Food	43.1	48.3	38.6	36.0
Raw Materials	86.3	136.1	82.1	193.0
Chemicals	135.1	118.9	158.3	105.3
Leather Products	75.9	84.7	104.8	152.1
Textile Products	167.9	166.1	138.1	132.9
Clothing	52.6	55.8	139.5	139.8
Wood and Paper	193.3	114.3	179.8	96.6
Building Materials	169.3	170.9	386.9	495.9
Glass	231.5	182.5	1407.3	796.5
Iron and Steel	157.1	149.6	488.2	483.2
Non-Ferrous Metal	6.8	58.3	10.3	84.1
Engineering Products	122.7	127.5	39.2	49.7
Transport Equipment	120.7	115.7	79.1	97.9
Electrical Machinery	87.7	108.1	29.4	57.4
NEC	85.6	101.3	78.7	83.0
Manufactured Products	110.2	104.2	105.7	101.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source : Eurostat.COMEXT.

\* Share of the products in the country exports to the EC/share of the products in the CEEC (or world) exports to the EC, in %.

**Table 16.1.**  
**Czech and Slovak Exports to EC: Specialisation Indexes\* (1993)**

(Excluding Fuels)	Relative to CEEC Average		Relative to the World Average	
	Czech Republic	Slovak Republic	Czech Republic	Slovak Republic
Agricultural Products	40.3	36.6	48.3	43.9
Food	55.4	19.0	41.3	14.2
Raw Materials	122.4	192.6	173.6	273.1
Chemicals	118.0	122.5	104.5	108.5
Leather Products	83.9	88.4	150.5	158.8
Textile Products	165.2	170.0	132.2	136.1
Clothing	48.8	85.0	122.1	212.9
Wood and Paper	105.5	150.4	89.2	127.1
Building Materials	169.7	175.7	492.5	509.8
Glass	185.7	169.1	810.7	738.1
Iron and Steel	135.3	208.6	437.0	673.6
Non-Ferrous Metal	58.7	56.6	84.6	81.7
Engineering Products	137.2	87.5	53.5	34.1
Transport Equipment	123.8	82.0	104.8	69.4
Electrical Machinery	121.3	53.8	64.3	28.5
NEC	110.8	62.2	90.8	51.0
Manufactured Products	104.4	103.1	101.4	100.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source : Eurostat.COMEXT.

\* Share of the products in the country exports to the EC/share of the products in the CEEC (or world) exports to the EC, in %.

**Table 17**  
**Bulgaria Exports to EC: Specialisation Indexes\***

(Excluding Fuels)	Relative to CEEC Average		Relative to the World Average	
	1988	1993	1988	1993
Agricultural Products	92.1	125.3	171.8	150.1
Food	310.3	320.1	277.8	238.6
Raw Materials	34.3	49.4	32.6	70.1
Chemicals	179.6	135.5	210.4	120.0
Leather Products	41.0	176.6	56.6	317.0
Textile Products	114.1	156.4	93.9	125.1
Clothing	71.6	117.5	190.1	294.1
Wood and Paper	55.8	60.4	52.0	51.1
Building Materials	74.6	112.9	170.4	327.8
Glass	39.3	59.4	238.6	259.1
Iron and Steel	87.4	38.0	271.6	122.7
Non-Ferrous Metal	80.8	189.8	122.8	273.7
Engineering Products	143.1	92.8	45.8	36.2
Transport Equipment	8.9	7.9	5.8	6.7
Electrical Machinery	93.6	69.8	31.3	37.0
NEC	87.2	61.4	80.2	50.3
Manufactured Products	102.2	99.2	98.0	96.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source : Eurostat.COMEXT.

\* Share of the products in the country exports to the EC/share of the products in the CEEC (or world) exports to the EC, in %.

**Table 18**  
**Romania Exports to EC: Specialisation Indexes\***

(Excluding Fuels)	Relative to CEEC Average		Relative to the World Average	
	1988	1993	1988	1993
Agricultural Products	36.5	42.3	68.2	50.6
Food	34.9	57.8	31.3	43.1
Raw Materials	56.3	95.7	53.6	135.8
Chemicals	76.4	52.5	89.5	46.5
Leather Products	98.9	207.3	136.6	372.1
Textile Products	96.2	82.9	79.2	66.4
Clothing	182.1	219.2	483.3	548.9
Wood and Paper	82.8	43.1	77.0	36.4
Building Materials	133.6	71.2	305.3	206.8
Glass	81.6	90.9	496.0	396.7
Iron and Steel	89.8	75.8	279.1	244.7
Non-Ferrous Metal	141.8	18.1	215.5	26.1
Engineering Products	70.0	52.8	22.4	20.6
Transport Equipment	68.6	32.6	45.0	27.6
Electrical Machinery	69.0	43.5	23.1	23.1
NEC	219.7	168.6	202.2	138.2
Manufactured Products	112.5	104.6	108.0	101.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source : Eurostat.COMEXT.

\* Share of the products in the country exports to the EC/share of the products in the CEEC (or world) exports to the EC, in %.

Thus since 1988, the relative specialisations of the CEEC has shown diverging trends between a group of countries (Hungary and the Czech Republic) which are developing or strengthening their specialisations in machinery and equipment, and another group (Romania and Bulgaria), which is more and more specialised in labor intensive industries. Poland lies in the between, since it displays strengths and weaknesses in both sectors. Slovakia is a special case, as its specialisations lie in sectors characterised by their high energy and raw material intensity (**Table 19**).

**Table 19**  
**CEEC Exports to the EC: Relative Specialisation Index\* (1993)**

	Czech Rep.	Slovak Rep.	Hungary	Poland	Bulgaria	Romania	CEEC
Agricultural & Food	44.7	31.5	173.6	109.4	181.6	46.7	100.0
Raw Materials	122.4	192.6	4.4	130.4	49.4	95.7	100.0
Chemicals	118.0	122.5	120.5	79.5	135.5	52.5	100.0
Textile, Clothing, Leather	66.4	93.7	100.2	94.7	132.5	204.2	100.0
Wood, Paper, Glass	132.4	158.4	64.5	102.5	69.0	57.4	100.0
Metallurgy	113.0	164.2	70.4	109.2	82.3	58.9	100.0
Machinery	127.7	75.5	117.4	94.7	55.8	42.8	100.0

Source : Eurostat.COMEXT.

\* Share of the products in the country exports to the EC/share of the products in the CEEC (or world) exports to the EC, in %.

### ***CEEC Specialisations Relative to the World Exports to the EC***

Compared to the world exports the CEEC have an export structure concentrated in a limited number of sectors, as shown by the strong specialisations they exhibit. All six countries have in common the fact that they are relatively specialised in the five following sectors: leather, clothing, building materials, glass, iron and steel. This makes it all the more important that some countries are able to diversify their export structures and to build strengths in new sectors. The specialisation in agricultural and food products (Hungary, Poland, Bulgaria) is in the decline due to the domestic conditions and to trade barriers. All CEEC show a "negative" specialisation in machinery and equipment except Poland and the Czech Republic which are relatively specialised in transport equipment; Hungary is coming close to the world average for the relative importance reached by its exports of electrical machinery.

The trends emerging during the last five years shed some light on the prospects of CEEC integration in the European trade. The diverging specialisation trends could be accentuated under the pressure of the relative wage levels. At the end of 1993, average wages in industry were much higher in the Central European countries, than in the Balkan countries, and the gap was as wide as from 1 to 3 between Romania and Hungary. Such wage disparities (as far as they are not fully compensated by difference in productivity) may

induce changes in the competitiveness of the labour intensive industries in the different countries. The changes could be all the more rapid given that a significant part of CEEC exports in clothing and leather industries stems from outward processing operations, and that the Western firms can react instantly to changes in labor costs.

