ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΙΑΣ

ΤΜΗΜΑ ΜΗΧΑΝΙΚΩΝ ΧΩΡΟΤΑΞΙΑΣ ΚΑΙ ΠΕΡΙΦΕΡΕΙΑΚΗΣ ΑΝΑΠΤΥΞΗΣ

ΣΕΙΡΑ ΕΡΕΥΝΗΤΙΚΩΝ ΕΡΓΑΣΙΩΝ

A EUROPEAN MACRO-REGION IN THE MAKING?
THE BALKAN TRADE RELATIONS OF GREECE*

95-02

George Petrakos



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1. Introduction

The process of transition in Central and Eastern European Countries (CEEC)¹ gives Europe an opportunity to expand but also re-orient economic and especially trade relations. As the artificial barriers in Central and Southern Europe are gradually removed, a larger economic space is created, in which the intensity and the type of economic relations are largely determined by geographical factors such as adjacency and proximity (Peschel 1990, Krugman 1993) and often by historical, cultural and other non-economic preference factors.

As distance related transportation costs will always set limits to the reach of goods and services and therefore to the geographical size of the markets, regional trade areas will be created, within which trade relations will be more intensive, and perhaps of different type. This short of geographical preference or clustering in trade relations, is an efficiency driven process in order for countries to fully exploit opportunities and benefits from exchange. It is also a rational reaction for peripheral countries that attempt to reduce or offset disadvantages of perimetric location or isolation, with respect to the gravity center of Europe.

In parallel with the transition process in CEEC, another equally complex, conflicting and challenging process that is taking place in Europe, is that of economic integration, with major elements the Single European Market, the Maastricht policies towards the Economic and Monetary Union and the enlargement of the European Union. This process, that involves states with different levels of development and different endowments of resources and technology, is considered to generate severe pressure for adjustment to the less advanced Southern European countries (CEC 1991, Amin et.al 1992) that have recently internationalized their economies with unsolved, in most cases, problems of efficient organization of their productive bases.

Especially for Greece, this process has intensified the structural difficulties and has coincided with the contraction of the industrial base of the economy and the concentration of activities in the less exposed to international markets tertiary sector. It has been claimed that an important source of these difficulties is the perimetric

¹For a discusion of the characteristics of this process see Hare(1991), Roland(1993), Wetzman(1993), Jackson and Bilsen(1994), Swinnen(1994), Jackson and Biesbrouck(1995), Jackson, Koltay and Biesbrouck(1995).

position of the country with respect to the European economic gravity centers (Petrakos and Zikos 1994). As a result, the recent developments in CEEC and especially in the Balkans should be seen and examined from the stand point of removing isolation and peripherality, by taking advantage of the opening of a large, new and accessible market in which Greece has at least the advantage of proximity. They should also be examined from the standpoint of creating opportunities for a new set of economic interaction with a long term impact on the economic geography of Europe.

The purpose of this paper is to examine, on the basis of existing experience, the trade patterns of Greece with the Balkan countries and especially Albania and Bulgaria. In the next section we examine the general trends in trade, in section 3 we examine the sectoral trade trends, in sections 4 and 5 we examine measures of revealed comparative advantage and intra-industry trade and in section 6 we draw our conclusions. In all sections the trade figures of Greece with the Balkan countries (BCs) are compared to those with the EU countries (EU11) and to figures of total trade.

2. General Trends in the Trade of Greece with the Balkan Countries

Trade relations between neighboring countries are by far the most important aspect of economic interaction and cooperation as they generate the well known benefits from exchange and specialization and can be a vehicle for growth and development. Furthermore, trade relations promote more intensive social interaction and understanding between different countries, broaden the area of common interests and in that sense help to maintain peace and stability in a region. In this section, we examine in a comparative basis the evolution, the characteristics and the structure of trade relations between Greece and Albania, Bulgaria and the BCs as a whole for the period 1989-1993². More specifically we examine the post-1989 trends in exports, imports, volume of trade (VOT) and balance of trade (BOT) of Greece with Albania, Bulgaria and the Balkan countries and make comparisons with the trends in the trade

²For the pre-1989 period see Charalambidou, Christodoulakis and Penglis(1993) and Christodoulakis and Penglis(1993). For the first years of transition see Dimelis and Gatsios(1994), while for an early assessment of transition on EU trade see CEC(1993).

of Greece with the other members of the European Union (EU12) and the rest of the

world.

2.1 Greek Imports and Exports with Albania, Bulgaria and the BCs

The evolution of Greek trade with Albania, Bulgaria and the BCs is given in Table 1

and Figures 1, 2, 3 and 4. From the examination of the data we can make the

following observations:

• The value of Greek exports to Albania in USD has increased in the period 1989-

1993 by 572%, accounting in 1993 for 1.5% of total Greek exports. Figures for the

first six months of 1994 (not shown in Table) raise this figure to 2.3% of total Greek

exports.

• The value of Greek exports to Bulgaria in USD has increased in the period 1989-

1993 by 342%, accounting in 1993 for 3.6% of total Greek exports. Figures for the

first six months of 1994 raise this share to 5.4% of total Greek exports.

• As a result, the joint share of Greek exports to Albania and Bulgaria has reached

5.1% of total exports in 1993 and 7.7% of total exports in the first six months of

1994, a far increase from the 1.15% figure of 1989.

• The value of Greek exports to the BCs in USD has increased in the period 1989-

1993 by 189%, accounting in 1993 for 8.2% of total Greek exports. Figures for the

first six months of 1994 raise this figure to 14%, which indicates a major

development in the structure of Greek exports in a short period of time when

compared to 3.1% which is the 1989 figure.

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TABLE 1 Trade of Greece with Albania, 1989-93

	Ē	EXPORTS		M	MPORTS		Volume (Of Trade	Volume Of Trade Balance Of Trade	
	Value	INDEX	Share	Value	INDEX	Share	(VOT)	(T)	(BOT)	EXPORTS/IMPORTS
EAR	AR (in thousand US\$)			(in thousand US\$)			Value	INDEX	Value	
989	18781		0,25%	7496		0,05%	26277	100,001	11285	2.51
990		94,88	0,22%	12283	163,86	%90'0	30103	114,56		1,45
991	12212		0,14%	11876	158,43	%90'0	24088	91,67	336	1,03
992			0,42%	18087	241,29	0,08%	59350	225,86	23176	2,28
993	126315	672,57	1,50%	15432	205,87	0,07%	0,07% 141747	539,43	110883	8,19

Trade of Greece with Bulgaria, 1989-93

	EXPORTS/IMPORTS		:	2 0,49			1.54
Volume Of Trade Balance Of Trade	(BOT)	Value	-467	-55132	-40743	6167	105791
Of Trade	(VOT)	INDEX	100,00	117,06	157,22	238,51	364,07
Volume	ON)	Value	0,45% 137593	161062		05% 328171	1,29% 500933
	Share		0,45%	0,70%	0,84%	1,05%	1.29%
IMPORTS	INDEX		100,00		186,20	233,23	286.21
IMI	Value	(in thousand US\$)	08069	108097	128533	161002	197571
	Share		%06'0	Ō	1,01%	1,70%	3.60%
EXPORTS	INDEX		100,00	77,25	128,04	243,82	442,46
EX	Value	YEAR (in thousand US\$)	68563	52965	87790	167169	303362
		YEAR	1989	1990	1991	1992	1993

Trade of Greece with Balkans, 1989-93

	Ê	EXPORTS		IWI	IMPORTS		Volume Of Trade		Balance Of Trade	
	Value	INDEX	Share	Value	NDEX	Share	(VOT)	7	(BOT)	EXPORTS/IMPORTS
YEAR	YEAR (in thousand US\$)			(in thousand US\$)			Value	INDEX	Value	
1989	239138		3,16%		383765 100,00	2,50%	622903	100,001	-144627	0.62
1990	310093	129,67	3,88%		121,09	3,03%	774809	124,39		0,67
1991	344739	144,16	3,98%	456782	119,03	2,97%	801521	128,68	-112043	0,75
1992	390540		3,96%	319668	83,30	2,08%	710208	114,02	70872	1,22
1993	692545	289,60	8,21%	329455	85,85	2,14%	1022000	164,07	363090	2,10

Trade of Greece with the E.U, 1989-93

	E)	EXPORTS		JWI	IMPORTS		Volume (Of Trade	Volume Of Trade Balance Of Trade	
	Value	INDEX	Share	Value	INDEX	Share	(VOT)	E	(BOT)	EXPORTS/IMPORTS
YEAR	YEAR (in thousand US\$)			(in thousand US\$)			Value	INDEX	Value	
1989			65,20%		100,001	64,72%	148817	100,001	-4998360	0.50
1990	5095693		63,73%	12628215 127,04 65,55% 177239	127,04	65,55%	177239	119,10	-7532522	
1991	5505757	111,41	63,51%	12869296	129,47	62,36% 183750		123,47	-7363539	0,43
1992	6448628	130,49	65,39%	14648034	147,36	64,56% 210966	210966	141,76	-8199406	0,44
1993	4718358	95,48	55,95%	13172399	132,52	63,96% 178907	-	120,22	-8454041	0,36

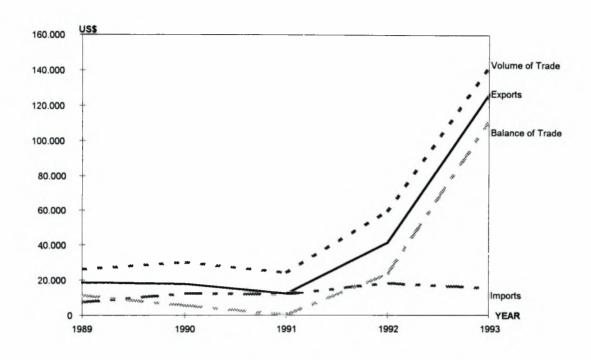
Total Trade of Greece, 1989-93

	EXPORTS/IMPORTS		3 0.49				
Balance Of Trade	(BOT)	Value	8/508//-	-11268527	-11967531	-12828412	-12161013
Volume Of Trade	(VOT)	INDEX	100,00	118,84	127,75	141,91	126,55
Volume	Š	Value	229383	272608	293045	325524	290284
	Share		100,00%	125,43 100,00% 272608	134,35 100,00% 293045	147,73 100,00% 325524	134 08 100 00% 290284 126 55
IMPORTS	INDEX		100,00	125,43	134,35	147,73	134,08
MI	Value	(in thousand US\$)	15359478 100,00 100,00% 229383	19264709	20636049	22690419	20594736
	Share		100,00%	100,00%	100,00%	100,00%	100,00%
EXPORTS	INDEX			105,51	114,38	130,12	111,28 100
EX	Value	EAR (in thousand US\$)	7578900	7996182	8668518	9862007	8433723
		EAR	989	990	1991	1992	993

Source : Export Research Center Panhellenic Exporters Association

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<u>Figure 1</u> Greek Exports, Imports, Volume of Trade and Balance of Trade with Albania, 1989-1993



<u>Figure 2</u> Greek Exports, Imports, Volume of Trade and Balance of Trade with Bulgaria, 1989-1993

