Enes Ćorović
State University of Novi Pazar,
Department of Economic Sciences

Živorad Gligorijević
Aleksandar Manasijević
Faculty of Economics, University of Nis

STRUCTURAL CHANGES AND ECONOMIC GROWTH
OF THE REPUBLIC OF SERBIA: THE EFFECTS OF APPLIED
STRUCTURAL ADJUSTMENT MODELS

Abstract

There is a general consensus in the economic literature that there is a strong
correlation between structural changes and economic growth: structural changes
are the most significant repercussion of economic growth, but at the same time, in the
long run, it’s most important factor. Having in mind this fact, the analysis of structural
changes and economic growth of the Republic of Serbia is a key research issue on which
this paper focuses. In that sense, the paper, based on relevant theoretical knowledge and
reference statistics on the movement of basic macroeconomic indicators, monitors and
analyzes the effects of applied models of economic growth in the process of structural
adjustment of the economy of the Republic of Serbia during the first two decades of the
21st century, in which major, and in some sub periods, specific structural changes took
place.

Key words: Structural changes, economic growth, neoliberal model of economic
growth, new model of economic growth, Republic of Serbia.

JEL classification: O11, O14, O25, O40, P23, P24.

СТРУКТУРНЕ ПРОМЕНЕ И ПРИВРЕДНИ РАСТ РЕПУБЛИКЕ
СРБИЈЕ: ЕФЕКТИ ПРИМЕЊЕНИХ МОДЕЛА
СТРУКТУРНОГ ПРИЛАГОЂАВАЊА

Апстракт

У економској литературни присутна је општа сагласност да између струк-
tурних промена и привредног раста постоји јако изражена корелативна веза: структурне промене представљају најзначајнији последић привредног раста, али су истовремено, на други рок, и његов најзначајнији фактор. Имајући у виду ту чињеницу, анализу структурних промена и привредног раста Републике Ср-
Introduction

By accepting the basic principles of the well-known doctrine of transition based on the postulates of the Washington Consensus (macroeconomic stabilization, the creation of market system and market institutions, privatization and restructuring of companies and liberalization in economic policy), i.e. the neoliberal model of growth, the Republic of Serbia reforms in order to create a market-configured economic system and, ultimately, in order to increase the efficiency of development (Gligorijević & Ćorović, 2019).

The key aim of these reforms was to increase the efficiency of the functioning of the economic system, whose performance in a long period of time did not enable development (Gligorijević & Ćorović, 2018). These reforms also conditioned the initiation of other changes (political, legal, institutional, social and others) in the socio-economic system, which were not independent goals, but a consequence of changes in the economic base of society. In that sense, it can be said that major social changes (private property, market institutions, competition, entrepreneurship, etc.) were not introduced due to radical political or ideological changes, but in order to increase the efficiency of development of certain economic structures.

In order to successfully implement the process of structural adjustment of the economy of the Republic of Serbia, a development model was established which should have resulted in a relatively rapid consolidation of economic flows. However, the spontaneous operation of the market mechanism, in conditions of partial macroeconomic stability, resulted in directing the economy of the Republic of Serbia towards foreign savings, disproportionate growth of the non-tradable goods and services sector and overheating domestic demand as the main drivers of growth (Gligorijević, Ćorović & Manasijević, 2020).

This has led to the configuration of development processes which, in short, can be marked as unsustainable growth path. The expectations of the protagonists of the neoliberal, theoretically rounded model did not come true. Development trends have conditioned the need to abandon the idea of “spontaneous” growth as soon as possible. Due to that, the Republic of Serbia was forced to change the model of economic growth. The general agreement on the existence of serious development problems, both in the scientific and professional environment, and among the then creators of economic policy, resulted in the adoption of a document entitled Strategy and Policy of Industrial Development of the Republic of Serbia from 2011 to 2020 and the announcement of a new model of economic growth (Gligorijević, Ćorović & Manasijević, 2020).
Changing the model of economic growth of the Republic of Serbia was, therefore, a development necessity that highlighted: eliminating the weaknesses of the fiscal system, creating the necessary balance in sources of financing growth (with a change in the GDP structure) and empowering the competitiveness of the domestic economy. The key change, of a structural nature, is contained in the foundation of future economic growth on the growth of industry (primarily manufacturing) and the relative increase in its share in gross domestic product, assuming dynamic investment growth, instead of previous growth in domestic consumption (Gligorijević & Ćorović, 2019).

Based on these facts, the aim of this paper is to, through using of reference statistics, analyze structural changes and trends in economic growth of the Republic of Serbia during the first two decades of the 21st century, as well as to highlight the key consequences of the cause-and-effect relationship between these phenomena.

1. Research methodology

The research process in this paper takes its basis in the researches of numerous authors. Namely, economic theory, through a long amount of time, clearly notices and points to a significant correlation between structural (sectoral) changes and economic growth. However, this correlation is not absolute, and structural changes could be both a repercussion of economic growth, or its significant and obvious source.

We can clearly say that in economic theory in modern conditions, there is no specific and generally accepted individual theory of structural change. However, there are various theoretical approaches that explain some structural mismatches of the fundamental sectors of the market economy (Kruger, 2008).

Observed from the methodological aspect, this paper applies a structural approach in researching the links of structural changes and economic growth, which emphasizes that economic growth is closely connected with the process of transformation of production structure (in order to start and accelerate it), through: removing hold-ups and additional factors answerable for such a slow growth and ensuring the redistribution of capitals into so-called growth engines, i.e. into highly competitive sectors and activities (Kuznets, 1973).

