

# Industry

The countries of South Eastern Europe (SEEC) have belonged to various empires for centuries and their boundaries and spatial extension have changed frequently. This situation, along with a peripheral setting in relation to the core areas of Europe had an adverse impact on the process of industrialisation. The decisive sector of economy was farming even at the turn of the last century, which left its fingerprint on the structure of emerging industry.

The industrial revolution made a delayed start; as late as the early 20<sup>th</sup> century, and its emergence took specific forms. Manufacturing began with food processing and the textile industry, followed by the extraction of minerals. Abundant deposits of raw materials and energy sources highly promoted their processing. Foreign investment had played an important role in the exploration of hydrocarbon fields in Romania, in the foundation of mining companies and chemical plants in Bulgaria, in addition to setting-up coal and non-ferrous (copper, chromium, lead, zinc) ore mining, timber and chemical industries in Serbia. Foreign investment, however, had not encouraged the development of manufacturing and this in turn accentuated the unbalanced industrial structure. The slow pace of advancement in manufacturing was illustrated by the fact that the overwhelming share of industrial production was the output of craftsmanship even in 1910 and the majority of industrial jobs were also concentrated in this segment of industry. The employment ratio remained virtually unchanged between 1860 and 1910 and stabilised around 7–10%. The backwardness of the region was also indicated by the per capita value of industrial production, reach-

ing a mere 33–39% of the European average in 1900. Consequently, in the early 20<sup>th</sup> century the Balkans experienced the initial phase of industrialisation, taking its first steps on the path of modernisation.

Devastation caused by World War I and the subsequent redrawing of the Balkan political map had led to serious problems in the national economies aggravated by the elimination of previous connections. After the wartime damage was repaired, the industrial revolution gained new momentum during the inter-war period. Preparations in advance of, and the subsequent boom experienced during World War II contributed to the acceleration of development from the mid-1930s onwards, particularly in Romania. Support for the war machinery of Germany chiefly stimulated food production and mineral extraction (Romanian oil, Yugoslav non-ferrous ores). No major changes occurred in the structure of national economies. A modest demand from abroad failed to encourage the progress of manufacturing. There had been a fluctuation of interest in raw materials and the sector heavily depended on the requirements of developed countries. Industrialisation enhanced spatial disparities owing to industrial plants being built primarily near to places of extraction and/or in the big cities (Belgrade, Sarajevo, Sofia, Bucharest). Industrial centres emerged as islets in the sea of backward agricultural regions extending over the major part from the Balkans. The overwhelming majority of the population made their living from farming, and before World War II it was the only region in Europe where the contribution of farming to national incomes was higher than that of industry.

## Development of Socialist Industry

Besides causing tremendous damage, World War II had also broken an earlier model of economic progress. After 1945, all the regional countries stepped onto the path of socialist development showing similar general trends, albeit at a dif-

ferent pace. The whole region belonged to the Soviet sphere of influence but there were considerable differences between the countries with respect to the scale of this interference. Of the SEEC economies, Bulgaria's was the most closely

linked to the Soviet economy, and the collapse of the Soviet Union consequently affected the Bulgarian economy most acutely.

The reconstruction after World War II was followed by an extraordinarily rapid, multi-phased industrialisation in the 1950s, which had been hitherto unprecedented in the history of the Balkan states. The development of the economy essentially meant the development of industry, with the bulk of investment being carried out in this sector. In the first step the extraction industries, energy production and metallurgy were developed, and later the emphasis shifted to the development of machine engineering and the chemical industry, which relied on the relatively rich domestic natural resources (hydrocarbons, various kind of coals and non-ferrous minerals). Agricultural output was processed by the different branches of the food industry (e.g. sugar, dairy, meat and tobacco industries) and light industry (mainly textiles, wood processing and leather). The structure of the rapidly developing socialist industry was similar in each of the Balkan countries as autarchy prevailed throughout.

The grand scale of industrial development in the 1950s and 1960s was reflected by the increase in the value of industrial output and also by the growing share of industry within GDP (*Table 15*). However, from the second half of the 1970s, the widespread growth started to lose momentum. Except for Yugoslavia, none of the SEEC really succeeded in switching to intensive industrial development. During the communist period, industrial employment had also increased rapidly, and by the 1980s it was three to fourfold higher than in the 1950s (*Table 16*).

The spatial pattern of industry has always highly depended on the location of natural resources and the layout of the transportation routes. Nonetheless, industrial site selection was often influenced by political factors. Furthermore, in different phases of industrialisation different areas were targeted. Socialist industrialisation mainly focused on traditional industrial centres, although less industrialised rural areas were also involved.

For such a large-scale industrialisation, SEEC initially mobilised internal resources, but with their depletion they had to resort to external resources, which led to negative trade balances and increasing foreign indebtedness. In addition, more and more difficulties emerged

within the sector (traditional and distorted structure of industry, unmarketable products, outdated manufacturing technologies and excessive raw material and energy consumption), which started to be resolved only after 1990.

