ABSTRACT: This paper analyses the world merchandise trade structure and the structure of Serbian merchandise exports. The analysis shows that the prominent characteristic of post-World War II world trade is more dynamic growth in the volume of manufactured goods as compared to agricultural goods. Due to the lessening share of agricultural products world merchandise trade has decreased and rapid industrialization has been fostered in developing countries. An increased share for developing countries followed the developed countries’ decreasing share in world manufacturing trade. The developing countries’ increased share was strongest in telecom and office equipment exports. These sectors are characterized by production fragmentation, which is being realized by transnational companies. Serbia, like the other South East European countries, has not yet managed to significantly integrate into international production networks. Serbia’s most important exports are manufactured products with a low level of added value. In addition, Serbia still has a high share of primary products in its exports. A higher share of exports of goods and services in the gross domestic products (GDP) cannot be achieved without increasing imports of new technologies and equipment, i.e. without a higher investment share of the GDP. The main conclusion of this article is that the creation of a favourable investment climate and an increase in Serbia’s international credit rating are the preconditions for stronger foreign direct investment (FDI), which would be the main channel for restructuring in the real sector. Creation of new small and medium enterprises (SMEs) through greenfield investment and their integration into the international production networks is the starting point for the restructuring of Serbian industrial production and merchandise export, i.e. the way of increasing the share of merchandise exports in the GDP.

KEY WORDS: merchandise exports, world trade structure, parts and components, intra-trade, concentration of exports.

JEL CLASSIFICATION: F14, F15, F18
1. INTRODUCTION

A strong growth of world trade after the Second World War was followed by structural changes, expressed in the increasing role of manufactured products and the relative diminishing role of agricultural and mining products. These tendencies emphasize the key role of developed countries in world trade, although developing countries managed to significantly enlarge their share in world trade in manufactured products\(^1\). The structural changes in the composition of world trade are consequences of the globalization of the world economy. Growing international mobility of production factors, as well as the appearance of intra-industry trade\(^2\), formed the frame within which the structural changes of world trade developed. Krugman’s famous monopolistic competition model explained trade growth among the developed countries (Krugman, 1979). Economy of scale became the base for product differentiation, the “trade mark” of world trade in manufactured products at the end of the 20\(^{th}\) century and the beginning of the 21\(^{st}\). Due to horizontal and vertical specialization, the share of offshoring business in world trade is increasing\(^4\).

Leading developed countries have a significant advantage in investment in research and development (R&D) compared to the developing countries\(^5\). Consequently, diminishing of production costs leads to the concentration of production in the so called “core countries”. In the late phases of development, as competition becomes stronger in the domestic market, production is dispersed from the “core” to the “periphery” (Head and Mayer, 2004).

One of the first works on this topic is the research of Balassa (1996). Research of “Wal-Mart” sales showed the different ways of using the economy of scale. Continuing investment in modern technology to match its stocks with customer demand resulted in diminishing operating costs and growth of profit (Basker, 2007). Basker and Van (2007) estimated that a 10% increase in Wal-Mart sales has decreased the average costs by 2%. Growth of world trade in intermediate products marked the modern structure of world trade (Ethier, 1982). Several studies recently have been carried out with the aim of measuring the utility of the rising number and variety of products for customers (Broda and Weinstein, 2004; Feenstra and Kee, 2007; Harald, 2007). Recently a new series of trade models have been made with the intention of analysing the role of firms in trade, as well as the differences between firms. The results of these analyses show new sources of benefits derived from resources allocation (Bernard et al., 2007; Mayer and Ottaviano, 2007; Kimura and Kiyota, 2006; Bustos, 2007; Melitz and Ottaviano, 2008; Vogel, 2008).

Romer (1990) starts with the assumption that creation of new products (by investing in R&D) is the profit making activity. This model introduces the concept of “horizontal innovations” as technological innovations consist of a new product that does not replace the existing one, as well as the concept of “vertical innovations” which improve the quality of the existing product, so the old ones become obsolete.

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\(^1\) Diminishing of production costs leads to the concentration of production in the so called “core countries”. In the late phases of development, as competition becomes stronger in the domestic market, production is dispersed from the “core” to the “periphery” (Head and Mayer, 2004).

\(^2\) One of the first works on this topic is the research of Balassa (1996).

\(^3\) Research of “Wal-Mart” sales showed the different ways of using the economy of scale. Continuing investment in modern technology to match its stocks with customer demand resulted in diminishing operating costs and growth of profit (Basker, 2007). Basker and Van (2007) estimated that a 10% increase in Wal-Mart sales has decreased the average costs by 2%. Growth of world trade in intermediate products marked the modern structure of world trade (Ethier, 1982). Several studies recently have been carried out with the aim of measuring the utility of the rising number and variety of products for customers (Broda and Weinstein, 2004; Feenstra and Kee, 2007; Harald, 2007). Recently a new series of trade models have been made with the intention of analysing the role of firms in trade, as well as the differences between firms. The results of these analyses show new sources of benefits derived from resources allocation (Bernard et al., 2007; Mayer and Ottaviano, 2007; Kimura and Kiyota, 2006; Bustos, 2007; Melitz and Ottaviano, 2008; Vogel, 2008).

\(^4\) Feenstra and Hanson (1996); Hummels et al. (2001).

\(^5\) Romer (1990) starts with the assumption that creation of new products (by investing in R&D) is the profit making activity. This model introduces the concept of “horizontal innovations” as technological innovations consist of a new product that does not replace the existing one, as well as the concept of “vertical innovations” which improve the quality of the existing product, so the old ones become obsolete.
products that are result of these investments have high prices, which bring big profits to the sellers.

The aim of this work is twofold:

- Firstly, our intention is to analyze the main tendencies and basic characteristics of world trade at the end of the 20th and the beginning of the 21st centuries. This research is followed by analysis of the structural changes in Serbian foreign trade, particularly after 2000.
- Secondly, our intention is to lay down basic recommendations for economic policy creators aiming to promote the Serbian export structure.

This paper consists of three sections. The first section describes the general tendencies of world trade. Analysis of contemporary trade is emphasized, and long-term development tendencies are also considered. The second section analyzes the world trade structure by sectors, particularly in the period 1995-2007, which was chosen for its dynamic changes in world exports, with the aim of highlighting distinctive aspects of the latest changes. The third section aims to highlight the volume of Serbian foreign trade, as well as the structure of trade according to sectors. The concluding remarks propose changes in the Serbian export structure that would harmonize it with changes in the world export structure. In addition, this section gives recommendations for promoting the Serbian export structure.

### 2. GENERAL TENDENCIES IN INTERNATIONAL TRADE

The growing integration of the world economy after the Second World War was strengthened by the process of trade liberalization. A decrease in tariffs and the removal of other obstacles to trade contributed to a stronger connection of national capital and labour markets. This further contributed to the integration of the world economy (Bordo et al., 2003; UNCTAD, 2008).

This process is usually understood as the globalization of the world economy. Although globalization is often considered a contemporary phenomenon there is research that shows its development even in the 19th century (Baldwin and Martin, 1999). Research carried out by Madison (2001) found the existence of two waves of globalization, the first starting in the middle of the 19th century and ending with the beginning of the First World War, the second starting after the Second World War and continuing until today (WTO, 2008: 15). Both are characterized
by rising interdependence among countries that trade with each other, resulting in the deepening of world trade integration. The main characteristics of the above mentioned globalization waves can be seen in Table 1.