Different from the so-called structural approach or structural method, old-style thoughts of stable economic growth found their basis mostly in savings rate and in the accumulation of capital, using mostly a single production function for the entire economy and giving structural changes lone as a kind of side effects of economic and GDP per capita growth (McMillan & Rodrik, 2011).

Structural changes in this paper are interpreted not just as redistribution of economic activity in fundamental economy sectors (agriculture, industry and services) which escorts the process of economic growth in modern conditions (Herrendorf, Rogerson & Valentinyi, 2014), but also as changes in the participation of particular sectors of the economy and in total production or employment level.

The analysis of structural changes and economic growth of the Republic of Serbia during the first two decades of the 21st century was performed using statistical data of various official institutions (domestic and international) - Federal Bureau of Statistics, Republic Bureau of Statistics, Ministry of Finance, International Monetary Fund and European Central Bank.
Structural changes and economic growth of the Republic of Serbia, during the first two decades of the 21st century, were the topic of special attention within our research. In doing so, we paid significant attention to: the pace of economic growth and structural changes in the three-sector model (Arandjelović & Gligorijević, 2008), structural changes and the new model of economic growth (Gligorijević & Ćorović, 2019) etc.

2. Structural changes and economic growth of the Republic of Serbia: The effects of applying the neoliberal model

The impact of international sanctions, war destruction and economic exhaustion of the population, during the last decade of the 20th century, significantly destabilized the economic reality of the Republic of Serbia. On the wave of social dissatisfaction, there were political changes in 2000. With these changes, a radical break was made with, until then, a hybrid system of functioning of political pluralism, with an unreformed economic system. In that way, the company decided to build a market economy, following the example of developed western countries, and to end the previous practice, in which the state was a key economic factor. The way out of the political blockade and the burden of accumulated economic problems have conditioned the establishment of close communication with international financial institutions, primarily with the World Bank, the International Monetary Fund and the European Bank for Reconstruction and Development. The set conditions for the promised financial assistance resulted in the acceptance of the concept of structural adjustment, applied in additional post-socialist countries, with the monitoring of the mentioned international institutions. In essence, these were the recommendations from the Washington Consensus, which were reduced to four key elements: macroeconomic stabilization, the creation of market system and market institutions, privatization and restructuring of enterprises, and liberalization in economic policy (Cerović, 2004).

In order to realize the generally accepted concept of structural adjustment, a new growth model was established, which should have resulted in a relatively rapid consolidation of economic opportunities, compared to other countries. The mechanisms and experiences of its application were known, and there were certain advantages and disadvantages.

The transformational recession has largely lost its strength; the economy, and especially industry, showed signs of a positive response to investment impulses; the private sector was on a continuous rise and created a significant part of the social product; structural imbalances had clearly profiled expansion tendencies. However, on the other hand, in that time the distribution of foreign direct investment has already taken off in the direction of countries that have previously embarked on a process of structural adjustment and have had the obvious results of ten years of these processes.

| Activities               | 2001 | 2002 | 2004 | 2006 | 2008 | 2009 | 2010 |
|--------------------------|------|------|------|------|------|------|------|
| Agriculture              | 17,3 | -6,8 | 19,1 | -0,1 | 8,7  | -4,8 | 6,4  |
| Mining                   | -23,3| 59,4 | 2,8  | 8,8  | 3,3  | -10,7| 18,0 |
| Manufacturing industry   | -9,7 | -5,9 | 3,7  | 1,9  | 3,3  | -4,5 | -0,3 |
| Electricity supply       | 1,2  | -1,7 | 6,6  | 4,8  | -0,8 | 6,4  | -4,5 |
| Water supply and waste management | -10.5 | -6.4 | 1.0  | 0.6  | -6.7 | 0.3  | 12.8 |
|----------------------------------|-------|------|------|------|------|------|------|
| Construction                     | -10.5 | 27.9 | 13.0 | 15.7 | 13.1 | -12.9| -2.4 |
| Wholesale and retail trade       | -7.6  | 21.2 | 20.0 | 9.7  | 3.8  | -8.8 | -3.0 |
| Traffic and storage              | 6.1   | 3.4  | 9.2  | 16.0 | -1.0 | -4.6 | 7.1  |
| Accommodation and catering services | -13.5 | -5.5 | 1.7  | 13.3 | -8.3 | -0.6 | -2.3 |
| Information and communication    | -0.9  | 17.3 | 2.1  | 13.9 | 9.6  | -3.0 | 3.2  |
| Finance and insurance            | -18.1 | 9.9  | 15.5 | 30.1 | 18.9 | 2.6  | 1.9  |
| Real estate business             | 1.4   | 1.7  | 0.6  | 0.6  | 4.0  | 0.8  | 0.2  |
| Professional, scientific, innovative activities | -31.6 | -3.8 | 27.5 | 13.0 | 7.4  | -10.6| -2.7 |
| Administrative and support service activities | -23.9 | -8.3 | -8.5 | 1.7  | 15.6 | 7.2  | 6.2  |
| Public administration and social security | 0.5   | 2.7  | 6.5  | -4.9 | 0.9  | 4.3  | -0.2 |
| Education                        | 2.7   | 9.0  | 0.5  | -4.9 | 5.8  | 2.0  | 0.5  |
| Health and social protection     | 0.5   | 8.0  | 2.8  | -10.8| 3.7  | 0.7  | -0.8 |
| Arts, entertainment and recreation | -19.4 | 28.9 | 17.1 | -3.2 | 2.0  | -2.3 | 1.0  |
| Other service activities         | -10.3 | 18.6 | 22.4 | 10.3 | 1.5  | -5.4 | -4.3 |
| Household activity               | 0.0   | 0.0  | 9.5  | 1.6  | -0.8 | -11.7| 0.8  |
| Gross value added                | -1.9  | 2.5  | 8.6  | 4.5  | 4.8  | -3.4 | -0.8 |
| Taxes on products                | 77.3  | 35.4 | 12.8 | 6.5  | 7.6  | -1.9 | -0.2 |
| Product subsidies                | 15.8  | 2.2  | 19.1 | 3.4  | 4.4  | 6.9  | 4.0  |
| Gross domestic product           | 5.0   | 7.1  | 9.0  | 4.4  | 5.4  | -3.1 | 0.6  |