*Table 15. Structure of GDP in the Countries of South Eastern Europe (1960–1990, %)*

Countries	Year	Agri-culture	Indus-try	Service
Albania	1960	38	19	43
	1983	34	43	23
	1990	40	37	23
Bulgaria	1967	30	46	24
	1975	22	52	26
	1990	18	43	39
Romania	1967	29	52	19
	1975	17	61	22
	1990	22	41	37
Yugoslavia	1976	17	38	45
	1982	15	40	45
	1990	11	42	47

Sources: International Statistical Yearbooks, 1970, 1986, 40 years of Socialist Albania, Tirana, 1984. Statistical Yearbooks of SEECs 1991.

*Table 16. Number of Industrial Employees in the Countries of South Eastern Europe (1960–1990)*

Countries	Year	Industrial employees
Albania	1960	58,500
	1970	128,200
	1983	252,700
	1990	116,405
Bulgaria	1961	1,142,500
	1975	1,297,000
	1983	1,378,000
	1990	1,810,878
Romania	1960	1,440,200
	1975	2,800,000
	1980	3,679,000
	1990	4,015,100
Yugoslavia	1961	1,516,700
	1975	1,922,000
	1982	2,461,000
	1990	1,288,000

Sources: International Statistical Yearbooks, 1970, 1974, 1986, 1989. 40 years of Socialist Albania, Tirana, 1984. Statistical Yearbooks of SEECs, 1991.

## Main Trends Following 1989

The way towards political, economic and social change was open for the countries of South Eastern Europe post-1989, as it was for other countries in the former Eastern bloc. However, economic reforms in the Balkan region began sluggishly, largely owing to the relatively slow and not always successful implementation of political transfer (in most cases unprepared), and also to the fact that in several of the present-day Balkan states the efforts to change the regime were accompanied by the struggle for an independent nation state, often leading to war. Owing to this, the restructuring of industry has also taken place very slowly and in a contradictory manner.

At the beginning of the 1990s SEEC faced serious economic difficulties caused by industrial crisis, the collapse of the CMEA and by the loss of markets. That is without even mentioning the impact of wars and the change in the global economy. The volume of GDP dropped by 15–40%, indebtedness increased, prices sky-rocketed and inflation was rampant. For example in Romania, the amount of debts grew from USD 1.1 billion to USD 8.3 billion between 1990 and 1997. The economic crisis was accompanied by financial crisis and spiralling inflation (*Table 17*).

Owing to the reasons mentioned above, the position of industry decreased very considerably in most Balkan countries, particularly at the beginning of the 1990s. This has been reflected, on the one hand in the share of the industrial sector within GDP, on the other in the share

of industry in employment. In 2005 the contribution of industry to employment and the GDP was between 26–40% in each country, except for Albania where its share was much smaller at only about 20% (*Figure 37*).

In the 1990s the volume of industrial production also decreased dramatically (for example by 60% in Albania) not only because it was a natural consequence of industrial development, but also because of the Balkan wars (*Figure 38*). Traditional industrial branches (mining, metallurgy, textile and leather industries) suffered the most serious declines. At the end of the 1990s, however, radical measures were taken in the Balkan countries aimed at industrial restructuring. The recovery of industry and its faster development are indicated by the industrial growth rates. In 2005 they were estimated to be 1.7% to 7.0%. The lowest value could be observed in the case of Serbia and Montenegro and the highest one in Bulgaria.

