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MACROECONOMIC ANALYSIS OF THE ECONOMY OF THE REPUBLIC OF SERBIA IN THE PRE-CRISIS AND POST-CRISIS PERIOD (2000-2020)

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Abstract: *Insufficient export activity and low level of investments in the formation of the gross domestic product are negative features of the economy of the Republic of Serbia in the last twenty years. The global financial and economic crisis showed that the previously valid model of economic growth, which was basically based on the growth of domestic consumption and imports and the low share of investments in the structure of GSP use, was unsustainable. It became clear that such a model must be replaced by a pro-investment and export-oriented model of economic growth. Bearing in mind the macroeconomic trends in the economy of the Republic of Serbia, it is clear that the increase in investments and the competitiveness of domestic production are imposed as one of the most important tasks of economic policy in the future.*
Keywords: *economy, investments, crisis, GDP, import, export*

INTRODUCTION

Serbia is a sovereign country situated at the junction of Central and Southeastern Europe. It covers the southernmost parts of the Pannonian Plain (Vojvodina), which is a part of Central Europe, as well as the Balkans. Serbia shares borders with Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, the Republic of North Macedonia, Montenegro, Romania and Albania, with the latter being through the disputed territory of Kosovo. Serbia is a continental country, but it has access to the Adriatic Sea through Montenegro. The Danube river offers waterway access to inner Europe and the Black Sea. The economy of Serbia follows the free-

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market model. The service sector/tertiary sector is the largest contributor to the economy, accounting for 67.9% of GDP. The industrial sector is the second-largest sector, comprising 26.1% of GDP, followed by the agricultural sector at 6.0% of GDP. In the late 80s, Serbia had a favorable position in the region as it began its transition from a planned economy to a market economy. However, this position was lost due to economic sanctions from 1992 to 1995, which resulted in breaking the record of hyperinflation, as well as the NATO bombing in 1999.

The Serbian economy is strong in several sectors including energy, automotive industry, machinery, mining, and agriculture. The country's primary industrial exports include cars, metal raw materials, furniture, food, machinery, chemicals, sugar, rubber, clothing, and pharmaceutical products. Trade plays a significant role in the Serbian economic production, with the main trade partners being Germany, Italy, Russia, China, and neighboring Balkan countries. In the late 80s, as the country transitioned from a planned economy to a market economy, Serbia had an advantageous position in the region, which was lost due to economic sanctions from 1992 to 1995. This led to a record-breaking hyperinflation. Furthermore, the NATO bombing in 1999 further worsened the situation. Since 2000, Serbia has introduced new laws to facilitate the privatization of the economy, resulting in exponential economic growth based on the sale of companies. The highest growth was recorded between 2006 and 2008. Nominal GDP per capita has increased from $1,160 in 2000 to $6,158 in 2011. The nominal GDP of Serbia in 2010 was estimated to be $43.6 billion, while GDP PPP for 2010 was $80.6 billion, or $10,897 per capita. Serbia has witnessed investments by large foreign companies in recent years, and the average real growth in the last decade is 4.45%. However, the country still faces economic challenges, particularly the high unemployment rate of 11.9% (data from September 2018) and a high foreign trade deficit of $6.9 billion. The trade deficit has decreased significantly compared to 2008, when it reached almost $12 billion. Import coverage by exports has increased from 32% in 2004 to 58.5% in 2010. Compared to other European countries, Serbia has a relatively small share of state administration, accounting for only 20.6% of GDP. Private consumption accounts for 74.3% of GDP, while investments account for 28.6%.

THE ECONOMY OF SERBIA IN THE PRE-CRISIS PERIOD

Many European countries that were in transition primarily relied on foreign savings and domestic consumption. This was the case with Southeast European and Baltic economies as well. However, in order to finance investments, these countries will need to rely more on exports and domestic savings. Serbia, for instance, with its large external deficit during the 2000s, will have to adopt this approach. The European Bank for Reconstruction and Development (EBRD) has prioritized export growth in its program for stronger and safer growth in transitional Europe, in response to the problems mentioned above. The analysis results should indicate the future growth of quantities like net exports, which is essential for stable and safe medium-term economic growth. The EBRD Transition Report (2010) highlights the critical role of external competitiveness, which is influenced by factors such as wages, labor productivity, and the real exchange rate of the domestic currency, in export growth. The current crisis has significantly impacted external competitiveness, particularly in light of the significant depreciation of the dinar. Finally, we will consider limiting the growth of domestic consumption and increasing savings, which is another pillar of future growth. One way to do this is to reduce current public consumption. Should current public spending slow down growth and create space for the necessary increase in state savings and investments in infrastructure, or should it increase to stimulate economic activity while the economy is still in crisis? This question will be explored in detail.