Under these circumstances, the industries in Central Europe would have to move toward new specialisations, to develop production with more value-added and incorporating skilled labour. In the medium and long run, the competition between the CEEC for the same commodity markets should alleviate. One can envisage that the Central European countries could develop a model of foreign trade in which inter-sectoral specialisations would progressively give way to intra-industry flows. Expanding cooperation and production links between Central European enterprises and Western firms would stimulate such a move.

### 2.3. Intra-Industry Trade

The level of intra-industry trade is important to assess the potential of trade between two partners. The most dynamic component of international trade is based on intra-industry flows, i.e. the exports and imports between two partners that take place in the same category of products. Inter-industry trade, based on complementary products, used to be the traditional form of trade between the Industrialised countries and the LDCs, but it has proved to hold out more limited prospects.

The Grubel-Lloyd index is one of the most generally used indices to measure the level of intra-industry trade. **Table 20** shows that:

- the intra-industry trade between the CEEC and the EC has been growing faster than the overall trade between these two areas, since 1988;
- the fastest increase in intra-industry trade was recorded by the CSFR and Hungary. In 1992, these two countries displayed a level of intra-industry trade with EC that was similar to that of Asian countries;
- in the cases of Poland and Bulgaria the importance of intra-industry trade increased but at a slower pace; its level remains below the CEEC average and below the average level of intra-industry trade of Central Europe;
- intra-industry trade did not rise in the trade of between Romania and the EC, and remained at a level similar to that of the North African LDCs.



**Table 20**  
**Trade With the EC: Index of Intra-Industry Trade\***

	1988	1989	1990	1991	1992
Hungary	0.446	0.454	0.503	0.521	0.544
Ex-CSFR	0.416	0.413	0.442	0.521	0.531
Poland	0.377	0.413	0.403	0.403	0.407
Central Europe (1)	0.456	0.469	0.472	0.494	0.500
Bulgaria	0.343	0.366	0.399	0.370	0.407
Romania	0.303	0.299	0.346	0.372	0.307
CEEC	0.465	0.471	0.481	0.487	0.485
Asian Country (2)	0.448	0.468	0.533	0.541	0.567
North Africa (3)	0.212	0.202	0.198	0.199	0.222

Source : Eurostat.COMEXT.

\* Grubel-Lloyd Index 
$$1 - \frac{\sum |xi - mi|}{X + M}$$

(1) Hungary, Czech Rep., Slovak Rep., Poland.

(2) South Korea, Taiwan, Indonesia, Philippines, Malaysia.

(3) Algeria, Morocco, Tunisia.

These trends confirm the differentiation process at work among CEEC exporters: Hungary and the CSFR display a better capacity to develop their trade with the EC, according to intra-industrial specialisations. Romanian exports follow the traditional model of inter-industry trade, similar to those of the LDCs. Bulgaria and Poland stand in an intermediate position.

#### 2.4. Similarity of Export Structures and Potential Competition

First, the similarity index (*Finger index*) was computed at the level of the 99 products of the Eurostat Combined nomenclature, to compare the commodity structures of exports of the different CEEC among themselves, and with exporters from Asia and North Africa, so as to provide further insight into the trade prospects, the potential competition and the convergence processes.

1) The **Table 21** that shows the similarity of the CEEC export structures to the EC draws to the following findings:

The commodity export structures of the CEEC are more similar among themselves than with third countries and this mutual similarity is generally on the rise from 1988 to 1992. The greatest similarity is found between Polish and Bulgarian exports, as well as between the Polish and CSFR exports. The Polish exports structure is also characterised by a convergence with that of Romania. This reflects the specific features of Polish exports, i.e. its relatively dispersed specialisations. Exports between Hungary and Bulgaria, as well as between Hungary and Poland also present a high level of similarity. Romania present the most specific export structure.

The second conclusion is that the CEEC face different levels of potential competition from third countries. In Central Europe the similarity of export structures with that of LDCs, namely countries from North Africa, is the lowest, and has generally been declining since 1988. This suggests that the potential competition between these two areas for the EC markets should not be very strong.

**Table 21**  
**Exports to the EEC: Similarity Index (Finger Index)\***

	Hungary		Poland		CSFR		Bulgaria		Romania	
	1988	1992	1988	1992	1988	1992	1988	1992	1988	1992
Hungary										
Poland	0.65	0.66								
CSFR	0.61	0.65	0.58	0.67						
Bulgaria	0.67	0.67	0.56	0.68	0.61	0.59				
Romania	0.6	0.57	0.54	0.61	0.53	0.56	0.47	0.59		
NIEs (1)	0.47	0.55	0.41	0.43	0.8	0.82	0.42	0.48	0.39	0.39
North Africa (2)	0.43	0.4	0.46	0.44	0.3	0.33	0.36	0.46	0.43	0.53

Source : Eurostat.COMEXT.

\* Finger Index:  $s(ab,c) : \left\{ \sum \min [X_i(ac), X_i(bc)] \right\}$  where  $X_i(ac)$  is the share of product  $i$  in the exports of country  $a$  to country  $c$ ;  $X_i(bc)$  is the share of product  $i$  in the exports of country  $b$  to country  $c$ .

(1) Hungary, Czech Rep., Slovak Rep., Poland.

(2) South Africa, Taiwan, Indonesia, Philippines, Malaysia.

The CSFR displays the export structure that is most similar to that of the Asian countries. This similarity is higher than with any other CEEC, although Hungarian exports also display an increasing similarity with Asian countries.

Bulgaria and Romania display export structures that are becoming increasingly similar to each other, and at the same time more similar to the countries from North Africa.

2) Subsequently, the similarity of the exports structures of the three countries of Central Europe was compared, at a more detailed level. Eight industrial products were selected, for which they had the best export performance since 1988, namely: clothing, knitted (Combined Nomenclature: 61) and non-knitted (62); iron and steel (72) and articles of iron and steel (73); machinery (84); electrical machinery (85); vehicles (87), furniture (94). For each product, the CEEC exports were detailed at the four digit level of the nomenclature, so as to compute the similarity indices. Several conclusions can be drawn from the **Table 22**, which presents the results of the bilateral comparisons of the export structures within each product.

**Table 22**  
**The Growing Similarity of Central European Country Exports to the EC**  
**in Some Major Products (Finger Index)\***

	Hungary/Poland		Hungary/Former CSFR		Poland/Former CSFR	
	1988	1992	1988	1992	1988	1992
Clothing Knitted (61)	0.65	0.70	0.78	0.86	0.75	0.74
Clothing not Knitted (62)	0.70	0.75	0.64	0.72	0.61	0.76
Iron and Steel (72)	0.62	0.59	0.59	0.59	0.61	0.60
Iron and Steel Products (73)	0.52	0.70	0.66	0.71	0.42	0.71
Engineering Products (84)	0.50	0.58	0.41	0.62	0.55	0.65
Electrical Machinery (85)	0.42	0.54	0.47	0.64	0.56	0.63
Vehicles (87)	0.14	0.41	0.15	0.38	0.65	0.81
Furniture (94)	0.81	0.84	0.89	0.84	0.86	0.79

Source : Eurostat.COMEXT.

\* Each product was disaggregated into commodities at the four digit level of the nomenclature, and the Finger Index was computed for each product:  $\text{Finger Index: } s(ab, c) : \left\{ \sum \min [X_i(ac), X_i(bc)] \right\}$  where  $X_i(ac)$  is the share of commodity  $i$  in the product exports of country  $a$  to  $c$ ;  $X_i(bc)$  is the share of commodity  $i$  in the product exports of country  $b$  to country  $c$ .

The greatest similarities are found in the exports of labour intensive products: clothing and furnitures. In these products, Central European country exports are clearly concentrated on the same commodities, and this concentration increased markedly between 1988 to 1992. Strong competition thus prevails among the CEEC in these sectors where they achieved high export growth since 1988.

