

CENTRE OF PLANNING AND ECONOMIC RESEARCH

No 92

**Greek Foreign Trade with Five Balkan States
During the Transition Period 1993 - 2000:
Opportunities Exploited and Missed**

Wassily Kafouros and Nicholas Vagionis

April 2007

Wassily Kafouros and Nicholas Vagionis

Research Fellows

Centre of Planning and Economic Research, Athens, Greece

e-mails:: vkafour@kepe.gr nvayonis@kepe.gr

**Greek Foreign Trade with Five Balkan States
During the Transition Period 1993 - 2000:
Opportunities Exploited and Missed**

Copyright 2007
by the Centre of Planning and Economic Research
11, Amerikis Street, 106 72 Athens, Greece
kepe.gr

Opinions or value judgements expressed in this paper
are those of the authors and do not necessarily
represent those of the Centre of Planning
and Economic Research.

CENTRE OF PLANNING AND ECONOMIC RESEARCH

The Centre of Planning and Economic Research (KEPE) was established as a research unit, under the title “Centre of Economic Research”, in 1959. Its primary aims were the scientific study of the problems of the Greek economy, the encouragement of economic research and the cooperation with other scientific institutions.

In 1964, the Centre acquired its present name and organizational structure, with the following additional objectives: first, the preparation of short, medium and long-term development plans, including plans for local and regional development as well as public investment plans, in accordance with guidelines laid down by the Government; second, the analysis of current developments in the Greek economy along with appropriate short and medium-term forecasts; the formulation of proposals for stabilization and development policies; and third, the additional education of young economists, particularly in the fields of planning and economic development.

Today, KEPE focuses on applied research projects concerning the Greek economy and provides technical advice on economic and social policy issues to the Ministry of Economy and Finance, the Centre ‘s supervisor.

In the context of these activities, KEPE produces four series of publications, notably the *Studies*, which are research monographs, *Reports* on applied economic issues concerning sectoral and regional problems, and *Statistical Series* referring to the elaboration and processing of specific raw statistical data series. Finally, it publishes papers in the *Discussion Papers* series, which relate to ongoing research projects.

Since December 2000, KEPE publishes the quarterly issue *Economic Perspectives* dealing with international and Greek economic issues as well as the formation of economic policy by analyzing the results of alternative approaches.

The Centre is in a continuous contact with foreign scientific institutions of a similar nature by exchanging publications, views and information on current economic topics and methods of economic research, thus furthering the advancement of economics in the country.

ABSTRACT

The demise of the socialist regimes in the Balkan region was hailed, among many other things, as a golden opportunity for the Greek economy to expand in every conceivable direction. The basic objective of this paper is to examine whether this has been the case at least as far as its sector of manufactured goods and agricultural products is concerned. The main postulate of this paper is that Greek exports to the area are based mainly on goods possessing low value added. Furthermore, as regards bilateral trade, Greek exports are performing rather well in Albania and FYROM; they encounter serious competition in Bulgaria, while they are losing ground in the more lucrative markets of Romania and Serbia-Montenegro.

Introduction

The objective of this paper, as its title implies, is to inquire into the nature of the development of Greek foreign trade in the new environment which has been created in the Balkan region in the post-socialist world and assess its dynamics¹. The Balkan states whose foreign trade with Greece is covered in this work are: Albania, Bulgaria, Former Yugoslav Republic of Macedonia (FYROM), Romania and Serbia-Montenegro. The period under examination is 1993–2000. We consider this period to be crucial for the purpose of this paper because before 1993 the situation was too feeble for any trends to become apparent and after 2000 trends had been established. It was, we believe, during 1993-2000 that the opportunities were there for Greece either to exploit or miss them.

As far as the “inclusion” of the above countries, and the consequent “exclusion” of the remaining Balkan states, is concerned, the rationale is as follows: Croatia, Slovenia and Bosnia–Herzegovina have almost negligible trade flows with Greece and their possible inclusion in this study would not have provided us with any useful insights with respect to the dynamics, or the lack of it, of the Greek economic penetration in the area under examination. Furthermore, in the case of Bosnia–Herzegovina data has been virtually impossible to be obtained. The inclusion of Turkey on the other hand, besides the fact that its importance for Greece is far too great, at any conceivable level, to be included in this study as a “sixth”

¹ For a more general and thorough exposition of the evolution of “the new environment which has been created in the Balkan region in the post socialist world”, see, among many others, Babanasis (1997), Carter and Norris (1996), Greek Centre of European Studies (1996), Karafotakis (1999), Petrakos (2000), Papazisis (2001), Woodward (1995).

Balkan state, would also cloud the basic aim of this paper namely, the examination of Greek trade performance and its dynamics in the newly created markets in the region.

The basic methodology of this work is based on data supplied by Eurostat². We examine the value of trade flows by sector (on the basis of the established two-digit Eurostat code), by country and by year, their total changes during the period of examination and their average annual changes. We then classify our findings according to the value of exports towards each of the countries examined. These classifications, we believe, provide the necessary material in order to draw conclusions with respect to the objectives of this work.

The first section of this paper isolates the most dynamic export sectors of the Greek economy in the region and examines their intertemporal development. The second section examines the development of bilateral trade relations of Greece with each of the five states. In the third section, correlations are being made between the magnitude and dynamics of the Greek foreign trade in the region and that of the European Union. Finally, the fourth section summarises our conclusions regarding the objectives of this paper.

1 Basic export sectors of the Greek economy in the region

By examining the available data regarding the export performance of the Greek economy in the region of our interest, we can isolate the sectors which exhibit the highest value in monetary terms. We can also examine the development of these sectors during the relevant time period. Finally, we can also single out the particular countries to which each of these sectors perform well and how important these sectors are for the economies of the recipient countries.

On aggregate, as it can be seen in Diagram 1, the total value of Greek exports to all of the five states we examine in this work was 568 million ECU in 1993 and showed a steadily increasing course for each of the subsequent years. In the year 2000, their value rose to 1816 million ECU. Simple calculations show that the value of these exports in the final year (2000) corresponds to 319% of that of the initial year (1993). Furthermore, the average annual increase of the Greek exports for the period 1993-2000 was of the order of 18%.

The first sign of warning in this context comes from the trade balance between Greece and the total of these five countries. This is because during the same period, total Greek

² Eurostat, Intra and Extra E.U. Trade, Annual Data, 1993-2000, Luxembourg 2001.

Such data, in addition to Eurostat, can also be acquired by the Country Profiles of the Economist Intelligence Unit, the Commission Staff Working Papers of the Commission of the European Communities, as well as by the Country Profiles of the European Bank for Reconstruction and Development. Our preference for Eurostat data is based solely on their overall chronological and interstate consistency which, in our case, facilitates comparisons.

imports (Diagram 1) from these countries rose to 366% of the initial period in total or by 20.35% per year (from 262 million ECU in 1993 to 958 million ECU in 2000)³. Although the trade balance undoubtedly remains positive throughout the period, there is a rather strong sign of reversal of past trends.

On a sectoral level, (see also Table 1)⁴ we can see that the most important export sectors of the Greek economy in the region of our examination according to the value of their exports are, in descending order, the following:

Mineral Fuels and Oils, has been the most important export branch of Greece. Alone it amounts to 19.8% of total Greek exports in the whole area. The increase of its value between 1993 and 2000 has been of the order of 184%. This sector is especially penetrating in FYROM, Albania and Bulgaria.

Electrical Machinery and Equipment, being a fast developing sector, became the second most important export branch of Greece. In the year 2000, amounted to 12.4% of total Greek exports in the area. The increase of its value between 1993 and 2000 has been of the order of 2256%. This sector is especially penetrating in Rumania.

Knitted Clothing has become the third largest export sector. Alone it had come to amount to 7.1% of total Greek exports in the area by the year 2000. The increase of its value between 1993 and 2000 has been of the order of 1118%. This sector is especially penetrating in Bulgaria.

Boilers and Machinery has also been fast developing and became the fourth most important export branch of Greece in the whole of the examined region. In the year 2000 amounted to 5.9% of total Greek exports. The increase of its value between 1993 and 2000 has been of the order of 155%. This sector is especially penetrating in Albania, Serbia-Montenegro, FYROM and Romania.

Plastics are especially penetrating in Bulgaria, Serbia-Montenegro, FYROM and Romania. Fruits in Serbia-Montenegro, FYROM and Romania. Aluminium in Bulgaria and in Serbia-Montenegro. Articles of iron and steel is especially penetrating in Albania.

