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STRUCTURAL CHANGES IN THE LIGHT OF NEW INDUSTRIAL STRATEGY

Strukturne promene u svetlu nove industrijske strategije

Abstract

Although a certain progress was made on a developmental trajectory in the last decade of the implementation of reform processes, the fact is that the economic performance of the Serbian economy has been unsatisfactory, due to the impact of factors of internal character and indirect influence of external factors, especially the global financial and economic crisis. The crisis not only slowed down the process of structural reform and adjustment of the Serbian economy to the requirements of a modern market economy, but also limited the opportunities for achieving basic development goals defined in the National Strategy of Economic Development from 2006 to 2012.

With the slowdown of transition process of the Serbian economy under the influence of crisis the true picture of the challenges that the Serbian economy will face in the future has been revealed, which has imposed the need to redefine the existing basis of its development, change the concept of development and adapt the system within which a new concept will be realized. The new pro-investment and export-oriented growth model implies the implementation of measures directed towards intensifying structural reforms of the Serbian economy, with a focus on investment, exports and increasing the share of industrial sector in GDP structure, as well as measures aimed at accelerating the reform process and the involvement of Serbia into European integration structures.

In the last decade of the transition process the Serbian economy did not experience any substantial change in its economic structure. Experience of advanced countries in transition confirms that implemented structural reforms contribute to accelerating the pace of economic growth and achieving a qualitative shift in the structure of industrial production. Given the fact that the new development orientation of the Serbian economy emphasizes the role that the industry, particularly manufacturing, will have in its realization, the goal of this paper is to highlight the importance of finding ways to accomplish more efficient transformation of the structure of Serbia's economy in achieving the goals of pro-investment and export-oriented growth model.

Key words: *structural changes, transition, Serbian economy, foreign direct investment, industry*

Sažetak

Iako je u prethodnoj deceniji sprovođenja reformskih procesa učinjen izvestan pomak na razvojnoj trajektoriji, činjenica je da su ekonomske performanse koje je srpska privreda ostvarila nezadovoljavajuće, zahvaljujući delovanju faktora internog karaktera i indirektnom uticaju eksternih faktora, posebno svetske finansijske i ekonomske krize. Pod uticajem krize ne samo da je došlo do usporavanja procesa strukturnih reformi i prilagođavanja srpske privrede zahtevima moderne tržišne ekonomije, već su i ograničene mogućnosti za ostvarivanje osnovnih ciljeva razvoja definisanih u Nacionalnoj strategiji privrednog razvoja od 2006. do 2012. godine.

Sa usporavanjem procesa tranzicije srpske privrede pod uticajem krize otkrivena je prava slika izazova sa kojima će se srpska ekonomija suočiti u narednom periodu, što je nametnulo potrebu za redefinisanjem osnove na kojoj se ona razvijala, kao i promenom koncepcije razvoja i prilagođavanjem sistema u okviru kojeg se ona ostvaruje. Novi proinvesticioni i izvozno orijentisani model privrednog rasta implicira primenu mera u pravcu intenziviranja strukturnih reformi srpske privrede, sa težištem na investicijama, izvozu i povećanju učešća industrijskog sektora u stvaranju BDP-a, kao i mere koje su usmerene ka ubrzanju reformskih procesa i uključivanja Srbije u evropske integracione strukture.

U prethodnoj deceniji sprovođenja procesa tranzicije srpske privrede nije došlo do nekih bitnih izmena njene privredne strukture. Iskustvo naprednih zemalja u tranziciji potvrđuje da su sprovedene strukturne reforme doprinele ubrzanju tempa privrednog rasta i uticale na kvalitativan pomak u strukturi industrijske proizvodnje. Imajući u vidu činjenicu da se u novoj razvojnoj orijentaciji srpske privrede potencira uloga koju industrija, posebno prerađivačka, ima u njenoj realizaciji, cilj ovog rada je da ukaže na značaj koji pronalaženje načina za ostvarivanje efikasne transformacije strukture privrede Srbije ima u ostvarivanju ciljeva proinvesticionog i izvozno orijentisanog modela rasta.

Ključne reči: *strukturne promene, tranzicija, privreda Srbije, strane direktne investicije, industrija*

Introduction

The main objective of developing countries and countries in transition is to create a competitive economic structure in order to achieve sustainable economic growth and increase material well-being of the population. It is well known that industrialization as an accepted general method of development has contributed to achieving high rates of economic growth in many countries as well as to structural transformation towards increasing the share of industrial sector in the creation of GDP. In general, the term industrialization refers to the structural changes in a country that is in the process of transition from agricultural to industrial economy, with certain repercussions on social system. This developmental phenomenon has led many economists to argue that the industrial sector is a promoter of economic growth.

Debates among economists on this issue over time lost their significance, whereas in the conditions of global economic change the process of tertiarization became a key direction of structural changes. The service sector in recent years increased its share in GDP, both in developed and developing countries, and it has been actively playing the role of an agent of development. However, although it is noticeable that industry and agriculture reduced their share in the gross domestic product, it does not mean that these sectors have lost their importance. On the contrary, their importance over time can only increase, because only compatible and tightly connected economic sectors can provide a stable and sustainable development.