Table 1 shows that world trade experienced strong expansion in the period after the Second World War. The average growth rate of world trade in real terms between 1950-2007 was 6.2 per cent. In the same period, the real growth rate of GDP was 3.8% per annum. If we look at the 1950-1973 period, we notice that average growth rates (in real terms) for both indicators were bigger than for the whole 1950-2007 period. Trade and GDP growth slowed after 1973 because of two oil price shocks, a burst of inflation in developed countries, and structural disturbance of the economy. At the beginning of the 1990s world trade again started to grow, owing to structural changes resulting from the growing role of information technology and high-tech products.

### Table 1. Globalization waves in the 19th and 20th century
(Percentage change unless indicated otherwise)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population growth</td>
<td>0.8²</td>
<td>1.7</td>
<td>1.9</td>
<td>1.6</td>
</tr>
<tr>
<td>GDP growth (real)</td>
<td>2.1²</td>
<td>3.8</td>
<td>5.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Per capita</td>
<td>1.3²</td>
<td>2.0</td>
<td>3.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Trade growth (real)</td>
<td>3.8</td>
<td>6.2</td>
<td>8.2</td>
<td>5.0</td>
</tr>
<tr>
<td>Migration (net) Million</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US, Canada, Australia, NZ (cumulative)</td>
<td>17.9²</td>
<td>50.1</td>
<td>12.7</td>
<td>37.4</td>
</tr>
<tr>
<td>US, Canada, Australia, NZ (annual)</td>
<td>0.42²</td>
<td>0.90</td>
<td>0.55</td>
<td>1.17</td>
</tr>
<tr>
<td>Industrial countries (less Japan) (cumulative)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>64.3</td>
</tr>
<tr>
<td>Global FDI outward stock, year</td>
<td></td>
<td>1982</td>
<td>2006</td>
<td></td>
</tr>
<tr>
<td>FDI as % of GDP (world)</td>
<td>-</td>
<td>-</td>
<td>5.2</td>
<td>25.3</td>
</tr>
</tbody>
</table>

² Refers to period 1870-1913.

*Primary source:* Maddison (2001), Lewis (1981), UNCTAD (2007), WTO (2007);
*Secondary source:* WTO (2008a: 15, Table 1).

If we divide the period after the Second World War into several sub-periods we can see a stronger expansion of world trade compared to GDP growth in all observed sub-periods, except 2001. After the drop in world trade in 2001 strong
growth happened in the 2000-2007 period: the average growth rate per annum was 6 per cent, and for the 1950-2007 period it was 6.2 per cent. These results were significantly stronger than in the 1850-1913 period, when the first wave of globalization happened (Table 1 and Chart 1).

Post-war integration of world trade resulted in its stronger growth compared to the growth of world GDP. If we look at the growth of world trade and GDP volumes, we notice a remarkable rise of both indicators until the beginning of the 1970s, although this period was followed by a period of lower growth rates for both. Revival started at the beginning of 1990s.

A prominent characteristic of world economy development in the post-war period, particularly for the sub-periods of 1950-1970 and 1990-2007, is the revival of world trade. This was supported by the fact that for the periods 1970-1980 and 1980-1990 there was a slowdown of export growth but the average export growth rates were well above the ones for GDP. Only in 2001, when the world economy showed some signs of recession, did world exports have a negative growth rate while the GDP maintained a positive dynamic.

(Annual percentage change)

These developments confirmed that world trade could have a positive impact on economic growth.

If we look at world trade developments by major product groups, we will notice a discrepancy between the growth rate of trade in manufactured goods and the growth rate of trade in other products. Growth tendency is presented in Chart 2.

A more dynamic trade growth in manufacturing as compared to agricultural products has been characteristic of world trade in the post-war period. Although the above-mentioned discrepancy had existed since 1950, its strong expansion has been noted since 1970.

**Chart 2.** World merchandise trade volume by major product group, 1950-2006. (Volume indeces, 1950=100)

![Chart 2](http://www.wto.org/english/res_e/statis_e/its2008_e/its08_charts_e.htm)

The sluggish growth of agricultural product exports resulted in diminishing their relative share in world trade. Although there was a strong growth in oil prices during the 1970s a slowing tendency of export growth was shown in fuels and mining products. As a consequence, their export volume has a similar dynamic to that of agricultural products. These developments suggest that countries whose export structure was characterized by the domination of manufactured goods recorded a rising share in world trade. This forced developing countries to industrialize their economies.

Growth of trade in manufactured products has contributed to an increase in the relative share of developed countries in world trade. The structural changes of world import demand in the post-war period contributed to stronger growth of demand for industrial products compared to agricultural products and raw materials. In this way the significance of countries that could respond to the demand for industrial products was intensified. Developed countries were at an advantage as they were able to increase mutual trade. In time it was shown that their mutual trade was the engine of world trade growth.

The industrial countries accounted for 85% of world exports of manufactured goods in 1955, but their share declined to about 2/3 in 2006. The decline of the developed countries’ share in world manufacturing exports by individual product categories did not have the same dynamic (Chart 3).

The developing countries’ share in exports of labour-intensive products such as textiles and clothing, was particularly low. For these relatively labour intensive products the share of industrial countries was well below the average for

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6 The share of agricultural products in world trade, including processed food, declined from more than 40% in 1950 to less than 10% in 1999 (WTO, 2008a: 17).

7 The share of fuels in world merchandise export has fluctuated sharply due to a marked variation in process. In 2007 this share was 20% of world trade (WTO, 2008a: 17).

8 Developing countries with an undeveloped production structure, characterized by the domination of primary product exports, were often exposed to export income fluctuations due to changes in the world price of raw materials and primary products. Although the latest developments indicate signals of extended deceleration, country-exporters of primary commodities accumulate significant benefits due to the high prices of these products (IMF, 2008: 3). Commodity prices are exposed to fluctuations, which put their producers in different situations. Speculators in primary commodity markets traditionally give customers protection from commodity price volatility. However, the latest speculations increased so much that they caused sharp price fluctuations with a significant deviation from the fundamental market developments. There are opinions that speculation is not the main driving force of commodity price volatility, but could have impact on the amplitude of price fluctuation (UNCTAD, 2008c: 44).
manufactured goods as a whole. These sectors declined in developed countries’ exports compared to the exports of capital products and research-intensive product groups (such as chemical and automotive products), which is still above average for manufactured goods as a whole. The pattern of global trade by sectors reflects the importance of exports of capital-intensive products (exported mainly by developed countries) and the decreasing role of consumer products. The share of developed countries in world exports of clothing, textiles, office and telecom equipment has steadily decreased since 1955. The decline in iron, steel and chemical exports began in 1973, and in automotive products around 1983. On the other hand the share of developed countries in world exports of agricultural products, including processed food, rose strongly from 40% in 1955 to about 60% in 2006. Of course we are talking about relative changes, where we consider the dynamics of the share in total world exports for some product groups when the absolute values of their trade were not exposed to decline.

**Chart 3.** Share of industrial countries in world manufacturing exports by product group, 1955-2006

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*a* Road motor vehicles for the years 1955-73.

*b* Break in time series between 1973 and 1983.

*Note:* EU(15) before 2003 and afterwards EU(25).


*Secondary source:* WTO (2008a: 18, chart 2).

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*9* WTO (2008a: 17).
The relative fall in the share of developed industrial countries in the world trade of manufactured products was followed by the rising share of developing countries, which now account for more than 2/3 of world clothing exports and more than half of world exports of textiles and office and telecom equipment. In addition, the strongest increase in the share of developing countries was in exports of office and telecom equipment. These sectors are characterized by underlined fragmentation of production.\(^{10}\)

The share of developing countries in world exports of manufactured goods reached more than a 1/3, thus doubling in the last 25 years (Chart 4).