2 Bilateral trade relations

We now turn our attention to bilateral trade relation between Greece and each of the five Balkan states we have specified as our area of interest. Our objective here is to single out those export sectors of the Greek economy which perform exceptionally well in each country

³ Ibid.

⁴ Table 1 shows details for the 25 largest export sectors.

and to discern their future potential.

2.1 Albania

The trade of Albania with Greece is shown in Diagram 25. In some more detail, imports of Greece from the above country, amounting in 1993 to some 13.1 million ECU, showed a steep increase of 120% for 1994, following a mildly increasing path during the following years. Eventually, Greek imports reached 43.9 million ECU in the year 2000, which is equivalent to 335% of the initial period's amount of imports, or an annual increase of 18.8% for the entire period. More specific analysis shows that for the years 1994-2000 the above rate is only 6.8%, implying a relative lack of competitiveness of Albanian products in the Greek market.

Exports of Greece to Albania in 1993 amounted to some 107 million ECU and experienced a steep increase of 70% for the year 1994, followed by a milder increasing path during the subsequent years. Greek exports reached 272.7 million ECU in the year 2000, equivalent to 254% of the initial period, giving an average annual increase of 14.3%. It must be noted though, that for the years 1994 to 2000 the above rate is only 6.2%, implying a slower rate of penetration of the Greek exports to Albania.

Table 2-a highlights the larger export sectors of Greece to Albania. The most important are : Mineral Fuels and Oils alone account for 17% of the Greek exports to Albania. Exports increased from 3.9 million ECU in 1993 to 46.1 million ECU in the year 2000, showing an average annual rate of increase of 42%. Earths and Cement, represented 5.5% of all Greek exports to Albania. In 1993 exports amounted to 1.6 million ECU and in the year 2000 they reached 14.9 million ECU, showing an average annual growth for the period of 37%. Beverages and Spirits accounted for 5.3% of total Greek exports to Albania. Iron and Steel, accounted for 4.9% total Greek exports to Albania. Boilers and Machinery (12.1 million ECU in 2000) accounted for 4.4% and finally Perfumery Oils in 2000 accounted for 4.3% of total Greek exports to Albania.

As it can be seen, although Greek exports to Albania grow on average at a moderate rate of 6.2% annually, there are certain basic and rather large sectors (steel, cement and fuel, etc.) that grow really fast. These show signs of a relative comparative advantage of Greek

⁵ For an analytical approach to the process of economic transition in Albania see also Clunies-Ross and Sudar (1998).

products, mostly due to proximity, in the Albanian market. These basic sectors, though, are of low added value for Greece, thus the advantage is mainly on trade and not on manufacturing. The situation, although favorable, cannot establish a lasting advantage for the future, but rather a temporary one.

2.2 Bulgaria

Greek trade with Bulgaria is shown in Diagram 3⁶. Imports of Greece from Bulgaria are by far the largest compared to any other Balkan country. In the year 2000 they amounted to 425 million ECU and represented 44% of all Greek imports from the five examined countries together (958 million ECU). In the year 1993 they had been 168 million ECU, showing thus an average annual increase of the order of 14.3%.

Exports of Greece to Bulgaria are very considerable as well. They are the second largest after FYROM, and amount to 27% of all Greek exports to these five Balkan countries. They amounted to 257 million ECU in 1993 and reached 488 million ECU by the year 2000, equivalent to 189% of the initial period, giving an average annual increase of 9,6%. This rate is notably lower than the 14.3% of the Greek imports from Bulgaria, and if the trends remain as they are, soon the positive balance of trade of the Greek side (488 to 425 million ECU) may become positive for the Bulgarian side.

Table 2-b highlights the largest export trade sectors of Greece to Bulgaria. The most important of them are: Knitted Clothing account for 22% of the total of Greek exports to Bulgaria. From 9.2 million ECU in 1993, exports reached 106 million ECU in year 2000, showing a very high average annual increase of 42%. Mineral Fuels and Oils account for 8.5% of total Greek exports to the above country. It should be noted though that Greek exports are decreasing, from 62.7 million ECU in 1993 to 41.5 million ECU in the year 2000, showing that Bulgaria finds alternative sources. Photographic and Cinematographic products, a new and very rapidly growing sector has become the third largest export sector of Greece to Bulgaria, with 7% of total exports. Finally, Plastics and Aluminium account for 5% of the total Greek exports to Bulgaria, each. They show a considerable growth, exhibiting an average annual increase of 15% and of 25% respectively, quite higher than the general increase of 9.6% of total Greek exports to Bulgaria.

As it can again be seen, Greek exports to Bulgaria grow at 9.6% annually, while imports increase annually at 14.3%. This shows a considerable dynamism of Bulgarian

⁶ For a general view of the development of the economic transition in Bulgaria see also Bristow (1996).

products entering Greece, while the Greek trade aggregate penetration is quite mild. Still, though, there are certain non-basic sectors (Knitted clothing, Aluminium, Plastics and Photographic products) where Greek exports grew fast at 25%-70% annually. On the other hand, Bulgaria seems to find alternative sources of fuels rather than importing them from Greece.

2.3 Former Yugoslav Republic of Macedonia (FYROM)

Foreign trade of FYROM with Greece is shown in Diagram 47. Greek imports from FYROM have been of the order of 24.3 million ECU in 1993, but a sharp decrease followed due to the Greek embargo of 1994 and 1995. In 1996, though, Greek imports amounted to 31 million ECU, and in the year 2000 they rose to 68.9 million ECU. The average annual increase of Greek imports from FYROM for 1993-2000 is 16% and for years 1996 to 2000 this increase has been 22%.

Greek exports to FYROM amounted to 127 million ECU in 1993 and there was a decrease during the following two years due to the embargo. Eventually, in the year 2000 exports of Greece to FYROM rose to 505 million ECU. They amounted to 28% of all Greek exports to the five Balkan countries. This growth is giving an average annual increase of 21.7% for 1993-2000. This rate however, is notably lower during the latest (1996-2000) period, at 15.6%.

It can be noticed that for the whole period Greece has a quite positive trade advantage with imports growing at 16% and exports at 21.7%. The trend, though, is reversed for the latest period 1996-2000, with Greek imports growing at 22% and exports at 15.6%.

Table 2-c highlights the most important export trade sectors of Greece to FYROM. They are: Mineral Fuels and Oils has been by far the largest export sector of Greece to FYROM accounting for 51% of the exports. It amounted to some 48 million ECU in 1993, reaching 257 million ECU in the year 2000 showing an average annual increase of 27%. Plastics, accounting for 5.2% of total Greek exports to FYROM, show a considerable growth, from 3.7 million ECU in 1993 to 26.6 million ECU in 2000, giving the high average annual increase of 32%. Boilers and Machinery account for 5.1% of Greek exports to FYROM. They showed an average annual increase of 34%. Fruits account for 4.5% of the total and show an average annual growth of 27% over the whole period. Ceramics finally has developed very

⁷ See also, Petrakos (2001).

rapidly, from 0.1 million ECU of exports in 1993 to 17 million ECU in 2000. It accounts for 3.5% of the Greek exports to FYROM.

Greek exports targeting FYROM have grown very fast in general. It should be noticed though that they are by 51% based on fuel. Fuel apart, the remaining Greek exports as a whole are not that large in amount. But still, there are some Greek sectors such as boilers and machinery, ceramics, plastics and fruits that are strongly exporting to FYROM and growing very rapidly. There may be some valid advantage in these that can be maintained for some time in the future.

2.4 Romania

Foreign trade between Romania and Greece is shown in Diagram 5⁸. More specifically, imports of Greece from the above country amounted in 1993 to some 56.2 million ECU. They showed a constant increasing path for the following years, reaching 196.8 million ECU in the year 1999 and 327.7 million ECU in the year 2000. The latter is equivalent to 583% of the initial period's amount of imports, or equivalent to an annual increase of 28.6%. In 2000, some 34% of all Greek imports from the five examined countries had Romania as their origin.

Exports of Greece to Romania rank third in our context, after exports to FYROM and Bulgaria. They have amounted to 76 million ECU in 1993 and to some 416 million ECU in the year 2000, representing some 23% of all Greek exports to the five countries taken together. These exports experienced an average annual increase of 27.5% over the period 1993-2000.