Industrial development of the 19th and most of the 20th century was replaced by a new concept of sustainable industrial development, based on knowledge, innovation and entrepreneurship. The European Union at a summit in Lisbon in 2000 defined the new concept of industrial development in the 21st century, noting “we should leave as soon as possible – a widespread but false assumption – that in the age of IT and service companies and the knowledge-based economy, the manufacturing industry no longer plays a key role” [2, p. 6]. In addition, the global financial and economic crisis, along with the expansion of the financial sector and problems with which many countries still have to deal on their way of industrialization,

has brought the issue of selection of the model of growth and development again into focus and reaffirmed the role of the industrial sector in the process. Policymakers in developed as well as in developing countries consider again the benefits of industry for development, as evidenced by recent empirical research assumptions about the industry as a sector that represents a driver of development (among others, these findings are prominently featured in the research of *Rodrik* [14], *Fagerberg* and *Verspagen* [4], [5], *Szirmai* [20], *Szirmai* and *Verpagen* [21]).

In accordance with the objective set forth herein, the paper is structured as follows. After introductory remarks a brief overview of the theoretical consideration of the phenomenon of structural change will be given. Further in the paper the key features of the structure of the Serbian economy will be discussed. In the third part of the paper the attention is focused on the analysis of trends in the development of industry in Serbia, while in the conclusion there will be presented the synthesis of relevant opinions, including some recommendations to policymakers.

Structural changes: A short review of theoretical considerations

In economic theory, the issue of structural change has always received much attention. Great economic classicist *Adam Smith* found the correlation between structural characteristics of the economy and the level of economic development [19], while, according to *Ricardo*, changes in the production structure are key assumptions for achieving high rates of economic growth [13]. Despite the fact that there are many different definitions of the concept of structural changes, their common feature is that they see structural changes as long-term and permanent changes in the sectoral composition of economic systems.

Structural changes in the economy are usually associated with the change in relative importance of certain sectors of the economy, as seen from the aspect of their participation in the creation of output and employment. Other aspects that should be taken into account are the changes in the location of economic activity, such as the process of urbanization and changes in institutional

environment. Therefore, the analysis of structural change implies that the economic dynamics can be studied by “focusing attention on a relatively small number of activities that make up the economic system and create economic structure” [14, p. 273].

The growth theories emphasize the importance that structural changes have on acceleration of growth. Thus, *Kuznets* points out that “structural changes... are necessary, without them the growth is impossible” [4, p. 348]. On the other hand, *Schumpeter* emphasizes the role that innovation and its dissemination through imitation and further improvement have in the structural transformation of the economy. Especially in recent years a growing number of economists have stressed the importance of technological innovation and its diffusion in the process of growth.

Unlike classical economists, in the works of neoclassic economists the issue of structural changes becomes less central. Standing firm in the belief that the market provides allocative efficiency, neoclassics observe structural changes as an automatic result of market development, rather than as a prerequisite for growth. Given all the above-mentioned facts, a question arises as to which of the two theoretical approaches to describing the phenomenon of structural change is adequate enough to explain the process of structural change in modern dynamic conditions imposed by the globalization of the world economy.

In the new environment imposed by the globalization, understanding the significance and need for structural transformation is gaining importance in developing countries and countries in transition for several key reasons that we do not cite in this part of the paper. It is of great importance to underscore that, in the conditions of increased mobility of international private capital flows, the opportunities for redefining the policy of industrial development in many countries are increased. The implementation of efficient structural transformation in accordance with the requirements of the global economy imposes the need for government intervention or correction of market failures in order to reduce barriers to attracting foreign investors to the sectors in which it is possible to achieve higher productivity. This directly implies that the industrial development policy should not focus on the protection

of young industries, but instead it should encourage mergers and improve their position in foreign markets, stimulating those activities with higher value added and taking the opportunities to increase productivity, which is a prerequisite for improving the competitiveness of the national economy.

Structural changes in Serbia: Key trends

It is an undeniable fact that economic development is a complex process, which is determined by a number of factors, among which the most important is economic structure. A lack of attention paid to the structural components of economic development could result in far-reaching and severe, irreparable consequences for development issues in the long term.

In the past period of the implementation of transition process besides serious shortcomings and clearly manifested weaknesses, there were no significant changes in the economic structure of Serbia. Although in the period from 2001 to 2008 relatively high average annual GDP growth rate was achieved, the fact is that despite high, albeit uneven annual inflows of foreign direct investment, this period was characterized by slowing pace of structural change (see Figure 1). “Observed by the sectors, the service sector with an average annual rate of 6.6% GVA represents a key generator of dynamic GDP growth of Serbia in the period 2001-2008. Since the beginning of the intensive implementation of transition process the share of the service sector in the creation of GVA increased from 52.6% in 2001 to 62.2% in 2008. Within the service sector the largest expansion experienced financial intermediation, wholesale and retail, and transportation and telecommunications sector, hence the sectors of non-tradable goods whose dominance in the creation of GVA does not represent a valid basis that may provide stronger support to exports and raise the competitiveness of Serbian economy” [10, p. 250].