**Source:** Republic Statistical Office, *Statistical Yearbook of Serbia 2007, 2010, 2016.*

Based on the above, high goals and expectations of fast results have been formulated. However, in the period from 2001 until the onset of the economic crisis in 2008, the gross domestic product of the Republic of Serbia, calculated at constant prices from 2002, grew at an average annual rate of 5.41%. At the same time, certain components of gross domestic product formation had different growth dynamics: gross value added, in this period, grew at an average annual rate of 4.08%, while indirect taxes (less subsidies) grew much faster (16.4% per year). Compared to the average annual growth of the world economy of 3.94%, the growth of GDP in the Republic of Serbia, in the same period, was higher. However, compared to the average annual growth of developing countries of 6.48%, as well as with countries of similar size in the environment, GDP growth was significantly lower (Stamenković, Kovačević, Vucković, Nikolić, & Bušatlija, 2009, p. 20).

At the same time, there are different assessments of the achieved economic growth of the Republic of Serbia after 2000. The creators of economic policy, about that period, spoke about “... a zone of very high growth rates” (Cvetković, 2007). However, many analysts, pointing to the financial assumptions of growth and the huge inflow of funds (based on medium-term and long-term loans taken abroad, then based on the sale of companies, as well as remittances and donations) call attention to the fact that the Republic of Serbia has achieved very modest real growth GDP (Kovačević, 2008, p. 103), while as a relevant court, the fact remains that the level of real economic activity of the Republic of Serbia, measured by the gross domestic product index, was at the level of 70% of the social product reached in 1989 (Đukić, 2009, p. 97-98).
Sectoral structure of economic growth in the 2001-2008 period was markedly unbalanced. The three non-exchange sectors generated about 75% of total economic growth. Sectors: trade 14.25%, financial intermediation 12.96% and transport and storage of 7% had extremely above-average growth rates of gross value added (Savić, 2009). With a slightly lower share of 18% in gross domestic product formation in 2001, these three sectors increased their relative share to 30% in 2008. These were, therefore, the main components of economic growth.

The share of indirect taxes, reduced by subsidies, also increased, so that with an 11.8% relative share in 2001, that share in the formation of gross domestic product in 2008 amounted to over 16%. On the other hand, the sectors of production of material goods had a growth of gross domestic product far below the average: agriculture grew at a rate of 0.15% per year, manufacturing at a rate of 0.47%, while significantly higher growth was recorded by construction, with an average at a rate of 10.7%.

Different growth dynamics of individual sectors led to a change in the structure of gross domestic product formation. There is a clear declining trend in the share of manufacturing activities, while the services sector has achieved dynamic growth. Production activities decreased from 53.3% in 2001, their relative share to 38.9% in 2008. At the same time, agriculture reduced its share from 19.9% in 2001 to 10.13% in 2008. In the same period, the industry reduced its share in gross value added from 28.5% to 22.3%, with a dominant decline in the manufacturing industry.

Table 2: Structure of gross value added of the economy of the Republic of Serbia by sectors

|       | 2001   | 2002   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Agriculture | 19.9   | 15.4   | 13.9   | 12.0   | 11.4   | 10.5   | 10.3   | 9.6    | 10.2   |
| Industry   | 28.5   | 27.2   | 24.1   | 23.6   | 23.3   | 21.9   | 22.3   | 22.8   | 23.0   |
| Construction | 4.9    | 5.2    | 5.9    | 5.7    | 6.6    | 5.7    | 6.3    | 5.8    | 5.6    |
| Services   | 46.7   | 48.2   | 56.1   | 58.7   | 58.7   | 61.9   | 61.1   | 61.8   | 61.2   |

Source: Republic Statistical Office, Statistical Yearbook of Serbia 2007, 2010, 2016.

The newly created structure of the gross domestic product in the Republic of Serbia, to a large extent, reminded of the situation in the most developed countries of the world, where the trend of the process of deindustrialization has been noticed. According to that, the Republic of Serbia is unique among the post-socialist countries which also went through a phase of structural adjustment, but in which the participation of industry in the formation of GDP remained at a much higher level. Unlike highly developed countries, where the industry generated the largest part of the surplus for export, the industry of the Republic of Serbia could not adequately satisfy domestic needs, which gives a clearer picture of the character of its structural changes. In the scientific and professional public, and declaratively also among the creators of economic policy, a unique assessment has been formed that further flows of structural adjustment of the economy must be based on an essentially, completely different model of growth. The backbone of this model was to be the accelerated growth of the industry (especially the manufacturing industry), with its pronounced export orientation and employment of a high number of unemployed able-bodied residents (Corovic, Jovanovic, & Ristic, 2013, p. 8).
3. Structural changes and economic growth of the Republic of Serbia: the effects of applying the new model

The serious consequences of the economic crisis from 2008 in the Republic of Serbia initiated a re-examination of the hitherto applied model of economic growth. Namely, the economic crisis (i.e. its impact on economic trends) has exacerbated and brought to the surface the accumulated problems of economic development from the previous decade. It was necessary to move away as soon as possible from the idea of “spontaneous” growth that prompted reforms, but which, as we already mentioned, directed the Serbian economy towards foreign savings, growth of the sector of non-tradable goods and services sector and hotness of aggregate demand. Due to that, the Republic of Serbia was forced to change the model of economic growth.