Table 2-d highlights the larger exporting trade sectors of Greece to Romania. The most important of them are: Electrical Machinery and Equipment is the largest export sector, accounting for 44% of all exports of Greece to Romania. Greek exports increased from 0.9 million ECU in 1993 to a huge 186 million ECU in 2000, showing an average annual increase of 114%. Boilers and Machinery exhibited a considerable growth, from 10.4 million ECU in 1993 to 35 million ECU in 2000, or an average annual increase of 19%. It is the second larger sector and accounts for 8.5% of total Greek exports to Romania. Fruits is a traditional and long established export sector and has produced a moderate rate of growth. Its exports to Romania, being 11.3 million ECU in 1993, rose to 21.4 million ECU in 2000. This gives an average annual growth of 9% over the whole period. It accounts for 5.1% of total Greek exports to Romania. Plastics shows a remarkable growth, from 1.9 million ECU in 1993 to

⁸ For a more general view of the economic situation in Romania see also Light and Phinnemore (2001).

20.7 million ECU in 2000, giving a high average annual increase of 40%. This exporting sector has lately become the fourth largest and accounts for 5% of total Greek exports to Romania. Finally, Inorganic Chemicals is a small but very fast growing sector, from a some 0.04 million ECU in 1993 to 17.8 million ECU in 2000, giving the very high average annual increase of 141%. It accounts for 4.3% of total Greek exports to Romania.

It must be noted here however, that although the balance of trade remains in favour of Greece, the rate of increase of exports at 27.5% annually is marginally lower than that of imports, 28.6%. No fuel is exported to Romania, but mainly electrical appliances and machinery, plastics and fruit. These sectors might be smaller, but they have higher value added produced within Greece.

2.5 Serbia - Montenegro

Trade between Serbia-Montenegro and Greece is shown in Diagram 6. Imports of Greece from this country for 1993 and 1994 had been zero, due to the military operations taken against this country, while in 1995 they were just 0.7 million ECU. Next year, 1996, imports of Greece amounted to 61.3 million ECU and rose mildly until the year 2000 when they amounted to 92.1 million ECU. The average annual increase of Greek imports from Serbia-Montenegro, for 1996-2000 has thus been a moderate 10.7%.

Exports of Greece to Serbia-Montenegro had been practically zero for 1993 and 1994, while in 1995 they amounted to 13.8 million ECU. The following year, 1996, they amounted to 132.9 million ECU, rose to 181 million ECU by 1997, reached 167 million ECU in 1998, to end up at 133.4 million ECU in year 2000. This is equivalent to 101% of the amount of 1996, giving thus an average annual increase of zero. Of course the historic events that this country has experienced, more than explain the above curve but, still, the result is that Greek exports have difficulty in penetrating Serbia-Montenegro.

Table 2-e highlights the larger exporting trade sectors of Greece to Serbia-Montenegro. The most important of them are :

Aluminium has been the largest sector as regards Greek exports to Serbia-Montenegro. It rose from 0.07 million ECU in 1995, to 3.1 million ECU in 1996, to reach 15.9 million ECU in the year 2000, giving an average annual growth of 50% for 1996-2000, quite high and important. Plastics has become the second larger export sector with a considerable growth, from 0.2 million ECU in 1995, to 3.3 million ECU in 1996 and to 13.9 million ECU in the year 2000. Average annual increase for 1996-2000 has been 43%. It accounts for 11% of total Greek exports to Serbia-Montenegro. Boilers and machinery shows a mild growth, from 7.1

million ECU in 1996, to 9.3 million ECU in 2000, or an average annual increase of 7%, considerable compared to the general stagnation, accounting for 7% of Greek exports to Serbia-Montenegro. Fruits has moderate growth regarding exports to Serbia-Montenegro. Being 1.5 million ECU in 1995, exports rose to 8.6 million ECU in 1996, to reach 8.1 million ECU by the year 2000. Although this gives a practically zero growth, the sector accounts for 6.1% of the total Greek exports to this country. Tobacco had a troublesome path as regards exports to Serbia-Montenegro. From 0.1 million ECU in 1995, exports rose to 3.1 million ECU in 1996. In 1997 it exploded to 15.4 million ECU becoming thus the second largest Greek export sector to Serbia-Montenegro, to eventually become the first in the following year. A steep decline followed in 1999 and continued in 2000, with exports amounting to 7.5 million ECU in the year 2000.

In general therefore, Greek exports to Serbia-Montenegro have run through a difficult path of political instability. Also, there are signs that trade is not freely based on supply and demand, as it is shown in the cases of fruit and tobacco. In any case, aluminium, plastics and machinery are sectors that do show some potential.

3 Comparisons with the European Union

At this stage, we feel it is necessary to enter into the picture the basic elements of foreign trade between the five Balkan states we investigate in this work and the European Union. On the one hand, we would like to see whether the trade magnitudes between Greece and each of the examined countries are significant in comparison. On the other hand, we would like to investigate whether Greece possesses (or does not possess) any relative advantage in the region due to, if not anything else, geographical proximity and historical reasons. What follows, is illustrated in Table 3.

Starting with imports, E.U. imports from the total of the five countries between 1993 and 2000 rose from 3,258 million ECU to 12,513 million ECU⁹. This is equivalent to 384% of the initial amount and represents an average annual increase of 21.2%. We can observe here, that these rates are virtually equal to the Greek ones of 366% and 20.3% respectively over the same period. Furthermore, in the year 2000, whereas E.U. imports from the area were, as we said, equal to 12,513 million ECU, the corresponding figure for Greek imports was 958 million ECU, which equaled 7.7% of the total of E.U. imports (Table 3). We can note that it does not seem to exist any differentiation in the pattern of trade between Greece and the E.U

⁹ Eurostat, Intra and Extra E.U. Trade, Annual Data, 1993-2000, Luxembourg 2001.

as far as the import side of trade with this region is concerned.

Continuing with exports, we can see that E.U. exports to the total of these five countries between 1993 and 2000 rose from 4,825 million ECU to 15,865 million ECU¹⁰. Simple calculations again show that the amount in the year 2000 is equivalent to 329% of the initial period showing an average annual increase of 18.5% (the corresponding Greek rates were 319% and 18% respectively). Also, in the year 2000, total Greek exports to the area amounted to 1,816 million ECU, which represents 11.4% of the total of E.U. exports (Table 3). Once again, we see that it does not seem to exist any differentiation in the pattern of trade between Greece and the E.U. as far as the export side with this region is concerned.

Thus, the foreign trade of Greece with these countries as a whole, when compared to E.U., does not exhibit any relative advantages.

Turning our attention to each country separately, there are a number of specific observations which can be made. This can be done again with the help of Table 3.

As far the imports Greece and the E.U made from these countries in the year 2000, we can see that, in the case of Albania, 16% of its total exports to the E.U. were absorbed by Greece. The corresponding figure for Bulgaria was 13.9%, for Serbia-Montenegro 11.5%, for FYROM 9.4% and for Romania 4.3%. Hence, with the notable exception of Romania, these countries show an important degree of export orientation towards Greece. With respect to the exports Greece and the E.U made to these countries in the year 2000, in the case of Albania 33.9% of its total imports from the E.U. came from Greece. An even more impressive percentage of the order of 38.2% is applicable in the case of FYROM. In the case of Bulgaria the percentage was 15.1%, for Serbia-Montenegro was 7.4% and, finally, for Romania it was 4.8%.

On a country level therefore, one can observe that Greece has a clear relative advantage as compared to the E.U., with respect to FYROM and Albania, a competitive edge with respect to Bulgaria and lags behind in the cases of Serbia-Montenegro and, especially, Romania.

4 Conclusions

The demise of the socialist regimes in the Balkan region was hailed, as stated in its introduction as a golden opportunity for the Greek economy to expand in every conceivable direction. The main postulate of this paper is that Greece exports to the markets of these

¹⁰ Ibid.

countries products which possess very low value added while also seems to be gradually loosing ground in the most important of them.

a) Trade balance

On an aggregate level concerning the total of the five countries examined in this work during the period 1993-2000, it has been shown that although the trade balance in value terms is positive (858 million ECU for the year 2000), exports to these countries rise by 18% per annum while imports rise by 20.35% per annum.

It should be noted that, out of total Greek exports to the area which for the year 2000 amounted to 1,816 million ECU, 19.8% (359.7 million ECU) of them came from mineral fuels and oils which, in the case of Greece, is a sector with very low value added. Furthermore, for the next most important export sectors, which concern machinery of various kinds, one could suspect that these are cases of products in which Greece puts in rather low percentage of value added. Things are slightly better for Greece as regards the sectors of clothing, plastics and aluminium, at least for the time being.

b) Bilateral

The above can be supported on a bilateral basis as well. In Albania total exports grow at 6.2% annually with fuels and oils growing at 42% p.a. and representing 17% of total exports in the year 2000. The remaining important export sectors which continue to grow are: cement, iron and steel and machinery. The final important export sector to Albania which has a relatively high value added, beverages and spirits, has exhibited a zero growth over the examined period.