Analyzing the data from Table 1 it could be said that the service sector in the observed period grew at a rate higher than the manufacturing sector, which led to a profound gap in the structure of GVA. It is notable that the largest decline in share of GVA happened in the

Table 1: The structure of GVA activities in %

	2001	2008	2009	2010	2011	Av. growth rate 2001-2011	Difference in part. 2011-2001
Agriculture	19.5	10.4	9.4	9.0	11.0	1.8	-8.5
Industry	23.3	20.5	20.8	20.7	21.4	0.3	-3.2
Manufacturing	21.7	16.3	15.8	16.1	14.6	-0.2	-6.1
Construction	3.3	5.5	4.8	4.2	4.6	5.1	1.3
Services	52.6	62.2	63.5	64.1	63	4.3	10.4
Wholesale and retail	7.5	12.1	11.0	10.9	10.5	8.6	3
Transport and storage	4.5	5.3	5.4	/	5.6	3.6	1.1
Information and communication	3.7	4.6	4.9	/	4.9	14.5	1.2
Financial activities and insurance activities	2.6	3.4	3.7	/	4.0	5.9	1.4
Real estate	14.4	11.3	12.8	/	12.8	2.0	-1.6
Other services	5.3	3.8	-3.5	1.0	1.62	3.5	
GVA activities	100.0	100.0	100.0	100.0	100.0		

Source: [12, p. 44]

sector of agriculture (-8.5%) and manufacturing (-6.1%), while the largest increase was recorded in the retail sector (3.0%). Negative growth rates recorded in most sectors point to a somewhat slower pace of structural change in the period after 2008.

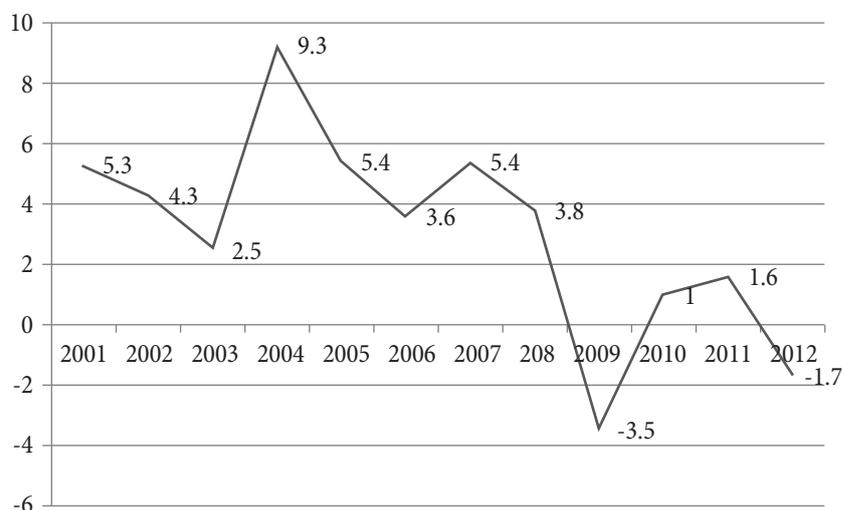
According to the index of structural change, which measures the overall change in the structure of GVA of all sectors of the economy observed between the two time points, periods of intense structural changes correlate with periods in which a relatively high annual growth rate is achieved (in the period 2001-2004 more than 10% of GVA reallocated among economic activities), and vice versa, which is confirmed by the data on the slowdown in the dynamics of economic growth after 2008, and consequently, in the pace of structural change. This fact directly indicates that without dynamic economic

development, accompanied by high rates of economic growth, there are no rapid structural changes, but also that rapid changes in the economic structure can have some impact on the growth rate.

The question is: What lies behind such an expansion of the service sector in the structure of GDP formation?

In transition model of economic growth in the past period foreign direct investment played an important role (see Figure 2). Its expansion was mainly a result of improved institutional framework aimed at encouraging FDI and privatization model, but also of the efforts of authorities to create a positive investment climate. When analyzing the development effects of foreign direct investment on the economy of the countries in transition, it is especially important to bear in mind its potentially great contribution to promoting the restructuring of the economy and

Figure 1: The growth rate of GDP in Serbia, 2001-2012, in %



Source: Authors own graphical presentation based on the data from NBS [8]

strengthening its effectiveness. These positive effects are particularly reflected in: (1) increasing exports, (2) creating the conditions for the transfer of modern technology, (3) direct and indirect impact on the growth of GDP and the volume of investment, (4) reducing inflation, and (5) improving the quality of management.

In addition, foreign direct investment generates positive effects on the acceleration of the process of transition in the country, as manifested in: (1) promoting or building the institutional and physical infrastructure, (2) acceleration of the privatization process, and (3) developing and strengthening the competitiveness of the domestic economy.