In the iron and steel industry, the highest growth rates of CEEC exports were reached in the more elaborated goods, i.e. the articles in iron and steel (73). There has been a growing similarity in the commodity composition of Central European exports within this sector. This was not the case for less elaborated products (72) for which the similarity of CEEC exports decreased. Thus the changes in the iron and steel exports of the Central European countries followed converging trends: they shifted away from the less elaborated products and concentrated on the same commodities with higher value added.

CEEC exports show the lowest degree of similarity in the three product groups belonging to the overall sector of machinery and capital equipment, though there is evidence of rapidly converging trends in the commodity composition of these exports. The under-development of these exports up to 1988 left room for rapidly increasing exports in machinery, electrical machinery, vehicles. But the situation is evolving rapidly, as new export capacities are being built in these industries. In 1988, the Polish and Czech-Slovak exports of vehicles already displayed a high degree of similarity, which increased abruptly due to their expanding sales of individual cars. In both countries, the cooperation of West-European firms to modernise their production sectors has had a decisive impact. In machinery and electrical machinery the commodity composition of exports of the Central European also show converging trends. Thus, the relative diversity that existed in 1988 to 1992, in these

new emerging export sectors could lead stronger competition in the future. This would have an impact both on Central European industries, and also on the pressures felt by producers in Western Europe.

It should be mentioned that the rising similarity of export structure does not necessarily mean that competition between CEEC countries is abnormally fierce. It is part of a general phenomena in the trade of European countries, which is characterised by a high share of intra-industrial flows.

## 2.5. Trends in Unit Values of CEEC Exports to the EC

The trends in the unit value of their exports, during the period 1988-1993, help to identify the positions of the CEEC in international competition. We observed the unit value of eight products that played a decisive role in their export drive to the EC. At this relatively aggregate level (two digit level of the Combined Nomenclature), a higher unit value, compared to a previous year or to another exporter, may indicate either a higher price for the same product, or a shift toward more expensive products.

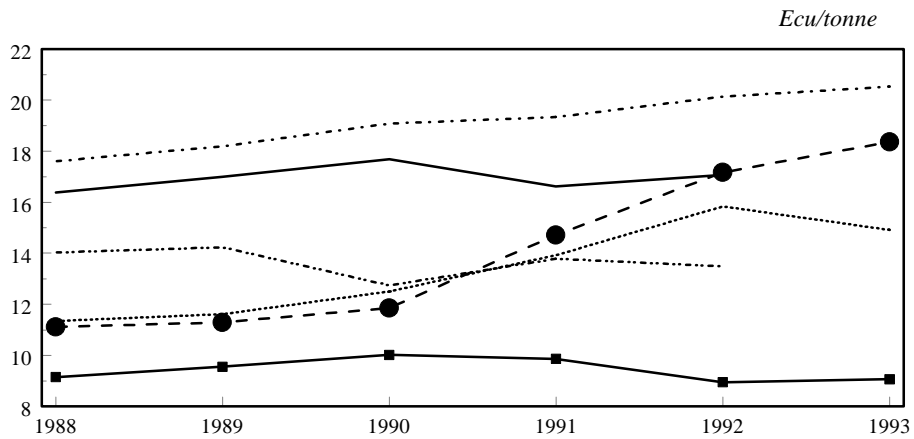
Concerning the relative level of the unit value of exports from the CEEC, two separate cases stand out:

1) In the clothing industries the unit value of Central European exports have shown a rising trend since 1988, and in 1992-1993 stood well above the level of that of Asian and North African exports (**Graphs 2.1 and 2.2**). It should be mentioned that clothing is an important item in the exports of the three groups of countries to the EC. Hungarian exports obtained the highest unit values; but the Czech and Slovak export unit values are catching up since they have registered the fastest increase since 1988. Bulgaria records the lowest unit values. These trends suggest that the export performance of the Central European countries in European markets in this sector was also the result of an upgrading of the goods exported. This can be explained to a large extent by the fact that a growing share of the clothing exports from the Central European countries are the result of subcontracting links with firms from the European Community, as shown below (point 2.6.). The products exported under outward processing contracts are of better quality, more in line with Western standards and fashions, and enjoy higher prices (*Cristina Corado, 1994*).

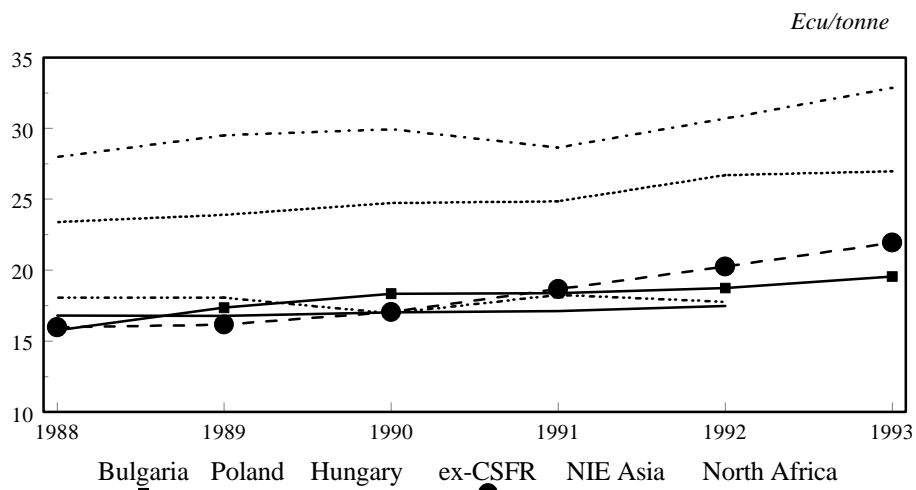
2) In the other sectors, CEEC unit values are generally lower than those of other exporters. The gap between CEEC unit values and Asian export unit values are generally wide enough to indicate that the goods they export are in fact not the same.

In iron and steel industry the CEEC unit values have been declining for less elaborated products (72) since 1988, whereas they rose for the products incorporating more value added (73). The trends and the level in unit values in this sector confirm that the Central European Countries have restructured their exports toward the upper end of the production chain (**Graphs 3.1. and 3.2.**). The comparison with Asian or North African exports is not relevant since the iron and steel exports of these countries to the EC are marginal (**Tables C and D in Statistical Appendix**)