The widespread agreement on the existence of serious development problems in the economy resulted in the adoption of the Strategy and Policy for the Development of Industry of the Republic of Serbia for the period from 2011 to 2020, with a new growth model. The key change, of a structural nature, is based on the growth of industry and the relative increase of its share in the creation of gross domestic product, assuming dynamic growth of investments, instead of the previous growth of domestic consumption, as a source of economic growth. In accordance with the above, it is clear that the key development priorities of economic, and especially industrial policy, were based on increasing the volume and changing the structure of investments, with adequate sources of funding and strengthening competitiveness in the European Union market, since foreign trade predominantly related to this economic space. The realization of this radical change in the development policy of the Republic of Serbia was accompanied by serious challenges for the country’s economic policy.

The first few years of implementation of the newly adopted strategy and policy of industrial development of the Republic of Serbia, despite serious warnings from the scientific and professional public and public commitments of economic policy makers, passed without a consistent set of measures to implement the new economic growth model. Eliminating the basic structural imbalance between production and consumption in the country required the adoption of economically necessary, socially painful, and politically risky moves, without which the external liquidity crisis was a certain short-term scenario. However, after 2014, as a result of fiscal consolidation measures, further economic flows were marked by a changed correlation between the GDP growth and aggregate demand, and especially final consumption in the Republic of Serbia. While the gross domestic product by the end of 2016 had an extremely slow growth of an average of 0.8% per year, the final consumption in the same period had a negative growth of an average of -0.2% per year.

By applying fiscal consolidation measures, the growing state budget deficit until 2014, when it reached the level of -6.4% of gross domestic product, was reduced to a tolerable -2.1% in 2016.

The positive trend continued in the 2017-2019 period with a surplus in the state budget. This was directly related to the reduction of the share of public debt in the gross domestic product to the level of 52.4% in 2019. At the same time, prices stabilized, reducing inflation from 2.4% in 2014 to 1.2% in 2016, and by the end of 2019 within the limits provided by the Maastricht Agreement (Statistical Yearbook of Serbia 2017, 2020). However, with the acceleration of economic growth and the reduction of public debt to an acceptable level, final consumption, especially in the public sector, has recorded an annual increase since 2016, true,
less than the rate of economic growth. This inconsistency in economic policy is in serious contradiction with the necessity of changing the structure of sources of financing economic growth and creating conditions for its acceleration (Ćorović, 2019, p. 43).

**Table 3:** Macroeconomic indicators of economic flows of the Republic of Serbia in the period 2011-2019

| Indicator                                      | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|------------------------------------------------|------|------|------|------|------|------|------|------|------|
| Gross domestic product (GDP) - growth rate     | 1,4  | -1,0 | 2,6  | -1,8 | 0,8  | 3,3  | 2,1  | 4,5  | 4,2  |
| % growth of final consumption expenditure from GDP | -0,7 | -1,2 | -0,7 | -1,2 | 0,1  | 1,6  | 2,3  | 3,2  | 3,3  |
| % share of budget deficit in GDP                | -4,0 | -5,9 | -5,2 | -6,4 | -4,1 | -2,1 | 0,7  | 0,6  | 0,2  |
| % share of public debt in GDP                   | 45,4 | 56,2 | 59,6 | 70,4 | 74,7 | 71,9 | 57,9 | 53,7 | 52,4 |

**Source:** Republic Statistical Office, *Statistical Yearbook of Serbia 2013, and 2017 and 2020*, and the National Bank of Serbia - *Statistics.*

The period after 2010 is characterized by extremely slow economic growth, without clear continuity, until 2016. Average growth rates of gross value added of 0.41% and 0.3% of gross domestic product in the period from 2010 to 2015 were achieved (Statistical Yearbook of Serbia 2017). In the period 2016-2019 The Republic of Serbia recorded significantly higher rates of economic growth. However, one of the characteristics of the economic growth of the Republic of Serbia is its significant oscillations by individual years.

For example, GDP growth in 2018, which is estimated at 4.3%, is more than twice as high as that attained in 2017 (2.1%), but, instead, economic growth in 2017 was 1.2 percentage points lower than in 2016 (3.3%). Further analysis shows that overdue such large oscillations of the annual GDP growth of the Republic of Serbia were not lasting changes in the GDP growth trend, but that they occurred mainly under the influence of temporary factors, primarily different agricultural seasons (Fiscal Council of the Republic of Serbia, 2019, pp. 11-12). The insufficient volume of investments is, of course, the key reason for the absence of high GDP growth rates and the targeted change in its structure in the direction of increased industry participation. The causes of such flows should, in part, be sought in the unilateral reliance on foreign direct investment, which strategy and economic policy have promoted as the only stable source of financing the economic growth and development of the Republic of Serbia.