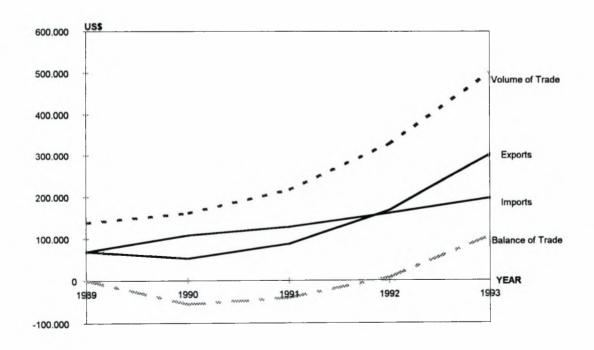
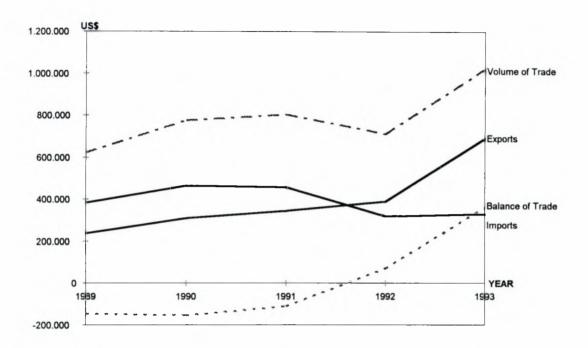
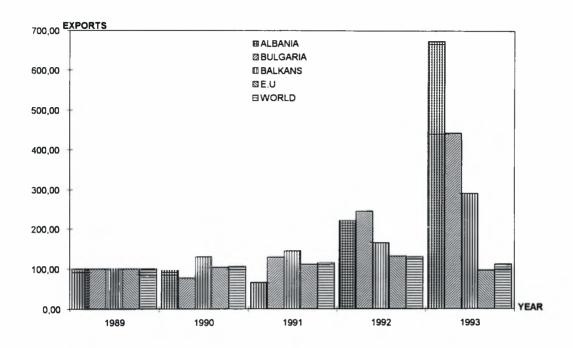
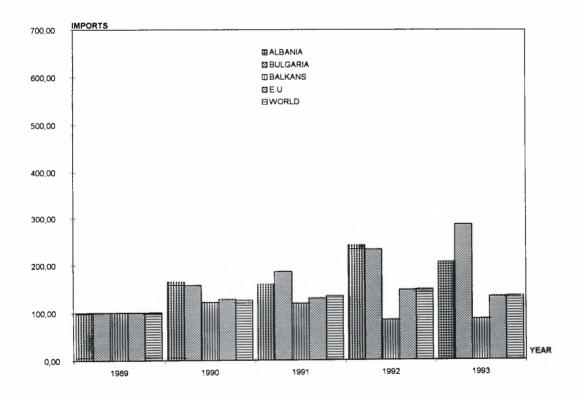


Figure 3 Greek Exports, Imports, Volume of Trade and Balance of Trade with the Balkans, 1989-1993



<u>Figure 4</u> Index of Greek Exports and Imports with Albania, Bulgaria, the Balkans, the E.U and the World.





These impressive increases come in a period where Greek exports to the EU have

decreased in dellar value because of the

decreased in dollar value, because of the appreciation of the drachma which is the

outcome of anti-inflationary policies in Greece. Similar trends of declining dollar

value of exports (but smaller in magnitude) are also found in total Greek exports.

• The Greek exports to Bulgaria account in 1993 for about 45% of Greek exports to

the BCs and are higher than the Greek exports to Albania (although they grow

slower), due to the larger size and the greater capacity of the market in Bulgaria.

The value of Greek imports from Albania in USD has increased in the same period

by 105%.

• The value of Greek imports from Bulgaria in USD has increased in the same period

by 186%

• Greek imports from Bulgaria have increased faster and have a higher value in

1993, due to the larger size and the better conditions existing in the Bulgarian

economy

The share of Greek imports from Albania have increased in the 1989-1993 period.

but it still remains (in 1993) under 0.1% of Greek imports.

• The share of Greek imports from Bulgaria has increased almost 3 times in the

same period to 1.3% of Greek imports.

• Greek imports from the BCs as a whole have declined in the 1989-1993 period, a

fact that is clearly related with the conflict in former Yugoslavia. As a result the

share of Greek imports from the BCs has declined from 2.5% in 1989 to 2.14% in

1993.

2.2. The Volume and Balance of Trade

As a result of the expansion of exports and imports of Greece with the BCs and

especially with Albania and Bulgaria, the volume of trade (VOT) has increased by

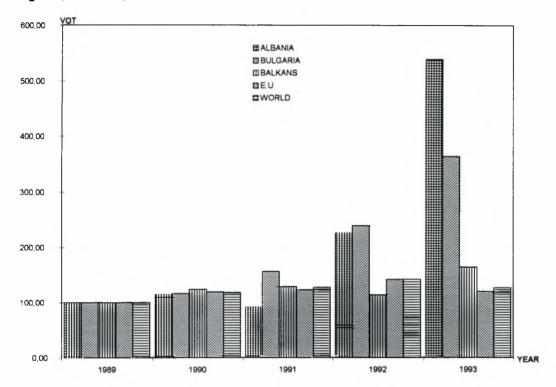
439% in the case of trade with Albania, 264% in the case of trade with Bulgaria and

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64% with BCs in the 1989-1993 period (Figure 5). The magnitude of this increase can be better appreciated if compared to the 20% and 26% increase in the Greek VOT with the EU and the rest of the World respectively. This explosive expansion of trade between Albania, Bulgaria and Greece indicates that the geographical, historical, cultural or other positive parameters that favor cross-border interaction and trade are to a large extent exploited in the area.

<u>Figure 5</u> Index of the Greek Volume of Trade (Exports+Imports) with Albania, Bulgaria, Balkans, the E.U and the World.



As expected due to the difficulties of the transition process, but also due to the conflict in Yugoslavia, Greece has increased faster its exports than its imports. As a result, its balance of trade (BOT) is positive and increasing in the case of trade with Albania and has turned from negative to positive in the case of trade with Bulgaria and the BCs.

2.3. Export/Import Ratios

The export/import ratio measures the value of exports of Greece that correspond to a dollar of imports. A ratio greater than one means that every dollar of imports in Greece

from another country is more than matched by Greek exports to the same country.

Therefore, higher than one values indicate a positive for Greece BOT, while lower

than one values indicate a negative balance of trade.

Another way to interpret this ratio is to think of it as the degree of relative penetration

of a foreign market by Greek products. Looking at the export/import ratio in Table 1.

we can make the following observations:

The Greek export/import ratio with Albania is greater than one and increasing over

time.

• The Greek export/import ratio with Bulgaria has turned from smaller than one to

greater than one and it is increasing over time. The same holds for the Greek ratio

with the BCs.

• The Greek export/import ratio with the EU dropped from 0.5 in 1989 to 0.36 in

1993, indicating that for each dollar of imports from the EU, Greece manages to

export to the EU countries products worth only \$ 0.36.

• Similarly, and to a certain extent affected by the relative weight of the Greek-EU

trade, the export/import ratio of Greece with the rest of the World has declined from

0.49 in 1989 to 0.41 in 1993.

The observations made above, indicate that in the post-1989 period two different in

direction processes take place with respect to the Greek performance in international

markets. On the one hand there is the deteriorating position of Greek exports in the

EU and World markets and on the other hand, there is a successful in all terms,

export performance in the neighboring Balkan countries.

Interpreting these facts, it becomes obvious that the competitiveness of the Greek

economy in the EU and World markets is at low levels and declining, while its

competitiveness in the Balkan countries is in high levels and increasing.

It is interesting to observe in these figures that despite the existence of the single

European market and the fact that the Greek products do not face anymore tariff or

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non-tariff barriers in the EU, their ability to penetrate the EU market is lower,

compared to Balkan and World markets where certain barriers to trade exist. This may

be an indication of the difficulties of integration among basically unequal partners and

the fact that the qualitative standards of the EU market are higher and more difficult to

meet than that of the World (and certainly the Balkan) markets. It may also be an

indication that geography is, after all, an important factor that affects the trade

performance of a country.

3. Sectoral Trends in the Trade of Greece with the BCs.

Besides the examination of the evolution of exports, imports, export/import ratios and

the VOT, a question that frequently arises is related to the sectoral structure and

composition of trade between two countries. The issues usually examined are those

of inter-industry or intra-industry specialization, that is whether two countries tend to

specialize and trade products that belong to different industries or tend to trade more

intensively products within the same industry. The first is known as inter-industry or

Heckscher-Ohlin (H-O) type of trade, while the second as intra-industry type of trade

(IIT).

The standard international trade theory has shown that in the case of H-O type of

trade, where countries specialize in different products and then exchange them, there

are well defined welfare gains for them, known as gains from specialization and gains

from exchange. H-O type of relations, however, have also been criticized as suitable

only for countries with comparable levels of development, because in the case of trade between a developed and a less developed country, the second will necessarily

specialize in primary sector, labor-intensive or raw material-intensive products,

missing the opportunity to industrialize and therefore missing the opportunity to

develop.

Also the H-O type of trade relations are considered to cause in several cases severe

adjustments to the productive base of a country (that attempts to fit within trade

relations) as some sectors shrink and some others expand, a process that is usually

followed by social friction.

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On the other hand, trade within the same industry is usually associated with welfare

gains to the extent that consumer preference functions have an additive form, that is,

consumers feel better when offered a greater selection of similar products. IIT is not

associated with major structural adjustments (as they take place within the industry or

even within the firm), it characterizes neighboring countries with similar levels of

development and similar tastes.

IIT it is also often used as a measure of economic integration. That is, the higher the

level of IIT between two countries, the greater the similarities in their productive

bases, the more homogeneous their consumer preferences and therefore the greater

the degree of economic integration. On the other hand, the higher the level of H-O

type of trade between two countries, the higher the possibility to have dissimilar

productive bases and development levels.

In this section we will attempt to examine the sectoral structure of trade between

Greece and the BCs with an emphasis on the trade of Greece with Albania and

Bulgaria, making, where necessary, comparisons with the sectoral structure of trade

between Greece and the (rest of the) EU countries and total Greek trade.

3.1 Trade by Large Categories of Products

In Tables 2 - 6 we present aggregate sectoral data for the trade of Greece with

Albania, Bulgaria, the BCs and EU, as well as total trade. The aggregate sectors

considered are agricultural products (SITC 0+1+4), raw materials (SITC 2), fuels (SITC

3) and industrial goods (SITC 5-8). From the examination of the data we can make a

number of observations:

3.1.1 Greek Trade with Albania

· Over-time, the Greek exports to Albania are concentrated in the sectors of

industrial goods (48% in 1993) and agricultural products (46% 1n 1993). Raw

materials have diminished and have almost been eliminated both in value and

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share of Greek exports, while fuels are represented with an increasing value but

small and decreasing share.

• Greek imports from Albania show a more mixed pattern at the sectoral level. The

largest categories are industrial goods (46% in 1993) and fuels (30% in 1993), both

showing however significant fluctuations over time. On the other hand the share of

agricultural products is increasing over time but remains relatively small (15.9% in

1993), while the share of raw materials decreases in a rather drastic way over time.