**Graph 2.1.**  
Trends in Unit Value of Exports to EC\*  
Clothing (Knitted)

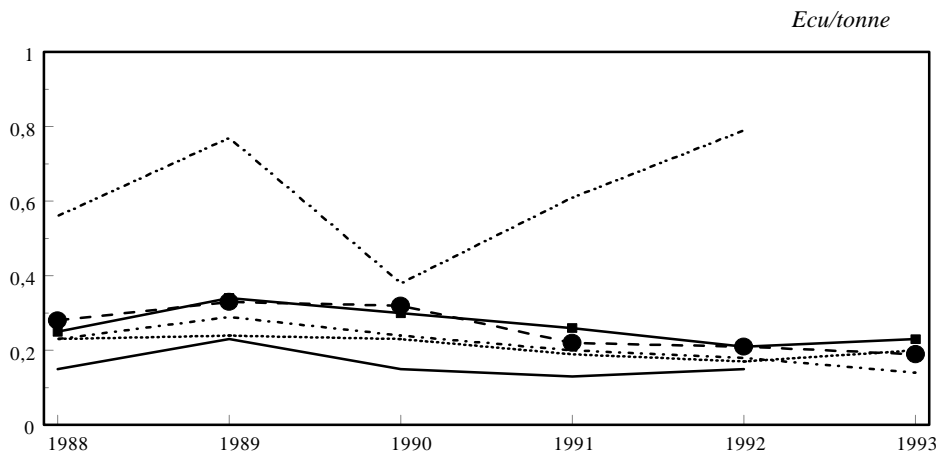


**Graph 2.2.**  
Trends in Unit Value of Exports to EC\*  
Clothing (Not-Knitted)

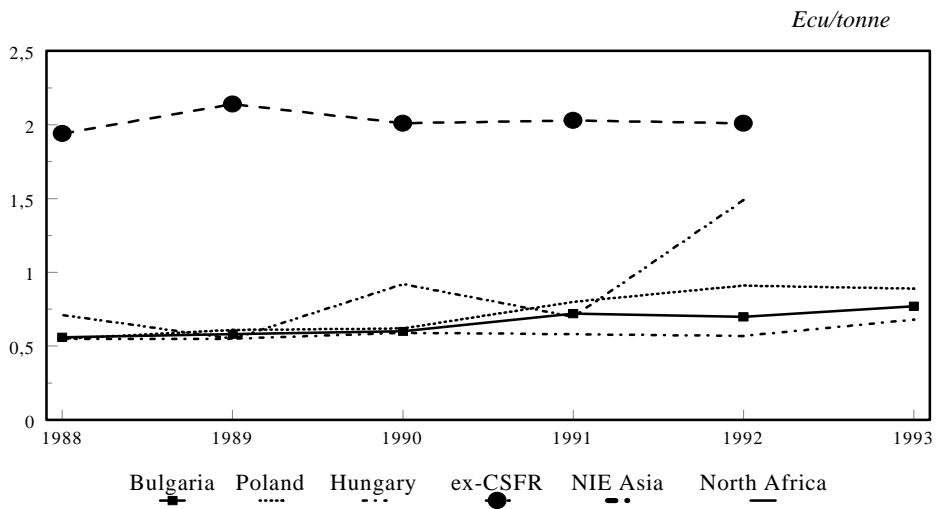


Source : Eurostat.COMEXT.  
\* : Calculated on Ecu value basis.

**Graph 3.1.**  
Trends in Unit Value of Exports to EC\*  
*Iron and Steel*



**Graph 3.2.**  
Trends in Unit Value of Exports to EC\*  
*Articles of Iron and Steel*



Source : Eurostat.COMEXT.  
\* : Calculated on Ecu value basis.

The importance of electrical machinery (85) is about the same in CEEC exports and in North African exports (5 to 6%) but much higher in Asian exports (18%). In electrical machinery, CEEC unit values are well below those of Asian exporters and even of North-African countries, and their wide discrepancies indicate that the product composition of exports is different. CEEC exports have shown rising unit values since 1988, with Hungarian unit values leading the way. In the case of electrical machinery, as with clothing though to a lesser extent, the development of sub-contracting activity is one of the factors that can explain the levels and trends in unit values (**Graphs 4.1. and 4.2.**). The production carried out and exported as part of outward processing contracts has unit values higher than average; this being due either to the quality or to the nature of the products. CSFR and Hungary, which accounted for the largest part of the exports under OPT in 1993, benefited from the highest average unit values whereas Poland was in the opposite situation (limited OPT and declining unit values).

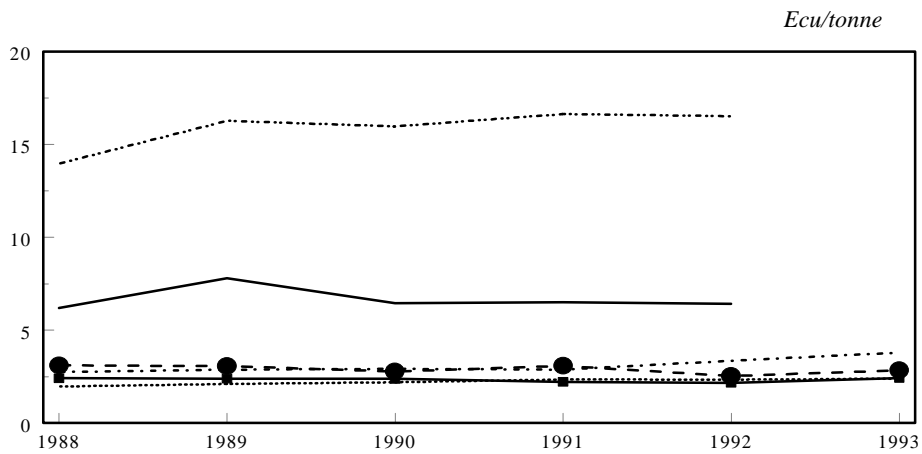
The unit values of vehicle exports (87) show two contrasting trends among CEEC (**Graph 5**). The unit values have risen rapidly for the exports of Central Europe, especially for Hungary and Poland, and contributed to the increasing share of this product in their exports. But they have declined sharply for Bulgaria for which this category of exports remains marginal. These trends are linked to the participation of Western European firms in the modernisation of production in this sector, in the different countries concerned.

The analysis of the unit values confirms that Central European exports are characterised by high degrees of mutual similarity, since the differences in unit values are relatively narrow. The similarities with the exports of Asia and North Africa are not so strong, except in the clothing industry. For the latter, competition with North Africa will depend mainly on the decision of West European firms to relocate production in the CEEC. The analysis also indicates that Hungarian exports have higher unit values, but it is not possible to determine whether this is due to the differentiation of Hungarian exported products (in some cases thanks to cooperative links with Western firms) or to higher prices that could undermine Hungarian competitiveness.

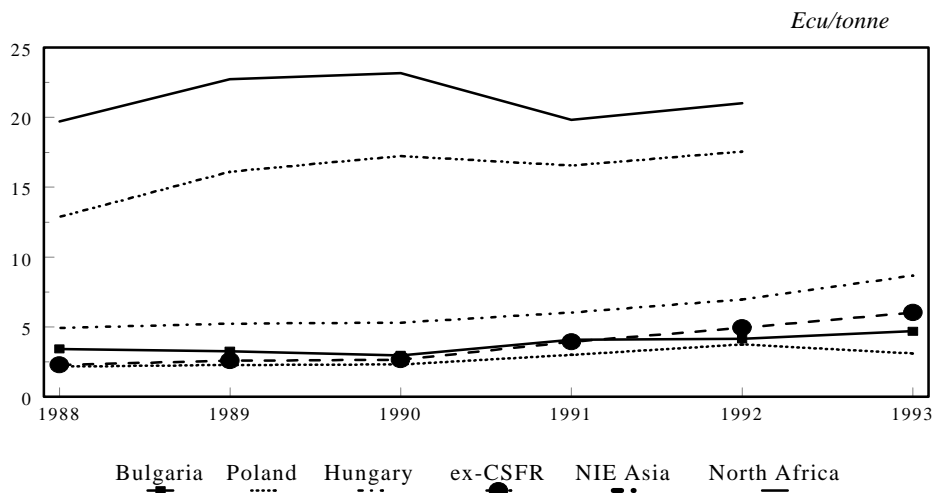
## **2.6. Integration into the Productive Networks of Western Firms**

West European firms have played an active part in expanding the CEEC export capacity in some industrial sectors since 1988. They had contributed to the growth and the upgrading of CEEC industrial exports through the development of sub-contracting relationships and through foreign direct investment in these countries.