**Chart 4.** Share of developing economies in world manufactures exports by product group, 1983-2006 (Percentage)


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\(^{10}\) This phenomenon in economic literature is known as outsourcing and offshore (Helpman, 2006). A strong expansion of production networks in the world economy has become apparent in the last twenty years (Jones et al., 2005). According to research carried out in OECD (2007), as well as in studies done by Feenstra and Hanson (1996), a growth in offshoring of both goods and services was recorded in the 1995-2000 period. In recent years, participation of Central and Eastern European countries in production networks has increased (Marin, 2006). Companies increase their profits thanks to allocation of production to different countries.
The reduction of the relative share of developed countries in world manufactured-trade begs the question whether a process of deindustrialization is taking place and will lead to the transfer of manufactured production from developed to developing countries. Recent movements show that the industrial sector tends to have a declining trend in the creation of GDP in developed countries and the service industry a rising share. As a consequence there has been a relative decline in the importance of industrial product exports in world exports. At the same time, decreasing sectors in developed countries’ economies have exerted a rising pressure on their governments to protect domestic markets. The important question of the modern development of the world economy and its deeper integration is the progressive openness to trade among countries. The process of trade openness in the period 1990-2007 had an uneven rhythm and proceeded within the WTO. Parallel to this process the role of regional economic integration became stronger, which occasionally generated resistance in the area of multilateral liberalization of world trade. Because certain adjustments are needed in the process of opening the economy it is far easier to apply measures for closing the market, and it was expected that closing markets within national boundaries could bring advantages to the domestic economy. Supporters of protectionism mainly come from the sectors that feel inferior in competition with imported products in the domestic market.

Hence in the future of the world economy it is realistic to expect the implementation of different restrictions rather than the complete liberalization of trade. The economic situation has been deteriorating since the middle of 2008 and in the current crisis there is a latent possibility of resurgence of neo-protectionism in the industrialized countries, and thus great challenges for the openness of trade. Some forms of protectionism and discrimination, used during the 1970’s and early 1980s, still exist today. Such protectionism could intensify the crises.

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11 World exports of commercial services in 2007 reached $3290 billion, while world exports of manufactured products amounted to $13950 billion (WTO, 2008: 12, 123).
12 It is not difficult to imagine the extent of employees’ support for protectionism in developed countries if they believe that limiting imports of certain products can save their jobs. There is no doubt that protection would be applied to imports from developing and newly industrialized countries.
13 One of such challenges is the current world financial crisis, which could be reflected in the significant slowing down of the growth rate of the world’s GDP and trade.
14 Subsidizing production and high tariff protection of agriculture in developed countries, as well as the emergence of tariff peaks and tariff escalation in the import of processed agricultural products. With the same intention non-tariff measures are applied.
2.1 Intra-regional trade

The emergence of regional integration in the world economy is accompanied by growth of mutual trade between member countries. As a result of growing trade within the region the share of intra-regional trade in world trade increases (Chart 5). Regionalization of international trade leads to trade creation and trade diversion\(^\text{15}\).

Trade within regions comprises a higher share of international trade than trade among the regions. Trade within the EU is growing much faster than its inter-regional trade due to deepening of its economic integration (2/3 of trade transactions in 2007 were realized within the region). Chart 5 shows the increase of Europe’s intra-trade, which indirectly exacerbates the position of other exporters to this market.

Chart 5. Selected intra-regional merchandise trade flows, 1995 and 2007


\(^\text{15}\) Integrating of Central and Eastern European transition countries in the European Union (EU) resulted in trade creation for these countries, which has replaced expensive domestic production. The results of their integration into the EU have shown that the process of EU enlargement led to a significant trade creation and limited trade diversion (Wilhelmsson, 2006). About effects of trade creation and trade diversion in the EU and developing countries see: European Commission (2002), UNCTAD (2007), Panagariya (2002).
Intra-regional trade in the North American Free Trade Agreement region - NAFTA - reached 51% in 2007, a 6% increase compared to 1995, when intra-regional trade represented 45% of the total\textsuperscript{16}.

Other regions, such as MERCOSUR, the Andean community or ASEAN show less depth of integration. Intra-trade within these regions is considerably smaller than in the EU or NAFTA. MERCOSUR realized only 14% of its total trade within the region in 2007, while the Andean Community realized 8% intra-trade. In these regional trade blocks intra-trade decreased in 2007 compared to 1995, as opposed to trends in the EU and NAFTA. In the ASEAN countries this share was 25% in 2007, the same as in 1995.\textsuperscript{17}

Regionalization of the world economy, the different shares among regional member countries of mutual trade in their trade totals, and the process of creating and diverting trade also affect the structure of trade. Therefore it can be expected that structural changes in future world trade will take place in an environment of multilateral liberalization of the world economy on the one hand, and regionalization on the other.

3. STRUCTURE OF WORLD EXPORTS BY SECTORS AND EXPORT CONCENTRATION IN THE PERIOD 1995-2007

3.1 Structure of world exports by sectors

We have already seen that the structure of world exports during the 1990s changed towards an increased share of manufactured products. This trend ended in 2000 when the share of mineral fuels and lubricants increased from 10.6% in 2000 to 14.5% in 2006 because of the growth in oil prices.

The increase in the price of minerals and ferrous and non-ferrous metals has led to an increase in the share of these product groups in world trade. This development reduced the share of industrial products in world exports from 73.9% in 2000 to 69.3% in 2006. It should be noticed that this share is less than the share of manufactured products in world trade in 1995 (73.7%). This is shown in Table 2.

\textsuperscript{16} WTO (2008: 3).
\textsuperscript{17} WTO (2008: 3).
Table 2. World exports structure 1995, 2000. and 2006
(Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>0+1+</th>
<th>2-(22 +27+28)</th>
<th>27+</th>
<th>3</th>
<th>5 to 8-(667+68)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-9</td>
<td>22+4</td>
<td>28+667+667+971</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>100</td>
<td>8,9</td>
<td>2,7</td>
<td>4,5</td>
<td>7,4</td>
<td>73,7</td>
</tr>
<tr>
<td>2000</td>
<td>100</td>
<td>6,7</td>
<td>1,9</td>
<td>4,0</td>
<td>10,5</td>
<td>73,9</td>
</tr>
<tr>
<td>2006</td>
<td>100</td>
<td>6,2</td>
<td>1,5</td>
<td>5,5</td>
<td>14,5</td>
<td>69,3</td>
</tr>
</tbody>
</table>

SITC (Standard International Trade Codes): All food items (SITC 0+1+22+4); Agricultural raw materials (SITC 2-(22+27+28)); Ores, metals, precious stones and non-monetary gold (SITC 27+28+68+667+971); Fuels (SITC 3); Manufactured goods (SITC 5 to 8 – (667+68)); Chemical products (SITC 5); Machinery and transport equipment (SITC 7); Other manufactured goods (SITC 6+8-(667+68).


The share of office and telecom equipment becomes more important in the structure of manufactured products trade (11.1% of world merchandise trade in 2007)\textsuperscript{18} with the variety of widely represented products. Research and development in this sector contribute to rapid improvement and creation of new products so competition is extremely strong and contributes to continued growth of international trade.

Automotive products represented 8.7% of world merchandise exports in 2007. However this sector lagged behind the growing share of office and telecom equipment\textsuperscript{19}.

Also, it should be emphasized that the share of chemical products in world merchandise exports in 2007 was 10.9% and that the value of international trade in these products increased to 19% in the same year. Thus this industrial sector, comprising a significant share of world merchandise trade, records a high annual rate of export growth reaching 17%\textsuperscript{20} in the period 2000-2007.