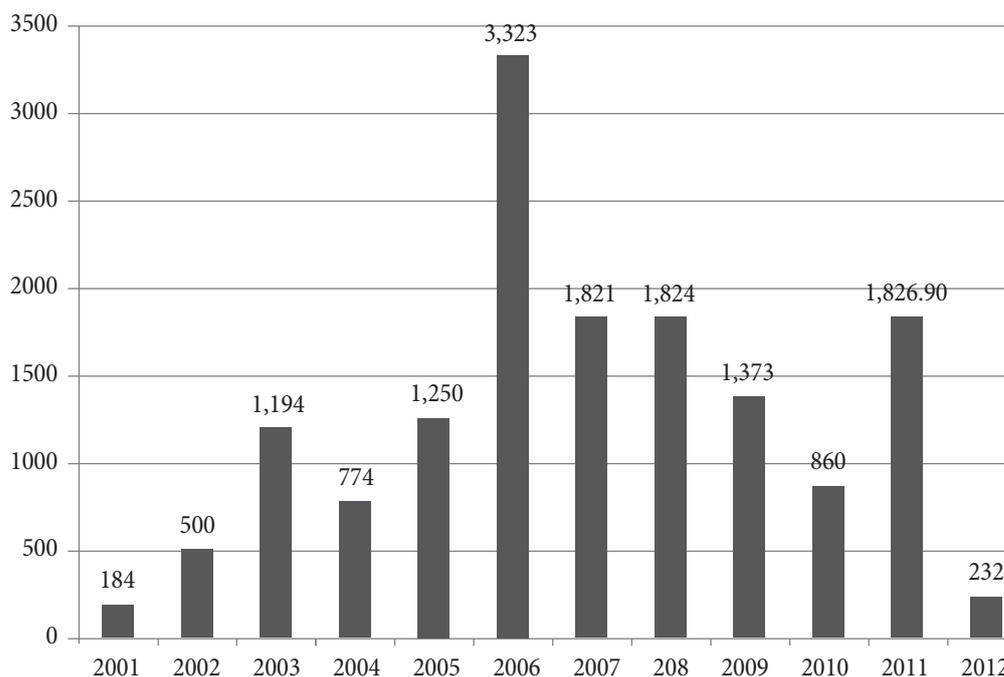
Issue of attracting a larger amount of foreign direct investment has become especially pronounced in the period after 2008 when, due to the increased investment risk caused by the crisis, many investors showed reluctance to implement major investment projects, which consequently affected the pace of implementation of the privatization process, thus slowing down the process of structural reforms of the Serbian economy. Policymakers today are facing much greater challenges than ever before, especially because of the fact that the implementation of a new development orientation based on investment and exports requires not only constant and high levels of

foreign direct investment, but also the sound structure of economic activities that is necessary for encouraging foreign direct investment.

“If we look at sectoral orientation of foreign direct investment, it can be seen that the inflow of foreign direct investment in Serbia according to the principle of automatic mechanism followed a well-known (in other transition countries) and established model of investment sectoral orientation. Creating the conditions for privatization of public companies and taking a series of reforms, with positive effects on achieving a certain degree of macroeconomic, as well as political stability, resulted in drastically increased inflow of foreign direct investment and its orientation to particular sectors. Initially, the largest inflow of foreign direct investment was realized in the manufacturing sector, after its experience an expansion in the sector of trade, automotive, electronic industry, and after all in telecommunications and financial sectors” [2, p. 29].

Comparison of the data from Table 2 and Table 3 confirms the previous assumption. From the perspective of sector orientation, the largest inflow of direct investment in 2001 was achieved in trade and industry sector. However, the period after the 2004 was characterized by a trend of prevailing sectoral orientation of foreign direct investment inflows to the service sector, due to higher profitability,

Figure 2: The net inflows of foreign direct investment in Serbia, 2001-2012, in mil. EUR



Source: Authors own graphical presentation based on the data from Ministry of finance and economy [7]

which led to an increase in share of the non-tradable sector in the economic structure. This is confirmed by the data in Table 3 which clearly indicate the dominance of financial intermediation in total foreign direct investment inflow in the period from 2004 to 2012. Hence, investment was also directed to manufacturing industry, which recorded a cumulative foreign direct investment inflow of EUR 4.4 billion, and then to wholesale, retail and repair of motor vehicles and real estate activities.

If, in addition to the above-mentioned picture of sectoral composition of investment, we also take into account the fact that the service sector played the role of the generator of GDP growth throughout the transition period from 2001 to 2008, it could be said that foreign direct investment largely contributed to its expansion. On the other hand, it is clear that due to the decline in production, privatization and inadequate investment structure, the

industry in the observed period recorded a slower average growth (of about 1.0%), and that reduced participation of the tradable sector in economic structure cannot provide an impetus for future growth. Continued adverse trends in the industry represent key constraints to achieving the vision of development as well as to the implementation of a new model of growth and development based on the growth of industrial production (annual rate of 6.9%) and, in particular, manufacturing (annual rate of 7.3%). According to the projections of a new model of growth and development, the state should provide direct support to such growth through measures directed at encouraging change in the composition of investments towards a higher share of export-oriented and technology-intensive greenfield investments, which would consequently contribute to an increase in the share of manufacturing from the current 30% to 40 % in total inflow of foreign direct investment.