The sectoral trade balances of Greece with Albania are consistently positive in the

categories of industrial and agricultural products and negative or mixed in the two

other smaller categories. For the entire period 1989-1993, Greece has a positive

balance of trade in all except the fuels category where Albania has a positive

balance of trade.

3.1.2 Greek Trade with Bulgaria

The largest category of Greek exports to Bulgaria is industrial products (41% in

1993) and the second largest is agricultural products with increasing over-time

value of exports, but fluctuating and relatively stable shares in total exports (30% in

1993). Raw materials maintain a constant value and a diminishing share in Greek

exports, while fuels have increased both their value and share (24% in 1993).

• The largest category of Greek imports from Bulgaria is by far industrial products

with increasing value and share (62% in 1993). Agricultural products maintain a

relatively stable but low share (14% in 1993), while the share of raw materials is

declining over time (10% in 1993).

Sectoral trade balances are mixed over sector and over time. In agricultural

production, Greece seems to have a positive and increasing trade balance, while

the same holds in the case of fuels. On the other hand, Bulgaria has a positive

trade balance in raw materials and also in industrial goods (for the entire period

except 1993). Note that the largest contributor to the positive trade balance of

Greece in 1993 are agricultural products and fuels, while the largest contributor to

the positive Bulgarian balance of trade are raw materials and industrial goods.

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TABLE 2 Trade of Greece with Albania, 1989-93 by Large Categories of Products

1989 1990 1991 1992 33 20,4% 21,8% 19,5% 36,1% 59 38,5% 24,7% 19,3% 5,0% 55 7,0% 4,2% 5,0% 11,2% 53 33,9% 49,2% 56,2% 47,7% 51 100,0% 100,0% 100,0% 100,0%							GREEK EXPORTS	PORTS						
(value in thousand US \$) 3826 3881 2379 14887 59130 84103 20,4% 21,8% 19,5% 36,1% 7232 4406 2362 2051 1078 17129 38,5% 24,7% 19,5% 36,1% 1323 743 606 4624 4559 11855 7,0% 4,2% 5,0% 11,2% 6372 8775 6858 19701 61357 103063 33,9% 49,2% 56,2% 47,7% 18781 17820 12212 41263 126315 216391 100,0% 100,0% 100,0% 100,0%	SITC	Large categories	1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1993 1989-93
3826 3881 2379 14887 59130 84103 20,4% 21,8% 19,5% 7232 4406 2362 2051 1078 17129 38,5% 24,7% 19,3% 1323 743 606 4624 4559 11855 7,0% 4,2% 5,0% 6372 8775 6858 19701 61357 103063 33,9% 49,2% 56,2% 18781 17820 12212 41263 126315 216391 100,0% 100,0% 100,0%		of products			(value in tho	usand US \$)					(% stru	cture)		
7232 4406 2362 2051 1078 17129 38,5% 24,7% 19,3% 1323 743 606 4624 4559 11855 7,0% 4,2% 5,0% 6372 8775 6858 19701 61357 103063 33,9% 49,2% 56,2% 18781 17820 12212 41263 126315 216391 100,0% 100,0% 100,0%	0+1+4	Agricultural products	3826	3881		14887		84103	20,4%	21.8%	19.5%		46.8%	38.9%
1323 743 606 4624 4559 11855 7,0% 4,2% 5,0% 6372 8775 6858 19701 61357 103063 33,9% 49,2% 56,2% 18781 17820 12212 41263 126315 216391 100,0% 100,0% 100,0%	7	Raw materials	7232	4406		2051	1078	17129		24,7%	19,3%		%6.0	7.9%
6372 8775 6858 19701 61357 103063 33,9% 49,2% 56,2% 18781 17820 12212 41263 126315 216391 100,0% 100,0% 100,0%	က	Fuels	1323	743		4624	4559	11855					3.6%	5.5%
18781 17820 12212 41263 126315 216391 100,0% 100,0% 100,0%	5- 8-	Industrial goods	6372	8775		19701	61357	103063	33,9%		ų)	47,7%	4	47,6%
	6-0	Total	18781	17820	12212	41263	126315	216391	100,0%	100,0%	100,0%	100,0%	100.0%	100.0%

						GREEK IMPORTS	PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1993 1989-93
	of products			(value in tho	lue in thousand US \$					(% structure)	cture)		
0+1+4)+1+4 Agricultural products	633	912	1104		2455				9,3%	ı	15.9%	ı
7	Raw materials	3091	2884	2153	1627	1214				18,1%		7,9%	
ო	Fuels	58	3160		10615	4668	24169			47,7%		30,2%	
5 8	Industrial goods	3714	5327	2951	3165	7095		49,5%	43,4%	24,8%	17,5%	46,0%	34,1%
6-0	0-9 Total	7496	12283	11876	18087	15432	65174 1	100,0%	100,0%	100,0%		T	-

Large categories 1989 1990 1992 1207 424<					TRADE B	TRADE BALANCE		
(value in thousand US \$) 3193 2969 1275 12207 424 4141 1522 209 424 1265 -2417 -5062 -5991 2658 3448 3907 16536 11285 5537 336 23176 1	SITC	Large categories	1989	1990	1991	1992	1993	1989-93
3193 2969 1275 12207 4141 1522 209 424 1265 -2417 -5062 -5991 2658 3448 3907 16536 11285 5537 336 23176 1		of products)	value in tho	usand US \$)		
4141 1522 209 424 1265 -2417 -5062 -5991 2658 3448 3907 16536 11285 5537 336 23176	0+1+4	Agricultural products	3193	2969	1275	12207	56675	76319
Fuels 1265 -2417 -5062 -5991 Industrial goods 2658 3448 3907 16536 Total 11285 5537 336 23176	7	Raw materials	4141	1522	209	424	-136	6160
Industrial goods 2658 3448 3907 16536 Total 11285 5537 336 23176	က	Fuels	1265	-2417	-5062	-5991	-109	-12314
Total 11285 5537 336 23176	5-8	Industrial goods	2658	3448	3907	16536	54262	80811
	6-0	Total	11285	5537	336	23176	110883	151217

Source : Export Research Center Panhellenic Exporters Association

TABLE 3 Trade of Greece with Bulgaria, 1989-93 by Large Categories of Products

						GREEK EXPORTS	(PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993 1989-93	1989-93
	of products			(value in tho	usan					(% structure)	cture)		
0+1+4	0+1+4 Agricultural products	17282	16431		цŋ	93391	197210	25,2%	31,0%	22,5%			29,0%
7	Raw materials	10370	10157		8327	10250	56580	15,1%	19,2%	19,9%	2,0%	3,4%	8,3%
က	Fuels	4322	4487	16313	50132	73690	148944	6,3%	8,5%	18,6%			21.9%
κυ φ	5-8 Industrial goods	35248	21123		58086	125468	273781	51,4%	39'6%	38,6%	34,7%	41,4%	
6-0	0-9 Total	68563	52965	87790	167169	303362	679849	100,0%	100,0% 100,0%	100,0%	100,0% 100,0% 100,0%	100,0%	T-

						GREEK IMPORTS	PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93	1989	1990	1991 1992	1992	1993	1993 1989-93
	of products)	(value in thousand US \$)	usand US \$)						cture)		
0+1+4	0+1+4 Agricultural products	13426	17539	19803	23306	28066	102140	19,4%	16,2%	15,4%	14.5%	14.2%	15.4%
7	Raw materials	15674	14933	21262	26747	19591	98207	22,7%	13,8%	16,5%	16,5% 16,6%	%6.6	
ო	Fuels	4392	24877	14871	2380	26150	72670	6,4%	23,0%	11,6%	1,5%	13,2%	10.9%
5- 8-	5-8 Industrial goods	35538	50748	72597	108569	123764	391216	51,5%	46,9%	26,5%	67,4%	62,6%	58,9%
6-0	0-9 Total	69030	108097	128533	161002	197571	664233	100,0%	100,0% 100,0% 100,0% 100,0% 100,0%	100,0%	100,0%	100,0%	100,0%

				TRADE B	RADE BALANCE		
SITC	Large categories	1989	1990	1991	1992	1993	1989-93
	of products			value in thousand US \$	usand US \$)		
0+1+4	+1+4 Agricultural products	3856	-1108	-44	27041	65325	95070
7	Raw materials	-5304	-4776	-3786	-18420	-9341	-41627
က	Fuels	-70	-20390	1442	47752	47540	76274
5-8	Industrial goods	-290	-29625	-38741	-50483	1704	-117435
6-0	Total	-467	-55132	-40743	6167	105791	15616

Source: Export Research Center Panhellenic Exporters Association

TABLE 4 Trade of Greece with Balkans, 1989-93 by Large Categories of Products

						GREEK EXPORTS	PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1993 1989-93	1989 1990	1990	1991	1992	1993 1989-93	1989-93
	of products)	(value in tho	usand US \$)					(% structure)	cture)		
0+1+4	0+1+4 Agricultural products	45729	100403	128752	128752 167739	229016	6211639	19,1%	1	37,3%	43,0%	33,1%	
7	Raw materials	79455	70114	60640	27201	48166	285576			17,6%	7.0%	7.0%	14.4%
ო	Fuels	15872	30057	56151	71376	156782	330238	%9'9	6,7%	16,3%	18,3%	22,6%	16,7%
5-8	5-8 Industrial goods	90156	100772	96493		257450	668396 37,7% 32,5% 28,0% 31,6% 37,2% 33,8%	37,7%	32,5%	28,0%	31,6%	37,2%	33,8%
6-0	0-9 Total	239138	310093	344739	390540	692545	1977055	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

						GREEK IMPORTS	PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93	1989 1990		1991 1992	1992	1993	1993 1989-93
	of products)	(value in thou	usand US \$					(% structure)	cture)		
0+1+4	0+1+4 Agricultural products	88778	89899	91515	50411	47156	367759	23,1%	19,3%	20,0%	15,8%	14.3%	18.8%
7	Raw materials	41256	42689	41332	40425	26154	191856	10,8%			12,6%	7,9%	9.8%
ო	Fuels	23127	70488	72549	19754	32736	218654	%0'9		`	6,2%		11.2%
5-8	Industrial goods	230585	261640	251386	209078	223409	1176098	60,1%	26,3%	55,0%	65,4%	_	60,2%
6-0	0-9 Total	383765	464716	456782	319668	329455	1954386	100,0%	100,0% 100,0% 100,0% 100,0%	100,0%	100,0%	100,0%	100,0%

				I KADE BALANCE	ALANCE		
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93
	of products)	value in thousand US \$	usand US \$)		
0+1+4	+1+4 Agricultural products	-43049	10504	37237	117328	181860	303880
7	Raw materials	38199	27425	19308	-13224	22012	93720
က	Fuels	-7255	-40431	-16398	51622	124046	111584
5-6	Industrial goods	-140429	-160868	-154893	-85553	34041	-507702
6-0	Total	-144627	-154623	-112043	70872	363090	22669