In Bulgaria, we have a reversal of the terms of trade, with Greek exports growing at 9.6% annually and imports growing by 14.3% p.a. This must be mainly due to the fact that exports of fuels and oils have been decreasing by 6% p.a. over the period of examination. Out of the remaining important export sectors, the third one is photographic and cinematographic products which, to a large extent, concerns goods which have first been imported to Greece from somewhere else.

In FYROM total exports do grow very fast but, again, with fuels and oils representing 51% of total exports over the period of examination (probably due to reasons of geographical proximity). In addition, not only FYROM is a very small market overall but also a 38% of its imports originating from Greece is a percentage that may not be sustainable over time.

In Romania, where no fuels and oils are exported because of local production, Greek

exports grow by 27.5% p.a. whereas imports have come to grow by 28.6% p.a. The most important of the remaining export sectors are, again, machinery of various kinds and plastics.

In Serbia-Montenegro, due to the various problems this country encountered over the period of our examination, it is difficult to discern a well-defined pattern of trade. However, as we showed in the relevant section of this paper, Greek exports have difficulty in penetrating this market.

Thus, it seems that Greek exports to the area are based mostly on goods possessing low value added and, even so, they are performing well only in Albania and FYROM, they find serious competition in Bulgaria whereas they are losing ground in the more lucrative markets of Romania and Serbia-Montenegro.

c) Sectoral

In order to summarise the implications of our findings for the Greek agricultural and manufacturing export sectors, we can infer the following:

As regards the agricultural sectors in general, it should be noted that they hardly ever show up in the upper ranks of Greece's list of exports to the area. Indeed, as it can be deduced from Tables 1 and 2, with the sole exception of sector 8 (fruits), no other agricultural sector has any significant presence in the export list of Greece to these countries. This is not so surprising given that the agricultural sectors of these countries were less affected, as compared to manufacture, by the sweeping changes of the beginning of the 90s. At the same time, agriculture, by its nature, can more flexibly adjust its production so as follow the prevailing market trends.

The implications as far as Greek manufacturing as a whole is concerned, are that while Greek manufacturing exports are increasing, they gradually constitute smaller part of the respective countries' imports. This happens because, while the Balkan market is growing, it does so at a pace that Greek manufacturing does not seem to be able to follow, at least for the time being. The cause of this delay is not confined solely on quantitative restrictions but is also due to the higher qualitative standards set by competition. In conclusion Greek manufacturing exports find themselves in an environment which becomes more and more competitive; the comparative advantages of the past seem to wither away.

d) Europe

Trying to find a comparative advantage of Greece with respect to the EU, as regards trade with the balkans we found that:

E.U. imports from the total of the five countries between 1993 and 2000 rose by 284% representing an average annual increase of 21.2%, growth rates virtually equal to the Greek imports of 266% and 20.3% respectively over the same period.

E.U. exports to the total of these five countries between 1993 and 2000 rose by 229%, showing an average annual increase of 18.5% as compared to the relevant Greek rates of 319% and 18% respectively.

It does not seem to exist any differentiation in the pattern of trade between Greece and the E.U., as far as the import or the export side is concerned. On a country-specific analysis, Greece shows a clear competitive advantage to E.U. with respect to FYROM and Albania, a competitive edge with respect to Bulgaria and lags behind in the cases of Serbia-Montenegro and, especially, Romania.

Thus, the thesis that Greece found a very promising entrepreneurial domain in these countries as they emerged in the post-socialist world, does not seem to be supported by the facts, at least as far as foreign trade is concerned.

REFERENCES

In Greek:

Babanasis, S., Changes and Business Opportunities in Central-Eastern Europe, Papazisis Editions, Athens, 1997.

Greek Centre of European Studies (eds.), The European Community and the Balkans, Sakkoulas Publishers, Athens 1996.

Karafotakis, E., The Balkan Economies in the Early Stage of Transition to the Economy of the Market, 1990-1996, Kritiki Publishers, Athens, 1999.

Ministry of National Economy of Greece, Greece - Balkan Countries: Development of Economic and Trade Relations, Athens, 2000.

Papazisis, Ch., Greece, Southeast Europe and the New International System: The Challenges of the 21st Century, Papazisis Editions, Athens, 2001.

Petrakos, G. (ed.), The Development of the Balkans, University of Thessaly Press, Volos, 2000.

In English:

Bristow, J., The Bulgarian Economy in Transition, Edward Elgar, 1996.

Carter, F.W. and H.T. Norris, The Changing Face of the Balkans, London, 1996.

Clunies-Ross, A. and P. Sudar (eds), Albania's Economy in Transition and Turmoil, Ashgate, Aldershot, 1998.

Commission of the European Union: Report from the Commission, The Stabilisation and Association Process for South East Europe, First Annual Report, Brussels, April 4, 2002.

Commission of the European Communities: European Economy: The Western Balkans in Transition, January 2003.

Commission of the European Communities, Albania: Stabilisation and Association Report, Commission Staff Working Paper, 2003.

Commission of the European Communities, Former Yugoslav Republic of Macedonia: Stabilisation and Association Report, Commission Staff Working Paper, 2003.

Commission of the European Communities, Serbia and Montenegro: Stabilisation and Association Report, Commission Staff Working Paper, 2003.

Economist Intelligence Unit, Country Profile, 2002, Albania.

Economist Intelligence Unit, Country Profile, 2002, Bulgaria.

Economist Intelligence Unit, Country Profile, 2002, Macedonia.

Economist Intelligence Unit, Country Profile, 2002, Romania.

Economist Intelligence Unit, Country Profile, 2002, Serbia/Montenegro.

European Bank for Reconstruction and Development, Country Profile: FYR of Macedonia, 2000.

European Bank for Reconstruction and Development, Country Profile: Bulgaria, 2000.

European Bank for Reconstruction and Development, Country Profile: Romania, 2000.

European Bank for Reconstruction and Development, Country Profile: Albania, 2000.

Eurostat: Intra and Extra E.U. Trade, Annual Data 1993-2000, Luxembourg 2001.

Light, D. and D. Phinnemore (eds.), Post-Communist Romania, Palgrave, 2001.

Petrakos, G., The Trade Relations between Greece and FYROM, Agora Without Frontiers, Volume 6, (3) 2001.

Woodward, Susan, Balkan Tragedy: Chaos and Dissolution after the Cold War, Washington, D.C., 1995.

Diagram 1: Imports and Exports of Greece from 5 Balkan Countries, 1993 - 2000.
(Albania, Bulgaria, FYROM, Romania, Serbia-Montenegro)