Table 2: Sectoral structure of foreign direct investment, 2001

Industry	Number of agreements	Participation of foreign direct investment in %
Construction	107	8.10
Production and finishing of textile products	106	8
Production and processing of foods	100	7.58
Mechanical and electrical industry	67	5.07
Graphic industry	46	3.48
Wood industry	39	2.95
Manufacturing and beverage processing	32	2.42
Production of plastics	30	2.27
Production of shoes and leather industry	30	2.27
Cosmetics	27	2.04
Paper production and printing industry	21	1.59
Production of home appliances	19	1.44

Source: [13, p. 65]

Table 3: Inward foreign direct investment by industries, 2004-2012

Industry	Investment value (USD mil.)
Financial intermediation	4,820.0
Manufacturing	4,450.0
Wholesale, retail, repairs	2,983.0
Real estate activities	2,384.0
Transport, storage and communication	2,360.0
Mining and quarrying	533
Construction	494
Other utility, social and personal services	134
Agriculture, forestry and fishing	133
Professional, scientific and technical activities	105
Accommodation and food service activities	94
Public administration and social insurance	83
Electricity, gas and water	56
Administrative and support service activities	22
Education	3

Source: Own tabular display based on the data from National Bank of Serbia [5]

Key trends in the development of industry in Serbia

Regarding the economic structure of the Republic of Serbia, it can be seen that the process of tertiarization is also present, which could send the wrong signals and possibly lead to the wrong conclusion that economic development should in the future lean exclusively on the growth of the tertiary sector. This solution would be detrimental to other sectors, but also to the entire economy, which is still determining the path of the new structural transformation. Neglecting strategic primary sector (mainly agriculture) and secondary sector (mainly manufacturing) would lead to a slowdown in growth of the economy and in the development of the tertiary sector which is largely dependent on other sectors. This is especially true for business services that are directly dependent on the development of the industry.

While Serbia is doing well on its way to achieving full membership in the European Union, it is justified to perform comparisons of the development levels of industry in Serbia and the European Union. Such an analysis provides a basis for concluding that in recent years the situation in Serbia has been significantly different from that of the EU. The leading industrial sectors in the EU include primarily mechanical, electronic, pharmaceutical, chemical and textile industries. In Serbia, the same sectors are under development or closure. Machinery industry is one of the leading industries in the EU, which makes the EU a leading manufacturer of mechanical equipment in the world. The EU is also at the top when it comes to electronic industry (behind Japan and the U.S.), and the pharmaceutical industry after the United States. The new EU industrial policy emphasizes the following objectives [11, p. 2]:

1. Competitiveness of industrial products,
 2. Greater use of alternative energy sources,
 3. Environmental protection,
 4. Review of the legislation,
 5. The advancement of knowledge,
 6. Winning foreign markets,
 7. More efficient management of structural changes.
- Serbia, however, shared the fate of the transitional

countries of South Eastern Europe that in the second half of the 1990s, unlike Serbia, recorded relatively high growth (due to the growth of investment, private consumption and exports) which led to significant changes in the structure of industrial production. The largest decline in the share was recorded in labor-intensive sectors, above all, in the food processing, textiles and wood industry. More sophisticated industries based on the use of technology experienced above-average increase. The trend of industrial growth in transition economies has continued in the 21st century. It is important to point out that the rapid growth and exports have been, for the most part, a result of the access to the EU market and the fact that considerable industrial capacities from the EU were moved to those countries.

In contrast to the successful transition economies, the EU members, which managed to carry out the restructuring and specialization of their manufacturing sector in a timely manner thanks to extensive reforms and foreign direct investment inflows, the presence of internal and external disturbing factors seemed to constrain the process of structural transformation of the Serbian economy. This resulted in the loss of competitiveness of the Serbian industry, the decline in exports and insufficient volume of foreign direct investment.

The development of the industrial sector in Serbia is burdened by a number of structural weaknesses, but also determined by the problems inherited from the past. Historically, “the dynamic development of the Serbian industry was deeply contradictory process. Very high growth rate was achieved (7.5% in the period 1953-1988), but the efficiency of industrial development was very low and formed industrial structure conservative and quite unsuitable as a basis for the future development of the industry. After the initial dynamic growth, the pace of Serbian industrialization slowed over time. In the last decade of the 20th century there was a definite breakdown of industrialization model in Serbia. Generally accepted view is that the collapse of the Serbian industry occurred due to the nuisance in which Serbia was in the last decade of the 20th century” [16, p. 2]. Expectations that the revitalization of industry in Serbia might happen after 2000, practically remained only on paper. The fact is that the “new transition concept of development, based on

liberalization, deregulation and privatization interrupted the development of Serbian industry. Average growth rates are several times lower than the growth of GDP, while the share of industry in GDP drops dramatically, which is contrary to the concept of development that is applied in leading countries in transition, China, and most highly developed countries in the world” [16, p. 2].