Unlike the aforementioned products, the share of textiles (1.9% of world merchandise trade in 2006) and clothing (2.6% of world merchandise trade in 2006) in world manufactured-exports indicates a decreasing tendency. The fact

\textsuperscript{18} WTO (2008: 43).
\textsuperscript{19} WTO (2008: 43).
\textsuperscript{20} WTO (2008: 43).
that less developed countries are the main producers of textiles and clothing means that this trend directly affects their position in the world market.

In manufacturing itself, there is an increase in the share of use of intermediate manufactured inputs. From the input-output tables of a number of OECD countries we can see that the share of intermediate manufactured inputs in the output of the manufacturing sector in Germany was 40.8% in 2000, in the USA 34.9%, and in Brazil and China 38.7% and 48.3% respectively\(^{21}\). The motor vehicles sector has the highest share of use of intermediate manufactured inputs in the total production of the sector in OECD countries (58.6%), and then come office accounting and computing machinery (54.3%). The majority of intermediate manufactured inputs in the output of emerging countries consist of electrical machinery and equipment (55.8%) and the motor vehicles industry (53.1%)\(^{22}\). Chart 6 shows the share of intermediate inputs in selected industrial sectors of USA, Japan and Germany.

**Chart 6.** Share of manufactured intermediates in output, 2000 (Percent)

![Chart 6](chart6.png)


The growing share of intermediate inputs in the manufactured goods of developed countries reveals that the exporters of these products can provide a market for

\(^{21}\) According to Yamano and Ahmed (2006); WTO (2008a: 90).

\(^{22}\) WTO (2008a: 89).
their intermediate products for which there is demand. This is particularly relevant to exporters from countries in transition and developing countries that can be competitive in the delivery of these products due to lower labour costs. Entry to an international production network in developed countries provides the market for continued delivery and releases funds that are normally required for market research and export promotion. It also reduces the funds needed for exports (crediting and insurance). In this way integration into the structure of import demand of developed countries is realized, although with lower added value than in the case of exports of final products.

### 3.2 Concentration of world exports

One of the more important indicators that show whether a country’s exports rely on a greater or smaller number of products is the export concentration index. It also shows the country’s exposure to external shocks. In order to look at the concentration of world exports, or the concentration of exports by individual countries and groups of selected countries, we will use data published by UNCTAD, which are given in Table 3.

Trade concentration indices show that countries in transition have the highest values of this index in comparison to developing and developed countries (Table 3). This applies to both observed years.

Regarding selected transition countries (Table 3), in both observed years Serbia and Montenegro had the lowest index of export concentration and in 2006 Croatia was in second place. This result indicates the fragmentation of transition countries’ merchandise exports so that they were not in a position to influence the prices of given products in world markets. This reveals the only advantage of this position: countries with a diversified export structure are less exposed to risk of export earnings instability, if there is a fall in prices of certain export products. This particularly applies to the export of raw materials and products with a lower degree of processing. On the other hand, the index of higher export concentration shows the greater vulnerability of economies with this profile, particularly in cases where it relies on the export of raw materials and products of a lower degree of processing.
Table 3. Export concentration of regions and countries, 1995, 2006

<table>
<thead>
<tr>
<th>Region or country</th>
<th>Export concentration index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1995</td>
</tr>
<tr>
<td>World</td>
<td>0.053</td>
</tr>
<tr>
<td>Developing economies</td>
<td>0.098</td>
</tr>
<tr>
<td>Economies in transition</td>
<td>0.169</td>
</tr>
<tr>
<td>Developed economies</td>
<td>0.055</td>
</tr>
<tr>
<td>Economies in transition: Europe</td>
<td>0.179</td>
</tr>
<tr>
<td>Albania</td>
<td>0.241</td>
</tr>
<tr>
<td>Belarus</td>
<td>0.099</td>
</tr>
<tr>
<td>Bosnia and Hercegovina</td>
<td>0.164</td>
</tr>
<tr>
<td>Croatia</td>
<td>0.103</td>
</tr>
<tr>
<td>Moldova</td>
<td>0.229</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>0.260</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>0.091</td>
</tr>
<tr>
<td>TFYR of Macedonia</td>
<td>0.126</td>
</tr>
<tr>
<td>Ukraina</td>
<td>0.109</td>
</tr>
</tbody>
</table>


Notes:

(1) Number of products (at SITC, Revision 3, 3-digit group level) exported or imported by country or country grouping; this figure includes only those products that are greater than $100,000 or more than 0.3% of the country’s or country group’s total exports or imports.

(2) The Herfindahl-Hirschmann index is a measure of the degree of market concentration. It has been normalized to obtain values ranking from 0 to 1 (maximum concentration), according to the following formula:

\[
H_j = \frac{\sqrt{n \sum_{i=1}^{n} \left( \frac{x_i}{X} \right)^2} - \sqrt{1/n}}{1 - \sqrt{1/n}}
\]

where \( H_j \) = country or country group index

\( x_i \) = value of exports of product \( i \)

\( X = \sum_{i=1}^{n} X_i \)

and \( n = \) number of products (at SITC Revision 3, 3-digit group level) .
The fact that developed countries show a lower concentration of exports in comparison with less developed countries and countries in transition points to a more developed export structure in developed countries than in the latter groups. Previous analysis has shown that developed countries have a higher share of manufactured products in total exports than less developed countries. Consequently the wide dispersion of exports of manufactured products leads to a lower concentration of total exports. Given that export of differentiated products with a higher level of processing, which result from high investment in research and development, represents the principal share of their manufacturing exports, developed countries enjoy substantial export advantage. First of all, the structure of their merchandise exports, based on the differentiated products of the higher processing stage, offers the possibility of obtaining greater export earnings. In addition, higher export dispersion reduces the exposure of these countries to world market developments. This structure of merchandise exports from developed countries indicates their superior position on the world market compared to countries in transition and developing countries. Thus, the lower value of the concentration index of developed countries’ exports reveals less exposure to foreign risks, and also demonstrates their competitive advantage in the world market due to the prevailing share of differentiated goods in their merchandise export.

4. SERBIAN FOREIGN TRADE: RELATIVE IMPORTANCE AND STRUCTURAL ASPECTS

4.1 Serbian merchandise trade

Export structure and the degree of product processing determine the trade performance of Serbia. The main characteristic of Serbian merchandise trade in recent years is a sizable trade deficit, which occurs primarily because of insufficient growth of merchandise exports. Data in table 4 indicate that Serbian export results are modest in comparison with other countries. Observing the share of Serbian goods and services exports in its GDP in 2000, we notice that it reached 23.0%, which is significantly less than other countries shown in table 4 with the exception of Albania. Among the other observed countries Slovakia, Hungary, the Czech Republic, Slovenia and Bulgaria had a share of over 50.0%, Macedonia 49.0%, Bosnia-Herzegovina 30.0%, while Albania with 19.0% had a smaller share than Serbia.