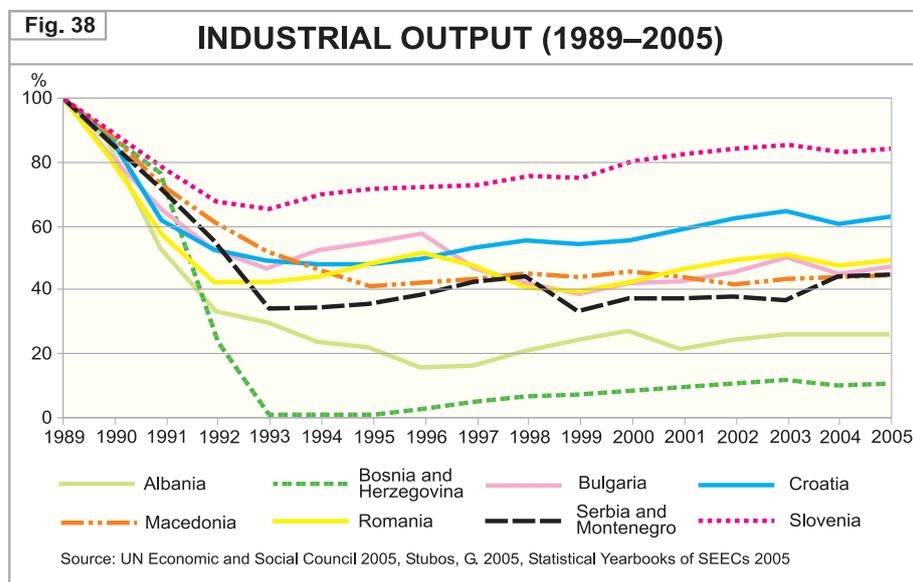
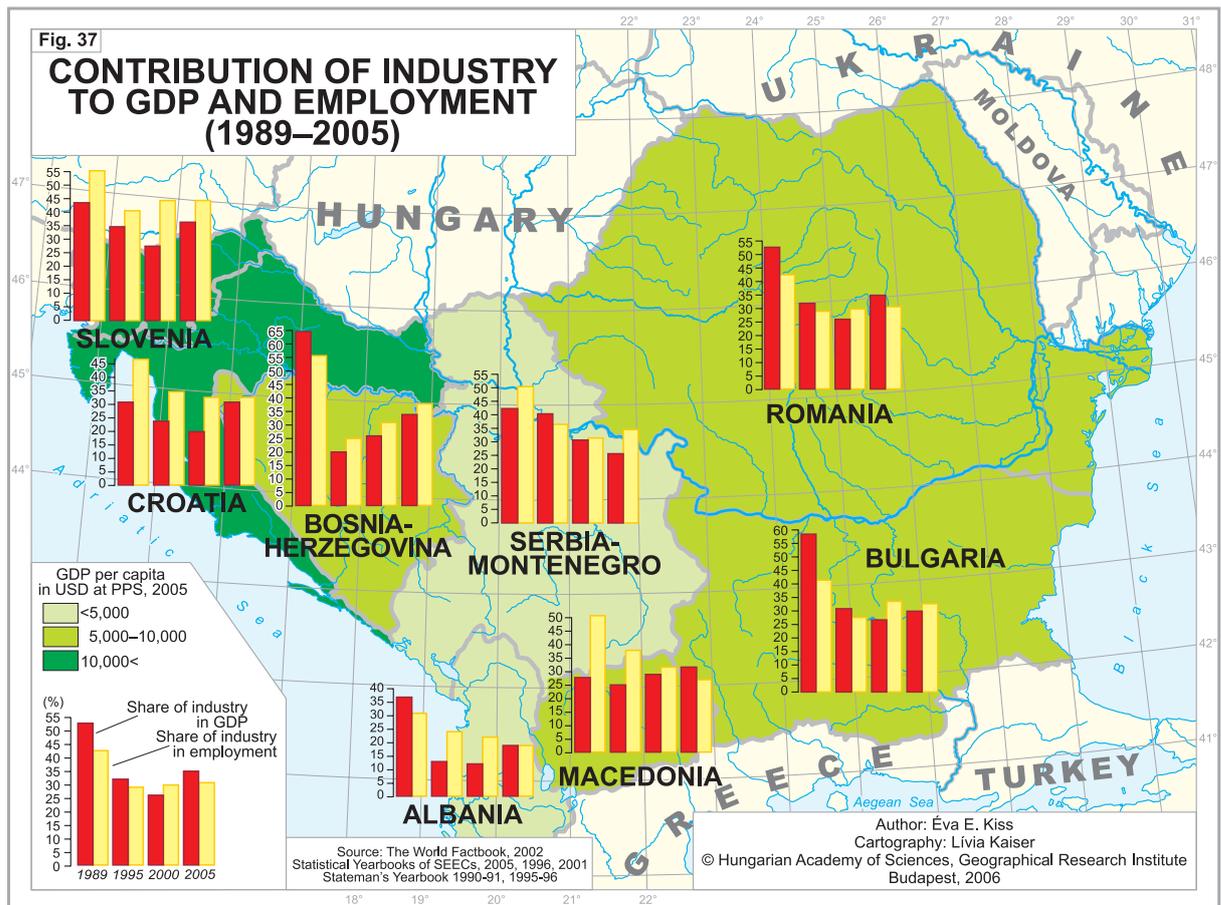
Production of almost all industrial products had considerably fallen back after 1989, because of the loss of markets, decreasing demand, wars and the closure or reorganisation of old industrial establishments. Compared to other SEEC the decrease in industrial production was even more dramatic in Serbia, where for example, the number of cars manufactured fell from 289,000 to 8,000 between 1990 and 1995, and the volume of ship manufacturing fell from 457,000 gtw to 7,000 gtw between 1990 and 1997 (*Table 18*).