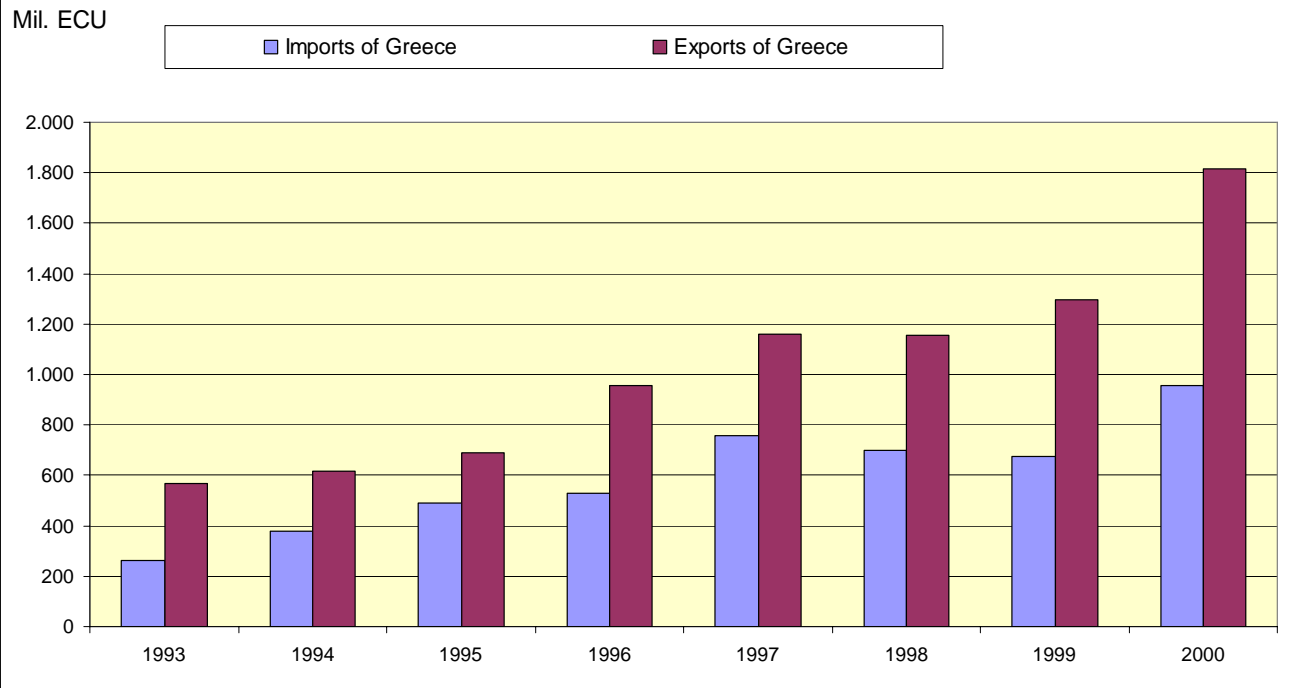


Diagram 2: Trade of Greece with Albania

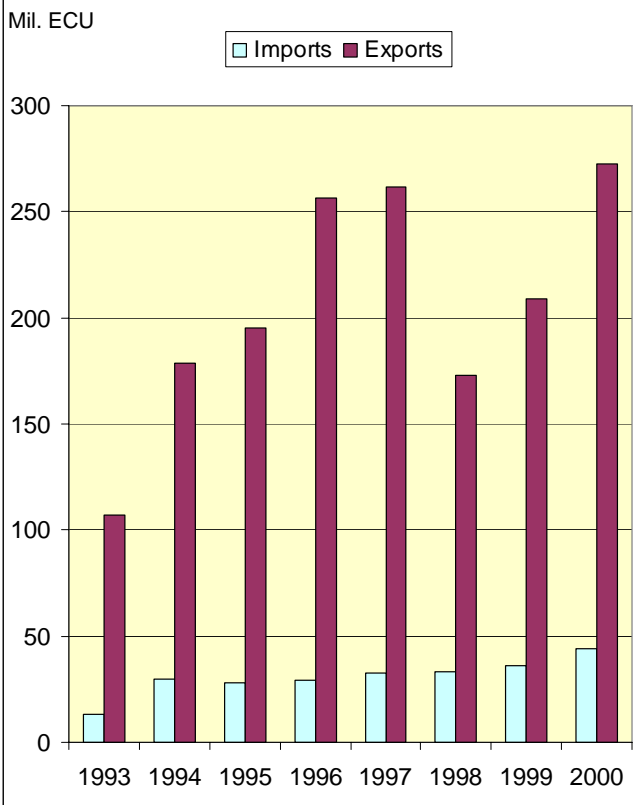
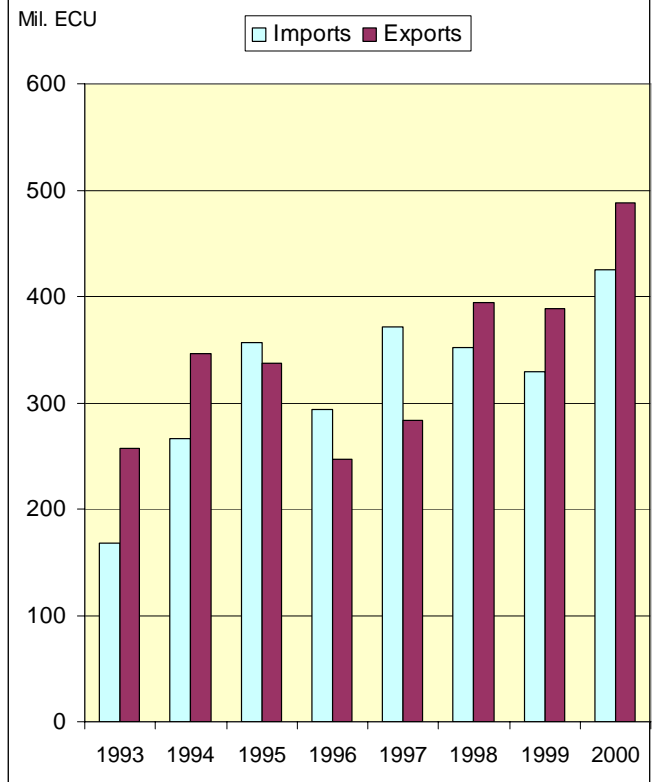
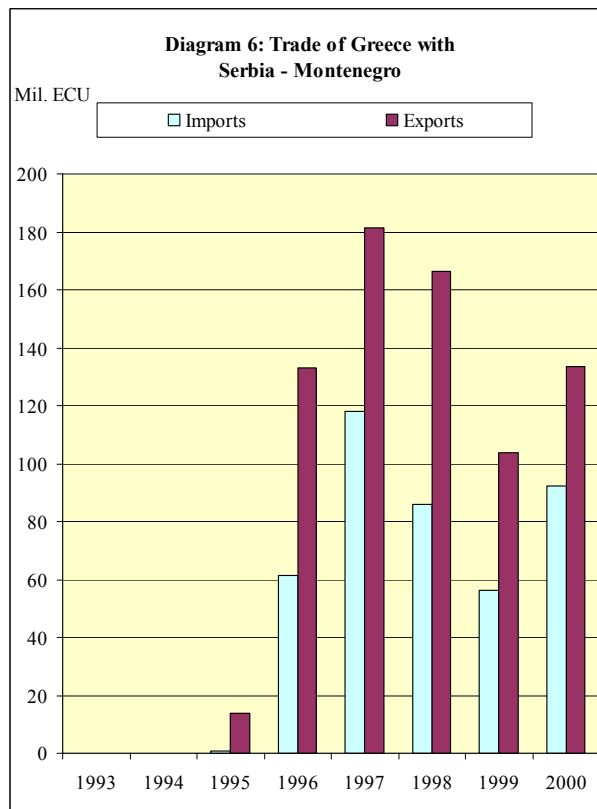
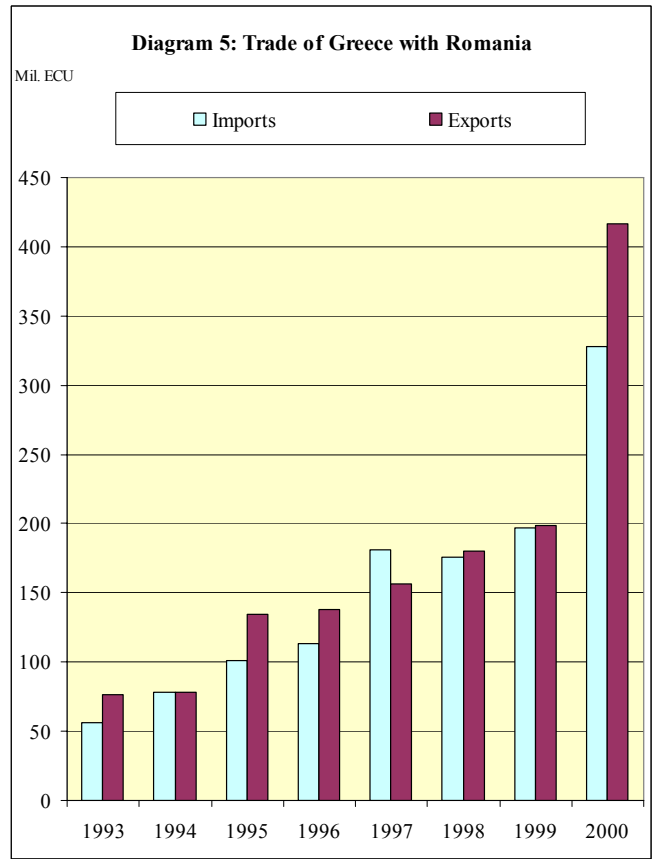
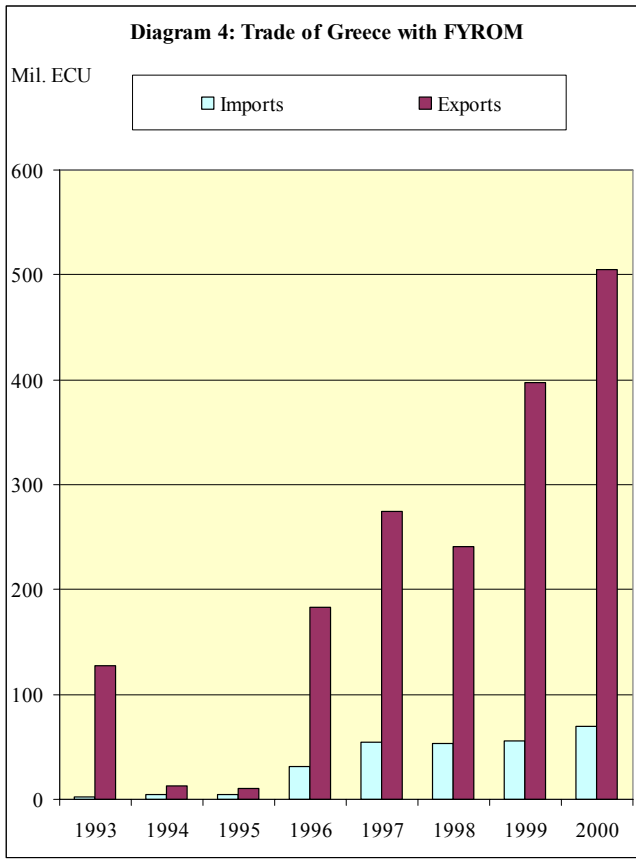


Diagram 3: Trade of Greece with Bulgaria



Source: Eurostat: Intra - Extra E.U. trade, 1993 - 2000.