23 The twenty least diversified countries had 2.3 times greater volatility in real export growth compared to the twenty most diversified countries (World Bank, 2008b: xxiii).
Table 4. Exports of goods and services (Percentage of GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovak Republic</td>
<td>70.0</td>
<td>86.0</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>26.4</td>
<td>72.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>63.0</td>
<td>80.0</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>58.8</td>
<td>55.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>38.2</td>
<td>56.0</td>
<td>63.0</td>
</tr>
<tr>
<td>Croatia</td>
<td>52.4</td>
<td>47.0</td>
<td>48.0</td>
</tr>
<tr>
<td>Macedonia, FYR</td>
<td>46.7</td>
<td>49.0</td>
<td>55.0</td>
</tr>
<tr>
<td>Montenegro</td>
<td>37.0</td>
<td>51.0</td>
<td></td>
</tr>
<tr>
<td>Moldova</td>
<td>50.0</td>
<td>46.0</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>27.0</td>
<td>41.0</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>33.0</td>
<td>31.0</td>
<td></td>
</tr>
<tr>
<td>Serbia</td>
<td>23.0</td>
<td>29.0</td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>15.4</td>
<td>19.0</td>
<td>28.0</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>30.0</td>
<td>39.0</td>
<td></td>
</tr>
</tbody>
</table>


Table 4 shows the increase in merchandise goods and services exports. Most of the observed countries have made remarkable progress up to 2007. For example in 2007 Slovakia had increased its share of goods and services exports relative to the GDP to 86.0%, Hungary to 80.0%, the Czech Republic to 80%, Slovenia to 80%, Bulgaria to 63%, Montenegro to 51%, and Macedonia to 55%. Serbia significantly lags behind the other countries with 29%, slightly higher than in 200024.

The data shows the insufficient share of exports of goods and services in the Serbian GDP. Serbia is behind the world by several technological cycles and this significantly contributes to maintaining a low level of goods and services exports.

---

24 From the comparative analysis of investment coefficients in Serbia and selected transition countries of Central and Eastern Europe IMF analysts concluded that the small size of investments in Serbia was connected with the expansion of trade deficit. For comparison, fixed investment in the Czech Republic in the period of 1995-1997 amounted to 31% of GDP, and in the Republic of Slovakia around 32-36% of GDP between 1996 and 1998. Later, observed participation has stabilized at the level of 26-27% of GDP. In Bulgaria and Romania fixed investment in 2005 reached 24% and 23% of GDP respectively. In comparison the level of investment in Serbia of 19% of GDP in 2004 was assessed as low. This study concluded that the small capital intensity of production in Serbia is the consequence of the low coefficient of investment (IMF, 2006: 10; Kovačević, 2008a).
The high share of raw materials and intermediate goods in Serbian exports is generally regarded as one of the main causes of its uncompetitive export structure. Exports still have not become the dominant channel for the realization of GDP, which implies insufficient export competitiveness. The overvalued dinar in the years 2006, 2007 and 2008 has not stimulated exports and resulted in the slowdown of merchandise export growth. Net exporter companies have been especially hit by exchange rate movements. The growth of merchandise exports in the coming years is the key factor in reducing the Serbian trade deficit. This is also important for the creation of a satisfactory amount of foreign exchange for the orderly payment of imports and repayments of external debt.

The external debt of Serbia at the end of 2008 amounted to $30.8 billion\textsuperscript{25} and represented 62.9\% of GDP in the last quarter of that year, or 204.9\% of exports of goods and services. According to both indicators, Serbia did not belong to the group of heavily indebted countries. In the same year, repayment of external debt reached 46.1\% of exports of goods and services (last quarter of the year), which turned the attention to the debt burden in the light of debt repayments in the future. To avoid external insolvency it was necessary to create preconditions for increasing merchandise exports in the coming years. In addition, the domestic economy’s high import dependence necessitates importing necessary raw materials and semi-finished manufactures\textsuperscript{26}. In an effort to increase exports, the subject of special attention should be commodity exports restructuring towards a higher content of high-level manufactured products and with more added value.

Improvement of infrastructure could be a factor encouraging greater foreign capital inflow and export promotion. It is also important to increase the involvement of the domestic economy in international production networks, which could reduce export costs and increase export earnings.

\section*{4.2 Structural characteristics of Serbian foreign trade}

The liberalization of Serbian foreign trade after 2000 contributed to the role of the industrial sector in Serbian merchandise export. The share of manufactured goods classified by materials (SITC Sector 6) in Serbian merchandise exports has grown from 29.3\% in 2001 to 35\% in 2007 (Table 5). This sector is the most important for Serbia’s merchandise exports, although it comprises different products of a lower degree of processing. Growth in exports of chemical products

\textsuperscript{25} NBS (2009: 55). Of this amount, $16.1 billion related to loans of enterprises and $5.5 billion to bank loans (medium-and long-term), while the public sector’s foreign debt amounted to $9 billion (NBS, 2009a).

\textsuperscript{26} Kovačević (2008a).
(SITC sector 5) was also recorded, increasing their share in total merchandise exports from 7.7% in 2001 to 10.4% in 2007. The share of machinery and transport equipment exports (SITC sector 7) slightly increased, while the relative share of miscellaneous manufactured products (SITC sector 8) decreased.

Although the export of products from SITC sector 6 constitutes the majority of Serbian merchandise exports, the export structure by products shows that products of a low degree of processing, and thus of little value-added content, still have an important share in total exports. In fact exports of the products classified in SITC 6 increased significantly in the period 2001-2007. However this growth rate was not based on investment. Export performance was achieved by the utilization of the existing capacity, which was largely created in the 1970s. World prices of these products are generally lower compared to industrial products of a higher stage of processing. In order to achieve greater export earnings, it is necessary to carry out structural changes in production, emphasizing the higher level of processing product. In this way competitiveness could be increased, both at home and in the world market, and export prices of domestic products could be significantly higher than today. Products with a higher degree of processing classified in SITC 6 would be accompanied by the growth of export earnings and a greater share of industrial products in Serbian merchandise exports.

Table 5. External trade of Serbia
(Percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>0 Food and live animals</td>
<td>15.7</td>
<td>15.3</td>
<td>7.8</td>
<td>4.5</td>
</tr>
<tr>
<td>1 Beverages and tobacco</td>
<td>0.7</td>
<td>2.0</td>
<td>2.2</td>
<td>0.9</td>
</tr>
<tr>
<td>2 Raw materials, except fuels</td>
<td>5.2</td>
<td>4.6</td>
<td>4.2</td>
<td>3.7</td>
</tr>
<tr>
<td>3 Mineral fuels and lubricants</td>
<td>2.9</td>
<td>2.6</td>
<td>19.5</td>
<td>17.3</td>
</tr>
<tr>
<td>4 Animal and vegetable oils and fats</td>
<td>1.0</td>
<td>1.1</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>5 Chemicals</td>
<td>7.7</td>
<td>10.4</td>
<td>15.5</td>
<td>14.1</td>
</tr>
<tr>
<td>6 Manufactured goods classified by materials</td>
<td>29.3</td>
<td>35.0</td>
<td>20.6</td>
<td>21.9</td>
</tr>
<tr>
<td>7 Machinery and transport equipment</td>
<td>14.0</td>
<td>14.3</td>
<td>21.0</td>
<td>28.6</td>
</tr>
<tr>
<td>8 Miscellaneous manufactured articles</td>
<td>20.8</td>
<td>14.5</td>
<td>7.5</td>
<td>8.7</td>
</tr>
<tr>
<td>9 Commodities and transactions, n.e.s.</td>
<td>2.6</td>
<td>0.1</td>
<td>1.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>

1 Standard International Trade Classification.

27 A growing trend in world prices of raw materials in recent years, however, especially products of the ferrous and non-ferrous industries, significantly contributed to increase the value of Serbian exports. This trend stopped at the end of 2008.
Machinery and transport equipment (SITC 7) represents an important export sector of the Serbian economy, and their share in merchandise export was stable in the period after 2000. This can be seen in Table 5, which shows that the relative share of these products in merchandise exports increased slightly from 14% in 2001 to 14.3% in 2007. This sector had a significant role in exports of the former Yugoslavia, but stagnation of exports came after its break-up. If we take into consideration the fact that transition countries in Central and Eastern Europe have recorded strong structural changes just in this sector, then we could expect growth of Serbian merchandise exports as a consequence of the adjustment in export supply of that sector.