With regard to the level of development, the industry of Serbia lags behind other countries in transition. A large decline in industrial production during the 1990s was not recovered in the past decade, not even mitigated. Despite the growth in the period from 1994 to 1998, the level of industrial production in 2000 was 42.4%, and in 2007 only 49.1% relative to 1990. The global financial and economic crisis that began to produce the first effects at the end of 2008 is a tragic confirmation of faulty transition strategy for growth and development of the Serbian economy, whereas due to the impact of the crisis all the indicators of macroeconomic trends entered into the zone of negative developments. “The crisis has only additionally burdened the transitional problems of the Serbian economy and stressed the need to redefine the basis on which it was developed in the previous decade, to change the concept of development and to adapt the system within which it is implemented. In such conditions, the relevant economists have proposed the “Post-crisis model of economic growth and development of Serbia in the period from 2011 to 2020”, which should lay out the future strategic courses of activities directed at speeding up the pace of economic growth and accelerating development and which, like a new development model, are to be built taking into consideration all the specifics of the Serbian economy and in accordance with new European strategy “Europe 2020” [10, p. 249].

This exact moment caused that the assessment of the achieved level of development of Serbian economy in transition is to be based on the analysis of two periods – the period from 2001 to 2008, and the period after 2008. In the pre-crisis period 2001-2008, the Serbian economy achieved relatively satisfactory transitional results. This statement is best supported by the fact that a relatively high average annual GDP growth rate of around 4.9% was achieved in this period. During the 2009, due to the

initial manifestation of the effects of global economic crisis, and especially internal structural problems, the economy entered recession and experienced a decline of 3.5%. Serbia, like other transition countries, experienced a huge drop in economic activity, since the recession wave most hit the industrial systems of the countries in transition. The growth rate of industrial production in Serbia is dictated by manufacturing industry, which is a dominant sector of the domestic industry. In its structure, the most important contributor is the production of food and beverage, and chemical products. It is therefore not surprising that the crisis in 2009 annulled entire transition growth of Serbian manufacturing of 18.6% achieved in the period 2001-2008 (-18.7%), while the number of industrial workers halved (i.e. reduced by 47% in the period 2001-2009), which is one of the largest economic transformations in all transition countries in the region [12, p. 7].

Economic recovery that followed during 2010 occurred mainly due to the implementation of the program of measures to mitigate the effects of the global financial and economic crisis, that were aimed at preserving jobs, creating new employment opportunities and achieving planned economic growth, as confirmed by the following data: the Serbian economy achieved moderate growth (GDP growth rate of 1%), manufacturing industry grew by 3.9%, which is supported by an increase in exports (24%) and investment (5%). After 2010 there has been noticed a gradual recovery in economic activity in Serbia, although the macroeconomic indicators are still below the levels achieved in the pre-crisis period.

During the period from 2001 to 2011 the industrial production grew at an average rate of about 0.7% per year. Throughout the period Serbian industry faced a number of problems and constraints affecting the profiling of the key features of industrial production such as: technological and economic backwardness of capacities, low competitiveness of products due to unsatisfactory quality but also unsatisfactory quality of service, high imports, low level of marketing management and production management, labor surplus due to still unfinished restructuring and privatization, unfavorable sectoral orientation of foreign direct investment.

The physical volume of industrial production in the past decade generally increased. Manufacturing sector as the most important sector of Serbian industry which accounts for about 70% of total industrial production behaved differently by sub-sectors. The largest decline in production volume occurred in the textile industry (textiles and clothing production), leather and footwear production, wood processing and wood products, except furniture and computer, electronic and optical products production. The highest growth was recorded in production of basic pharmaceutical products and pharmaceutical preparations, production of coke and refined petroleum products, basic metals production, production of chemicals and chemical products, food products production, rubber and plastic products and electrical equipment production.

Available data indicate that industrial production recorded a recovery growth trend during 2012 and especially in the first five months of 2013. The physical volume of industrial production recorded inter-year growth of 4.2%. Growth was recorded in all three industrial sectors: mining (5.6%), manufacturing (5%), electricity, gas and water supply (1.4%).

Analysis of industrial policy that was pursued in the previous transition period shows that it was essentially based on the following elements: the privatization and restructuring of the economy, strengthening of the enterprise sector, and the creation of a competitive business environment. Such a strategic direction determined the definition of specific institutional arrangements and measures of state support towards the implementation of the privatization and restructuring of state-owned enterprises, encouraging foreign direct investment and creating a stimulating business environment through the reform of existing regulations. However, it is evident that, despite the measures of direct state support, the recovery of the industry was too slow in the past, and that the crisis has intensified the problems in this sector.