Source: Export Research Panhellenic Exporters Association

TABLE 5 Trade of Greece with the E.U, 1989-93 by Large Categories of Products

						GREEK EXPORTS	(PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93 1989 1990	1989	1990	1991 1992	1992	1993	1993 1989-93
	of products			(value in tho	lue in thousand US \$)					(% structure)	cture)		
0+1+4	0+1+4 Agricultural products	1735585	1668434	1865205	2297486	1557941	9124651	35,1%	32.7%	33.9%	35.6%	33.0%	34.2%
7	Raw materials	286013	255342	256633	260947	215266	1274201	2,8%	5,8% 5,0%	4.7%	4.7% 4.0%	4 6%	
n	Fuels	165617	231995	187729	126487	60718	772546	3,4%	4,6%	3,4%	2,0%	1,3%	2.9%
5-8	5-8 Industrial goods	2601948	2818724	3063497			2834787 14959084 52,7% 55,3% 55,6% 56,4% 60,1% 56,0%	52,7%	55,3%	25,6%	56,4%	60,1%	26,0%
6-0	0-9 Total	4941701	5095693	5505757	6448628		26710137	100,0%	100.0%	100.0%	100.0%	100 0%	100 0%

						GREEK IMPORTS	PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1991 1992	1993	1993 1989-93
	of products)	(value in thousand US \$)	usand US \$)					(% structure)	cture)		
0+1+4	products	1961381	2299029	2316382	2726683		2551934 11855409	19,7%	18,2% 1	18,0%	18,0% 18,6%	19.4%	18.7%
7	Raw materials	221433	256116	269501	258114	221732	1226896	2,5%	2,0%	2,1%	1,8%	1.7%	
ო	Fuels	68745	125473	106815	133382	104518	538933	0,7%	1,0%	%8'0	%6'0	0,8%	
5-8	5-8 Industrial goods	7676273	9939878	10169572 11509063	11509063	10250519 49545305	49545305	77,2%	78,7%	%0'62	%9'82	77,8%	78,3%
6-0	0-9 Total	9940061	9940061 12628215 12869296 14648034 13172399 63258005 100,0% 100,0% 100,0% 100,0% 100,0% 100,0% 100,0%	12869296	14648034	13172399	63258005	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

				TRADE BALANCE	ALANCE		
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93
	of products)	value in thousand US	usand US \$)		
0+1+4	+1+4 Agricultural products	-225796	-630595	-451177	-429197	-993993	-2730758
7	Raw materials	64580	-774	-12868	2833	-6466	47305
က	Fuels	96872	106522	80914	-6895	-43800	233613
5-8	Industrial goods	-5074325	-7121154	-7106075	-7868935	-7415732	-34586221
6-0	0-9 Total	-4998360	-7532522	-7363539	-8199406	-8454041	-8454041 -36547868

Source : Export Research Center Panhellenic Exporters Association

TABLE 6 Total Trade of Greece, 1989-93 by Large Categories of Products

						GREEK EXPORTS	(PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1989-93 1989	\Box	1990	1991	1991 1992 1993 1989-93	1993	1989-93
	of products			(value in thousand US \$)	usand US \$)					(% structure)	icture)		
0+1+4	0+1+4 Agricultural products	2303266	2366773	2639672	3293866	2500242	2500242 13103819 30,4% 29,6%	30,4%		30,5%	33.4%	29.6%	30.8%
7	Raw materials	525722	455437	456356	426333	486623	2350471	%6,9		5,3%	5,3% 4,3%		
က	Fuels	412201	586069	773843	519481	661518	2953112	5,4%	_	8,9%	5.3%		
5-8	5-8 Industrial goods	4131056	4405563	4604608	5390093	4669923	4669923 23201243	54,5%	55,1%	53,1%	54,7%	55,4%	54,5%
6-O	0-9 Total	7578900	7996182	8668518	9862007	8433723	8433723 42539330 100,0% 100,0% 100,0% 100,0% 100,0% 100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

						GREEK IMPORTS	PORTS						
SITC	SITC Large categories	1989	1990	1991	1992	1993	1993 1989-93 1989		1990	1991	1992	1993 1989-93	1989-93
	of products			(value in tho	lue in thousand US \$					(% structure	_		
0+1+4	0+1+4 Agricultural products 2534958	2534958	2924601	2918157	3313620	3003827	3003827 14695163		15,2%	14.1%	14.1% 14.6%	14.6%	14.9%
7	Raw materials	868579	984927	963344	752702	640738	4210290		5,7% 5,1%	4.7%	3,3%	3.1%	4 3%
က	Fuels	1029466	1522967	2069791	2295721	2336658	9254603	6,7%	7,9%	10,0%	•	11.3%	9.4%
5-8	5-8 Industrial goods	10873532	10873532 13776922	14634423 16223270	16223270	14545986	70054133	70,8%	71,5%	%6,07	71,5%	%9'02	_
6-0	0-9 Total	15359478	15359478 19264709 20	20636049	22690419	0636049 22690419 20594736 98545391 100,0% 100,0% 100,0% 100,0% 100,0% 100,0%	98545391	100,001	100,0%	100,0%	100,0%	100,0%	100.0%

				TRADE E	TRADE BALANCE		
SITC	SITC Large categories	1989	1990	1991	1992	1993	1993 1989-93
	of products			(value in tho	(value in thousand US \$)		
0+1+4	0+1+4 Agricultural products	-231692	-557828	-278485	-19754		-503585 -1591344
8	Raw materials	-342857	-529490	-506988	-326369	-154115	-154115 -1859819
ო	Fuels	-617265	-936898	-1295948	-1776240	-1675140	-1675140 -6301491
5 8	5-8 Industrial goods	-6742476	-9371359	-10029815	-6742476 -9371359 -10029815 -10833177	-9876063	-9876063 -46852890
0-9 Total	Total	-7780578	-11268527	-11967531	-7780578 -11268527 -11967531 -12828412 -12161013 -56006061	-12161013	-56006061

Source : Export Research Center Panhellenic Exporters Association



3.1.3 Greek Trade with the Balkan countries

The largest categories of Greek exports to the Balkan region as a whole are

agricultural and industrial products with a share of 34.0% and 33.8% for the 1989-

1993 period respectively. The share of agricultural products is rather increasing over

time while the share of industrial is decreasing up to 1991 and increasing thereafter.

Raw materials have a continuously increasing and fuels a continuously decreasing

share in Greek exports. As a result, fuels is in 1993 the third largest exporting

category with 22.6% of Greek exports.

The largest category of Greek imports from the Balkan countries is industrial goods

with an increasing share after 1991, equal to 60.2% for the entire 1989-1993 period.

Agricultural products is the second largest importing category with an 18.8% share for

the period 1989-1993 and diminishing trends, followed by fuels with an 11.2% and

raw materials with a 9.8% share of total Greek imports. The share of raw materials is

over time declining, while the share of fuels is fluctuating.

The Greek balance of trade with the other Balkan countries is improving over time in

all sectors. It turned from negative in 1989 to positive in 1990 and thereafter in

agricultural products, it is consistently positive (except 1992) in raw materials, it turned

from negative in the 1989-1991 period to positive in the 1992 and 1993 for fuels and

also turned from negative in the 1989-1992 period to positive in 1993 for industrial

goods. For the entire 1989-1993 period the negative balance of trade in industrial

goods is more than offset by the positive balance of trade in all other categories.

Following these trends, the most likely projection for the near future is that Greece will

run a positive and perhaps increasing balance of trade with the other Balkan countries in all sectors of production with the greatest one being in the agricultural and the fuel

sectors.

3.1.4 Comparisons with the sectoral trends in the EU and Total trade of Greece

Comparing the sectoral structure of Greek trade with Albania, Bulgaria and the Balkan

region as a whole, to that with EU and the World (total trade) we can make the

following observations:

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The general orientation of the Greek trade structure is maintained in all cases.

Greece has higher export than import shares in agricultural products and lower

export than import shares in industrial products in all cases (Greek trade with

Albania, Bulgaria, BCs, EU and total) under examination.

• An important differentiation is that the sectoral distribution of trade is smoother and

more balanced with the Balkan countries than with the EU or the World. On the

Greek exports side, fuels tends to become a significant category, while on the

Greek import side the share of industrial products is not so dominant in the trade

with Albania, Bulgaria or the Balkan countries as a whole.

More analytically the comparisons for each one case show that:

• The structure of Greek exports to Albania compared with that to EU and total

Greek exports is characterized by a higher share of agricultural products, which is

in accordance with the urgent needs of Albania to cover food shortages and the

needs generated by the existing level of development in Albania.

• The structure of Greek imports from Albania is differentiated from the EU and total

Greek imports structure in that it has a relatively higher share of fuels and lower

share of industrial products.

• The structure of Greek exports to Bulgaria is differentiated from that to EU and the

World, in that it has a relatively higher share of fuels and lower share of industrial

products.

• The structure of Greek imports from Bulgaria in the aggregate categories is very

similar to the structure of total Greek imports and also similar to the structure of

Greek imports from EU.

• The structure of Greek exports to the Balkan countries is differentiated from the

structure of Greek exports to EU countries in that it contains a lower share of

industrial products and a higher share of raw materials and fuels.

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The structure of the Greek imports from the Balkan countries is differentiated from

the structure of the Greek imports from the EU countries in that it has also a lower

share of industrial products and a higher share of raw material and fuels.

3.2 Trade by 1-Digit SITC sectors

In Tables 7 - 10 we present data on Greek trade with Albania, Bulgaria, the BCs and

EU as well as total Greek trade by 1-digit SITC categories for the period 1989-1993.

From the analysis of the Tables we can make the following observations:

3.2.1 Greek Trade with Albania

The largest exporting category of Greece to Albania in the 89-93 period is

manufactured goods (22%), followed by food (19%) and beverages and tobacco

(18%).

The largest importing category in Greece from Albania in the 89-93 period is mineral

fuels (37%), followed by crude materials (17%) and manufactured goods (15%).

This type of economic relations tends to indicate a rather inter-industry type of

specialization and trade between Greece and Albania.

3.2.2 Greek Trade with Bulgaria

The largest exporting category of Greece to Bulgaria in the 89-93 period is fuel (22%),

followed by food (17%), misc. manufacturing (15%) and manufacturing goods (13%).

The largest importing category of Greece from Bulgaria in the 89-93 period is

manufacturing goods (31%), chemicals (16%) crude materials (14%) and food (14%).

This type of exchange allows for some intra-industry trade (IIT), especially in the

sectors of food and manufacturing goods

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3.2.3 Greek Trade with the Balkan countries.

The largest exporting sector of Greece to the Balkan countries is food (23%), followed

by fuels (17%), manufactured goods (15%) and crude materials. The largest importing

sector of Greece from the BCs is manufactured goods (32%), followed by food (18%),

chemicals (14%), mineral fuels (11%) and machinery and transportation equipment

(11%).

This type of sectoral trade structure, allows for significant intra-industry trade,

especially in the food, fuel and manufactured goods sectors

3.2.4 Sectoral Comparisons of Greek Trade with Albania, Bulgaria, the Balkan

countries, the EU and the World.

The main sectoral differences between the trade of Greece with the Balkan countries

on the one hand and the EU and the World on the other are:

• Greece in sector 1 (beverages and tobacco) has a much better export performance

to Albania and Bulgaria than to EU and the World.