*Table 17. Some Basic Economic Indicators of South East European Countries (1990–2005)*

Countries	GDP per capita (USD at PPS)			Inflation (%)			Economic growth (%)			Gross foreign debt in % of GNP			Unemployment rate (%)		
	1992	1998	2005*	1992	1998	2005*	1992	1998	2005*	1990	1997	2005*	1990	1998	2005*
Albania	196	670	4,900	226.0	30.0	2.4	-10.0	2.0	5.5	..	..	20.0	35	13.5	14.3
Bosnia and Herzegovina	1,310	707	6,800	..	3.0	4.4	..	25.0	5.3	57.1	101.3	35.0	19.8	30.0	45.5
Bulgaria	1,008	1,190	9,000	90.0	35.0	5.0	-9.1	4.0	5.5	14.0	35.2	64.0	1.0	14.0	11.5
Croatia	1,800	4,610	11,600	384.3	5.8	3.3	..	4.3	4.0	..	..	86.0	9.3	17.5	18.0
Macedonia	1,527	1,090	7,400	..	3.0	0.0	..	4.5	3.7	..	..	44.1	..	41.2	37.3
Romania	852	1,780	8,200	202.3	45.0	9.0	-7.6	-3.5	4.5	3.0	26.4	35.2	1.0	9.3	5.9
Serbia and Montenegro	1,630	1,138	4,400	19810.0	54.0	15.5	..	7.0	5.9	..	..	58.5	..	24.5	31.6
Slovenia	6,210	9,161	20,900	201.3	9.0	2.5	..	5.3	3.9	..	..	63.6	5.7	14.6	10.1

Remarks: .. no data; \* estimation

Sources: CEE Report 2005, Stubos, G. 2005.



The crisis and decline of industry have also had a negative impact on employment, especially in the first half of the 1990s, as the number and proportion of industrial earners fell dramatically (*Figure 39*). Parallel with this process not only has unemployment increased but so too has the number of agricultural employees in some

countries. For example in Romania, the ratio of agricultural employees grew from 29% to 40% between 1989 and 1998. This was due to redundant industrial workers seeking jobs in farming.

From the end of the 1990s the number and ratio of industrial employees started to increase very slowly in most of the SEEC. The situa-

tion began to improve, albeit modestly, due to the normalisation of the economy, cessation of conflicts, and in particular to growing political stability. As a consequence, until recently the share of industrial employees reached almost one-third of active earners in each Balkan state, except for Albania where it was estimated at 19%.

During the last 16 years the structure of industry has not changed considerably. The leading branches of socialist industry (e.g. mining, metallurgy, textile industry) have declined. But neither the renewal of industry, the appearance of new and dynamically developing branches nor the modernisation of production have taken place, owing to a variety of reasons (e.g. peripheral geographical location, small interest to foreign investors, less skilled labour force, undeveloped infrastructure).

A decrease in industrial employment is considered one of the most important indicators of de-industrialisation. This process took place very intensively in the 1990s, when a great number of factories were closed down because they proved to be highly uncompetitive and obsolete in terms of raw materials and energy consumption. Even those remaining in operation are usually uncompetitive, since they were either demolished during warfare or have yet to be modernised. De-industrialisation was the highest in some countries (Albania, Bosnia and Herzegovina and Macedonia), primarily owing to the consequences of the war, and in particular in certain parts within the countries where heavy industries were once based.

The transformation and take-off of industry within the SEE was also hindered by the slow advance of privatisation and the lack of interest displayed by foreign investors. Privatisation of industrial establishments has yet to be finished, owing to numerous unprofitable, out-of-date firms still waiting for strategic investors, in almost every country.

The SEE were not amongst the popular target locations for foreign investors in the 1990s. This was due to various factors, such as unfavourable geographical location, economic embargo, isolation, political instability, underdeveloped infrastructure, considerable corruption, insufficient law enforcement, a relatively unskilled workforce, ethnic conflicts etc. The interest of foreign investors in the region was aroused only at the end of the 1990s, after the peaceful settlement in Croatia and Bosnia. The

yearly amount of foreign direct investment (FDI) largely depended on what had been privatised in the given year. Between 1990 and 2005, the volume of FDI in the region increased almost a hundred-fold, by now exceeding USD 48 billion. 65% of the investment was made in Romania and Croatia (43% and 21% respectively), while the remaining 44% was shared among six countries. The cumulative amount of FDI per capita was the highest in Croatia (2,049 USD) and the lowest in Bosnia (437 USD) (*Figure 40*).

In most of the countries industry, finance and trade have proven to be the most popular sectors. However, there are considerable annual fluctuations among these sectors depending on the preferences of foreign investors (*Figure 41*).

Generally speaking, each Balkan state has a key EU-member state as the main investor country, with which it has maintained a long and close relationship. Historical ties, cultural links, traditional commercial partnerships and/or language relations also affect the composition of investors in SEE. This is why Italy is an important investor for Albania, Germany and Austria for Croatia, and France for Romania. In some Balkan countries religious links (e.g. between Bosnia and Herzegovina and Kuwait) also have a significant influence on the composition of investors by origin (*Figure 42*).