According to the criteria of the share in total Serbian merchandise exports, SITC 8 (miscellaneous manufactured articles) has the same importance for Serbian exports as the export of machinery and transport equipment. However, unlike the relatively stable share of machinery and transport equipment exports, the share of SITC 8 in the merchandise exports of Serbia decreased from 20.8% in 2001 to 14.5% in 2007. SITC 8 comprises different products that could be reclassified in other sectors with a higher level of processing.

If we divide total Serbian merchandise exports into export of manufactured products and other commodity exports on the basis of export developments after 2000 we can conclude that the manufacturing sector increased from 71.8% in 2001 to 74.2% in 2007. Given the fact that at the same time the share of manufactured products in world exports decreased, it could be concluded that Serbia managed to improve its export structure. However the Serbian manufactured products exported were of a low degree of processing\textsuperscript{28}, and the basis for comparison was also extremely low.

When we discuss changes in Serbian merchandise exports during the period 2001-2007, we should bear in mind that the export of manufactured products was characterized by a significant share of primary resourced and low-skilled labour-intensive products. The low level of innovation and added value of these products is accompanied by a reduction in export earnings.

The overall pattern of Serbian exports is not favourable, and is inimical to the sustainable growth of exports. An important share of Serbian manufactured exports consists of unskilled-labour or natural-resource-intensive products. Serbia, like most countries from the CEFTA (Central European Free Trade Agreement)

\textsuperscript{28} In other words, the technology content of manufactured exports is extremely low.
region, is vulnerable to low-wage competition from other regions. Expanding the industrial base and deepening services-sector liberalization appear to be the core elements of a sustainable growth strategy for Serbia. Liberalization in services is necessary to increase the competitiveness of the manufacturing sector.

The principal imported products are machinery and equipment: this sector experienced a growth of the share of total merchandise imports from 21% in 2001 to 28.6% in 2007. The liberalization of imports and the reduction of tariff rates have contributed to an increase in imports. Among these products cars and other transport equipment are particularly notable.

There is no doubt that the increasing machinery and equipment imports are an essential element in restructuring the domestic economy, but there is a necessary methodological caveat. According to the Serbian National Statistical Office products SITC 7 are classified in capital goods, so could give the impression that they represent investment goods. However, some SITC 7 products such as trucks, buses and other transport vehicles could be classified in investment products, while passenger cars should have been classified as durable consumer goods.

Therefore, it is necessary to separate the import products under SITC 7 that are used in production from the product groups that could be classified in capital consumer goods.

Products under SITC 6 constitute a significant share of Serbian imports. They represented 20.6% of total merchandise imports in 2001, and 21.9% in 2007. The relatively stable participation of this sector in merchandise imports confirms that domestic production depends on the import of semi-finished products and products of a lower phase of processing.

Attention has to be paid to the high imports of products classified in SITC 3 (Mineral fuels and lubricants). In spite of the decreasing share of this sector in imports from 19.5% in 2001 to 17.3% in 2007, oil and gas world price fluctuations resulted in the relative importance of this sector in Serbian imports. The great energy import dependence of the Serbian economy results in the strategic importance of these product imports and their high proportion in total merchandise imports.

The divide of Serbian merchandise imports into the part that comprises manufactured products and those that can be marked as “the rest of merchandise imports” shows that the share of manufactured products in Serbian imports
Structure of World Trade and Serbian Exports

grew from 66.1% in 2001 to 73.3% in 2007. The growth of domestic production has caused the growth of imports of semi-finished goods, equipment and parts, which increased the share of industrial products in total merchandise imports.

The tendency of a high increase in the importation of these products has been partly the consequence of growth of domestic consumer demand for capital goods and partly caused by investment demand. Both of these components of the total domestic demand suggest that further increase in the importance of the industrial sector can be expected in Serbian imports in the coming years. Certainly we should have in mind the fact that domestic production is highly dependent on imports of raw materials and semi-finished goods, so the imports of investment equipment still has not achieved a satisfactory share of total imports.

If it is well-known that expected structural changes in domestic production will not be possible to carry out without imports of modern investment equipment and growth of imports of these products can be expected in the coming years. This could be achieved through increased participation of greenfield investments in total domestic investments. Through greenfield investment, structural changes in the real sectors of the domestic economy could be financed without additional foreign borrowing.

Serbia, like other countries in Southeast Europe, has still not managed to involve itself significantly in international production networks. Serbian exports are mainly based on the unskilled-labour-intensive products. Several countries in Southeast Europe have been able to increase the share of skilled-labour-intensive and capital-intensive products in their exports. These changes are recorded in the automotive industry and information technology industries, in which there are vertically integrated stages of production.

The aggregate data for the South East Europe Countries show that their exports of parts and components - P&C - over the period 1996-2005 increased from 6% to 11% of manufactured exports (see table 6). This growth is principally due the rising export of P&C from Romania. This country provided 60% of regional P&C exports in 2005, considerably more than the 36% of 1996.

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29 World Bank (2008: 43). Thanks to trade and financial liberalization, Central and Eastern European countries have managed to achieve significant participation in the export of parts and components of manufactured exports (Lemone: 1998).
Table 6. Trade in Parts and Components by SEE Country and Other Selected Comparators, 1996-2005

<table>
<thead>
<tr>
<th>Reporter</th>
<th>Year</th>
<th>Export of P&amp;C ($ millions)</th>
<th>Import of P&amp;C ($ millions)</th>
<th>P&amp;C as % total exports</th>
<th>P&amp;C as % total imports</th>
<th>P&amp;C as % manufact. exports</th>
<th>P&amp;C as % manufact. imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>1996</td>
<td>2</td>
<td>52</td>
<td>1.0</td>
<td>5.6</td>
<td>1.5</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>18</td>
<td>152</td>
<td>2.7</td>
<td>5.8</td>
<td>3.3</td>
<td>8.2</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>2005</td>
<td>336</td>
<td>426</td>
<td>13.8</td>
<td>6.0</td>
<td>23.9</td>
<td>9.3</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1996</td>
<td>130</td>
<td>254</td>
<td>2.7</td>
<td>5.0</td>
<td>4.4</td>
<td>10.4</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>497</td>
<td>1,078</td>
<td>4.2</td>
<td>5.9</td>
<td>7.1</td>
<td>9.0</td>
</tr>
<tr>
<td>Croatia</td>
<td>1996</td>
<td>321</td>
<td>448</td>
<td>7.1</td>
<td>5.8</td>
<td>9.8</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>762</td>
<td>1,275</td>
<td>8.7</td>
<td>6.9</td>
<td>12.7</td>
<td>9.4</td>
</tr>
<tr>
<td>Macedonia, FYR</td>
<td>1996</td>
<td>29</td>
<td>84</td>
<td>2.5</td>
<td>5.1</td>
<td>3.9</td>
<td>7.9</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>46</td>
<td>126</td>
<td>2.3</td>
<td>3.9</td>
<td>3.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Romania</td>
<td>1996</td>
<td>314</td>
<td>862</td>
<td>3.9</td>
<td>7.5</td>
<td>5.1</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>2,664</td>
<td>3,870</td>
<td>9.6</td>
<td>9.6</td>
<td>12.1</td>
<td>12.6</td>
</tr>
<tr>
<td>Serbia and Montenegro</td>
<td>1996</td>
<td>52</td>
<td>247</td>
<td>2.8</td>
<td>6.0</td>
<td>5.8</td>
<td>10.1</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>160</td>
<td>745</td>
<td>3.4</td>
<td>7.9</td>
<td>5.4</td>
<td>10.2</td>
</tr>
<tr>
<td>Western Balkans</td>
<td>1996</td>
<td>416</td>
<td>945</td>
<td>5.1</td>
<td>5.7</td>
<td>7.9</td>
<td>8.9</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>1,322</td>
<td>2,725</td>
<td>7.1</td>
<td>6.7</td>
<td>10.7</td>
<td>9.3</td>
</tr>
<tr>
<td>SEE</td>
<td>1996</td>
<td>861</td>
<td>2,060</td>
<td>4.1</td>
<td>6.2</td>
<td>6.0</td>
<td>10.1</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>4,482</td>
<td>7,673</td>
<td>7.7</td>
<td>7.7</td>
<td>10.9</td>
<td>10.7</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1996</td>
<td>954</td>
<td>890</td>
<td>11.5</td>
<td>9.4</td>
<td>12.7</td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>2,782</td>
<td>2,099</td>
<td>14.4</td>
<td>10.3</td>
<td>16.4</td>
<td>13.8</td>
</tr>
</tbody>
</table>