Source: Eurostat: Intra - Extra E.U. trade, 1993 – 2000.

Table 1: Exports of Greece to 5 Balkan States : The 25 largest export sectors

Annual Sectoral Analysis, 1993-2000	Unit: 1000 ECU					Sectors by order of Volume of year 2000			Average Annual
	SECTOR*	1993	1994	1995	1996	1997	1998	1999	2000
27:Mineral Fuels	126,433	84,640	65,830	173,810	282,231	208,024	294,499	359,735	16%
85:Electical Machinery	9,575	14,777	24,297	30,631	32,506	45,589	61,524	225,681	57%
61:Knitted clothing	10,786	15,143	28,717	36,251	55,653	71,913	86,776	129,122	43%
84:Boilers, machinery	41,722	41,392	57,192	57,994	57,054	73,912	94,997	106,426	14%
39:Plastics	19,809	28,309	34,807	39,510	38,325	46,658	51,061	97,484	26%
8: Fruits	33,260	50,986	45,813	50,076	58,332	56,404	60,591	80,068	13%
76:Aluminium	5,878	16,164	25,418	35,498	40,862	53,203	51,399	71,397	43%
73:Products of Iron &Steel	5,461	9,831	15,114	22,654	18,590	22,899	27,253	43,735	35%
37:Photo-Cine Products	997	1,679	2,350	2,386	2,110	5,609	13,716	39,745	69%
52: Cotton	18,206	29,658	36,487	37,905	44,294	45,970	34,111	39,319	12%
24: Tobaccos	31,829	27,416	34,136	43,924	55,058	33,449	60,350	37,081	2%
87:Vehicles (no rail)	13,090	13,827	18,607	24,396	32,195	30,222	32,683	36,136	16%
22:Spirits & Beverages	33,759	44,437	24,854	25,309	21,591	16,199	20,405	31,621	-1%
62:Clothing, not knitted	4,856	7,556	11,711	17,044	26,259	30,091	27,331	30,542	30%
72:Iron & Steel	4,270	3,220	9,286	20,387	27,306	20,274	17,803	27,255	30%
33:Perfumery oils	1,925	2,259	4,915	10,963	14,610	14,233	10,784	25,987	45%
25:Salts & Earths	7,256	11,108	14,631	20,478	15,673	16,157	17,655	24,892	19%
48:Paper	4,303	7,023	13,455	18,019	16,308	17,081	17,407	21,663	26%
28:Inorganic chemicals	2,049	1,494	2,046	8,865	9,279	14,635	12,986	20,311	39%
60:Fabrics, knitted	3,093	6,479	6,451	4,935	11,007	16,039	12,814	19,967	31%
20:Fruit & nut products	15,770	12,337	17,173	16,907	16,715	22,644	14,646	19,623	3%
34:Soaps, waxes, etc.	7,232	7,025	8,169	10,221	10,858	11,584	12,740	18,814	15%
11:Milling products	10,168	8,252	3,555	20,491	24,468	17,087	10,879	12,931	3%
23:Animal fodder	4,967	1,650	763	4,154	10,230	10,618	12,193	12,262	14%

*Source and numbering of sectors: Eurostat: Intra-Extra E.U. Trade, 1993-2000.

Table 2: Major Sectors of Exports of Greece to each of the 5 Balkan States
Annual Sectoral Analysis, 1993- 2000
Unit: 1000 ECU
Sectors by order of
Volume of year 2000
SECTORS*

	1993	1994	1995	1996	1997	1998	1999	2000	Average Annual
a. ALBANIA									
27	3905	20689	15452	16990	51895	13487	26007	46154	42%
25	1664	6539	10498	15000	11282	10734	11449	14919	37%
22	14840	26840	19443	19486	12177	7893	10352	14578	0%
72	670	1592	6182	12628	14673	10873	10520	13329	53%
84	9625	8872	12000	12007	8844	10070	11512	12140	3%
33	64	222	318	1443	1568	414	644	11727	111%
39	4762	10643	11573	14477	10653	9006	9218	11472	13%
8	1928	5894	11564	10866	8005	7012	16886	10607	28%
11	7968	7845	1994	17255	21462	14392	9038	10286	4%
61	1283	1628	5013	5473	5590	6443	6994	9087	32%
b. BULGARIA									
61	9264	13373	23562	27452	43283	58465	70897	105931	42%
27	62761	47237	22107	14305	28203	50120	40424	41581	-6%
37	857	1479	1821	1104	1076	4141	11388	35056	70%
39	9385	15079	17570	10381	10221	14499	18967	24687	15%
76	4837	14236	19889	21160	20147	23527	23073	23671	25%
84	18296	25115	29709	19022	15892	26781	27964	23082	3%
52	8300	23061	23823	18365	28394	26425	19542	21273	14%
8	16300	35263	23547	12586	9731	14457	13392	20065	3%
87	4634	8749	13322	7205	8067	11294	13605	14288	17%
62	3802	5631	9885	10516	15120	15993	12833	14009	20%
c. FYROM									
27	48263	2902	680	84018	146611	100170	207908	256632	27%
39	3726	666	312	5106	5021	5758	6408	26658	32%
84	3329	267	229	7597	8118	10142	15069	26342	34%
8	3686	725	398	10535	14317	11516	12613	19792	27%
69	98	0	178	674	1528	1400	5072	17462	110%
73	1186	180	179	1303	1896	2429	3664	11454	38%
85	563	120	74	1591	2290	3371	5904	11357	54%
61	85	28	7	2740	5072	5358	6593	9449	96%
87	2053	243	419	3602	3692	3412	7265	8794	23%
24	5648	1355	2374	4442	4607	8338	31820	7609	4%
d. ROMANIA									
85	909	1544	6165	7081	10871	22593	30972	186452	114%
84	10472	7138	15133	12283	14669	16534	34740	35561	19%
8	11346	9104	8796	7445	13521	13144	11794	21412	9%
39	1936	1921	5130	6206	8236	11454	11185	20730	40%
28	38	104	1079	7449	7363	11224	10021	17817	141%
76	700	1071	2023	3160	7296	13201	12169	17578	58%
73	659	688	1416	3057	3870	8776	10111	15563	57%
27	11504	13812	26116	14389	17151	9609	11165	11039	-1%
33	493	497	2004	3994	5051	4946	3499	8282	50%
52	2948	5079	9767	8097	6522	6315	3649	6656	12%
e. SERBIA - MONTENEGRO									
76	0	0	69	3134	4784	7032	6999	15892	50%
39	0	0	222	3340	4194	5941	5283	13937	43%
84	0	0	121	7085	9531	10385	5712	9301	7%
8	0	0	1508	8644	12758	10275	5906	8192	-1%
24	0	0	98	3110	15444	14695	6282	7477	25%
85	0	0	173	3450	4179	5580	7645	7033	19%
87	0	0	246	9382	16254	12030	5088	5901	-11%
22	2	0	3	548	5549	4444	2946	5097	75%
27	0	0	1475	44108	38371	34638	8995	4329	-44%

52	0	0	130	4871	3538	3026	3469	4181	-4%
----	---	---	-----	------	------	------	------	------	-----

*Source and numbering of sectors: Eurostat: Intra-Extra E.U. Trade, 1993-2000. Code numbers explained in Table 1