**Table 4:** Share of investments in the GDP of the Republic of Serbia in the period 2011-2019

| Indicator                                      | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|------------------------------------------------|------|------|------|------|------|------|------|------|------|
| % of investments in GDP                        | 18,4 | 21,2 | 17,2 | 18,7 | 17,7 | 20,3 | 17,7 | 20,0 | 22,5 |
| % share of foreign direct investment in GDP    | 9,9  | 2,4  | 3,8  | 3,7  | 5,5  | 5,6  | 6,5  | 8,1  | 8,3  |

**Source:** Republic Statistical Office, *Statistical Yearbook of Serbia 2013, and 2017 and 2020*, and the National Bank of Serbia - *Statistics.*
For a continuous share of investments in GDP of 25%, which could provide stable growth of about 5% per year, according to the Harod-Domar model (Harod, R., 1948, Domar, E., 1947), are necessary, as emphasized development the character of the budget of the Republic of Serbia, with a significantly higher relative share of capital expenditures, as well as simulative measures of industrial policy, aimed at domestic investors and changes in the structure of credit placements of domestic banks. The mentioned shortcomings in economic policy have been pointed out in the academic literature (Gligorijević & Ćorović, 2019, p. 192), as well as in the analyze of the Fiscal Council (Fiscal Council of the Republic of Serbia, 2019, pp. 16-17). Although positive changes are visible in the projections and execution of the state budget for 2018 and 2019, it’s more pronounced developmental character is, to a huge amount, limited by the growth of final spending in the public sector.

Foreign direct investment was low in the first years of the analyzed period, except in 2011, when it reached the target relative volume of approximately 10% of gross domestic product. In that year, the effects of activating previously received foreign direct investments became visible, particularly in the automotive industry, production of electrical equipment, rubber and plastics. Measures to attract new FDI, particularly green field investments, had more visible success only since 2017. Their volume in 2018 and 2019 had a great impact on the growth of total investments, as well as on economic growth above 4%. Achieved average growth rates of gross domestic product in the period after 2010 were insufficient material basis for the necessary structural changes. All parts of the tertiary sector recorded either negative or minimal average growth of 1.5%, while in the same period the manufacturing industry grew at an average annual rate of 2.46% and mining at a rate of 4.73%. It can be stated that with such a structure of economic growth, in the first part of the observed period, the first steps were taken towards the affirmation of a new model of economic growth.

As a result of economic policy, the application of fiscal consolidation measures after 2014 and stopping the growth of consumption above the country’s production capacity stopped further deformation of the economic structure and the relative growth of the services sector. The share of industry in the creation of gross value added increased from 23% in 2010, to 25.8% in 2015, which is a positive shift in the necessary structural changes. The successful start of fiscal consolidation has eliminated the risks of an external liquidity crisis, but economic policy has been slow to attack other hotspots of structural imbalances rather slowly and cautiously.

**Table 5:** Growth indicators of the processing industry of the Republic of Serbia in the period 2010-2019

| Indicator                                   | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------------------------------------------|------|------|------|------|------|------|------|------|------|
| Manufacturing industry - growth rate        | -0.5 | 7.7  | 5.7  | -2.1 | 1.9  | -2.2 | 4.8  | 1.5  | 0.2  |
| % share of the manufacturing industry in GDP| 14.0 | 15.1 | 16.1 | 15.7 | 15.8 | 15.6 | 15.1 | 14.5 | 13.7 |

**Source:** Republic Statistical Office, *Statistical Yearbook of Serbia 2013, 2017 and 2020*

The acceleration of economic growth after 2016, however, did not result in the continuation of the trend of increasing the participation of industry, especially the processing industry, in the creation of gross domestic product. The analysis of the structure of foreign
direct investments, as the dominant source of growth in this period, indicates that their focus on the industrial sector is only 41.3% (Gligorijević, Ćorović, 2019, p. 189). This is the cause of the paradox in the economic growth of the Republic of Serbia, i.e., the fact that the acceleration of growth does not necessarily lead to positive structural changes. A more detailed analysis of the imbalance in the economic structure of the Republic of Serbia shows that the role of an independent factor of development defects cannot be attributed to external imbalance. In this case, it is, to a large extent, a consequence of internal structural problems related to the trends of domestic consumption, the structure of that consumption, as well as the relations within the growth of gross domestic product.

Table 6: Indicators of foreign trade of the Republic of Serbia in the period 2010-2019.

| Indicator                           | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|
| % of exports in GDP                 | 36,6 | 36,9 | 41,2 | 43,4 | 46,7 | 48,1 | 50,5 | 50,4 | 51,0 |
| % of imports in GDP                 | 53,0 | 53,6 | 51,9 | 54,2 | 56,4 | 56,3 | 57,1 | 59,1 | 61,0 |
| % of coverage of imports by exports | 59,3 | 59,3 | 71,1 | 73,5 | 77,3 | 78,8 | 77,5 | 74,3 | 73,4 |
| % share of foreign trade deficit in GDP | 5,3  | 5,5  | 3,8  | 3,6  | 3,3  | 1,5  | 5,2  | 5,2  | 4,0  |

Source: Republic Statistical Office, Statistical Yearbook of Serbia 2013, and 2017 and 2020 and Trends - Macroeconomic projection model for testing long-term debt sustainability and growth performance 2019-2030.