The results of Serbia and Montenegro export of parts and components are below the average figures for the Western Balkans and Southeast Europe, with a tendency for the export share to deteriorate in manufactured exports. The value of exports of these products from Serbia and Montenegro in 2005 amounted to only $160 million, indicating a low initial position. Albania, Macedonia and Bulgaria also had below average shares.

The Bulgarian P&C trade share of manufactured exports increased from 4.4% in 1996 to 7.1% in 2005. Croatia has a greater share than the average South East Europe country, which increased to 12.7% in 2005. The value of these Croatian exports in 2005 amounted to $762 million, but the starting base was small.
The largest increase in the P&C share in manufactured exports over the period 1996-2005 was achieved in Bosnia and Herzegovina (from 5.5% to 23.9%). In contrast to the low value of P&C exports from the above-mentioned countries, Romania’s share of these products was high (12% in 2005), and also of significant value ($2.6 billion) compared to other South East European countries. The Western Balkan countries have a poorer performance than Slovenia in P&C exports. Slovenian P&C exports have grown from $954 million to $2.8 billion in the years 1996-2005. This has led to an increase in the relative share of P&C exports in manufactured exports from 12.7% in 1996 to 16.4% in 2005. Thanks to increased P&C exports, Slovenia has managed to maintain its past export dynamics and to raise the market share of developed countries in its merchandise exports. Recorded Slovenian merchandise export movements show that sustainable growth of exports can be achieved through production-sharing networks, so it can serve as a matrix for the Western Balkan countries to increase their exports and boost foreign trade orientation towards the EU.

4.3 Foreign direct investment and structural changes of Serbian merchandise exports

The limited possibilities of Serbian borrowing from abroad emphasize the need for ensuring a stable FDI inflow in the coming years, especially greenfield investments. Imports of advanced technologies would contribute to a faster restructuring of domestic industries and their adjusting to demand on the international market. Although a significant FDI inflow into the Serbian economy was registered over 2000-2007, the prevailing part of this inflow was linked to privatization. This process is characterized by the lower inflow of necessary new equipment to the new investments. This trend could be reversed by activities that will increase the motivation of foreign investors to enhance post-privatization investment in the Serbian economy. Strengthening confidence in the domestic economy as well as stronger integration of Serbia in the CEFTA free trade zone can encourage larger FDI inflow in the coming years.

This kind of capital inflow would significantly facilitate the external debt burden. The Serbian current account deficit has reached an astonishing amount\(^{30}\), so its

\(^{30}\) Current account deficit of the balance of payments to GDP reached 16% in 2008 (estimation IMF) (NBS, 2009c: 61, Table V); According to the same source, current account deficit to GDP in the first quarter of 2009 has decreased to 12.4% (NBS, 2009c: 60, Table B).
financing by growing borrowing from abroad could make repayments difficult in the future\textsuperscript{31}.

The role and importance of FDI for economic growth and the Serbian balance of payments can be seen from the parallel review of GDP and FDI movements, as well as their relative participation in the capital inflow into Serbia (Chart 7)\textsuperscript{32}.

\textbf{Chart 7. Inflow of FDI in Serbia}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart7.png}
\caption{Inflow of FDI in Serbia}
\end{figure}

Source: NBS (2009c: 59 and 60) (Table A and B).

Chart 7 shows that FDI inflow over the years 2001-2007 had an increasing tendency. A decline in FDI inflow was registered in 2004 and 2007. Although significant FDI inflow was realized (mainly through the programme of privatization of domestic enterprises), in the same period volatile growth rates were observed\textsuperscript{33}, so the participation of FDI in GDP had oscillated\textsuperscript{34}. While the majority of FDI

\begin{itemize}
\item Repayment of external debt in relation to exports of goods and services in 2008 amounted to 35.3\% and 36.6\% in the first quarter of 2009 (NBS, 2009c: 59).
\item FDI in the Serbian economy originated mostly from the EU (Kovačević (2008)).
\item The lowest rate of GDP growth over 2001-2007 was realized in 2003 - 2.5\%, but the highest growth was in 2004 - 8.4 \%
\item FDI per capita in Serbia in 2006 amounted to $587, while average FDI per capita for the Western Balkans in the same year amounted to $512. Per capita FDI in Albania, Bosnia-Herzegovina and FYR Macedonia was below $200. Only Montenegro had a larger FDI inflow than the region's average - $985 (EBRD, 2007: 41).
\end{itemize}
inflow was realized through privatization there was a smaller contribution of FDI to Serbian economic growth and exports of goods and services\textsuperscript{35}.

The low share of Serbian exports of goods and services in the GDP confirms that the realized importation of modern equipment and technology is not enough to change the structure of production and exports. Greater participation of exports of goods and services in the GDP cannot be achieved without an increase in imports of new equipment and technologies and without a greater capital expenditure share of GDP. Creation of a favourable investment climate and increased country credit ratings by major international rating agencies are preconditions for a stronger FDI inflow as a primary channel for restructuring the real sector of economy\textsuperscript{36}.

Creation of new small and medium-sized enterprises by undertaking greenfield investments and the inclusion of these companies into international production networks are starting points for restructuring domestic production\textsuperscript{37}. Products of higher added value that could be competitive on the world market would contribute to the increased share of manufactured products in total Serbian merchandise exports.

The advantages of FDI compared to borrowing are indisputable: FDI does not lead to an increase in external debt so it represents a desirable source for financing the current account deficit. Dominant FDI inflow into Serbia through the process of privatization points to the need for further improvements that could encourage foreign investors. The aim is to maintain the FDI inflow even after privatization has ended. Besides the profitable investment, foreign investors should recognize the advantages of investing in Serbia that are offered by the creation of a free trade zone (known as CEFTA), as well as opportunities for access to the Russian Federation market, where Serbia could export most products without paying customs duties. Macroeconomic stability, improved credit rating abroad, and

\textsuperscript{35} The share of exported goods and services rose from 18\% of GDP in 2002 to 30\% in 2008 (NBS, 2009c:60)

\textsuperscript{36} The restructuring of the real sectors implies redirecting resources to the more productive sectors. The challenges that face policy makers are to facilitate reallocation of resources, and to reduce the costs of adjustment to the individual and society as a whole. From this point of view a successful country would not be characterized by an unchanged structure of production and employment, but first of all by its ability to manage structural changes without a permanent increase in unemployment (OECD, 2005: 5).