The impact of the rise in the value of the dinar on the increase in Serbian imports during the 2000s was less controversial. Econometric evaluations as of 2004 have already indicated previous dependence.[2]

In addition to the price (dinar exchange rate), import demand is also influenced by income (GDP), so the following import function for the Serbian economy was evaluated:

Import function:

Sample: monthly data January 2004 - August 2008.

M - is import,

REER - real effective exchange rate;

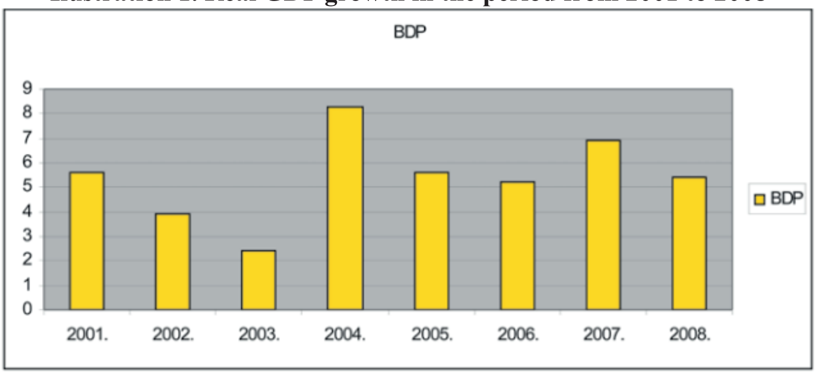
(all variables are logarithmized.)

Cointegration link.

2 M. Arsić, Z. Mladenović, A. Nojković i P. Petrović: Makroekonometrijsko modeliranje privrede Srbije, CES
Mecon, Beograd, 2005, str. 116-118.

The results of a cointegration analysis show that there is a strong econometric relationship between the value of the dinar, imports, and GDP. Specifically, if the value of the dinar goes up by 1%, imports are expected to increase by 0.71%, while a 1% increase in GDP leads to a 2.06% increase in imports. This effect occurs because a rise in GDP means that consumption, investments, and public spending also increase, which in turn leads to an increase in imports. Serbia made significant progress between 2001 and 2008, thanks to institutional reforms and favorable conditions in the international capital market. However, the high annual growth rate of 6.2% was achieved at the cost of growing fiscal and foreign trade deficits, low domestic savings, increasing foreign debt, and high inflation rates. Macroeconomic imbalances and risks became more pronounced in 2007 and 2008, primarily due to the slow process of Serbia's adaptation to the European Union, underdeveloped institutions, and high public spending. Despite these challenges, Serbia implemented significant economic reforms, particularly in the banking sector, privatization, and attracting foreign investments. These reforms strengthened the private sector, which accelerated economic growth, increased exports, and improved living standards. The banking sector's performance improved significantly, and the enterprise sector became profitable in 2006 and 2007. However, the Serbian economy is still recovering from the deep decline of the 1990s, and while GDP growth is primarily driven by demand, it is increasingly based on investment, competitiveness, and productivity. The service sector, wholesale and retail trade, financial intermediation, and telecommunications are the most significant contributors to growth, while the contribution of industry is smaller.

Ilustration 1. Real GDP growth in the period from 2001 to 2008



Source: Serbian Chamber of Commerce, 2009

Over the past eight years, the standard of living for the majority of the population in Serbia has significantly improved. Gross domestic product (GDP) per capita rose from around 1,700 euros in 2001 to an estimated 4,700 euros in 2008, thanks to high real GDP growth and the dinar's depreciation against the euro. Real wages, pensions, and social transfers increased rapidly, resulting in a decrease in the poverty rate from approximately 11% in 2001 to around 7% in 2007. However, regional differences persisted, with the southern part of the country remaining the poorest. The global economic conditions worsened significantly during this period, and it was predicted that the world economy would only grow by a modest 2.2% in 2009. Developed economies such as the USA, EU, and Japan were expected to experience a decline in economic activity, while developing countries, particularly those in Central and Eastern Europe, would only see modest growth. Restructuring the economy is an integral part of Serbia's transition to a market economy. This process involves comprehensive changes in production structure, finance, property rights, and organization at both the macro and micro level.