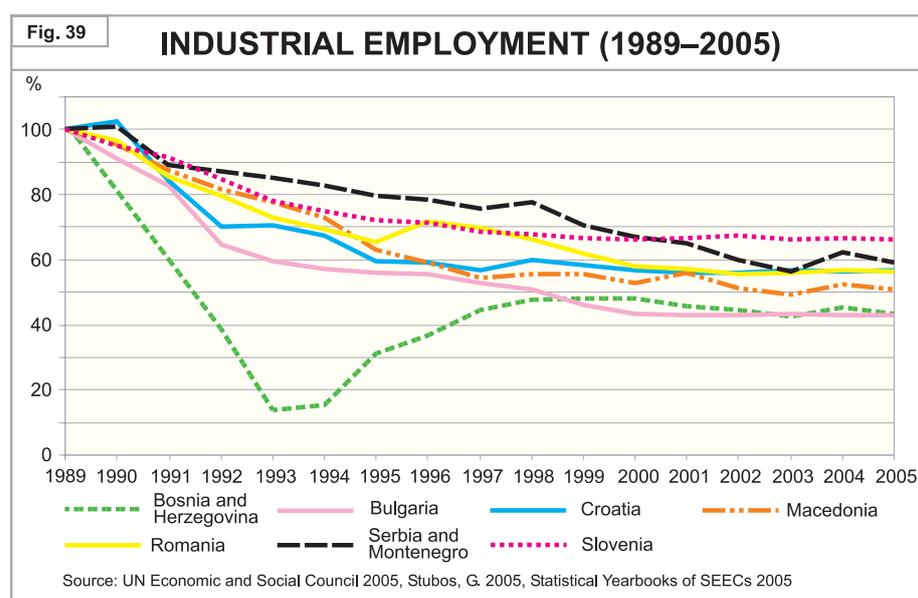
The spatial pattern of industry has remained basically unchanged. Only the significance of some settlements with a narrow industrial focus has decreased considerably because of the closure of mines or metallurgical factories. Thus, the spatial differences have increased. However, large cities have remained the major industrial centres, possessing different industrial branches and due to the fact that they were able to adjust to the new challenges much easier. In each Balkan state the majority of industrial production is concentrated in capital cities where it is the most multifarious in sector, and in larger towns or in some cases around major sites of mineral extraction, which are usually situated in remote and mountainous areas. In countries where de-industrialisation progressed the furthest, "blank spots" have appeared on the map, while in those countries where the process was less pronounced, and which escaped the devastation of war, the location structure of industries and its characteristics have not changed substantially, although the extension of their industrial areas has shrunk.