**Graph 4.1.**  
Trends in Unit Value of Exports to EC\*  
*Machinery*



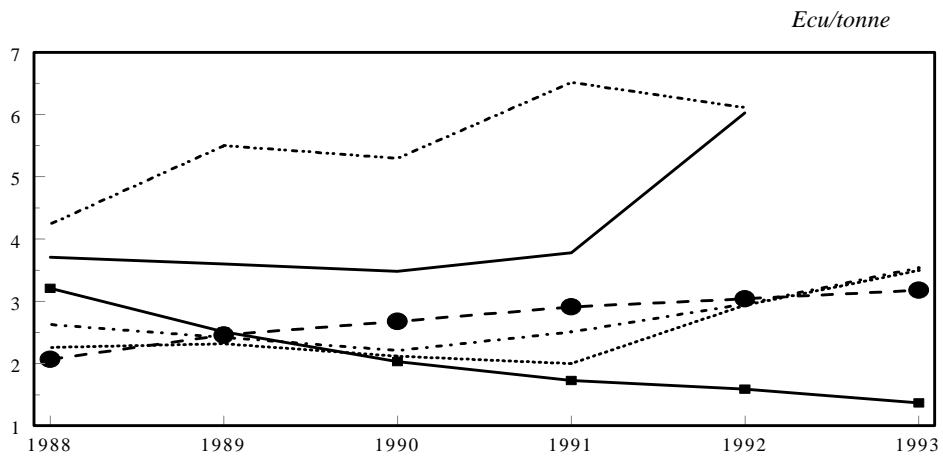
**Graph 4.2.**  
Trends in Unit Value of Exports to EC\*  
*Electrical Machinery*



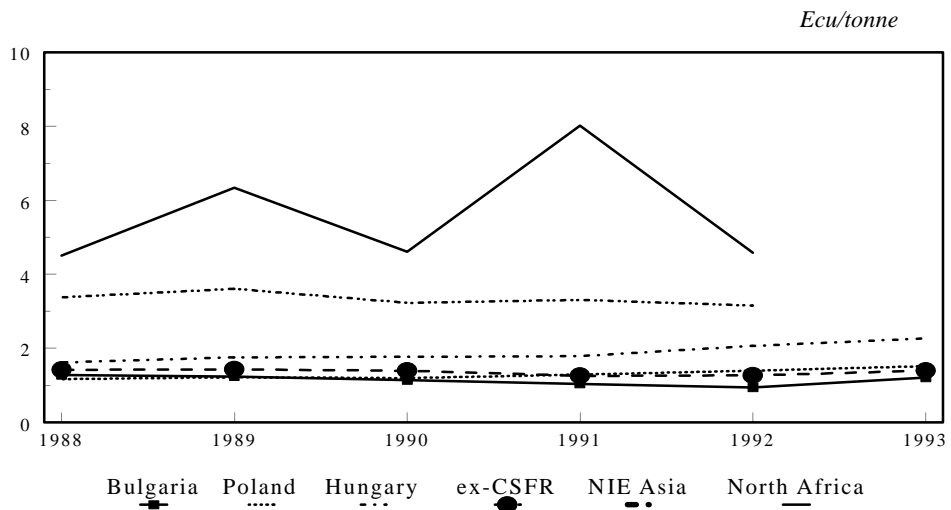
Source : Eurostat.COMEXT.  
\* : Calculated on Ecu value basis.



**Graph 5**  
Trends in Unit Value of Exports to EC\*  
Vehicles



**Graph 6**  
Trends in Unit Value of Exports to EC\*  
Furnitures



Source : Eurostat.COMEXT.  
\* : Calculated on Ecu value basis.

### *Outward Processing Traffic<sup>4</sup>*

It is generally not possible to identify, within international trade, the flows of products that result from sub-contracting activities, as these encompass a wide range of activities and various forms of relationships. In a simple definition, a subcontracting relationship exists when "a firm (the principal) places an order with another firm (the subcontractor) for the manufacture of parts, components, assemblies or sub-assemblies to be incorporated into a product which the principal will sell. Such orders may include the treatment, processing or finishing of materials or parts by the subcontractor at the principal request" (*OECD, 1980*). Nevertheless the Statistical data on the foreign trade of European Community members (*Eurostat. Comext data base*) provide data on trade flows related to one form of subcontracting, labelled "outward processing traffic". This exists when the materials, parts or components to be processed or assembled by the subcontractor are supplied to him by a principal in the Community, and when the processed/assembled product is to be imported into the EC afterwards. In such cases, when entering the EC the products benefit from a special customs regime (the value of the incorporated inputs supplied by the principal is exempted from custom duties). Furthermore, in the case of textiles, the products imported by the EC in the framework of OPT relationships benefit from special import quotas, separate from "ordinary" quotas. (*Messerlin, 1993*). For both these reasons exports and imports related to OPT are precisely recorded in EC trade statistics and available for 1988 to 1993.

They show that OPT has contributed to a large extent to the export performance of CEEC exports in sectors such as clothing, footwear, electrical machinery (**Table 23, Graph 7**). In the clothing industry, OPT already had an overwhelming importance for the main part of CEEC exports to the EC in 1988. During the period from 1988 to 1993, OPT role expanded further, and it extended to other parts of the clothing industry, as well as to the footwear industry. These subcontracting relationships explain that the limits to trade liberalisation between the EC and the CEEC in the textile sector did not impede the flow of products coming from the CEEC at the initiative of EC producers. The growing propensity of EC producers to relocate their production into Eastern Europe during this period can easily be explained by the economic liberalisation in these countries, and the low level of wages after the devaluation of the national currencies. The Yugoslavian crisis also caused a drop of OPT in this country, which used to attract a large part of these activities up to the end of the 80s, and it favoured their redirection toward Central Europe.

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<sup>4</sup> The analysis of the outprocessing traffic in the EC trade was realised by Romain Trapp, during his internship at Cepii.

**Table 23**  
**Outward Processing Traffic in CEEC Exports to the EC**  
**Share of Exports After OPT in % of the Total Commodity Exports**

	Clothing (Knitted)		Clothing (not Knitted)	
	1988	1993	1988	1993
Poland	15	64	82	87
Ex-CSFR	7	60	51	72
Hungary	65	73	90	80
Romania	9	42	61	76
Bulgaria	19	41	61	69

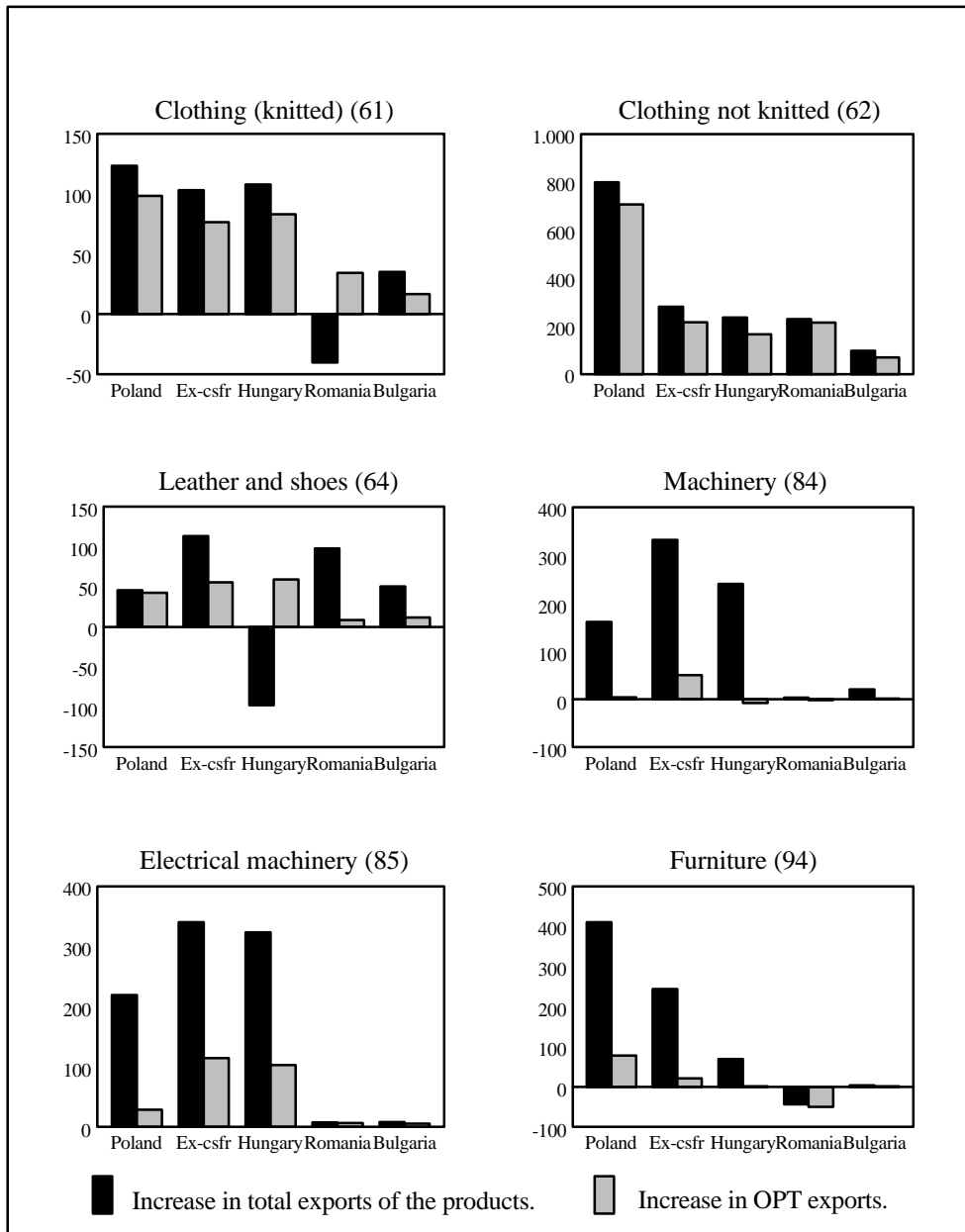
	Leather and Shoes		Furniture	
	Poland	16	50	26
Ex-CSFR	11	41	9	9
Hungary	19	67	19	9
Romania	11	11	26	9
Bulgaria	0	23	0	0