Another crucial macroeconomic indicator is the balance of payments deficit, which occurs when revenues are lower than expenditures. Many countries around the world face this problem. The only permanent solution to the balance of payments deficit is to increase the value of exports, as this is the only way to generate foreign exchange.

Table 1 Deficits on balance of payments accounts and related indicators in the period from 2001 to 2008

DESCRIPTION	2001.	2002.	2003.	2004.	2005.	2006.	2007.	2008.
Foreign trade deficit, mIrd.	-2,6	-3,4	-3,5	-5,2	-4,2	-5,0	-6,7	-8,3
Foreign trade deficit, in %	-19,9	-21,0	-20,3	-27,2	-20,8	-21,0	-22,9	-23,8
Current rgun deficit, WM.	-1,0	-1,8	-1,7	-2,7	-2,0	-3,1	.4,3	-6,4
Deficit current raison, without	-7,6	-	-9,6	•	-	-	-	-18,4
Growth rate of exports of goods and services	21,6	15,3	23,0	16,1	18,0	29,0	25,8	20,5
Growth rate of import of goods and services	32,3	27,7	12,8	31,9	0,3	24,0	27,1	23,9
MTh export coverage, in %	44,1	40,7	45,2	38,7	48,0	51,0	50,1	47,9

Share of exports of goods and services in %	21,0	19,3	22,0	23,4	26,0	29,0	29,6	29,9
Share of import of goods and services in %	38,8	39,5	41,3	49,8	46,0	50,2	51,7	53,8
Foreign exchange reserves, in billion euros	-	-	3,5	3,8	5,5	9,6	10,9	10,1
Foreign exchange reserves/import of goods and services, in months		-	5,9	4,8	6,9	9,7	8,7	6,8

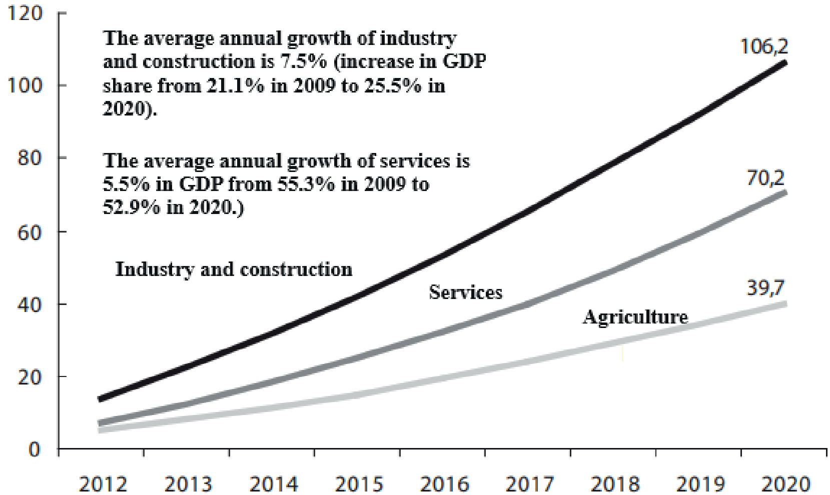
Source: RSZ, 2009, www.ministarstvofinansija.net

ECONOMY OF SERBIA IN THE POST-CRISIS PERIOD

The world economic crisis has fully exposed that the current model of economic growth and development in Serbia is not sustainable. If we want to avoid the fate of an underdeveloped and over-indebted country, we must fundamentally change the model. Specifically, the current model in which significantly faster growth of internal demand than GDP growth is made possible by the growing share of current transactions deficit and GDP will no longer be functional. Serbia must turn to a new model of economic growth and development that is pro-investment and export-oriented.

In the basic scenario of future development during the period of 2011-2018, consumption growth is replaced by the dominance of investment growth. The expansion scenario in the period up to 2020 assumes the acquisition of the status of a candidate, and eventually, a member of the EU, and the use of economic benefits that this political development would bring. Average annual GDP growth would be 5.8%, and domestic demand would be 4.7%. Final internal demand must grow more slowly than GDP, due to the reduction of the share of negative net exports, in order to ensure the sustainability of external debt. The GDP value in 2020 would reach 52.7 billion euros, or about 7.5 thousand euros per inhabitant. Within this dynamic, by the end of the observed period, productivity would cumulatively increase by 50.4%, and employment by 16.9% (which corresponds to an increase in the number of employees by about 440 thousand). The GDP growth accelerates over time, and this is conditioned by the dynamics of investments.