• Greece in sector 3 (mineral fuels) has a much better export performance to

Bulgaria than to the EU and the rest of the World

Greek total imports and imports from the EU are very concentrated in the sectors 5

- 8 (industrial products) while Greek imports from Albania and Bulgaria have a

smaller share of industrial goods and a higher share of raw material and fuels.

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TABLE 7 Trade of Greece with Albania by SITC Sections (1 - Digit Level), 1989-93

						GREEK EXPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION			(value in thou	e in thousand US \$)					(% structure	icture)		
0	Food and live animals	757	111	687	7447	32363	41365	%0'4	%9'0	2,6%	18,0%	25,6%	19,1%
_	Beverages and tobacco	3069	3728	1688	6593	23466	38544	16,3%	20,9%	13,8%	16,0%	18,6%	17,8%
7	Crude materials inedible	7232	4406	2362	2051	1078	17129	38,5%	24,7%	19,3%	2'0%	%6'0	7,9%
ო	Mineral fuels, etc.	1323	743	909	4624	4559	11855	%0'2	4,2%	2,0%	11,2%	3,6%	5,5%
4	Animal, vegetab.oils, fats	0	42	4	847	3301	4194	%0'0	0,2%	%0'0	2,1%	2,6%	1,9%
2	Chemicals, etc.	689	966	937	2387	4624	9633	3,7%	2,6%	7,7%	5,8%	3,7%	4.5%
9	Manuf.goods,class.by mat.	5265	9999	4027	9745	23742	49444	28,0%	37,4%	33,0%	23,6%	18,8%	22,8%
7	Machinery and transp.equip.	177	896	898	4924	23397	30262	%6 ['] 0	2,0%	7,1%	11,9%	18,5%	14,0%
•	Misc.manufactured articl.	241	218	1026	2645	9594	13724	1,3%	1,2%	8,4%	6,4%	7,6%	6,3%
ത	Commod.not elsewhere clas	28	15	7	0	191	241	0,1%	0,1%	0,1%	%0'0	0,2%	0,1%
6-0	Total	18781	17820	12212	41263	126315	216391	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
						GREEK IMPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION)	(value in thou	e in thousand US \$)					(% structure	icture)		
0	Food and live animals	585	910	945	1131	2368	5939	%8'L	7,4%	%0'8	9,3%	15,3%	9,1%
_	Beverages and tobacco	20	7	159	1528	82	1791	0,3%	%0'0	1,3%	8,4%	0,5%	2.7%
7	Crude materials inedible	3091	2884	2153	1627	1214	10969	41,2%	23,5%	18,1%	%0'6	7,9%	16,8%
က	Mineral fuels, etc.	58	3160	2668	10615	4668	24169	0,8%	25,7%	47,7%	58,7%	30,2%	37,1%
4	Animal, vegetab.oils, fats	28	0	0	21	S	54	0,4%	%0'0	%0'0	0,1%	%0'0	0,1%
ı,	Chemicals, etc.	1418	1498	1523	1172	283	5894	18,9%	12,2%	12,8%	6,5%	1,8%	%0'6
9	Manuf.goods,class.by mat.	1823	3547	899	785	2773	9827	24,3%	28,9%	2'6%	4,3%	18,0%	15,1%
7	Machinery and transp.equip.	-	က	28	124	615	771	%0'0	%0'0	0,2%	0,7%	4,0%	1.2%
∞	Misc.manufactured articl.	472	279	501	1084	3424	5760	6,3%	2,3%	4,2%	%0'9	22,2%	8,8%
6	Commod.not elsewhere clas	0	0	0	0	0	0	%0'0	%0'0	%0'0	%0'0	%0'0	%0'0
6-0	Total	7496	12283	11876	18087	15432	65174	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source : Export Research Center Panhellenic Exporters Association

TABLE 8 Trade of Greece with Bulgaria by SITC Sections (1 - Digit Level), 1989-93

)	GREEK EXPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION		J	(value in thousand US	sand US \$)					(% structure	icture)		
0	Food and live animals	14951	14546	13858	22559	54665	120579	21,8%	27,5%	15,8%	13,5%	18,0%	17.7%
-	Beverages and tobacco	1947	1579	5599	27541	37169	73835	2,8%	3,0%	6,4%	16,5%	12,3%	10,9%
7	Crude materials inedible	10370	10157	17476	8327	10250	56580	15,1%	19,2%	19,9%	2,0%	3,4%	8,3%
ო	Mineral fuels, etc.	4322	4487	16313	50132	73690	148944	6,3%	8,5%	18,6%	30,0%	24,3%	21,9%
4	Animal, vegetab.oils, fats	384	306	302	247	1557	2796	%9'0	%9'0	0,3%	0,1%	0.5%	0.4%
2	Chemicals, etc.	3064	1751	2719	6619	14377	28530	4,5%	3,3%	3,1%	4,0%	4.7%	4.2%
9	Manuf.goods,class.by mat.	27093	7277	16873	12618	27391	91252	39,5%	13,7%	19,2%	7,5%	%0.6	13.4%
7	Machinery and transp.equip.	729	2330	3864	10808	32108	49839	1,1%	4,4%	4 4%	6,5%	10,6%	7.3%
∞	Misc.manufactured articl.	4362	9765	10400	28041	51592	104160	6,4%	18,4%	11,8%	16,8%	17,0%	15,3%
6	Commod.not elsewhere clas	1341	797	386	277	563	3334	2,0%	1,4%	0,4%	0,2%	0,2%	0.5%
6-0	Total	68563	52965	87790	167169	303362	679849	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
					3	GREEK IMPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION)	(value in thousand US	sand US \$)					(% structure	cture)		
0	Food and live animals	12930	17082	19430	21775	26408	97625	18,7%	15,8%	15,1%	13,5%	13,4%	14.7%
_	Beverages and tobacco	156	94	48	29	79	406	0,2%	0,1%	%0'0	%0'0	%0,0	0,1%
7	Crude materials inedible	15674	14933	21262	26747	19591	98207	22,7%	13,8%	16,5%	16,6%	%6'6	14,8%
က	Mineral fuels, etc.	4392	24877	14871	2380	26150	72670	6,4%	23,0%	11,6%	1,5%	13,2%	10,9%
4	Animal, vegetab.oils, fats	340	363	325	1502	1579	4109	0,5%	0,3%	0,3%	%6 ['] 0	%8'0	%9'0
2	Chemicals, etc.	10978	15800	22080	23688	33452	105998	15,9%	14,6%	17,2%	14,7%	16,9%	16,0%
9	Manuf.goods,class.by mat.	17002	25066	36724	62909	68979	210680	24,6%	23,2%	28,6%	39,1%	34,9%	31,7%
7	Machinery and transp.equip.	6999	7896	9724	13750	12532	50570	9,7%	7,3%	2,6%	8,5%	6,3%	7.6%
•	Misc.manufactured articl.	890	1986	4069	8222	8801	23968	1,3%	1,8%	3,2%	5,1%	4,5%	3,6%
6	Commod.not elsewhere clas	0	0	0	0	0	0	%0'0	%0'0	%0'0	%0'0	%0'0	%0,0
6-0	Total	69030	108097	128533	161002	197571	664233	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source : Export Research Center Panhellenic Exporters Association

TABLE 9 Trade of Greece with Balkans by SITC Sections (1 - Digit Level), 1989-93

							2						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION)	(value in thou	e in thousand US \$)					(% structure	icture)		
0	Food and live animals	34150	84275	101791	92877	142374	455467	14,3%	27,2%	29,5%	23,8%	20,6%	23,0%
-	Beverages and tobacco	7882	15088	25275	72419	80269	200933	3,3%	4,9%	7,3%	18,5%	11,6%	10,2%
2	Crude materials inedible	79455	70114	60640	27201	48166	285576	33,2%	22,6%	17,6%	7,0%	7,0%	14,4%
<u>გ</u>	Mineral fuels, etc.	15872	30057	56151	71376	156782	330238	%9'9	6,7%	16,3%	18,3%	22,6%	16,7%
4	Animal, vegetab.oils, fats	3697	1040	1686	2443	6373	15239	1,5%	0,3%	0,5%	%9'0	%6'0	%8'0
S	Chemicals, etc.	7211	8679	11520	17131	36650	81191	3,0%	2,8%	3,3%	4,4%	5,3%	4,1%
9	Manuf.goods,class.by mat.	71147	57307	48921	42023	69537	288935	29,8%	18,5%	14,2%	10,8%	10,0%	14,6%
7	Machinery and transp.equip.	2366	8430	12917	22558	77409	123680	1,0%	2,7%	3,7%	2,8%	11,2%	6,3%
∞	Misc.manufactured articl.	9432	26356	23135	41813	73854	174590	3,9%	8,5%	6,7%	10,7%	10,7%	8,8%
<u>ა</u>	Commod.not elsewhere clas	7926	8747	2703	669	1131	21206	3,3%	2,8%	%8'0	0,2%	0,2%	1.1%
1 6-0	Total	239138	310093	344739	390540	692545	1977055	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
						GREEK IMPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION)	(value in thou	e in thousand US \$)					(% structure	cture)		
0	Food and live animals	87498	88957	88127	46839	44787	356208	22,8%	19,1%	19,3%	14,7%	13,6%	18,2%
-	Beverages and tobacco	206	158	2903	2041	333	5641	0,1%	%0'0	%9'0	%9'0	0,1%	0,3%
7	Crude materials inedible	41256	42689	41332	40425	26154	191856	10,8%	9'5%	%0'6	12,6%	7,9%	%8'6
<u>ح</u> ۳	Mineral fuels, etc.	23127	70488	72549	19754	32736	218654	%0'9	15,2%	15,9%	6,2%	%6'6	11,2%
4	Animal, vegetab.oils, fats	1074	784	485	1531	2036	5910	0,3%	0,2%	0,1%	0,5%	%9'0	0,3%
2	Chemicals, etc.	40643	56149	61674	51449	55664	265579	10,6%	12,1%	13,5%	16,1%	16,9%	13,6%
9	Manuf.goods,class.by mat.	126311	138462	131541	111557	120162	628033	32,9%	29,8%	28,8%	34,9%	36,5%	32,1%
_	Machinery and transp.equip.	90099	55388	44219	32308	30992	218913	14,6%	11,9%	9,7%	10,1%	9,4%	11,2%
<u>~</u>	Misc.manufactured articl.	7625	11641	13952	13764	16591	63573	2,0%	2,5%	3,1%	4,3%	2,0%	3,3%
6	Commod.not elsewhere clas	19	0	0	0	0	19	%0'0	%0'0	%0'0	%0'0	%0'0	%0'0
6-0	Total	383765	464716	456782	319668	329455	1954386	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source : Export Research Center Panhellenic Exporters Association

TABLE 10 Trade of Greece with the E.U by SITC Sections (1 - Digit Level), 1989-93