In the period from 2010 to 2016, merchandise exports of the Republic of Serbia recorded a dynamic growth at an average annual rate of 9.3%, while exports to the European Union market reached a level of 11%, despite the slow recovery of EU countries from the consequences economic crisis. Simultaneously, the average annual growth rate of total imports of the Republic of Serbia was 3.5%, while imports from European Union countries grew at a rate of 4.2%. The deficit in total foreign trade was reduced from 5.226 billion euros in 2010, to 3.958 billion euros in 2016, so that its share in the gross domestic product of 4.7% in 2010 was reduced to 1, 5% in 2016. The share of exports in the GDP increased from 33% in 2010 to 48% in 2016.

The key contribution to the reduction of the external imbalance of the Republic of Serbia was made by the manufacturing industry, which relative share in total exports increased from 90% in 2010 to 96% in 2016 (Republic Statistical Office, 2017). However there is still a question: which factors have significant impact on the better tendencies in the foreign trade of the Republic of Serbia after 2010? The market assumptions of the new growth model of the Republic of Serbia after 2010 did not significantly help the growth of exports of the processing industry. According to the IMF, the real growth of world trade in the period from 1985 to 2007, on average, was twice as high as the growth of world gross domestic product. In the last four years, these two rates have, according to the same source, almost equalized. Global import demand, after a period of recovery from 2010 to 2013, recorded an extremely slow growth. A similar situation, in that period, was with the market of the European Union countries, with signs of somewhat faster growth in 2016 and 2017 (European Central Bank, 2016).

Positive trends in the direction of reducing the external imbalance, in large part, are a consequence of the slower growth of imports of the Republic of Serbia in the period after
the economic crisis of 2008. Basically, it is about the already mentioned, changed correlation between the GDP growth and aggregate demand, particularly final consumption. On the other hand, the efforts of economic policy to, after 2010, use its measures to correct the inadequate economic structure, through faster growth of the manufacturing industry, resulted in a modest increase in its share in gross domestic product, from 13.6% in 2010 to 15.6% in 2016. At the same time, in the period from 2010 to 2017, it achieved an average annual growth rate of 2.8%, so that, in 2017, it reached the volume of production from 2008 (Republic Statistical Office, 2013 and 2017). At the same time, there was no serious recovery in gross domestic product.

Acceleration of economic growth in the 2016-2019 periods was not accompanied by a further reduction in external imbalances. Although the trend of relatively fast growth in merchandise exports continued, but with a decrease in the average rate to 7.8%, there was a dynamic growth of imports with a threefold average growth rate of 10.8% (Republic Statistical Office, 2020). The consequences of the growth of final consumption are, therefore, also present in the foreign trade plan, with the fall in the coverage of merchandise exports by imports.

The presented analysis of macroeconomic indicators clearly indicates the fact that the measures of economic and industrial policy, envisaged by the Strategy and Policy of Industrial Development of the Republic of Serbia from 2011 to 2020, gave positive, but quite modest results. The projected growth rates of key macroeconomic indicators, in no segment, have been achieved. Therefore, the economic policy of the Republic of Serbia faces challenges related to solving the problem of insufficient investment and creating the necessary balance in the sources of financing for growth.

**Conclusion**

The analysis of structural changes and economic growth of the Republic of Serbia, during the first two decades of the 21st century, results in an unequivocal confirmation of the theoretically established cause-and-effect relations of these phenomena. At the same time, empirically established defects in the correlation of these links, both economic and systemic nature and the consequences of failed reforms, and errors of economic policy in choosing an adequate growth model, clearly highlighted the causes and nature of accumulated numerous structural deformations, which still burden economic growth and development of the Republic of Serbia. With this in mind, the paper provides an answer to open dilemmas about the main initial factors of these negative flows.

In general, the measure of success of the process of structural adjustment of the economy of the Republic of Serbia lies, without a doubt, in answering the question could new structure of economy produce independent economic growth with long-term development potentials. The fact that, after ten years of realization of the concept of structural adjustment of the economy by applying the neoliberal model of economic growth, the model was changed, gives a clear answer to the question. The economic crisis has unequivocally revealed the key problem of economic growth in the Republic of Serbia in the first decade of the 21st century. The formed economic structure was not able to maintain macroeconomic stability without the inflow of foreign capital, and especially to develop on a sustainable basis. The current economic policy, whose chosen
model of growth was based on the growth of consumption, beyond the real possibilities of the economy, contributed to that to the greatest extent.

In addition to inherited structural imbalances, in this period there was a deformation of the economic structure, which necessarily led to a crisis of external liquidity. The relatively high growth rate in the initial years of transition was accompanied by insufficient growth of the domestic real sector and by the supremacy of the sector of services in the GDP structure.

The appearance of the economic crisis in 2008 clearly indicated that the neoliberal model of growth is not optimal for economies in transition. It was obvious that the change of the previous growth model is a development necessity, which highlighted the need to eliminate the weaknesses of the fiscal system, create the necessary balance in sources of financing for growth, change the structure of gross domestic product, strengthen the competitiveness of domestic export economy, especially processing industry, export structures and the like.

Under the pressure of the devastating effects of the economic crisis, a document entitled Strategy and Policy for the Development of Industry of the Republic of Serbia from 2011 to 2020 appeared. The document projects the basic development goals: dynamic growth of gross domestic product, with a radical change in its sectoral structure and dynamic growth of merchandise exports. The movement of these key macroeconomic variables, according to the projection, would be based on high investment growth, with a slowdown in the growth of all forms of consumption.

Efforts to, after 2010, use various measures to correct the inadequate economic structure, have resulted in a modest increase in the participation of industry in the GDP structure.