Ilustration 2. Production structure of GDP, cumulative growth 2011-2020 (%)



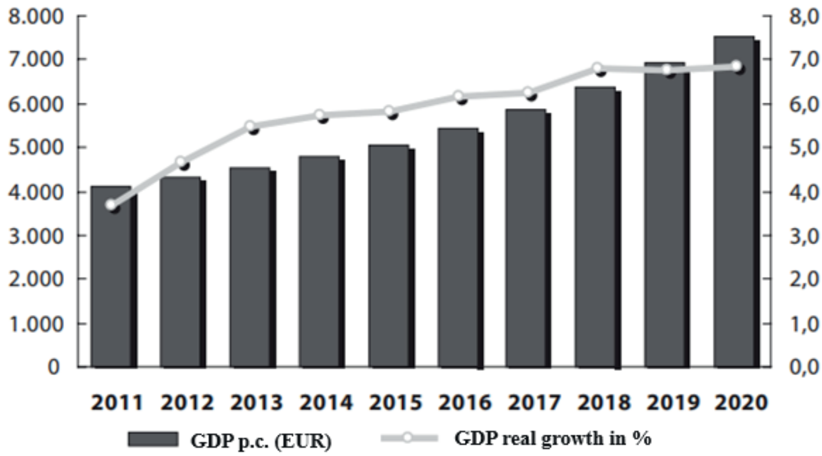
Source: Post-crisis model of economic growth and development of Serbia 2011-2020. Economic Institute - MAT, p. 9, 2010

The target parameters in the basic development scenario are:

- raising the share of fixed investments to 25% in 2015 and 28% in 2020 (with an average annual growth of 9.7%),
- reduction of the share of state spending in GDP from 20.5% in 2009 to 12.4% in 2020
- increasing the share of exports of goods and services in GDP, from 27.6% in 2009 to 65% in 2020,
- significant narrowing of the deficit of current transactions in the balance of payments from 7.1% in 2010 to 3.3% of GDP in 2020.

The target share of investments will be realized if their average annual real growth amounts to 9.7% (two-thirds faster than GDP growth). The value of these investments would rise from 4.9 billion euros in 2009 (estimated) to around 9 billion euros in 2015 and to almost 15 billion euros in 2020. At the same time, the share of gross domestic savings in gross investments, with around 14% in 2009, rising to close to 55% in 2015 and to 61% in 2020. As for the balance of payments, the main targeted parameters are: raising the share of exports of goods and services in GDP, from 27.6% in 2009 to 65% in 2020 and limiting the reduction of coverage of imports of goods and services with foreign exchange reserves (from 11 months in 2009 for about 6 months at the end of the observed period). The construction is that in the period 2011-2020. the net inflow from foreign direct investments amounted to 22.7 billion euros (the cumulative amount of the deficit of current transactions in that period is about 17 billion euros; eventual donations, which would have eased the situation, were not taken into account). On the other hand, the gross inflow of long-term loans for ten years would amount to 51.1 billion euros.

Ilustration 3. Projection of gross domestic product trends, 2011-2020



Source: Post-crisis model of economic growth and development of Serbia 2011-2020. Economic Institute – MAT, , 2010, p. 56.

Serbia has made progress in its reform and transition processes, but it is only halfway there. To achieve a new model of economic growth and development in the next decade, two interrelated turns are necessary. The first turn is to shift from consumer to pro-investment and export-oriented economic growth. The second turn involves accelerating reform processes, European integration and corresponding macroeconomic and structural policies. This will create a much more attractive economic environment, which is necessary for realizing the new model of growth and development.

This scenario assumes that Serbia will become a candidate and eventually a member of the EU and will use the economic benefits that this political development would bring. The average GDP growth rate for the period from 2011 to 2020 is projected at 5.8%. This growth is expected to result from the estimated growth of the main components of GDP formation, with their average growth.

In 2011, the GDP growth rate was below 4%, but it rose to an average of 5.8% by 2015, and it is expected to exceed 6% in the second five-year period, starting from 6.1% in 2016 to 6.9% in 2020. By 2020, the GDP value is projected to amount to 52.7 billion euros. Within this dynamic, productivity is expected to cumulatively increase by 50.4%, and employment by 16.9% (i.e. by 419 thousand among the working population).