**Table 3: Comparison of Trade Flows of Greece and European Union to 5 Balkan states
Year 2000**

	Albania	Bulgaria	F.Y.R.O.M	Romania	Serbia - Montenegro	Total of 5
In Thousand ECU						
IMPORTS						
Of Greece	43,963	425,293	68,922	327,753	92,117	958,048
Of Eur. Union	275,134	3,065,414	736,145	7,632,051	803,998	12,512,742
% Greece/E,U,	16.00%	13.90%	9.40%	4.30%	11.50%	7.70%
EXPORTS						
Of Greece	272,714	488,563	504,924	416,564	133,382	1,816,147
Of Eur, Union	803,649	3,226,945	1,320,631	8,721,861	1,792,458	15,865,544
% Greece/E,U,	33,90%	15,10%	38,20%	4,80%	7,40%	11,40%

Source: Eurostat, Intra - Extra EU Trade, 1993-2000,

IN THE SAME SERIES

- No 91 St, Karagiannis, "The Knowledge-Based Economy, Convergence and Economic Growth: Evidence from the European Union", Athens, 2007,
- No 90 Y, Panagopoulos, "Some further evidence upon testing hysteresis in the Greek Phillips-type aggregate wage equation", Athens, 2007,
- No 89 N, Benos, "Education Policy, Growth and Welfare", Athens, 2007,
- No 88 P, Baltzakis, "Privatization and deregulation", Athens, 2006 (In Greek),,
- No 87 Y, Panagopoulos and I, Reziti, "The price transmission mechanism in the Greek food market: An empirical approach", Athens, 2006,
- No 86 P, I, Prodromidis, "Functional Economies or Administrative Units in Greece: What Difference Does It Make for Policy?" Athens, 2006, Published in: *Review of Urban & Regional Development Studies*, vol, 18,2, 2006, 144-164,
- No 85 P, I, Prodromidis, "Another View on an Old Inflation: Environment and Policies in the Roman Empire up to Diocletian's Price Edict", Athens, 2006,
- No 84A E, Athanassiou, "Prospects of Household Borrowing in Greece and their Importance for Growth", Athens, 2006,
- No 83 G, C, Kostelenos, "La Banque Nationale de Grèce et ses statistiques monétaires (1841-1940)", Athènes, 2006, Published in: *Mesurer la monnaie, Banques Centrales et construction de l' autorité monétaire (XIX^e-XX^e siècle)*, Paris: Edition Albin Michel, 2005, 69-86,
- No 82 P, Baltzakis, "The Need for Industrial Policy and its Modern Form", Athens, 2006 (In Greek),
- No 81 St, Karagiannis, "A Study of the Diachronic Evolution of the EU's Structural Indicators Using Factorial Analysis", Athens, 2006,
- No 80 I, Resiti, "An investigation into the relationship between producer, wholesale and retail prices of Greek agricultural products", Athens, 2005,
- No 79 Y, Panagopoulos, A, Spiliotis, "An Empirical Approach to the Greek Money Supply", Athens, 2005,
- No 78 Y, Panagopoulos, A, Spiliotis, "Testing Alternative Money Theories: A G7 Application", Athens, 2005,
- No 77 I, A, Venetis, E, Emmanuilidi, "The fatness in equity Returns, The case of Athens Stock Exchange", Athens, 2005,
- No 76 I, A, Venetis, I, Paya, D, A, Peel, "Do Real Exchange Rates "Mean Revert" to Productivity? A Nonlinear Approach", Athens, 2005,
- No 75 C, N, Kanellopoulos, "Tax Evasion in Corporate Firms: Estimates from the Listed Firms in Athens Stock Exchange in 1990s", Athens, 2002 (In Greek),
- No 74 N, Glytsos, "Dynamic Effects of Migrant Remittances on Growth: An Econometric Model with an Application to Mediterranean Countries", Athens, 2002, Published "The contribution of remittances to growth: a dynamic approach and empirical analysis" in: *Journal of Economic Studies*, December 2005,
- No 73 N, Glytsos, "A Model Of Remittance Determination Applied to Middle East and

- North Africa Countries", Athens, 2002,
- No 72 Th, Simos, "Forecasting Quarterly GDP Using a System of Stochastic Differential Equations", Athens, 2002,
- No 71 C, N, Kanellopoulos, K, G, Mavromaras, "Male – Female Labour Market Participation and Wage Differentials in Greece", Athens, 2000, Published in: *Labour*, vol, 16, no, 4, 2002, 771-801,
- No 70 St, Balfoussias, R, De Santis, "The Economic Impact of The Cap Reform on the Greek Economy: Quantifying the Effects of Inflexible Agricultural Structures", Athens, 1999,
- No 69 M, Karamessini, O, Kaminioti, "Labour Market Segmentation in Greece: Historical Perspective and Recent Trends", Athens, 1999,
- No 68 S, Djajic, S, Lahiri and P, Raimondos-Moller, "Logic of Aid in an Intertemporal Setting", Athens, 1997,
- No 67 St, Makrydakis, "Sources of Macroeconomic Fluctuations in the Newly Industrialized Economies: A Common Trends Approach", Athens, 1997, Published in: *Asian Economic Journal*, vol, 11, no, 4, 1997, 361-383,
- No 66 N, Christodoulakis, G, Petrakos, "Economic Developments in the Balkan Countries and the Role of Greece: From Bilateral Relations to the Challenge of Integration", Athens, 1997,
- No 65 C, Kanellopoulos, "Pay Structure in Greece", Athens, 1997,
- No 64 M, Chletsos, Chr, Kollias and G, Manolas, "Structural Economic Changes and their Impact on the Relationship Between Wages, Productivity and Labour Demand in Greece", Athens, 1997,
- No 63 M, Chletsos, "Changes in Social Policy - Social Insurance, Restructuring the Labour Market and the Role of the State in Greece in the Period of European Integration", No Athens, 1997,
- No 62 M, Chletsos, "Government Spending and Growth in Greece 1958-1993: Some Preliminary Empirical Results", Athens, 1997,
- No 61 M, Karamessini, "Labour Flexibility and Segmentation of the Greek Labour Market in the Eighties: Sectoral Analysis and Typology", No Athens, 1997,
- No 60 Chr, Kollias and St, Makrydakis, "Is there a Greek-Turkish Arms Race?: Evidence from Cointegration and Causality Tests", No Athens, 1997, Published in: *Defence and Peace Economics*, vol, 8, 1997, 355-379,
- No 59 St, Makrydakis, "Testing the Intertemporal Approach to Current Account Determination: Evidence from Greece", No Athens, 1996, Published in: *Empirical Economics*, vol, 24, no, 2, 1999, 183-209,
- No 58 Chr, Kollias and St, Makrydakis, "The Causal Relationship Between Tax Revenues and No Government Spending in Greece: 1950-1990", No Athens, 1996, Published in: *The Cyprus Journal of Economics*, vol, 8, no, 2, 1995, 120-135,
- No 57 Chr, Kollias and A, Refenes, "Modelling the Effects of No Defence Spending Reductions on Investment Using Neural Networks in the Case of No Greece", No Athens, 1996,
- No 56 Th, Katsanevas, "The Evolution of Employment and Industrial Relations in Greece