Although economic flows were marked by a changed correlation between the GDP growth and aggregate demand, particularly final consumption, the key source of low dynamics of economic growth is certainly related to the insufficient volume of investments.

With low GDP growth rate, insufficient volume and adverse FDI structure, it was not possible to attain higher annual industry-based GDP growth. Observed through the prism of the movement of basic macroeconomic indicators, it can be concluded: the Republic of Serbia did not achieve well-balanced structure of financing sources needed for the new model of economic growth.

Finally, it should be noted that with the existing amount and structure of investments and high reliance on the FDI inflow, it is not realistic to expect rapid and desired structural changes and high growth, nor the establishment of a new industrial structure, dominated by technology-intensive industries.

The positive results of fiscal consolidation have created room for a more radical change in economic and industrial policy. The financial gap, whose coverage is possible only from domestic sources, must necessarily be financed by increasing the capital expenditures of the state, while considering the possibility of an investment-oriented, limited budget deficit. However, the growth of final consumption in the last four years has seriously limited the possibilities of economic policy in changing the sources of financing economic growth. In addition, the condition for faster growth of total investments is that the domestic banking sector, with appropriate incentives, is stimulated to increase investment placements intended for the export-oriented processing industry. In that
sense, legislative reform of the domestic financial market and a more active policy of attracting domestic savings are necessary.

References

Abramovitz, M. (1986). Catching Up, Forging Ahead, and Falling Behind. *Journal of Economic History*, XLVI (2).

Arandelović, Z., & Gligorijević, Ž. (2008). *Nacionalna ekonomija* (National economy), Niš: Petrograf.

Cerović, B. (2004). *Ekonomika tranzicije*, (Economics of Transition) Beograd: Institut ekonomskih nauka.

Chatterjee, S. (1995). *Structural Change, Growth and Optimal Poverty Interventions*. Asian Development Bank, Mimeo.

Chenery, H. B. (1960). Patterns of industrial growth. *The American Economic Review*, 50(4).

Chenery, H. B. (1975). *The structuralist approach to development policy*, American Economic Association.

Chenery, H., Robinson, S., & Syrquin, M. (1986). *Industrialization and growth: A comparative study*. New York, NY: Oxford University Press.

Corovic, E., Jovanovic, P., & Ristic, L. (2013). Current Trends on the World Textile Market and the Competitiveness of the Serbian Textile Industry. *Lodz: Fibres & Textiles in Eastern Europe* 5(1019).

Cvetanović, S. (2014). Izvori finansiranja razvoja zemalja Zapadnog Balkana u periodu 2001-2012 (Sources of financing the development of the Western Balkan countries in the period 2001-2012). Ekonomika broj 3, Niš: Društvo ekonomista „Ekonomika“.

Cvetković, M. (2007). *Intervju u dnevnom listu „Politika“* (The interview in the daily newspaper “Politika”) 27. *septembar 2007. godine* (September 27, 2007).

Ćorović, E. (2019). Strukturni problemi finansiranja privrednog rasta Republike Srbije (Structural problems of financing the economic growth of the Republic of Serbia). *Naučne publikacije Državnog Univerziteta u Novom Pazaru*, Serija B, Volumen 2, broj 1.

Domar, E. (1947). *Essays in Theory of Economic Growt*, New York: Oxford University Press.

Drbonjak, J. (2013). *Nova reindustrijalizacija* (New reindustrialization). preuzeto sa linka: http://www.ukovenskisavetdss.com/2013/09/-jovo-drobnjak-reindustrijalizacijarealnost-ilirec-koja-samo-lepo-zvuci/.

Đukić, P. (2009). Ekonomski rast, stabilnost i zaposlenost u 2010: Kako iz krize (a da to ne vodi u novu) (Economic growth, stability and employment in 2010: How to get out of the crisis (without leading to a new one)). Ekonomska politika Srbije u 2010. godine - Ka novom modelu makroekonomskih stabilnosti. Beograd:
European Central Bank (2016). Statistics. Preuzeto sa linka (taken from the link): https://www.ecb.europa.eu/stats/html/index.en.html.

Filipović, M. (2006). Structural Transformation and Transition in Serbia. Agora without Frontiers, 12(2).

Fiskalni savet Republike Srbije (2019), Radni dokument 19/01: Zašto privredni rast Srbije zaostaje?, Beograd.

Fosu, A. (2010). Growth, Inequality and Poverty Reduction in Developing Countries: Recent Global Evidence. OECD, Development Centre Background Paper for the Global Development Outlook 2010, Shifting Wealth: Implications for Developmen.

Gligorijević Ž. & Ćorović, E. (2018). Ekonomika industrije (Industry Economics). Novi Pazar: Državni univerzitet u Novom Pazaru.

Gligorijević Ž. & Ćorović, E. (2019). Strukturne promene i novi model privrednog rasta Republike Srbije (Structural changes and a new model of economic growth in the Republic of Serbia). Niš: Ekonomski fakultet.

Gligorijević, Ž. (2019). Ekonomika industrije (Industry Economics). Niš: SVEN.

Gligorijević, Ž., Marjanović, V., (2016). Uticaj privrednog sistema na privrednu strukturu (analiza na primeru Republike Srbije)( Impact of the economic system on the economic structure (analysis on the example of the Republic of Serbia)). Antikrizne politike i postkrizni procesi: izazovi ekonomske nauke, Niš: Ekonomski fakultet.