The available funds for the use of GDP depend on the sum of the value of GDP and the deficit of goods and services (negative net exports). The share of the foreign trade deficit in GDP is decreasing from 15.5%, as it was in 2009, and 15.3%, as we estimate it in 2010, to 14.5% in 2011. This decreases by half a percentage point every year until 2016, in which it stops at 12% and will remain at that level until 2020 (the absolute value in 2011-2015 is around 4.5 billion euros, to reach 6.3 billion euros in 2020).

CONCLUSION

Premature and excessive liberalization of the market and foreign trade led to global instability and an enormous foreign trade deficit. This trade deficit, which included both imports and exports, resulted in a permanent balance of payments deficit. The strategy of opening up the national economy, attracting foreign capital, and liberalizing trade has become a fundamental part of the development policy. However, has this strategy helped the national economy and society prosper? While the economy is becoming more open, the foreign trade deficit is also increasing.

For a long time, the economy of the Republic of Serbia has been characterized by insufficient export activity and a low level of investment in the Gross Domestic Product (GDP) formation. The global financial and economic crisis exposed the unsustainability of the previous economic growth model that relied mainly on domestic consumption, imports, and a low share of investment in the GDP structure. It is now clear that this model must be replaced with a pro-investment and export-oriented model of economic growth. Given the macroeconomic trends in the economy of the Republic of Serbia, increasing investment and enhancing the competitiveness of domestic production are vital tasks of economic policy in the future.

The crucial transitional feature of the economies of the countries in the region, before the onset of the global financial crisis, was the discrepancy between production and consumption. This discrepancy resulted in a consistently higher level of aggregate consumption than the level of national production (about 20%). The structure of GDP use was characterized by a high share of personal consumption and an insufficient share of investment in fixed assets. Additionally, the GDP growth of the Republic of Serbia between 2001 and 2008 was mainly based on the rapid growth of the service sector, leading to a low relative share of tradable goods in the sectoral structure of GDP formation. These factors led to an increase in the foreign trade deficit.

The expansion of domestic demand, which drove economic growth during this period, was financed and encouraged by high inflows of capital from abroad. However, this growth in demand did not correspond with a corresponding expansion of production, especially in sectors of the economy that deal with tradable goods (such as the processing industry). As a result, economic growth coincided with an increase in the foreign trade deficit, relatively high inflation, and a rise in unemployment.

After a prolonged period of relatively high economic growth rates, the outbreak of the global economic crisis in the region resulted in a break from the previous economic trends. The economic crisis led to a decrease in aggregate demand, a reduction in the inflow of foreign capital, an increase in illiquidity, and economic recession. It became clear that a new economic growth model was necessary, which should enable changes in the structure of GDP creation and use. The model must strengthen the sector of tradable goods, increase the contribution of investments financed from national and foreign savings, and raise the contribution of exports to the economic growth of the region's countries. Therefore, this new model of economic growth should enable higher rates of economic growth, a more significant share of exports and investments in the GDP formation, and an increase in the level of employment. It should also create more new jobs, higher standards of living, and reduce poverty in the Republic of Serbia.

MAKROEKONOMSKA ANALIZA PRIVREDE R.SRBIJE U PRETKRIZNOM I POSTKRIZNOM PERIODU(2000-2020)

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Aapstrakt: Nedovoljna izvozna aktivnost i nizak nivo investicija u formiranju bruto domaćeg proizvoda negativna su obeležja privrede R. Srbije u yadnjih dvadesetak godina. Globalna finansijska i ekonomska kriza pokazala je da je neodrživ do tada važeći model ekonomskog rasta koji se u osnovi zasnivao na rastu domaće potrošnje i uvoza i niskom učešću investicija u strukturi upotrebe BDP-a. Postalo je jasno da se takav model mora zameniti proinvesticiono i izvozno orijentisanim modelom privrednog rasta. Imajući u vidu kretanja makroekonomskih tokova u privredi R.Srbije, jasno je da se porast investicija i konkurentnosti domaće proizvodnje nameću kao jedan od najvažnijih zadataka ekonomske politike u budućnosti.

Ključne riječi: privreda, investicije, kriza, BDP, uvoz, izvoz

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