A NEW MODEL OF ECONOMIC GROWTH AND DEVELOPMENT OF REPUBLIC OF SERBIA

Radmilo Nikolic, Aleksandra Fedajev, Dejan Riznic

Abstract

Serbian economy for many years has been facing serious difficulties in its development. The rate of economic growth is declining, unemployment is increasing, as well as the external and internal imbalances; high indebtedness and macroeconomic instability are becoming more prominent limiting factors of improving the business environment. The global economic crisis has greatly worsened the situation.

The concept of market economy, which has been applied for more than two decades, is being applied slowly and difficultly. Market institutions are underdeveloped and the infrastructure development is slow. Therefore, the degree of economic freedom of economic entities is on very low level, with still too much government influence on business trends in the economy.

In order to improve the business economy and to exit the current economic crisis, the authorities accessed a change of the old model of doing business. Instead of the consumer model oriented to consumption, which implied spending rather than earning and the difference being covered with new borrowing, the new model of economic growth and development is based on reindustrialization, increase of exports and reduction of public expenditure. This model is pro-investment and export oriented, where the dominance of consumption growth is replaced with the domination of investment growth.

Keywords: Economic growth and development, economic crisis, reform processes, market economy.

JEL Code: O11

Introduction

Crisis has been “a host” in Serbia for a long time now. It influences practically each segment of economy and society. In some areas, the situation is getting more and more complicated.

Many analyses had shown that the crisis originated in the early 70's of the last century. New Constitution, established in 1974, brought many changes in the economy. The unique economic market in former Yugoslavia was divided into several specific markets, arranged by former Yugoslav republics' authorities (Urošević, Fedajev, Nikolić, 2011).

The new Constitution brought new a economy model, a new system, with very questionable economic institutions and infrastructure. Such a system was more theoretical, it has never been truly applied. Instead, we had Government which dictated each segment of economy (Jakšić, M., Praščević, 2011).

In the early 90's, the economic crisis was followed by a political one. Unfortunately, the political crisis escalated into civil war and break-out of the country, with huge human and material losses. The republics of former Yugoslavia became independent countries, and Serbia faced more challenges – UN economic sanctions and NATO military campaign. After all of that, Serbian economy was ruined (Uvalć, 2010).

At the beginning of this century, the situation gets slightly better. However, the recovery is going slowly and difficultly. The world economic crisis, which began in 2008, stopped some positive economic trends and significantly reduced positive results. The economy of the country faced a new challenge, and recession is very close.

In such a situation, we have a need for new and radical economic processes. Current model of economic development, based on expenditure, is not sustainable. Instead, more investments, increase of employment, increase of export and decrease of public expenditure should be the priorities of future economic development of Serbia.

1. The achieved level of economic development

First decade of this century brought gradual recovery of Serbian economy. After terrible 90's, there was finally a spark of optimism. However, the situation was very unfavorable: ruined economy, obsolete technology, over utilized equipment in industry, low productivity, low life standard – 1,600 € GDP and average wages up to 50 € per month. Besides, there were significant debts from the previous period, with estimated 150 million € GDP losses (Nikolic, Fedajev, Svrkota, 2012). We will keep our focus at some main indicators of development in this period.

1.1. GDP flow

Gross Domestic Product is an important indicator of the level of economic development. It reflects overall business activity achieved by national economy. It could be calculated as a cumulative, for the entire country, or “per capita”, i.e. per citizen.

In a period after 2000, GDP has a trend of constant increase, except in 2009, when the growth slowed down due to world economic crisis. However, this GDP level is still way beyond GDP level in the late 80’s. In 2010, GDP reached 72 % of GDP in late 80’s.

Tab. 1: GDP flow

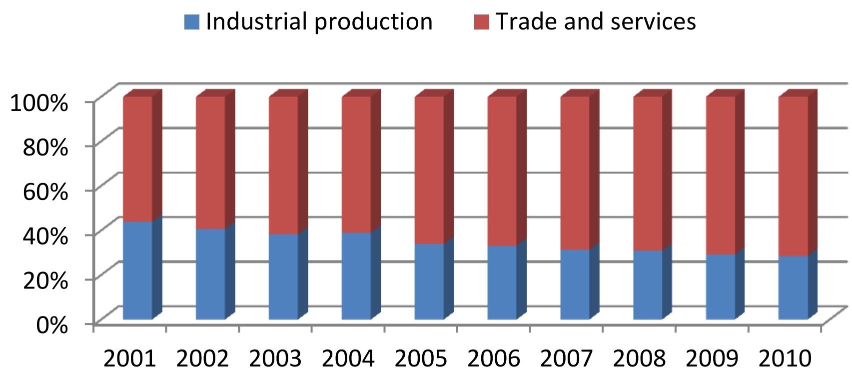
Year	GDP in current prices, Billions of RSD	GDP, Billions of €	GDP per capita, Billions of €
2001	762.2	12,820.9	1,708.7
2002	972.6	16,028.4	2,137.1
2003	1,125.8	17,305.9	2,313.4
2004	1,380.7	19,026.2	2,549.4
2005	1,683.5	20,305.6	2,729.0
2006	1,962.1	23,304.9	3,144.4
2007	2,276.9	28,467.9	3,856.6
2008	2,661.4	32,668.2	4,444.5
2009	2,713.2	28,883.4	3,945.4
2010	2,986.6	28,984.9	3,966.9