						GREEK EXPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION		()	(value in thousand US	sand US \$)					(% structure	cture)		
0	Food and live animals	1175155	1179165	1454103	1550318	1091338	6450079	23,8%	23,1%	26,4%	24,0%	23,1%	24,1%
_	Beverages and tobacco	226203	217578	225126	247832	206027	1122766	4,6%	4,3%	4,1%	3,8%	4,4%	4,2%
7	Crude materials inedible	286013	255342	256633	260947	215266	1274201	5,8%	2,0%	4,7%	4,0%	4,6%	4,8%
m	Mineral fuels, etc.	165617	231995	187729	126487	60718	772546	3,4%	4,6%	3,4%	2,0%	1,3%	2,9%
4	Animal, vegetab.oils, fats	334227	271691	185976	499336	260576	1551806	8,9	2,3%	3,4%	7,7%	2,5%	5,8%
2	Chemicals, etc.	119813	123689	133363	163690	147327	687882	2,4%	2,4%	2,4%	2,5%	3,1%	2,6%
9	Manuf.goods,class.by mat.	1198040	1189820	1279581	1385194	910436	5963071	24,2%	23,3%	23,2%	21,5%	19,3%	22,3%
7	Machinery and transp.equip.	136195	180696	186586	235106	230940	969523	2,8%	3,5%	3,4%	3,6%	4,9%	3,6%
∞	Misc.manufactured articl.	1147900	1324519	1463967	1856138	1546084	7338608	23,2%	26,0%	26,6%	28,8%	32,8%	27,5%
6	Commod.not elsewhere clas	152538	121198	132693	123580	49646	579655	3,1%	2,4%	2,4%	1,9%	1,1%	2,2%
6-0	Total	4941701	5095693	5505757	6448628	4718358	26710137	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
						GREEK IMPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION)	value in thousand US	sand US \$)					(% structure	cture)		
0	Food and live animals	1708271	1945891	1837498	2288265	2089079	9869004	17,2%	15,4%	14,3%	15,6%	15,9%	15,6%
_	Beverages and tobacco	214690	284589	304570	389891	423542	1617282	2,2%	2,3%	2,4%	2,7%	3,2%	2,6%
7	Crude materials inedible	221433	256116	269501	258114	221732	1226896	2,2%	2,0%	2,1%	1,8%	1,7%	1,9%
ო	Mineral fuels, etc.	68745	125473	106815	133382	104518	538933	%2'0	1,0%	%8,0	%6'O	%8'0	%6'0
4	Animal, vegetab.oils, fats	38420	68249	174314	48527	39313	369123	0,4%	0,5%	1,4%	0,3%	0,3%	%9'0
S	Chemicals, etc.	1352420	1633207		1887832	1796008	8363107	13,6%	12,9%	13,2%	12,9%	13,6%	13,2%
9	Manuf.goods,class.by mat.	2514451	2977394	2896385	3011137	2604824	14004191	25,3%	23,6%	22,5%	20,6%	19,8%	22,1%
_	Machinery and transp.equip.	2839538	4008384	4189700	4980602	4375489	20393713	28,6%	31,7%	32,6%	34,0%	33,2%	32,2%
∞	Misc.manufactured articl.	969864	1320893	1389847	1629492	1474198	6784294	%8'6	10,5%	10,8%	11,1%	11,2%	10,7%
თ 	Commod.not elsewhere clas	12229	7719	7026	20792	43696	91462	0,1%	0,1%	0,1%	0,1%	0,3%	0,1%
6-0	Total	9940061	12628215	12869296	14648034	13172399	63258005	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source : Export Research Center Panhellenic Exporters Association

TABLE 11 Total Trade of Greece by SITC Sections (1 - Digit Level), 1989-93

						GREEK EXPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION)	(value in thousand US \$	isand US \$)					(% structure	icture)		
0	Food and live animals	1575481	1622872	1923750	2089864	1669414	8881381	20,8%	20,3%	22,2%	21,2%	19,8%	20.9%
-	Beverages and tobacco	370463	442249	493544	652134	528830	2487220	4,9%	2,5%	2,7%	%9'9	6,3%	2,8%
7	Crude materials inedible	525722	455437	456356	426333	486623	2350471	%6'9	2,7%	5,3%	4,3%	2,8%	2,5%
ო	Mineral fuels, etc.	412201	586069	773843	519481	661518	2953112	5,4%	7,3%	8,9%	5,3%	7,8%	%6'9
4	Animal, vegetab.oils, fats	357322	301652	222378	551868	301998	1735218	4,7%	3,8%	2,6%	2,6%	3,6%	4,1%
'n	Chemicals, etc.	301634	314258	338475	374647	390899	1719913	4,0%	3,9%	3,9%	3,8%	4,6%	4,0%
9	Manuf.goods,class.by mat.	1921432	1882072	1950687	2169636	1690637	9614464	25,4%	23,5%	22,5%	22,0%	20,0%	22,6%
7	Machinery and transp.equip.	249983	336484	372751	473315	528746	1961279	3,3%	4,2%	4,3%	4,8%	6,3%	4,6%
∞	Misc.manufactured articl.	1658007	1872749	1942695	2372495	2059641	9905587	21,9%	23,4%	22,4%	24,1%	24,4%	23,3%
თ	Commod.not elsewhere clas	206655	182340	194039	232234	115417	930685	2,7%	2,3%	2,2%	2,4%	1,4%	2,2%
6-0	Total	7578900	7996182	8668518	9862007	8433723	42539330	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
						GREEK IMPORTS	ORTS						
		1989	1990	1991	1992	1993	1989-93	1989	1990	1991	1992	1993	1989-93
SITC	SECTION)	(value in thousand US \$	isand US \$)					(% structure	icture)		
0	Food and live animals	2239646	2518143	2364790	2774177	2473535	12370291	14,6%	13,1%	11,5%	12,2%	12,0%	12,6%
-	Beverages and tobacco	243783	324651	363755	465595	476788	1874572	1,6%	1,7%	1,8%	2,1%	2,3%	1,9%
7	Crude materials inedible	868579	984927	963344	752702	640738	4210290	2'.2%	5,1%	4,7%	3,3%	3,1%	4,3%
ო	Mineral fuels, etc.	1029466	1522967	2069791	2295721	2336658	9254603	%2'9	%6'2	10,0%	10,1%	11,3%	9,4%
4	Animal, vegetab.oils, fats	51529	81807	189612	73848	53504	450300	%6'0	0,4%	%6 ['] 0	0,3%	0,3%	0,5%
2	Chemicals, etc.	1723543	2086182	2232976	2493761	2432544	10969006	11,2%	10,8%	10,8%	11,0%	11,8%	11,1%
9	Manuf.goods,class.by mat.	3608185	4269242	4216375	4218085	3639891	19951778	23,5%	22,2%	20,4%	18,6%	17,7%	20,2%
7	Machinery and transp.equip.	4176184	5614317	6195745	7177953	6311003	29475202	27,2%	29,1%	30,0%	31,6%	30,6%	29,9%
∞	Misc.manufactured articl.	1365620	1807181	1989327	2333471	2162548	9658147	8,9%	9,4%	%9'6	10,3%	10,5%	%8'6
б	Commod.not elsewhere clas	52943	55292	50334	105106	67527	331202	0,3%	0,3%	0,2%	0,5%	0,3%	0,3%
6-0	Total	15359478	19264709	20636049	22690419	20594736	98545391	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source : Export Research Center Panhellenic Exporters Association

Overall, the most apparent difference in the sectoral structure of Greek trade with the BCs on the one hand and the EU or the World on the other is the greater diversification and sectoral spread of Greek exports in the first case and the relatively higher concentration in the second. Almost 75% of Greek exports to the EU belong to 3 sectors, while in the case of Greek exports to the Balkan countries 6 sectors have a significant share in exports (that is, close or greater than 10%). This indicates that Greek production sectors that after 15 years of EU membership have not succeeded, for a number of reasons, to show a significant export performance in the European market, find now a second opportunity to expand their activities by increasing their exports to the neighboring countries.

4. Measures of Revealed Comparative Advantage (RCA)

In an attempt to further analyze the 1-digit SITC data of Greek trade with Albania, Bulgaria and the BCs, we have estimated in Table 12 and present in Figure 6 the sectoral coefficients of Revealed Comparative Advantage (RCA) for the Greek exports to Albania Bulgaria, the BCs and the EU. The RCA coefficients are measured as a share of a sectors' i exports to a country j, divided by the share of sector' i total exports { RCA =(Xij/Xj) / (Xi/X) }. A value of RCA coefficient greater than one (RCA>1) in a sector, indicates a better exporting performance than average and therefore a specialization or a comparative advantage (CA). From the examination of the Table we can make the following observations:

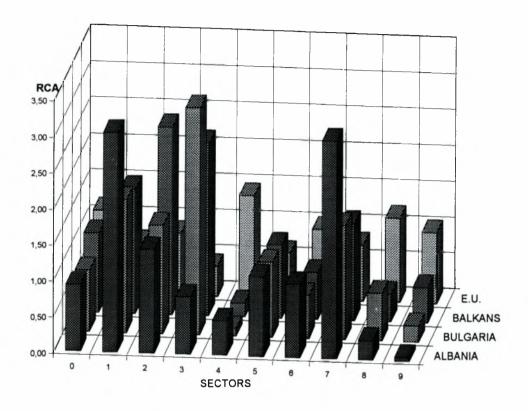
- The Greek exports to Albania appear to have a strong and stable or increasing CA in sectors 1 (beverages and tobacco) and 7 (machinery and transportation equipment), a declining CA in sector 2 (crude materials) and a weak and fluctuating CA in sectors 5 (chemicals) and 6 (manufacturing goods).
- Greek exports to Bulgaria appear to have a strong CA in sector 3 (fuels), an increasing CA in sectors 1 and 7, a declining CA in sector 2 and weak and fluctuating CA in sector 5 (chemicals).