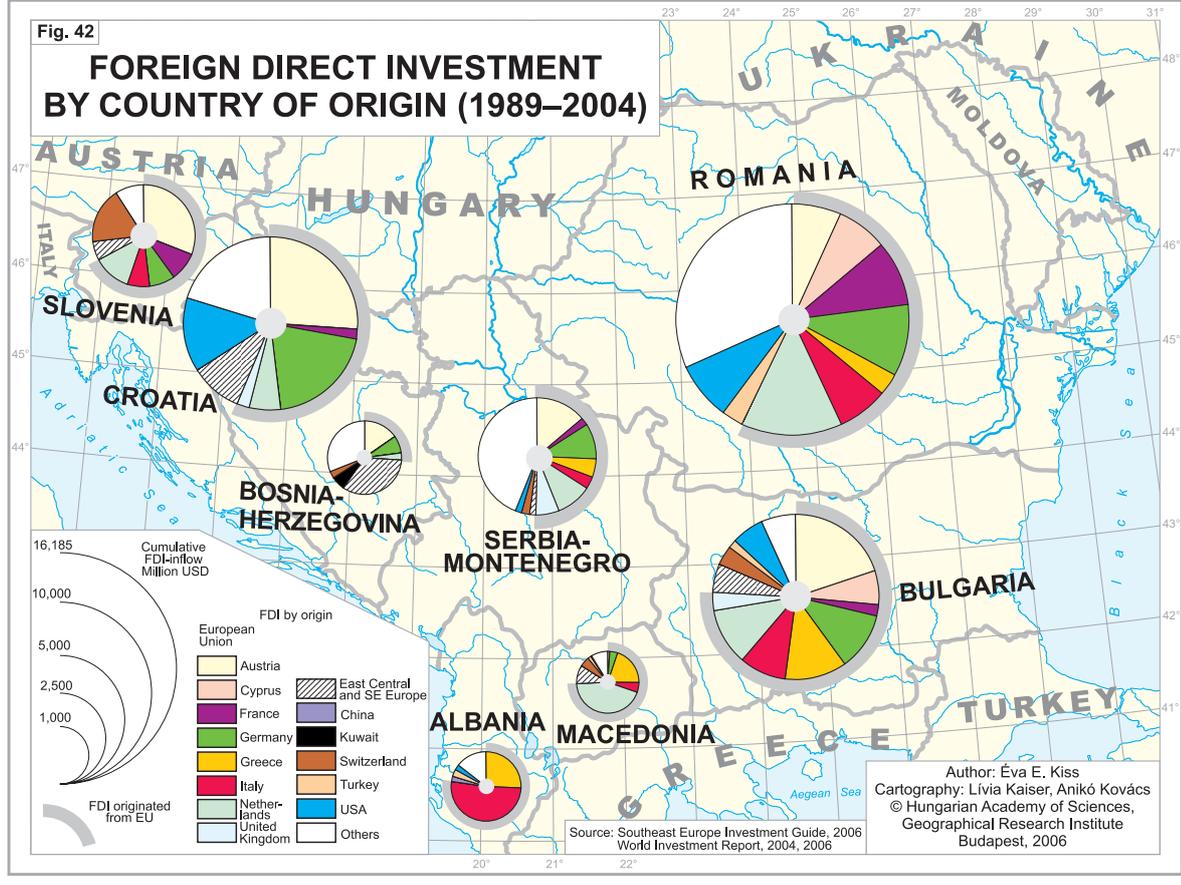
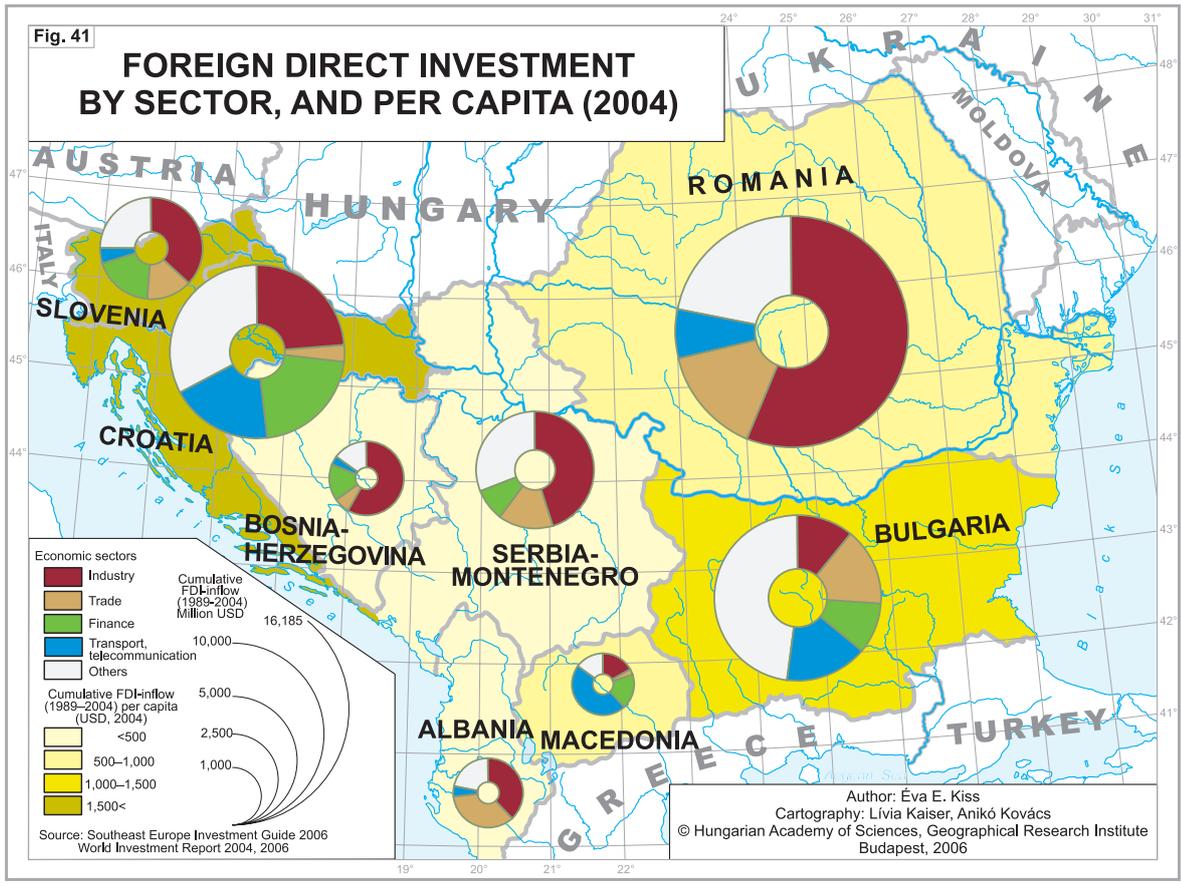
Table 18. Output of Some Industrial Products in the Countries of South Eastern Europe (1990–2004)