	Machinery		Electrical Machinery	
	Poland	5	4	2
Ex-CSFR	2	12	6	29
Hungary	17	4	18	28
Romania	7	2	0	15
Bulgaria	0	3	0	14

	Vehicles	
	Poland	1
Ex-CSFR	28	11
Hungary	42	18
Romania	15	19
Bulgaria	..	..

Source : Eurostat.COMEXT.

**Graph 7**  
**The Role of OPT in the Export Growth**  
**of Selected Products to the EC From 1988 to 1993**  
**(Million Ecu)**



Source : Eurostat.COMEXT.

In 1993, the Visegrad countries (Hungary, Poland, the former CSFR) accounted for between three quarters and four fifths of the CEEC OPT exports in clothing and footwear. Poland and the former CSFR benefited from an increasing part of the subcontracting orders, whereas Hungary proved to be relatively less attractive; this latter phenomena may be related to the higher level of Hungarian wages, but may also be explained by the fact that the involvement of Western firms in Hungary shifted to more stable forms of cooperation, namely direct investment in this country. Romania, which used to attract a large share of OPT in 1988, has lost ground since in the distribution of subcontracting orders from EC firms. Bulgaria has proved not to be very active in OPT. Several reasons may account for this relative "unattractiveness" of the Balkan countries: 1) their geographic location which is relatively far from Germany, where the industrial firms are the most heavily involved in OPT; 2) the delay in trade liberalisation due to the fact that the Association Agreements with these two countries came later into force; 3) the economic and political instability that made the alternative subcontractors in Central Europe more attractive. But this may evolve in the future, as one of the main features of OPT relationships is its volatility, and the lack of long term commitment to the sub-contractors, which gives the EC firms a great flexibility in adapting to changes in the relative costs in the different alternative countries.

In the machine and capital equipment sector, the OPT relationships are responsible for a smaller share of the CEEC exports than in the clothing industries, but still have had a part in the performances achieved by some countries. OPT in machinery and in electrical machinery from 1988 to 1993 developed rather fast with the former CSFR, and these flows have accounted for respectively 15% and 33% of the increase of its exports in these two sectors, since 1988. Hungary has experienced a decline of subcontracting exports in machinery since 1988 (when they had an important role) but these activities were still major engine of its exports in the electromechanical industry, in which they accounted for nearly 30% of its exports. Poland is much less involved in OPT in these sectors. In the two Balkan countries the increase in exports of electrical machinery from 1988 to 1993 was overwhelmingly dominated by OPT, but the amount involved remained marginal. The conclusion to be drawn is that the good performances of the Visegrad countries in a relatively "new" export sector, such as electrical machinery, were stimulated by cooperative links, which actively helped the upgrading of this sector and opened the access to EC markets.

The exports of vehicles during this period proved to be less and less dependant on subcontracting, and this can be explained by the fact that in this sector FDI took the lead as OPT declined.

### ***Foreign Direct Investment***

The foreign direct investment also has influenced the trends and the sectoral structures of CEEC exports since 1988, but its impact is generally difficult to identify precisely due to the lack of available statistical information. FDI flows in the CEEC grew rapidly from 1990 (300 million \$) to 1992 (3.4 billion \$) but preliminary data suggest that the trend slowed

down in 1993. The cumulative amount of investment flows at the end of 1993 was around 10 billion \$, but the committed funds through contracts has been much bigger (**Table 24**). Compared to the size of world-wide FDI, the flows directed to CEEC look marginal. In 1992, they amounted to only 2% of the total FDI realised by OECD countries, and about 10% of the FDI received by all the developing countries. Nevertheless, given the small size of the CEEC, and the fact that the FDI is concentrated in three countries (the Czech Republic, Hungary and Poland), they represents a relatively important inflow of capital for these economies. In 1992, the FDI per capita in the Czech Republic stood at around \$140 and in Hungary at around \$100, which is comparable to the relative level in Portugal (\$140), and much higher than in Turkey (\$15) or in Mexico (\$50).

**Table 24**  
**Foreign Direct Investment in CEEC**  
**(Millions \$)**

	Balance of Payment Basis				
	Before 1990	1990	1991	1992	1993
Poland	231	89	291	678	900
Ex-CSFR	257	207	600	1.103	766
Hungary	3	..	1.472	1.479	2.200
Romania	..	..	40	77	48
Bulgaria	..	4	56	42	62
<b>Total</b>	<b>491</b>	<b>300</b>	<b>2.459</b>	<b>3.379</b>	<b>3.976</b>

	Commitments on Contract Basis				
	Before 1990	1990	1991	1992	1993
Poland	..	..	479	1.545	2.100
Ex-CSFR	..	..	..	1.573	2.053
Hungary	..	..	3.137	3.680	6.005
Romania	..	..	269	5.340	755
Bulgaria	..	..	130	170	200
<b>Total</b>	<b>..</b>	<b>..</b>	<b>4.015</b>	<b>12.308</b>	<b>11.113</b>

Source : World Investment Report 1994. Transnational Corporations, Employment and the Workplace. United Nations 1994.

EBRD : Transition Report. October 1994.

There is evidence that it has had an impact on industrial restructuring as, according to recent studies, the manufacturing sector has attracted more than half of the FDI in the CEEC. The strategies of foreign investors differ according to whether their aim is to expand their sales in domestic or in foreign markets (or both). But, on average, firms with foreign capital are more outward-oriented than national firms. In Poland, firms with foreign capital are responsible for about 7% of domestic sales, and for 10% of exports. A recent study on joint ventures in Hungary gives a precise picture of their role in Hungarian foreign trade. It shows that in 1992 joint ventures in Hungary were responsible for 30% of the country's exports (versus 11% in 1990), and that their contribution to exports was much higher in some sectors: they accounted for 44% of exports in machinery and capital

equipment, and 43% of exports in consumer goods. They have decisive role in the restructuring of both industrial production and exports (*J. Hamar, 1993*).

### **III. CONCLUSIONS AND PROSPECTS**

The analysis of CEEC exports to the EC between 1989 and 1993 leads to the following conclusions:

1. CEEC exports of manufactured industrial products have been growing rapidly but the sectoral trends have been quite differentiated; the highest export growth was registered in the following industries (in descending order): electrical machinery, building materials, transport equipment, clothing, engineering products, leather products. This provides evidence of the diversifying export capacities of the CEEC as a whole. It is worth noting that even in 1993, as the overall exports of CEEC slowed down, most of these sectors recorded fast export growth. The involvement of Western firms in the production of these sectors, through sub-contracting or foreign direct investment, has played a decisive role in their export expansion.