TABLE 12
The coefficient of Revealed Comparative Advantage for the Trade of Greece with Albania, Bulgaria, Balkans and the E.U. RCA, ALBANIA

SECTORS	89	90	91	92	93	1989-93
0	0,19	0,03	0,25	0,85	1,29	0,92
1	3,34	3,78	2,43	2,42	2,96	3,05
2	5,55	4,34	3,67	1,15		1,43
3	1,30	0,57	0,56	2,13	0,46	0,79
4	0,00	0,06	0,01	0,37	0,73	0,78
5	0,92	1,42	1,97	1,52	0,79	1,10
6	1,11	1,59	1,47	1,07	0,94	1,01
7	0,29	1,19	1,65	2,49	2,95	3,03
8	0,06	0,05	0,37	0,27	0,31	0,27
9	0,05	0,04	0,03	0,00	0,11	0,05
TOTAL	1,00	1,00	1,00	1,00	1,00	
RCA, BUL		1,00	1,00	1,00	1,00	1,00
SECTORS	89	90	91	92	93	1989-93
0	1,05	1,35	0,71	0,64	0,91	0,85
1	0,58	0,54	1,12	2,49	1,95	1,86
2	2,18	3,37	3,78	1,15	0,59	1,51
3	1,16	1,16	2,08	5,69	3,10	3,16
4	0,12	0,15	0,13	0,03	0,14	0,10
5	1,12	0,84	0,79	1,04	1,02	1,04
6	1,56	0,58	0,85	0,34	0,45	0,59
7	0,32	1,05	1,02	1,35	1,69	1,59
8	0,32	0,79	0,53	0,70	0,70	0,66
9	0,72	0,79	0,33	0,70	0,70	0,00
TOTAL		1,00	1,00	1,00	1,00	1,00
	1,00	1,00	1,00	1,00	1,00	1,00
RCA, BAL		90	91	92	93	1989-93
SECTORS	89	90	91 1.33	92	93	1989-93
SECTORS 0	89 0,69	1,34	1,33	1,12	1,04	1,10
SECTORS 0 1	0,69 0,67	1,34 0,88	1,33 1,29	1,12 2,80	1,04 1,85	1,10 1,74
SECTORS 0 1 2	0,69 0,67 4,79	1,34 0,88 3,97	1,33 1,29 3,34	1,12 2,80 1,61	1,04 1,85 1,21	1,10 1,74 2,61
SECTORS 0 1 2 3	0,69 0,67 4,79 1,22	1,34 0,88 3,97 1,32	1,33 1,29 3,34 1,82	1,12 2,80 1,61 3,47	1,04 1,85 1,21 2,89	1,10 1,74 2,61 2,41
0 1 2 3 4	0,69 0,67 4,79 1,22 0,33	1,34 0,88 3,97 1,32 0,09	1,33 1,29 3,34 1,82 0,19	1,12 2,80 1,61 3,47 0,11	1,04 1,85 1,21 2,89 0,26	1,10 1,74 2,61 2,41 0,19
9 SECTORS 0 1 2 3 4 5	89 0,69 0,67 4,79 1,22 0,33 0,76	1,34 0,88 3,97 1,32 0,09 0,71	1,33 1,29 3,34 1,82 0,19 0,86	1,12 2,80 1,61 3,47 0,11 1,15	1,04 1,85 1,21 2,89 0,26 1,14	1,10 1,74 2,61 2,41 0,19 1,02
9 SECTORS 0 1 2 3 4 5 6	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17	1,34 0,88 3,97 1,32 0,09 0,71 0,79	1,33 1,29 3,34 1,82 0,19 0,86 0,63	1,12 2,80 1,61 3,47 0,11 1,15 0,49	1,04 1,85 1,21 2,89 0,26 1,14 0,50	1,10 1,74 2,61 2,41 0,19 1,02 0,65
9 1 2 3 4 5 6 7	0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36
9 1 2 3 4 5 6	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38
9 SECTORS 0 1 2 3 4 5 6 7 8	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49
9 TOTAL	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38
9 TOTAL	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49
9 TOTAL	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00
SECTORS 0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93
0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86
0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42
0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS 0 1 2 3	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62 1,43	1,34 0,88 3,97 1,32 0,09 0,71 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62 1,41	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38 1,32	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37 1,38	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16 1,54	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42 1,42
0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS 0 1 2 3 4 5	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62 1,43 0,61	1,34 0,88 3,97 1,32 0,09 0,71 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62 1,41 0,62	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38 1,32 0,62	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37 1,38 0,67	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16 1,54 0,67	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42 1,42 0,64
0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS 0 1 2 3 4 5 6	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62 1,43 0,61 0,96	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62 1,41 0,62 0,99	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38 1,32 0,62 1,03	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37 1,38 0,67 0,98	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16 1,54 0,67 0,96	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42 1,42 0,64 0,99
0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS 0 1 2 3 4 5 6	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62 1,43 0,61 0,96 0,84	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62 1,41 0,62 0,99 0,84	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38 1,32 0,62 1,03 0,79	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37 1,38 0,67 0,98 0,76	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16 1,54 0,67 0,96 0,78	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42 1,42 0,64 0,99 0,79
SECTORS 0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS 0 1 2 3 4 5 6 7 8	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62 1,43 0,61 0,96 0,84 1,06	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62 1,41 0,62 0,99 0,84 1,11	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38 1,32 0,62 1,03 0,79 1,19	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37 1,38 0,67 0,98 0,76 1,20	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16 1,54 0,67 0,96 0,78 1,34	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42 1,42 0,64 0,99 0,79 1,18
0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS 0 1 2 3 4 5 6	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62 1,43 0,61 0,96 0,84	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62 1,41 0,62 0,99 0,84	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38 1,32 0,62 1,03 0,79	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37 1,38 0,67 0,98 0,76	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16 1,54 0,67 0,96 0,78 1,34 0,77	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42 1,42 0,64 0,99 0,79 1,18 0,99
SECTORS 0 1 2 3 4 5 6 7 8 9 TOTAL RCA, E.U SECTORS 0 1 2 3 4 5 6 7 8	89 0,69 0,67 4,79 1,22 0,33 0,76 1,17 0,30 0,18 1,22 1,00 89 1,14 0,94 0,83 0,62 1,43 0,61 0,96 0,84 1,06	1,34 0,88 3,97 1,32 0,09 0,71 0,79 0,65 0,36 1,24 1,00 90 1,14 0,77 0,88 0,62 1,41 0,62 0,99 0,84 1,11	1,33 1,29 3,34 1,82 0,19 0,86 0,63 0,87 0,30 0,35 1,00 91 1,19 0,72 0,89 0,38 1,32 0,62 1,03 0,79 1,19	1,12 2,80 1,61 3,47 0,11 1,15 0,49 1,20 0,45 0,08 1,00 92 1,13 0,58 0,94 0,37 1,38 0,67 0,98 0,76 1,20	1,04 1,85 1,21 2,89 0,26 1,14 0,50 1,78 0,44 0,12 1,00 93 1,17 0,70 0,79 0,16 1,54 0,67 0,96 0,78 1,34	1,10 1,74 2,61 2,41 0,19 1,02 0,65 1,36 0,38 0,49 1,00 1989-93 1,16 0,72 0,86 0,42 1,42 0,64 0,99 0,79 1,18

Source : Export Research Center Panhellenic Exporters Association

<u>Figure 6</u> Revealed Comparative Advantage (RCA) coefficients for trade of Greece with Albania, Bulgaria, Balkans and the E.U. 1989-1993.



- Greek exports to the Balkan countries appear to have a strong CA in sector 3
 (fuels), an increasing CA in sectors 1 (beverages and tobacco), 5 (chemicals) and
 7 (machinery and transportation equipment), a decreasing CA in sector 2 (crude materials) and a weak and fluctuating in sector 0 (food).
- These specializations appear to be complementary to those developed with the EU where Greece appears to have a CA in sectors 0 (food), 4 (oils and fats) and 8 (miscellaneous manufacturing articles).

This analysis reveals two points with significant long term implications for the trade relations of Greece. It indicates that Greece has expanded its trade in the Balkans in such a way that more production sectors can expand their activities because of trade, getting a comparative advantage in the new market that was not available before. Moreover Greece appears to have CA in more sectors (6 in total) when trading with its Balkan neighbors, than when trading with the other EU members (3 sectors).

5. Measures of Intra-Industry Trade (IIT).

Measures of IIT are usually estimated in an attempt to find the share of the total trade

of a country with another country or a group of countries that takes place within

sectors (rather than between sectors). On the basis of these estimates conclusions

can be drawn about the existing type of trade relations with all the implications about

the structure and the required adjustments in the production base as well as the type

and the strength of the specific ongoing process of economic integration.

In order to get reliable results, estimates of IIT are usually based on 3-digit SITC

sectors, since estimations based on more aggregate data tend to overestimate the IIT

share of trade, while estimations based on more detailed data tend to underestimate

it. In this study, our purpose is not so much to correctly estimate the actual level of IIT

between Greece and the Balkan countries, but rather to compare in broad lines the

Greek IIT shares with the BCs, to the Greek IIT shares with the EU and the World. As

a result, in order to avoid cumbersome and unnecessary at this point calculations, we

have based our estimates on 1-digit SITC data, on the understanding that out

coefficients will be an overestimation of the true ones.

Table 13 and Figure 7 present IIT coefficients for Greek trade with Albania, Bulgaria,

the BCs, EU and total trade, estimated from the standard Grubel-Lloyd equation.

From the examination of the data we can make the following observations:

• For the entire period 89-93, 38% of the Greek-Albanian, 51% of the Greek-

Bulgarian, 68% of the Greek-Balkan, 54% of the Greek-EU and 56% of the total

Greek trade was of an intra-industry character, that is trade within (1-digit SITC)

sectors.

• On a comparative basis, the Greek-Albanian trade has the lowest share of intra-

industry and therefore the highest share of inter-industry (H-O) type of trade. Even

more, the share of IIT of Greece with Albania declines over time. These facts are

compatible with standard trade theory as the low level of development in Albania

does not allow for different type of specialization and a higher share of IIT.

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The trade of Greece with Bulgaria is characterized by a higher IIT coefficient. About half of the Greek-Bulgarian trade takes place within industries in the 89-93 period, with significant however fluctuations over time.

TABLE 13
The Intra-Industry Trade Coefficient for the Trade of Greece with Albania, Bulgaria, Balkans, the E.U and World.

IIT, ALBANIA

SECTORS	1989	1990	1991	1992	1993	1989-93
0	87	22	84	26	14	25
1	1	0	17	38	1	9
2	60	79	95	88	94	78
3	8	38	19	61	99	66
4	0	0	0	5	0	3
5	65	80	76	66	12	76
6	51	69	37	15	21	33
7	1	1	6	5	5	5
8	68	88	66	58	53	59
9	0	0	0	-	0	0
TOTAL	50	56	50	41	21	38

IIT, BULGARIA

III , DOLOA	*****					
SECTORS	1989	1990	1991	1992	1993	1989-93
0	93	92	83	98	65	89
1	15	11	2	0	0	1
2	80	81	90	47	69	73
3	99	31	95	9	52	66
4	94	91	96	28	99	81
5	44	20	22	44	60	42
6	77	45	63	33	57	60
7	20	46	57	88	56	99
8	34	34	56	45	29	37
9	0	0	0	0	0	0
TOTAL	65	30	52	24	40	51

IIT . BALKANS

SECTORS!		4000	4004	1002	1002	1989-93
SECTORS	1989	1990	1991	1992	1993	
0	56	97	93	67	48	88
1	5	2	21	5	1	5
2	68	76	81	80	70	80
3	81	60	87	43	35	80
4	45	86	45	77	48	56
5	30	27	31	50	79	47
6	72	59	54	55	73	63
7	8	26	45	82	57	72
8	89	61	75	50	37	53
9	0	0	0	0	0	0
TOTAL	58	63	69	54	51	68

IIT, EU

SECTORS	1989	1990	1991	1992	1993	1989-93
0	82	75	88	81	69	79
1	97	87	85	78	65	82
2	87	100	98	99	99	98
3	59	70	73	97	73	82
4	21	40	97	18	26	38
5	16	14	15	16	15	15
6	65	57	61	63	52	60
7	9	9	9	9	10	9
8	92	100	97	93	98	96
9	15	12	10	29	94	27
TOTAL	56	54	57	54	49	54

IIT, WORLD

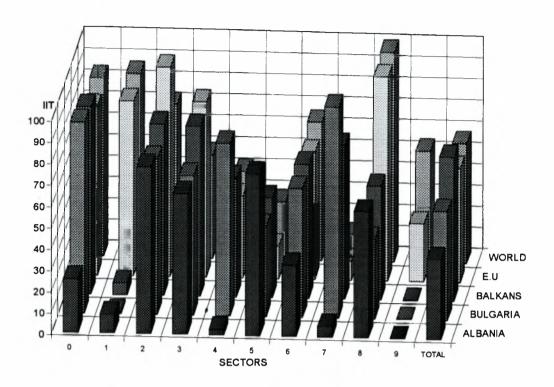
SECTORS	1989	1990	1991	1992	1993	1989-93
0	83	78	90	86	81	84
1,	79	85	85	83	95	86
2	75	63	64	72	86	72
3	57	56	54	37	44	48
4	25	43	92	24	30	41
5	30	26	26	26	28	27
6	69	61	63	68	63	65
7	11	11	11	12	15	12
8	90	98	99	99	98	99
9	41	47	41	62	74	52
TOTAL	58	55	57	55	56	56

Source : Export Research Center Panhellenic Exporters Association

The overall share of IIT between Greece and Bulgaria is very close to that between Greece and the EU and the total Greek trade. This relatively high figure is explained by the higher level of development (compared to Albania) and the greater proximity of Bulgaria to Greece (compared to EU).