\textsuperscript{37} Of course, it should be kept in mind that the FDI inflow could enable the transfer of knowledge management and marketing to those sectors of the local economy that can support exports (Lesher and Miroudot, 2008: 21-22).
accelerated legislative and institutional harmonization with EU rules could significantly contribute to the increasing interest of foreign investors in the Serbian economy. Higher investment through FDI inflow, structural changes of production and exports, as well as stronger involvement in international production networks, can contribute to the sustainable growth of exports.

FDI inflow contributes to growth of trade in parts and components. Transnational companies have a key role in the production and distribution network. This can be seen in the case of South East European countries. Although due to the large number of inhabitants per capita FDI in Romania was lower than in Croatia and Bulgaria, thanks to a large FDI inflow in Romania (FDI stock amounted to $24 billion in 2005 compared to $13 billion of FDI in Croatia) it held a key role in distribution networks. Chart 8 suggests a very close correlation between South East European countries’ FDI per capita and per capita exports.

**Chart 8. FDI and Exports in SEE, 2005**

![Chart 8](chart.png)

Source: World Bank (2008: 48, Figure 2.3).

Lower per capita FDI inflow in Albania, Bosnia and Herzegovina, Serbia and Montenegro, and Macedonia resulted in poorer export performance in comparison with Romania, Bulgaria and Croatia. It is obvious that the creation of attractive preconditions for greater FDI inflow can open up wider possibilities of production fragmentation and increase Serbian parts and components exports. Deeper integration of the Western Balkans in the framework of CEFTA can

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38 One of the most important issues is the possibility of technology diffusion, so it is necessary to investigate further the link between the level of protection of intellectual property rights and the FDI inflow in Serbia (World Bank, 2008c: 146).

contribute to greater FDI inflow, which will, above all, be motivated by the size of this market. This would create opportunities for the greater involvement of local small and medium-sized enterprises in the international production network, at the same time increasing the export of parts and components from Serbia. FDI inflows bring new technology and management, and create opportunities for transferring positive experiences and knowledge to domestic enterprises. FDI also boosts reforms in the country, contributing to the creation of a more competitive production and export structure.

5. CONCLUDING REMARKS

The growing integration of the world economy after World War II was enhanced by the liberalization of world trade flows. Reduced tariff protection and removal of other barriers to trade contributed to a more powerful connection between national capital and labour markets, which further deepened integration of world trade.

An important characteristic of world trade in the post-war period was a more dynamic growth of trade in manufactured goods than in agricultural products. The decrease of exports of agricultural products led to a reduction in their share of world trade. Countries whose export structures were dominated by manufactured products recorded rising participation in world trade. This forced developing countries to start industrializing their domestic economies.

Growth of trade in manufactured products has contributed to the increase of developed countries’ participation in world trade. Developed countries exported 85% of all world exports of manufactured products in the mid-1950s, but their participation later dropped in favour of developing countries. Developed countries particularly had a low participation rate in the export of labour-intensive products such as textiles and clothing. This is a sector of decreasing importance for industrial countries, unlike the constantly emphasized role in their exports of capital and research-intensive products such as chemical and automotive products.

40 World Bank (2008a: 42). A Connection between FDI and exports in transition countries was analyzed by Broadman (2005).
41 Miroudot, S., E. Pinali and N. Sauter (2007); UNCTAD (2008b); (OECD, 2001).
Industrial countries’ decreasing share in world trade of manufactured products was accompanied by the rising participation of developing countries. The increasing share of developing countries was strongest in the export of telecommunication and office equipment. These sectors are characterized by emphasized fragmentation of production, which is realized through transnational companies.

Serbia, like other Southeast European countries, has not yet managed to be significantly involved in international production networks. Its exports mainly consist of unskilled-labour-intensive products. However the growth of exports based on skilled-labour-intensive products has registered in recent times. The share of primary products in the total merchandise exports of developing countries has remained high as opposed to the desirable growth of exports of manufactured products.

Several Southeast European countries were able to increase the participation of skilled-labour-intensive and capital-intensive products in total manufactured exports. These changes are recorded in the automotive industry and information technology industries in which there are vertically integrated stages of production.

The low share of Serbian exports of goods and services in the GDP confirms that realized import of modern equipment and technology is not sufficient to change the structure of production and exports. Higher export of goods and services in the GDP cannot be achieved without an increase in imports of new equipment and technologies and an increase in the capital expenditure share of the GDP. Creation of a favourable investment climate and increased country credit ratings by major international rating agencies are preconditions for a stronger FDI inflow as a primary channel for restructuring the real sector of economy.

Creation of new small and medium-sized enterprises by undertaking greenfield investments and the inclusion of these companies into international production networks are both starting points for the restructuring of domestic production. Products of higher added value that could be competitive on the world market would contribute to an increased share of manufactured products in the total of Serbian merchandise exports. Manufactured products of a higher production phase could help the creation of greater added value so that export prices and earnings could be higher.

A high Serbian dependence on imported raw materials and other primary products is the main characteristic of the import structure. As well as these
products Serbia needs to import modern equipment and technology in order to change the production structure. These changes should enable the integration of domestic supply and the import demand structure of developed countries, primarily in the EU. When importing equipment and technology it is necessary to avoid the transfer of “dirty” technology to the domestic economy.

It is important to create a favourable investment climate in Serbia. As well as the profitable investment, foreign investors should recognize the advantages of investing in Serbia offered by the creation of a free trade zone (CEFTA), as well as opportunities for access to the Russian Federation market, where Serbia could export most products without paying customs duties. Macroeconomic stability, improved credit rating abroad, and accelerated legislative and institutional harmonization with EU rules could contribute significantly to increasing the interest of foreign investors in the Serbian economy. Structural changes in production and exports, as well as stronger involvement in international production networks, can contribute to the sustainable growth of exports. Efforts to achieve economies of scale will have a positive impact on export growth. At the same time imports of new equipment will depend on the absorption capacity of the domestic economy. Prospective successful export-oriented sectors are the main candidates to attract new investment.

Significant reduction of FDI inflow in Serbia in the first quarter of 2009 as a consequence of the world financial and economic crisis, imposed the need to activate other channels to cover the large external imbalances. Because the external indebtedness of Serbia has reached a high level it is necessary to direct domestic economic policy in order to increase exports in the coming years. First of all it is necessary to continue reducing the “cost of the border”, through increasing the efficiency of customs procedures. The Stabilization and Association Agreement (SSA) with the EU (one-sided implementation of this agreement by Serbia is in progress as of January 1, 2009) provides a gradual abolition of customs duties in trade with the EU, which will act to increase competition in the domestic and foreign markets and encourage domestic companies to increase efficiency.

42 “The Western Balkan countries are also severely affected by the current global economic crisis, because of large external imbalances, substantial reduction of FDI and other forms of capital inflows, banking systems owned almost entirely by western banks, and falling demand for their exports in EU markets” (Uvalic, M., 2009). Net FDI inflows to Serbia in the first quarter of 2009 (643 million) have declined from the first quarter of 2008 ($830 million) (NBS, 2009b).
Increasing competition in the CEFTA free trade zone will have a similar effect\textsuperscript{43}. Further institution building and business facilitation and continued growth of investment in R&D and education are all areas in which economic policy can significantly contribute to increasing the competitiveness of Serbian exports.

**REFERENCES**


\textsuperscript{43} “… A free trade zone has the potential to expand regional trade. Trade liberalization could increase competitiveness and specialization in export sectors, which could enhance productivity and economies of scale, along with the more efficient allocation of resources. This might foster investments in research and development, innovation, and closer links between businesses and research institutions, which could draw in additional foreign capital” (UNDP Serbia, 2008: 68).


NBS (2009c), Izveštaj o inflaciji – maj 2009, Beograd.