Country, industrial product	1990	1995	2000	2004 *
<b>Bulgaria</b>				
<i>brown coal, lignite (million tons)</i>	31.5	27.4	25.9	27.8
<i>artificial fertilizer (thousand tons)</i>	961	919	498	312
<i>tobacco (thousand tons)</i>	72	19	38	58
<i>wine (thousand litres)</i>	248	262	183	144
<i>vegetables, processed and preserved (thousand tons)</i>	185	134	42	78
<b>Croatia</b>				
<i>textile stuff (million m<sup>2</sup>)</i>	30	22	34	43
<i>sugar (thousand tons)</i>	..	80	57	215
<i>wine (thousand litres)</i>	745	608	498	501
<i>tobacco (thousand tons)</i>	12	7	8	14
<i>cargo ships (GT)</i>	..	..	146,889	83,095
<b>Romania</b>				
<i>brown coal, lignite (million tons)</i>	33.7	40.0	29.0	30
<i>textile stuff (million m<sup>2</sup>)</i>	536	275	17.0	2
<i>artificial fertilizer (thousand tons)</i>	1,636	1,398	968	1,222
<i>passenger car (thousand pieces)</i>	84	70	64	99
<i>sugar (thousand tons)</i>	334	218	493	506
<b>Serbia and Montenegro</b>				
<i>brown coal, lignite (million tons)</i>	40.0	39.9	34.2	35.2
<i>textile stuff (million m<sup>2</sup>)</i>	46	20	20.0	21
<i>artificial fertilizer (thousand tons)</i>	191	84	129	218
<i>sugar (thousand tons)</i>	584	183	115	340
<b>Slovenia</b>				
<i>textile stuff (million m<sup>2</sup>)</i>	102	71	19	24
<i>paper and paperboard (thousand ton)</i>	413	441	582	687
<i>footwear (thousand pairs)</i>	9,124	6,951	4,686	3,568
<i>cheese (thousand tons)</i>	11	16	22	23
<i>refrigerators (thousand units)</i>	720	863	841	1,125

Remarks: .. no data; \* data of Bulgaria from 2003.

Sources: Statistical Yearbooks of SEECs, 1991 1996, 2004, 2005, FAO Yearbook Production, 1992, 1996, Industrial Commodity Statistics Yearbook, 2000, International Statistical Yearbook, 2004.





## Major Characteristics by Country

**Slovenia** has been and still is the most developed country of the SEEC. Its industrial restructuring has taken place slowly, owing to industry already being in a relatively healthy state thanks to the bulk of its companies being efficient. This is reflected in the fact that nearly 50 per cent of its foreign trade was already being conducted with developed countries from the 1980s. De-industrialisation was not so considerable as in other SEEC. Metallurgy, machinery, textiles, chemicals and food industries still are the most important branches. Their major centres are Ljubljana and Maribor. Slovenia is also a country which is among the 15 leading world producers in selected divisions: machinery and equipment; electrical machinery and apparatus; medical, precision and optical instruments; and furniture manufacturing.

In the communist era, **Croatia's** industrial output was primarily intended for the internal market, thus the collapse of this and the wider socialist market has affected it much more seriously than the case with Slovenian industry. In addition, because of the war in 1991 and 1992 about one quarter of industrial establishments were damaged and the production of industry has decreased by 43%. These days, industrial branches involved in the repair of war damage and renovation are developing at the most rapid pace. The wider vicinity of Zagreb is the most important industrial centre, where in the main knowledge intensive branches (electronics and pharmaceuticals) are developing. The other major industrial centres of the country (Rijeka, Split) are situated along the coast. Their shipbuilding and chemical industries are the most important to the local economy.

During the socialist era **Bosnia and Herzegovina** was the most important location of the arms industry. The overwhelming majority of industrial facilities, which were used for military production, were damaged or totally destroyed during the war and ethnic cleansing that took place between 1992 and 1995. According to some estimations, 45% of industrial sites were destroyed. This provides a part explanation for industry running at 13% of its pre-war capacity in 1997, as well as for the dramatic rise in unemployment (60 jobless persons per 100 adults).

The existing industrial capacities are still far from fully utilised, and most of its industrial establishments are in bad shape. Sarajevo with its one-sided industry is the largest industrial centre of the country. Banja Luka is famous for its traditional carpet weaving.

Prior to 1991 **Serbia** had a relatively well-developed industry, but subsequently its industry collapsed, and since then it has been facing a continual crisis. As a consequence of the war between 1992 and 1995 and the NATO bombing of Serbia in 1999, several industrial plants were destroyed or closed down. As a consequence de-industrialisation was not simply the result of natural development. The inherited regional differences still exist: the northern part of the country is more industrialised than its southern part. Belgrade, Novi Sad and Kragujevac are the most important industrial centres, where machinery, food, textile and chemical industries have traditions. The industry of **Montenegro** was not significant as its share was only 1.7% of the Yugoslavian industrial output. Its major branches (metallurgy, textile and wood industries) are concentrated in Podgorica.