- (from the Decade of 1970 up to the Present)", Athens, 1996 (In Greek),
- No 55 D, Dogas, "Thoughts on the Appropriate Stabilization and Development Policy and the Role of the Bank of Greece in the Context of the Economic and Monetary Union (EMU)", Athens, 1996 (In Greek),
- No 54 N, Glytsos, "Demographic Changes, Retirement, Job Creation and Labour Shortages in Greece: An Occupational and Regional Outlook", Athens, 1996, Published in: *Journal of Economic Studies*, vol, 26, no, 2-3, 1999, 130-158,
- No 53 N, Glytsos, "Remitting Behavior of "Temporary" and "Permanent" Migrants: The Case of Greeks in Germany and Australia", Athens, 1996, Published in: *Labour*, vol, II, no, 3, 1997, 409-435,
- No 52 V, Stavrinos, V, Droucopoulos, "Output Expectations Productivity Trends and Employment: The Case of Greek Manufacturing", Athens, 1996, Published in: *European Research Studies*, vol, 1, no, 2, 1998, 93-122,
- No 51 A, Balfoussias, V, Stavrinos, "The Greek Military Sector and Macroeconomic Effects of Military Spending in Greece", Athens, 1996, Published in N,P, Gleditsch, O, Bjerkholt, A, Cappelen, R,P, Smith and J,P, Dunne: *In the Peace Dividend*, , Amsterdam: North-Holland, 1996, 191-214,
- No 50 J, Henley, "Restructuring Large Scale State Enterprises in the Republics of Azerbaijan, Kazakhstan, the Kyrgyz Republic and Uzbekistan: The Challenge for Technical Assistance", Athens, 1995,
- No 49 C, Kanellopoulos, G, Psacharopoulos, "Private Education Expenditure in a "Free Education" Country: The Case of Greece", Athens, 1995, Published in: *International Journal of Educational Development*, vol, 17, no, 1, 1997, 73-81,
- No 48 G, Kouretas, L, Zarangas, "A Cointegration Analysis of the Official and Parallel Foreign Exchange Markets for Dollars in Greece", Athens, 1995, Published in: *International Journal of Finance and Economics*, vol, 3, 1998, 261-276,
- No 47 St, Makrydakis, E, Tzavalis, A, Balfoussias, "Policy Regime Changes and the Long-Run Sustainability of Fiscal Policy: An Application to Greece", Athens, 1995, Published in: *Economic Modelling*, vol, 16 no, 1, 1999, 71-86,
- No 46 N, Christodoulakis and S, Kalyvitis, "Likely Effects of CSF 1994-1999 on the Greek Economy: An ex Ante Assessment Using an Annual Four-Sector Macroeconometric Model", Athens, 1995,
- No 45 St, Thomadakis, and V, Droucopoulos, "Dynamic Effects in Greek Manufacturing: The Changing Shares of SMEs, 1983-1990", Athens, 1995, Published in: *Review of Industrial Organization*, vol, 11, no, 1, 1996, 69-78,
- No 44 P, Mourdoukoutas, "Japanese Investment in Greece", Athens, 1995 (In Greek),
- No 43 V, Rapanos, "Economies of Scale and the Incidence of the Minimum Wage in the less Developed Countries", Athens, 1995, Published: "Minimum Wage and Income Distribution in the Harris-Todaro model", in: *Journal of Economic Development*, 2005,
- No 42 V, Rapanos, "Trade Unions and the Incidence of the Corporation Income Tax", Athens, 1995,
- No 41 St, Balfoussias, "Cost and Productivity in Electricity Generation in Greece", Athens,

- 1995,
- No 40 V, Rapanos, "The Effects of Environmental Taxes on Income Distribution", Athens, 1995, Published in: *European Journal of Political Economy*, 1995,
- No 39 V, Rapanos, "Technical Change in a Model with Fair Wages and Unemployment", Athens, 1995, Published in: *International Economic Journal*, vol, 10, no, 4, 1996,
- No 38 M, Panopoulou, "Greek Merchant Navy, Technological Change and Domestic Shipbuilding Industry from 1850 to 1914", Athens, 1995, Published in: *The Journal of Transport History*, vol, 16, no, 2, 159-178,
- No 37 C, Vergopoulos, "Public Debt and its Effects", Athens, 1994 (In Greek),
- No 36 C, Kanellopoulos, "Public-Private Wage Differentials in Greece", Athens, 1994,
- No 35 Z, Georganta, K, Kotsis and Emm, Kounaris, "Measurement of Total Factor Productivity in the Manufacturing Sector of Greece 1980-1991", Athens, 1994,
- No 34 E, Petrakis and A, Xepapadeas, "Environmental Consciousness and Moral Hazard in International Agreements to Protect the Environment", Athens, 1994, Published in: *Journal Public Economics*, vol, 60, 1996, 95-110,
- No 33 C, Carabatsou-Pachaki, "The Quality Strategy: A Viable Alternative for Small Mediterranean Agricultures", Athens, 1994,
- No 32 Z, Georganta, "Measurement Errors and the Indirect Effects of R & D on Productivity Growth: The U,S, Manufacturing Sector", Athens, 1993,
- No 31 P, Paraskevaidis, "The Economic Function of Agricultural Cooperative Firms", Athens, 1993 (In Greek),
- No 30 Z, Georganta, "Technical (In) Efficiency in the U,S, Manufacturing Sector, 1977-1982", Athens, 1993,
- No 29 H, Dellas, "Stabilization Policy and Long Term Growth: Are they Related?" Athens, 1993,
- No 28 Z, Georganta, "Accession in the EC and its Effect on Total Factor Productivity Growth of Greek Agriculture", Athens, 1993,
- No 27 H, Dellas, "Recessions and Ability Discrimination", Athens, 1993,
- No 26 Z, Georganta, "The Effect of a Free Market Price Mechanism on Total Factor Productivity: The Case of the Agricultural Crop Industry in Greece", Athens, 1993, Published in: *International Journal of Production Economics*, vol, 52, 1997, 55-71,
- No 25 A, Gana, Th, Zervou and A, Kotsi, "Poverty in the Regions of Greece in the late 80's, Athens", 1993 (In Greek),
- No 24 P, Paraskevaides, "Income Inequalities and Regional Distribution of the Labour Force Age Group 20-29", Athens, 1993 (In Greek),
- No 23 C, Eberwein and Tr, Kollintzas, "A Dynamic Model of Bargaining in a Unionized Firm with Irreversible Investment", Athens, 1993, Published in: *Annales d' Economie et de Statistique*, vol, 37/38, 1995, 91-115,
- No 22 P, Paraskevaides, "Evaluation of Regional Development Plans in the East Macedonia-Thrace's and Crete's Agricultural Sector", Athens, 1993 (In Greek),
- No 21 P, Paraskevaides, "Regional Typology of Farms", Athens, 1993 (In Greek),
- No 20 St, Balfoussias, "Demand for Electric Energy in the Presence of a two-block

- Declining Price Schedule", Athens, 1993,
- No 19 St, Balfoussias, "Ordering Equilibria by Output or Technology in a Non-linear Pricing Context", Athens, 1993,
- No 18 C, Carabatsou-Pachaki, "Rural Problems and Policy in Greece", Athens, 1993,
- No 17 Cl, Efstratoglou, "Export Trading Companies: International Experience and the Case of Greece", Athens, 1992 (In Greek),
- No 16 P, Paraskevaides, "Effective Protection, Domestic Resource Cost and Capital Structure of the Cattle Breeding Industry", Athens, 1992 (In Greek),
- No 15 C, Carabatsou-Pachaki, "Reforming Common Agricultural Policy and Prospects for Greece", Athens, 1992 (In Greek),
- No 14 C, Carabatsou-Pachaki, "Elaboration Principles/Evaluation Criteria for Regional Programmes", Athens, 1992 (In Greek),
- No 13 G, Agapitos and P, Koutsouvelis, "The VAT Harmonization within EEC: Single Market and its Impacts on Greece's Private Consumption and Vat Revenue", Athens, 1992,
- No 12 C, Kanellopoulos, "Incomes and Poverty of the Greek Elderly", Athens, 1992,
- No 11 D, Maroulis, "Economic Analysis of the Macroeconomic Policy of Greece during the Period 1960-1990", Athens, 1992 (In Greek),
- No 10 V, Rapanos, "Joint Production and Taxation", Athens, 1992, Published in: *Public Finance/Finances Publiques*, vol, 3, 1993,
- No 9 V, Rapanos, "Technological Progress, Income Distribution and Unemployment in the less Developed Countries", Athens, 1992, Published in: *Greek Economic Review*, 1992,
- No 8 N, Christodoulakis, "Certain Macroeconomic Consequences of the European Integration", Athens, 1992 (In Greek),
- No 7 L, Athanassiou, "Distribution Output Prices and Expenditure", Athens, 1992,
- No 6 J, Geanakoplos and H, Polemarchakis, "Observability and Constrained Optima", Athens, 1992,
- No 5 N, Antonakis and D, Karavidas, "Defense Expenditure and Growth in LDCs - The Case of Greece, 1950-1985", Athens, 1990,
- No 4 C, Kanellopoulos, *The Underground Economy in Greece: "What Official Data Show"*, Athens (In Greek 1990 - In English 1992), Published in: *Greek Economic Review*, vol, 14, no,2, 1992, 215-236,
- No 3 J, Dutta and H, Polemarchakis, "Credit Constraints and Investment Finance: No Evidence from Greece", Athens, 1990, in M, Monti (ed.), *Fiscal Policy, Economic Adjustment and Financial Markets, International Monetary Fund*, (1989),
- No 2 L, Athanassiou, "Adjustments to the Gini Coefficient for Measuring Economic Inequality", Athens, 1990,
- No 1 G, Alogoskoufis, "Competitiveness, Wage Rate Adjustment and Macroeconomic Policy in Greece", Athens, 1990 (In Greek), Published in: *Applied Economics*, vol, 29, 1997, 1023-1032,