2. The commodity patterns of exports show increasing country differentiations among the CEEC. All of them developed their exports of traditional labour intensive products (clothing, leather and shoes) at an accelerating pace, but only those of Central Europe (Hungary, the Czech Republic and Poland) managed to enlarge rapidly their export capacities in mechanical and electromechanical industries, and in transport equipment. The Balkan countries (Bulgaria and Romania) relied more and more exclusively on their specialisation in traditional labour-intensive industries. Thus, the Central European countries and the Balkan countries are characterised by diverging patterns of specialisation, though some countries, such as Poland, stand in an intermediate position.

After a slowdown in 1993, the CEEC exports experienced a rebound in 1994. The partial data for 1994 seem to indicate that CEEC exports to the world regained momentum: in the first six months their total exports increased by 9% (in current dollars). The fastest growth was registered by Slovakia (+23%), as this country redirected its trade away from the Czech Republic, and by Poland (+11%). Romania, Hungary and the Czech Republic recorded export growth of around 7-8%, while only Bulgarian exports declined (-6%). Though data are still lacking, there is evidence that the CEEC exports to the EC followed the same upward trend: Hungarian exports to the EC increased by 14% during the first six months of 1994, and Polish exports by 8%. This rebound was favored by economic recovery in Western Europe and by a revival of industrial output. The decision taken in 1994 to prepare the entry of the CEEC into the European Union in most countries of Central Europe, that should lead to further reductions of trade barriers, should foster trade and capital flows.

The links between foreign trade and internal developments are beyond the scope of this paper, but it should be mentioned that the CEEC export performance will be more and more linked to domestic factors, since it will depend on the capacity of the different countries to finance industrial restructuring. The progress achieved in macroeconomic stabilisation, as well as in microeconomic adjustments, once again, draw a dividing line

between the Central European countries and the Balkan countries. Thus the differences in domestic developments coincide with diverging trade patterns, that were shown up by the present analysis. This raises a crucial issue, formulated in recent research on the CEEC trade (*M. Landesmann, 1994*), of a possible bifurcation in the development patterns. While some CEEC countries are getting on with catching up with Western Europe, others are liable to fall behind. The enlargement of the European Union to CEEC will have to take into account these national differences, while helping the least advanced countries in their transition to closing the gap.



**APPENDIX**

***Some Restrictive Measures Taken by the EC  
Against Imports From the CEEC in 1992-1993***

**1992**

*August*

Germany and Italy requested safeguard measures against steel pipes from Czechoslovakia.

*November*

EEC imposed antidumping duty on seamless pipes from Hungary (rate: 21.7%), Poland (10.8%), CSFR (30%).

**1993**

*May*

Antidumping procedure for imports of fertilisers from Bulgaria and Poland.

*June*

Restriction on imports of other chemical products from Czech Republic, Hungary, Poland and Slovenia.

*26 February to 30 June*

EC imposed minimum prices on imports on several kinds of fish.

*April*

EEC and Austria suspended their imports of livestock, meat and dairy products from Eastern European countries. Ban lifted on May 1, for Bulgaria, Czech Republic, Romania, Hungary, Slovakia, Slovenia, Estonia. Lifted in July for Poland and others.

*May*

V.E.R. negotiated by the EEC with the Czech and Slovak Republics to limit their combined exports of certain steel products for 1993-1995, reportedly below the level reached in 1992.

Source : ECE-ONU. Economic Bulletin for Europe, 1993, Geneva.

**Statistical Appendix - Table A**  
**Trends in EC Imports From CEEC 1988-1992\***  
**Index 1988 = 100**

<b>Bulgaria</b>	1988	1989	1990	1991	1992	1993
Total	100	115.0	126.2	162.9	194.4	205.8
Manufacturing	100	112.3	124.7	169.6	216.5	224.3
Total without Fuels	100	115.5	127.9	172.5	209.8	213.6

<b>Romania</b>	1988	1989	1990	1991	1992	1993
Total	100	114.1	71.8	65.7	62.8	75.4
Manufacturing	100	106.2	76.4	75.8	86.6	103.3
Total without Fuels	100	106.1	75.3	78.6	86.4	102.5

<b>Hungary</b>	1988	1989	1990	1991	1992	1993
Total	100	119.7	135.5	168.0	184.9	183.8
Manufacturing	100	118.5	144.1	180.7	209.3	208.0
Total without Fuels	100	119.7	135.8	169.2	187.8	186.4

<b>Former CSFR</b>	1988	1989	1990	1991	1992	1993
Total	100	115.7	121.6	183.6	250.3	272.4
Manufacturing	100	111.9	122.2	190.9	264.4	289.9
Total without Fuels	100	114.7	123.1	189.1	260.4	283.5

<b>Poland</b>	1988	1989	1990	1991	1992	1993
Total	100	114.8	153.4	184.9	210.6	225.2
Manufacturing	100	112.0	158.5	203.4	250.8	275.4
Total without Fuels	100	115.3	157.2	191.6	223.8	238.7

<b>CEEC</b>	1988	1989	1990	1991	1992	1993
Total	100	115.9	124.3	154.6	181.3	193.7
Manufacturing	100	112.2	128.5	168.6	211.3	228.9
Total without Fuels	100	114.6	128.8	165.1	199.0	211.7

<b>Visegrad Countries</b>	1988	1989	1990	1991	1992	1993
Total	100	116.2	138.9	179.1	214.4	227.2
Manufacturing	100	113.8	142.5	193.0	243.8	262.2
Total without Fuels	100	116.4	141.0	184.3	223.9	236.3

Source : Eurostat.COMEXT.

\* Calculated on Ecu value basis.

**Statistical Appendix**  
**Table B**  
**CEEC: Changes in Exports to EC From 1992 to 1993\***  
**(Thousand Ecus)**

**Major Losses**

72	Iron and Steel	-213.636
74	Copper and Articles Thereof	-204.171
31	Fertilizers	-81.759
02	Meat and Edible Meat	-68.773
07	Edible Vegetables and Certain Roots and Tubers	-67.246
20	Preparations of Vegetables, Fruits	-43.385
03	Fish and Crustaceans	-39.297
75	Nickel and Articles Thereof	-30.703
01	Live Animals	-29.174
35	Albuminous Substances	-23.214

**Major Gains**

88	Aircraft, Spacecraft and Parts	47.154
64	Footwear	67.750
61	Articles of Apparel and Clothing Accessories (Knitted)	110.221
84	Nuclear Reactors, Boilers, Machinery	118.336
27	Mineral Fuels, Mineral Oils	131.976
89	Ships, Boats and Floating Structures	154.679
94	Furniture	182.529
87	Vehicles Other than Railway	195.659
85	Electrical Machinery and Equipment	373.580
62	Articles of Apparel and Clothing Accessories (Not-Knitted)	450.161
	<b>Total Products</b>	<b>1.288.933</b>

Source : Eurostat.COMEXT.

\* Differences between the export value in 1993 and the export value in 1992. The ten products recording the biggest decreases are presented in descending order, the ten products recording the biggest increases are presented in ascending order.

**Statistical Appendix**  
**Table B.1.**  
**Ex-CSFR: Changes in Exports to EC From 1992 to 1993\***  
**(Thousand Ecus)**

**Major Losses**

72	Iron and Steel	-33.845
31	Fertilizers	-22.320
74	Copper and Articles Thereof	-19.901
87	Vehicles Other than Railway	-13.197
47	Pulp of Wood	-12.954
71	Natural or Cultured Pearls	-12.006
48	Paper and Paperboard	-10.822
54	Man-Made Filaments	-10.063
12	Oil Seeds	-9.614
88	Aircraft, Spacecraft	-8.703

**Major Gains**

69	Ceramic Products	16.792
40	Rubber and Articles Thereof	18.511
89	Ships, Boats and Floating Structures	23.470
61	Articles of Apparel and Clothing Accessories (Knitted)	25.461
39	Plastics	30.155
97	Works of Art	35.256
94	Furniture	53.487
62	Articles of Apparel and Clothing Accessories (Not-Knitted)	68.520
84	Machinery, Engines	81.622
85	Electrical Machinery	135.182
	<b>Total Products</b>	<b>489.594</b>

Source : Eurostat.COMEXT.