**Macedonia** was the poorest republic of the former Yugoslavia, and contributed to Yugoslavian industrial production with only 6–7% of the total. Since the beginning of the 1990s Macedonian industry has been in crisis, owing to a variety of reasons (e.g. altered regional situation, challenges of the market economy, decreased demand for their products, especially textile, steel and iron). As a result, lots of old factories were closed down and the number of industrial employees fell in half between 1990 and 1998. However, the heaviest blow to the country, independent since 1992, were the UN sanctions in that year and the trade ban imposed by Greece in 1994 and 1995. The damage to the Macedonian economy caused by these two measures amounted to some 750 million USD, and still impedes the economic development of the country. After the turn of the millennium, the industrial growth rate increased and a larger emphasis was put on the development of traditional branches (food, textile and tobacco industries). The most important industrial centre of the country is Skopje.

**Albania** was the poorest and least developed European country for a variety of reasons (unfavourable geographical location, lack of a skilled labour force and modern machines etc.). At the beginning of the 1990s, mining production collapsed and numerous chemical plants and engineering factories were closed down, which led to the virtual disappearance of a manufacturing industry. The advancement of Albania's economy has been impeded by the serious shortage of energy resources after 1989, and by fear of the inflow of foreign capital. Albania is relatively rich in mineral resources, which together with agricultural raw materials provides a good basis for mining, food and textile industries. About one-fifth of industrial production is concentrated in Tirana, next to which the industries of Durrës (tobacco), Vlorë (chemicals) and Korçë (sugar and tobacco) are significant. The northern part of the country is the less industrialised.

In **Bulgaria**, such industry developed under socialism, which did not fit into either the historical traditions or natural resources of the country. Not only was the loss of the Soviet market a problem, but incidentally, the Yugoslavian crisis also had a negative impact on Bulgarian industry, in which currently the textile and food

industries are developing most rapidly. Thus, in 2005 already more than 50% of the total industrial workforce was employed in these manufacturing branches. The metallurgy factories located in Kremikovci, Pirdop and Kârdžali are in decline. The future of different branches of the machinery industry is also uncertain, the products of which are uncompetitive on the world market. However, the chemical industries of Devnya and Burgas are developing relatively fast.

**Romania** is the largest country of the SEEC, both in terms of population and territory. It is also the richest in natural resources, which have always been an important basis of its industry. De-industrialisation was also relevant here, as the number of industrial employees had decreased from 4.7 millions to 2.3 millions by 2005. From the turn of the millennium industrial growth has been moderate, with mining, chemical, machinery and food industries developing chiefly. Major industrial centres are the large towns like Bucureşti, Braşov, Cluj-Napoca, Timișoara and Ploieşti, which are situated in different parts of the country. Industry declines have been witnessed mostly in the traditionally industrial centres where mining and metallurgy were the major branches during the socialist era.

## Conclusions

The legacy of the past is still manifest in the history, economy and industry of SEEC. History repeats itself, albeit in a different form and under a new set of circumstances. Industrialisation dominated during the socialist era, but after 1991 de-industrialisation became typical. It is evident that from the end of the 20<sup>th</sup> century re-industrialisation has gained a fresh impetus. The latter statement is confirmed by the fact that foreign investors also tend to prefer this sector. These days, de-industrialisation and re-industrialisation take place concurrently.

On the whole, the recent recovery of industry in South Eastern Europe started much later than in the countries of Central and Eastern Europe, and the process has been much slower. Therefore the results are not – and cannot be

– so spectacular. In the light of developments so far, the Balkan countries can be divided into two groups on the basis of the importance of their industry. One of the groups comprises those countries in which the situation of industry fails to show significant signs of improvement at the moment, and no positive changes are likely to occur in the foreseeable future. In these countries it is agriculture and the tertiary (service) sector that are expected to grow in importance, which represents, to a certain extent, a return to the past. The other group includes countries where the industrial sector has played an important part in the recent past, although it has been losing ground. It will require a lot of time and financial support to update regional industry in order to meet the demands of the

21<sup>st</sup> century, i.e. to take measures necessary for the modernisation of the sector. A priority is for the political and social circumstances to be made more attractive. Nonetheless, this division on the basis of the importance of industry does not necessarily mean that only the first or the second group mentioned above will be able to catch up

with the more developed regions of Europe. No doubt, however, that the condition and characteristics of industry can be improved to a large extent, on the one hand, by catching up with the region, and on the other, through its integration into the European and – in a wider sense – into the global economy.