Paradoxically, the IIT figure for the Greek-EU countries trade is consistently lower than that for the Greek-Balkan countries and total Greek trade for the period 89-93. To the extent that the IIT coefficient is an indication of economic integration, this means that 15 years of membership in the EU (EC), have not brought the Greek economy closer to the EU than the World economy, since Greek-EU trade relations basically retain an inter-industry character. This becomes even more clear when one considers that our IIT estimates are upwards biased (so that the real share of IIT with the EU is even lower). This type of integration is probably explained by the large distance (and the lack of adjacency) separating Greece from the other EU members as well as the significant Greek differences from the production structure of the average EU country.

<u>Figure 7</u> Greek Intra-Industry Trade (IIT) shares with Albania, Bulgaria, Balkans, the E.U and the World, 1989-1993.



These figures also indicate that the Greek trade relations in the Balkans have a greater intra-industry component than the Greek-EU or the total Greek trade relations. This fact is probably explained by proximity, similar consumer preferences and tastes, or the technology level capacity and requirements of the two markets. Although it is rather early to draw any firm conclusions and further examination of this issue is certainly necessary, it seems that this development in Greek-Balkan trade relations has two significant implications.

First, it allows for the expansion of economic relations in a more sectorally diversified manner, without exerting pressure for a strict H-O type of specialization that would perhaps require severe structural adjustments in the Balkan region. This gives some room to restructuring policies to reorganize productive resources within sectors, maintaining existing specializations and avoiding major sectoral shifts of resources that could generate structural unemployment and reduce the diversity of the production base.

Second, it offers Greece the missing component in its trade relations, that is cross-border trade of strong intra-industry character that would balance and ameliorate the implications of the existing inter-industry type of specialization and trade with the distant EU markets

6. Summary and Conclusions

The economic geography of Europe is changing in a fundamental way by the forces of a two-dimensional integration process. On the one hand is the enlargement of the European Union, the operation of the Single European Market and the Maastricht policies towards the Economic and Monetary Union, usually understood as an efficiency driven process and a European response to the challenges posed by global markets. This process however, is known to generate severe pressure for adjustment to the European periphery, consisting of countries with weak economic structures and an unfavorable index of strategic location in the new European space. On the other hand, the process of transition, putting itself a tremendous pressure to Central and East European economies for structural and institutional change, eliminates gradually a historical divide with long-lasting implications for the future European spatial regularities and dynamics.

This new reality in Europe, with all its complexity, conflict and rapid change, has generated, for the first time in the post war period, conditions that provide a real opportunity to the countries in the Balkan peninsula to remove barriers that for decades restricted economic and social interaction.

The main findings of this study indicate that, on the basis of the accumulated experience, the development of economic relations in the region is mutually beneficial and generates the conditions for the formulation of an alternative paradigm of intra-Balkan economic relations. As the artificial barriers in Central and Southern Europe are gradually removed, a larger economic space is created, in which the intensity and the type of economic relations are largely determined by geographical factors such as adjacency and proximity, by membership in economic or trade unions and often by historical, cultural and other non-economic preference factors. Given that distance related transportation costs will always set limits to the reach of goods and services

and therefore to the geographical size of the markets, regional trade areas will be shaped, within which trade relations will be more intensive, and perhaps of different type. This short of geographical preference or clustering in trade relations, is an efficiency driven process as countries seek to fully exploit opportunities and benefits from exchange. It is also a rational reaction for perimetric countries that attempt to reduce or offset disadvantages of perimetric location or isolation, with respect to the gravity center of Europe.

After some 40 years of separation by military blocks (and assuming that the Bosnian war will stop soon) a large regional market of 60-70 million people in Southeastern Europe is shaped, including Greece (a EU member), Albania, Bulgaria, Romania and the territory of ex-Yugoslavia, where significant opportunities for cooperation, specialization and trade exist. To the extent that geography plays a role in shaping preferences in economic interaction (something clearly evident by the bulk and type of relations between countries in Northwestern Europe), a regional market will gradually emerge in the Balkans, driven by distance (of the countries in the region from the European core), size and proximity (to each other). The main characteristic of this new market is the existence of intensive economic relations, especially between countries with common borders, such as Albania and Greece and Bulgaria and Greece.

The basic characteristic of the Greek-Albanian and Greek-Bulgarian trade relations is the fast expansion of the volume of trade with both countries and the high increase they recorded in their share of total Greek trade. Due to the difficulties of the transition process in Albania and Bulgaria, Greece runs a positive and increasing trade balance with both countries and has a greater than 1 and increasing export/import ratio. On the contrary, the export/import ratio of Greece with the EU and the World is significantly smaller than 1 and declining, indicating a growing balance of trade deficit. As a result, in the post-1989 period the performance of the Greek economy in international markets has a dual character, since its competitiveness in the (relatively distant) EU and World markets is low and declining, while its competitiveness in the neighboring Balkan countries is in high levels and increasing.

Measures of Revealed Comparative Advantage (RCA) indicate that Greece appears to have comparative advantages in more 1-digit SITC sectors when trading with its Balkan neighbors than when trading with the EU countries. An interesting fact is that

the specialization that Greece has developed with the Balkan countries are complementary to those developed with the EU.

On the other hand, measures of intra-industry trade (IIT) indicate that Greece and the Balkan countries as a whole have a relatively high share of IIT compared to the share of Greek trade with the EU and the World. To the extent that the IIT figures indicate the degree of integration between two areas or countries, the integration of Greece with the EU remains after 15 years of membership at low levels, since trade relations basically maintain an inter-industry character. This H-O type of integration, which is probably explained by the large distance separating Greece from the other EU countries, implies that from the efficiency point of view, Greece could seek a parallel in nature and complementary to that with the EU, integration process, based on the advantages generated by geographic and other non-economic preference factors, as well as the needs of the Balkan neighbors that accrued from the transition process.

From this analysis two points become in our view clear and deserve consideration from the policy making point of view, the first one concerning Greece and the second, all the countries in the region. For the first time after its membership in the EU, a real opportunity is given to Greece to effectively deal with the difficulties and the pressures imposed by the process of European integration on its economic structure. This opportunity is related to the prospect of gradually re-composing the economic space in its vicinity with the creation of a regional Balkan market, in which it will have a central and highly influential role. For the first time also in the post-war period, a real opportunity is given to the Balkan countries to interact and cooperate without systemic or military block barriers, leaving the level and type of their relations to be an affair of markets, preferences and geography.

From the strategic point of view, the long-term interests of Greece and the other countries in the region require stable relations, successful implementation of the policies of transition and a policy mix promoting the unification and coherence, of the European economic space, the development of the European Southeastern region and the facilitation of cross-border cooperation. Since Greece, from all the other Balkan countries, has the higher "degrees of freedom" in influencing policies for the region, it has also the greater responsibility for promoting them.

The appropriate policy mix should include a steady and energetic support to the efforts of all Balkan countries to join in the future the EU, according to the progress they make in the requirements and the criteria set. This policy is a cornerstone for the future of the Balkan region and it is the only one that allows in the long run the unification of the Balkan and European space and the better accessibility and connection of Southern with Northern and Western Europe.

The impact of this policy will be of great important for Greece. First, it leads to the removal of isolation from the EU countries with the unification of the European economic space with long lasting implications. Second, it shifts in the long run the gravity center of the EU to the south and east and contribute to the creation of a sizable regional market. Existing evidence shows that this market improves the terms of economic integration for Greece since it allows specialization and comparative advantage in different sectors than those existing with the EU and provides a large market to a number of Greek products, that because of distance and strong competition, are unable to penetrate the North European markets.

The impact of this policy, the promotion of regional cooperation and integration in the Balkans and the strengthening of economic relations of the other countries with Greece is also beneficial for them, irrespectively of the support that Greece may provide to them in the EU decision making bodies.

For these countries the process of internationalization is in fact a process of integration among unequal partners that leads in several cases to a shrinking production base and a shift of specialization and comparative advantage to traditional and labor or material-intensive sectors. It seems that Greece provides a market which is closer, offers opportunities for intra-industry trade (which reduces pressures for severe sectoral shifts in production) and has in general lower standards and requirements than the Western European ones and greater room (due to preferences influenced by cultural and historical ties) for the exporting industries of neighboring Balkan countries.

The impact of these trends and policies may also be beneficial for the EU, that may at least find a possible answer to the peripherality condition of its southeastern part. Letting geography to drive economic relations and trade preferences and allowing or encouraging the formation of regional markets with significant intra-regional activities

at the edges of the single European space (that is anyway too large to be homogeneous), is a possible way to promote a spatial spread of development and avoid further concentration of activities and power to existing core regions, that would require a greater effort and allocation of resources in the form of structural and regional policies to be impeded. Given that a Europe of macro-regions is slowly emerging, the attraction of the bulk of international mobile investment to the technologically advanced Western European countries can only be balanced by the Balkan region on the basis of intensive relations, emerging markets opportunities and a strategic development plan that will reveal the new role of the region in connecting Europe with the Mediterranean basin and the Black Sea countries.

The observers of the international economic relations have noticed that the process of internationalization and liberalization of the markets, coexists with increasing trends of regionalization at all geographical levels. Regional economic areas, agreements or unions appear with an increasing frequency in all parts of the world, giving each one of them a different speed and content in the process of internationalization of economic relations. Despite questions about their viability and future, these trends are based on a real need for cooperation of countries with geographic proximity, common cultural or other characteristics and mutual trust. Given the perimetric position of the Balkans with respect to Western Europe and the strategic importance of their size, the possibility of the creation of a Balkan regional market in which Greece will participate as the only EU member, a Balkan country and the more developed country in the region has to be seriously examined. Although political analysts will, correctly note that the history of Balkan relations does not offer a suitable framework for the promotion of such a strategy, we must all agree that our future must be determined not only from the past, but mainly from the willingness of nations to take advantage of existing opportunities for growth and prosperity.

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