To what extent is the role of the industry important in the realization of dynamic development of Serbia is explained by the fact that the government in the mid-2011 adopted the Strategy and Policy of Development of Industry of Serbia for the period 2011-2020. The adoption of such a strategic document was determined by a number of factors, both

internal and external in character. Internal factors arise from the structural problems in the domain of industry, while external ones are related to the effects of the global financial and economic crisis. The strategy completely rests on and directly supports the goals defined in the post-crisis model of growth and development of Serbian economy for the period from 2011 to 2020, but it is also consistent with the objectives of the new European strategy "Europe 2020". It defines the main strategic goals and objectives of industrial development in Serbia on the way to building a new competitive industrial structure. The basis for the new industrial policy consists of revitalization, restructuring, development and competitiveness improvement of the Serbian industry with the aim of increasing production, productivity and exports in all areas of manufacturing.

According to the Fiscal Strategy for 2013 with projections for 2014 and 2015, it is reasonable to expect that policymakers will engage in the conduct of an active industrial policy in order to increase the competitiveness of the industrial sector and exports, and expand the share of tradable sector in the economic structure. In order to achieve this primary objective, measures are planned to support exports of sophisticated products, before all, of metal, automotive, electronic, food, pharmaceutical and military industries, primarily through attracting foreign direct investment. Special support measures will be directed towards those development projects that contribute to resolving the balance of payments imbalances, involve the use of high technology and employ skilled local workforce, create high value added, contribute to the development of vertical linkages with local suppliers and increase the number of employees.

Conclusion

It is quite clear that without intensive structural transformation, revitalization of industry and especially manufacturing it is not possible to achieve a dynamic and sustainable growth of the Serbian economy in the future. In the previous course of transition, foreign direct investment played a key role in accelerating its dynamics, so it is reasonable to expect that they will retain this role in the future. Policymakers in Serbia believe that in the future

they will also have a strategic role to play in the realization of the vision of development, with emphasis on changing its structure towards a higher share of export-oriented greenfield projects, which should provide a crucial support to increase the share of the export sector in the economic structure and improve its competitiveness.

It is very difficult to make any recommendation for reviving and stimulating industrial production in Serbia, because the matters in this sector are quite out of control. However, it is possible to identify the key activities of policymakers in this sector in the future. In order to reach valid conclusions, it would be illustrative to review following facts, which will provide the basis for explaining some of the attitudes.

If we analyze the manufacturing structure in terms of technological groups it is notable that the low-tech sectors make up 1/2 of the total manufacturing sector, followed by medium-low technology sectors (25.4%), medium-high technology sectors (16.4%) and, finally, the high technology sectors with the share of only 7.5%. Given the very adverse competitiveness ranking of Serbia according to the latest Global Competitiveness Report (95th position), it is clear that with this industrial structure is difficult to raise the ranking of competitiveness, but also to provide entry to a higher stage of competitiveness. A major problem of manufacturing is related to low-tech sectors that currently employ most of the workforce, have the lowest average salary and, at the same time, face a decline in production and growth of the foreign trade deficit. It is obvious that restructuring of industrial sector needs to start right here, i.e. by identifying branches that can be relatively successful in international competition, and those that are in “critical” condition.

It is well known that the food and beverage production is the most important industrial sector of the Republic of Serbia, having the greatest number of employees, relatively stable growth and high profits, and it records the largest foreign trade surplus. This strategic branch, irrespective of its low-tech nature, should be further promoted and modernized in order to enable continual increase in its productivity and strengthen its position in the structure of the manufacturing industry. Also, additional support measures are necessary so that this strategic branch would

be able to produce positive effect on the development of agriculture, from which it derives raw materials.

Production of tobacco products is the most productive sector in the group of low-tech sectors, has steady growth and by far the highest average wages, which makes it very attractive, so its further development might go easily. Further expansion of this sector is good also because of the potential reduction of the deficit that it records, which should not be underestimated. Agricultural production should be positively affected by the growth of this sector.

Publishing, printing, reproduction, furniture production and especially recycling are promising sectors, as they have already shown an increase. The recycling sector has recorded surplus in foreign trade, so it will gain significance in the future development period.

All “promising” sectors (including food and beverages production, tobacco products, clothing and fur, publishing, printing and reproduction, production of furniture and heterogeneous products, recycling, rubber and plastic products, production of basic metals, metal products, except machinery and equipment, production of coke and refined petroleum products, chemical products, electrical machinery and equipment, other transportation equipment, office machinery and computers production) must be most strongly supported by measures of economic policy, especially fiscal and monetary policies, which will be the easiest task of economic policymakers of the Republic of Serbia, as these sectors are rather “stealed” in the international game. Efforts in the direction of their development will be focused on their continuing encouragement.