Gligorijević, Ž. & Bošković, G. (2007). Industrijska politika u procesu unapređenja konkurentnosti industrije Srbije (Industrial Policy in the process of Improving the competitiveness of the Serbian industry). project: Razvijanje konkurentske prednosti preduzeća u Srbiji u uslovima evropskih integracija (Developing the competitive advantage of companies in Serbia in the context of European integration). Niš: Ekonomski fakultet.

Gligorijević, Ž., Ćorović, E., Manasijević, A. (2020) Development processes in the industry of the Republic of Serbia during the first decade of the 21st century, TEME, No 2.

Gligorijević, Ž., & Stanojević, J. (2014). Industrijska politika i regionalni razvoj Republike Srbije (Industrial Policy and Regional Development of the Republic of Serbia). Regionalni razvoj i demografski tokovi zemalja jugoistočne Evrope (Regional development and demographic flows in Southeast European countries), Niš: Ekonomski fakultet.

Harod, R. (1948). Towards a Dynamic Economics. London: MacMillan.

Hatzichronoglou, T. (1997). Revision of the High-Technology Sector and Product Classification. OECD Science, Technology and Industry, Working Papers, No. 1997/02.

Herrendorf, B., Rogerson, R., & Valentinyi, A. (2014). Growth and structural transformation. In Aghion, P., & Durlauf, S. (Eds.): Handbook of economic
growth, vol. 2, pp. 855–941. Amsterdam & New York: North Holland.

International Monetary Fund, (2002). Federal Republic of Yugoslavia - Selected Issues and Statistical Appendix. Washington.

Janković, M. (2020). Impact of financial structure on economic growth: Example of Serbia, Croatia and Slovenia. Anali Ekonomskog fakulteta u Subotici, 55(42). Retrieved from https://anali.ef.uns.ac.rs/index.php/AnnalsEFSU/article/view/32

Kovačević, M., (2008). Realne i virtualne performanse privrede Srbije u periodu 2000-2007. godine, (Real and virtual performance of Serbian economy in 2000-2007.). Tekuća privredna kretanja, ekonomska politika i strukturne promene u Srbiji 2007/2008. godine, Beograd: Naučno društvo ekonomista.

Kruger, J. J. (2008). Productivity and structural change: A review of the literature. Journal of Economic Surveys, No: 22 (2).

Kuznets, S. (1957). Quantitative Aspects of the Economic Growth of Nations. Chicago: The University of Chicago Press.

Kuznets, S. (1966). Modern economic growth: Rate, structure, and spread. New Haven, CT: Yale University Press.

Kuznets, S. (1973). Modern economic growth: Findings and reflections. American Economic Review, No: 63 (3).

Laitner, J. (2000). Structural Change and Economic Growth. The Review of Economic Studies Vol. 67, No. 3.

Landesmann, M. (2000). Structural Change in the Transition Economies, 1989 to 1999, Wien: WIWW working paper.

Marjanac, D. (2020). The effect of the exchange rate system on economic growth of Bosnia and Herzegovina. Anali Ekonomskog Fakulteta u Subotici, 56(43). Retrieved from https://anali.ef.uns.ac.rs/index.php/AnnalsEFSU/article/view/34

Marjanović, V. (2010). Značaj i uticaj privredne strukture na privredni razvoj. Ekonomske teme, 48(3) 4, str. 369-382.

McMillan, M. S., & Rodrik, D. (2011). Globalization, structural change and productivity growth. NBER Working Papers Series, No. 17143.

Narodna banka Srbije, (2016) Statistika (Statistics). preuzeto sa linka (taken from the link): https://www.nbs.rs/internet/latinica/80/index.html.

Nelson, R. R., & Phelps, E. S. (1966). Investment in humans, technological diffusion and economic growth, American Economic Review, LVl(2).

Ngai Rachel, L., & Pissarides, C. (2007) Structural change in a multi-sector model of growth. American economic review, 97 (1).

Republički zavod za statistiku, (2000, 2002, 2004, 2007, 2008, 2010, 2013, 2016, 2017) Statistički godišnjak Srbije (Statistical Yearbook of Serbia) Beograd.

Republički zavod za statistiku, Trendovi – Model makroekonomskih projekcija za testiranje dugoročne održivosti duga i perfomansi rasta 2019-2030.

Rosić, I., (2002) Rast, strukturne promne i funkcionalanje privrede (Growth, structural change and the functioning of the economy). Kragujevac: Ekonomski fakultet.
Savić, L.J., (2009). Srpska industrializacija za dvadesetprvi vek (Serbian industrialization for the twenty-first century). Industrija broj 1, Beograd: Ekonomski institut.

Simonović, Z. (2014). Upravljanje agrarom Srbije u tranziciji. Beograd: Institut za ekonomiku poljoprivrede,

Simonović, Z., & Simonović, D. (2010). A review of agricultural policy of Serbia in the period of First Serbian Uprising to World War II (1804-1941). Facta universitatis - series: Economics and Organization, 7(4).

Stamenković, S., Kovačević, M., Vučković, V., Nikolić, I., & Bušatlija, M., (2009). Ekonomsko politika u 2010. godini: Ka novom modelu ravnoteže, (Economic policy in 2010: Towards a new equilibrium model). Beograd: Naučno društvo ekonomista.

Svennilson, I. (1954). The Process of Economic Growth. In: Hagemann, H., Landesmann, M., Scazzieri, R., (eds.) The Economics of Structural Change, Volume III, Critical Writings, Edward Elgar, Aldershot.

Uprava za javni dug, (2016) Stanje i struktura javnog duga (State and structure of public debt). Beograd: Ministarstvo finansija Republike Srbije.