\* Differences between the export value in 1993 and the export value in 1992. The ten products recording the biggest decreases are presented in descending order, the ten products recording the biggest increases are presented in ascending order.

**Statistical Appendix**  
**Table B.2.**  
**Hungary: Changes in Exports to EC From 1992 to 1993\***  
**(Thousand Ecus)**

**Major Losses**

02	Meat and Edible Meat	-34.748
72	Iron and Steel	-30.253
20	Preparations of Vegetables, Fruits	-29.817
39	Plastics	-27.502
44	Wood	-20.255
07	Edible Vegetables	-19.601
42	Articles of Leather	-14.911
08	Edible Fruit	-13.919
01	Live Animals	-13.823
23	Residues and Waste	-11.890

**Major Gains**

97	Works of Art	5.358
27	Mineral Fuels	5.817
76	Aluminium and Articles Thereof	7.301
95	Toys, Games and Sports Requisites	8.778
89	Ships, Boats and Floating Structures	14.001
61	Articles of Apparel and Clothing Accessories (Knitted)	20.443
12	Oil Seeds	23.206
62	Articles of Apparel and Clothing Accessories (Not-Knitted)	32.707
84	Machinery, Engines	38.679
85	Electrical Machinery	110.867
	<b>Total Products</b>	<b>-24.689</b>

Source : Eurostat.COMEXT.

\* Differences between the export value in 1993 and the export value in 1992. The ten products recording the biggest decreases are presented in descending order, the ten products recording the biggest increases are presented in ascending order.

**Statistical Appendix**  
**Table B.3.**  
**Poland: Changes in Exports to EC From 1992 to 1993\***  
**(Thousand Ecus)**

**Major Losses**

74	Copper and Articles Thereof	-187.597
72	Iron and Steel	-93.361
31	Fertilizers	-54.466
03	Fish and Crustaceans	-35.190
07	Edible Vegetables	-30.256
01	Live Animals	-27.596
35	Albuminous Substances	-26.871
75	Nickel and Articles Thereof	-25.678
02	Meat and Edible Meat	-22.569
70	Glass and Glassware	-16.810

**Major Gains**

25	Salt, Sulphur, Earths and Stone	35.499
44	Wood and Articles of Wood	39.340
61	Articles of Apparel and Clothing Accessories (Knitted)	39.701
27	Mineral Fuels	51.099
88	Aircraft, Spacecraft	54.575
85	Electrical Machinery	107.122
89	Ships, Boats and Floating Structures	108.021
94	Furniture	128.172
62	Articles of Apparel and Clothing Accessories (Not-Knitted)	208.224
87	Vehicles Other than Railway	223.502
	<b>Total Products</b>	<b>489.035</b>

Source : Eurostat.COMEXT.

\* Differences between the export value in 1993 and the export value in 1992. The ten products recording the biggest decreases are presented in descending order, the ten products recording the biggest increases are presented in ascending order.

**Statistical Appendix**  
**Table B.4.**  
**Bulgaria: Changes in Exports to EC From 1992 to 1993\***  
**(Thousand Ecus)**

**Major Losses**

72	Iron and Steel	-33.452
07	Edible Vegetables	-14.191
01	Live Animals	-4.658
12	Oil Seeds	-3.572
47	Pulp of Wood	-3.173
40	Rubber and Articles Thereof	-3.144
73	Articles of Iron or Steel	-3.086
79	Zinc and Articles Thereof	-2.985
87	Vehicles Other than Railway	-1.920
03	Fish and Crustaceans	-1.857

**Major Gains**

41	Hides and Skins	4.674
02	Meat and Edible Meat	4.823
74	Copper and Articles Thereof	5.459
85	Electrical Machinery	6.412
22	Beverages, Spirits	7.363
71	Natural or Cultured Pearls	7.968
64	Footwear	8.089
62	Articles of Apparel and Clothing Accessories (Not-Knitted)	9.332
29	Organic Chemicals	11.943
27	Mineral Fuels	36.440
	<b>Total Products</b>	<b>52.655</b>

Source : Eurostat.COMEXT.

\* Differences between the export value in 1993 and the export value in 1992. The ten products recording the biggest decreases are presented in descending order, the ten products recording the biggest increases are presented in ascending order.

**Statistical Appendix**  
**Table B.5.**  
**Romania: Changes in Exports to EC From 1992 to 1993\***  
**(Thousand Ecus)**

**Major Losses**

72	Iron and Steel	-22.725
39	Plastics	-10.641
02	Meat and Edible Meat	-10.007
87	Vehicles Other than Railway	-4.479
29	Organic Chemicals	-4.384
25	Salt, Sulphur, Earths and Stone	-3.960
76	Aluminium and Articles Thereof	-3.409
63	Other Made up Textile Articles	-2.915
46	Wickerwork and Basketwork	-2.819
10	Cereals	-2.813

**Major Gains**

07	Edible Vegetables	4.892
41	Hides and Skins	5.303
89	Ships, Boats and Floating Structures	8.782
26	Ores, Slag and Ash	9.991
94	Furniture	13.742
85	Electrical Machinery	13.997
61	Articles of Apparel and Clothing Accessories (Knitted)	20.683
27	Mineral Fuels	24.066
64	Footwear	66.322
62	Articles of Apparel and Clothing Accessories (Not-Knitted)	131.378
	<b>Total Products</b>	<b>282.338</b>

Source : Eurostat.COMEXT.

\* Differences between the export value in 1993 and the export value in 1992. The ten products recording the biggest decreases are presented in descending order, the ten products recording the biggest increases are presented in ascending order.



**Statistical Appendix - Table C**  
**Share of Some Asian Countries in EC Imports\* (in %)**  
**(Without Intra Trade)**

(Fuels Included)	1988	1992
Agricultural Products	2.3	1.8
Food	9.3	8.2
Raw Material & Fuels	0.1	0.2
Chemicals	5.1	3.3
Leather Products	24.4	10.3
Textile Products	5.5	5.8
Clothing	14.3	8.3
Wood and Paper	4.7	4.8
Building Materials	12.5	8.1
Glass	3.4	3.9
Iron and Steel	3.9	2.9
Non-Ferrous Metal	1.1	1.4
Engineering Products	5.5	5.8
Transport Equipment	1.9	2.0
Electrical Machinery	12.4	8.3
NEC	6.3	6.0
Manufactured Products	7.0	5.5
<b>Total</b>	<b>5.5</b>	<b>4.4</b>

Source : Eurostat.COMEXT.

\* South Korea, Taiwan, Malaysia, Philippines, Indonesia.

**Statistical Appendix - Table D**  
**Share of North African Countries in EC Imports\* (in %)**  
**(Without Intra Trade)**

(Fuels Included)	1988	1992
Agricultural Products	2.3	2.7
Food	1.7	1.8
Raw Material & Fuels	7.9	7.5
Chemicals	1.3	1.0
Leather Products	1.6	2.3
Textile Products	1.2	1.2
Clothing	7.5	9.4
Wood and Paper	0.2	0.2
Building Materials	0.3	0.5
Glass	0.1	0.1
Iron and Steel	0.8	0.4
Non-Ferrous Metal	0.5	0.5
Engineering Products	0.1	0.1
Transport Equipment	0.3	0.8
Electrical Machinery	0.5	0.7
NEC	0.3	0.2
Manufactured Products	0.9	1.2
<b>Total</b>	<b>2.2</b>	<b>2.6</b>

Source : Eurostat.COMEXT.

\* Algeria, Morocco, Tunisia.

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