However, one of the most acute problems of the Serbian economy is low-tech sectors of textiles, leather and footwear, wood and paper production. These “critical” sectors have recorded a huge drop in production, productivity and exports, their average earnings are at the lowest level, while they are still employing a huge number of workers. It is evident that their restructuring is the most urgent, but also the most complex, because many workers will have to relocate from these sectors. The problem is thus two-fold: on the one hand, an attempt to encourage production with higher productivity, and on the other, solving the problem of labor surplus. It is clear that some companies in this

sector so seriously lost a step that they must go bankrupt, but relatively healthy companies need to be backed up by an expansive economic policy measures. This primarily refers to the section of clothes, which despite a negative growth rate and the lowest average wage records trade surplus! In these “critical” sectors the state will have to use a strong expansionary fiscal policy in terms of tax exemptions or various subsidies to encourage production. Expansionary monetary policy in terms of loan with minimum interest rates would also give a positive result. Labor surplus would be solved by a strong social policy, without which economic policy stimulus package will be incomplete. Expansionary policy would also positively influence the future attraction of foreign direct investment in this sector.

Sector of medium-low technology is the second most important when the manufacturing is in question and accounts for nearly 1/3 of industrial production. The highest growth within this sector was recorded in the production of rubber and plastic, and production of coke and refined petroleum products. This sector is relatively healthy with very high growth rates, except for production of non-metallic minerals which has recorded a slight decline.

The third in importance is the sector of medium-high technology, which makes 16.4% of total manufacturing. The promising sectors within this group are the production of chemical products, production of electrical machinery and apparatus, production of other transport equipment. Machinery and equipment production, except electrical and motor vehicles, are sectors that should receive special attention. In general, all these sectors are very specific, they require a relatively high technological equipment of production, and the action of the state in terms of attracting suitable strategic partners from developed countries is of great importance here. It is clear that modern technology is a *conditio sine qua non* for the development of this sector, and it will be provided in two ways: transfer from abroad and through offering strong incentives for the scientific-research institutions to actively participate in the permanent process of applied research for the need of the economy. Therefore, the financial support of the state will be of great importance, because it is now very limited and linking

research institutions with industry and creating a kind of “network” will be a winning combination in this respect.

Serbia certainly has a major problem with the development of high-technology sector, which is the most present in the developed countries that base their development primarily on this sector. A huge amount of time may be required before the sector becomes dominant in Serbia, as it is currently participating with modest 7.5% in total manufacturing. This miserable share is a result of the difficult economic legacy and impossibility of weakened state to deal with expensive scientific-research endeavors. Of course, this situation should change over time, and the separation of the DP in order to raise the scientific and technological level of the country should be a permanent task of the state.

Having in mind the above-mentioned facts, specific recommendations could be put forward in order to encourage secondary mega sector.

It has already become clear that currently one of the sectors supporting the economic development of Serbia is the sector of the food and beverage industry that has traditionally represented the largest percentage of the total production, employment and exports. Better capacity utilization of the industry, increasing productivity and creating a brand are the future actions of the greatest importance. Serbia has extensive knowledge and experience in this sector, but still has no clear recognition of its major brands on the international market.

In the group of low technology sectors, as potentially propulsive sector stands out the recycling which will become more interesting as soon as tighter environmental requirements have been set up. Perhaps a workforce of “critical” sectors should be diverted to this sector after some retraining, because it is already recording a surplus in international trade. The state should actively support this sector in the future.

Tobacco products production is in itself attractive, because it has the highest average salary in Serbia and there is scope for further development and increase in capacity.

The most critical sectors which need to be carefully and urgently restructured are textile sector, leather and footwear production, wood and cellulose production. Huge international competition, disinvestment and loss of markets

have led these sectors to a critical stage of development, and the situation is even more alarming because there are a large number of trapped non-productive workers which have to be reallocated. Emergency measures of the state should be aimed at identifying potentially promising companies (primarily companies in the production of clothing) whose revitalization and further development should be encouraged by expansionary fiscal and monetary policies. The competitiveness of these products should be based on quality, not on price because in this case the pressure of price competition, especially from Asian countries, would make this attempt useless. So, branding, quality and design should be in focus, not price and quantity.

Particularly difficult task of economic policy will be to ensure development of the medium-high, and especially, high technology. It should primarily start from the sector of medium-high technology, because this sector consists of already developed traditional branches such as chemical production, motor vehicles, transportation equipment, machinery and appliances, including electric. In addition to the active networking of scientific-research institutions with this part of the economy and creating “own innovations” the state must create a favorable investment environment to attract strategic foreign partners. Also, the action “buy domestic” in this sector along with a package of measures of expansive fiscal and monetary policies can largely contribute to enhancement of mechanical and process industries, so that they should slowly become capable of “catching up”.

High-tech sectors are now more actively considered by economic policymakers, although their intensive development is foreseen in future. Greater government investments in scientific research are base for the development of the sector.

Besides the processing sector, the energy sector can also be singled out as potentially promising sector. Emphasis should be placed on renewable energy, because Serbia has favorable natural conditions for the development of hydropower, wind energy, energy from biomass. Construction of a new energy infrastructure would especially have a favorable impact on the development of the middle and high-technology sectors of industry.

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