Source: National Bank of Serbia

In this period, GDP increased 3.9 times in RSD, or 2.3 times in €. At the same time, GDP per capita increased from 1,708.7 € in 2001 to 3,966.9 € in 2010, but still remained low comparing to the countries in the region.

Also, some significant changes occurred in the structure of GDP. Share of industry is reduced, while share of trading and services is growing.

Fig. 1: Structure of GDP



In 2001, share of industrial production in GDP was 43.86 %, while in 2010 it was reduced to 28.5 %, which is a 35 % decrease. Main reason for this is difficult situation in two main industrial sectors – agriculture and processing industry. At the beginning of the last decade, these two sectors shared 34.73% of GDP, but at the end of it their share was reduced to 22.96%.

During the transition process, especially in late 90's, Serbian industry suffered a serious blow. Many business entities were out of business, especially large systems which were the carriers of economic development (Cerović, Nojković, 2009). Later, due to world economic crisis, industrial production at the end of the last decade was far beyond the level reached at the beginning of transition process (in 1989), only at 47% of that level.

In Serbia, agriculture has a strong influence on national economy and social stability. This is an industrial sector with long tradition. In time, it provided employment and existence to majority of people. Today, some 11% of the population is employed in this sector.

Huge ups and downs are typical for agriculture, especially in crop production.

Animal husbandry is a bit more stable, but with constant decrease of livestock. In most difficult circumstances, the agriculture held most of the crisis burden, but with high price. Its share in GDP fell down from 19.37% to only 10.03%.

1.2. Employment

Transition, unfavourable privatization, economic crisis and other unfavorable circumstances caused a constant trend of decrease of employment . In the period between 2001 and 2010, number of employees decreased by 15% or 306,000 employees. Crisis of employment is present in each segment of economy, but especially in processing industry, with

50% decrease, and agriculture (56%).

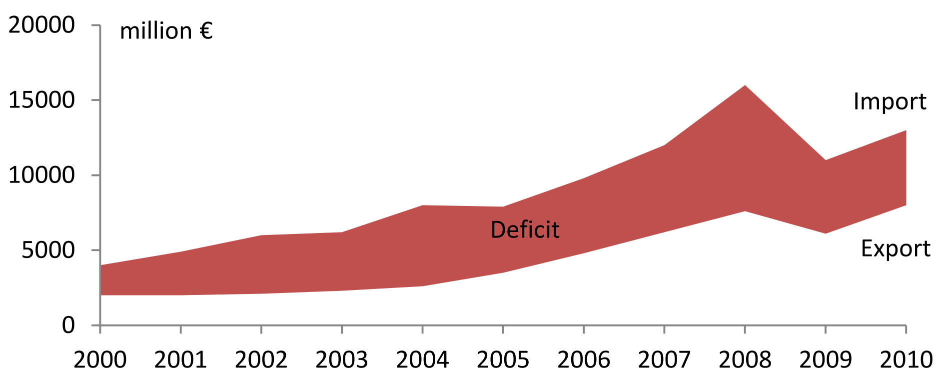
Also, Serbia has very high unemployment rate, which almost reached 20% in 2010. A total of 729,520 people are unemployed. 40% of them have a university or high school degree, 33% are qualified and 27% have lower education. Significant share of unemployed population are young people, but there are also older people with many years of service, which became unemployed due to transition process (.

1.3. External and internal balance

Yet another problem in our country's development is an imbalance. Some measures were taken in order to improve the situation, but it is getting more complicated.

In the first decade of this century, Serbian foreign trade had a constant growth. Export was increased by 3.8, and import by 2.7 times. However, deficit is very high, and it reached 5 billion € in 2010.

Fig. 2: Serbian foreign trade



Most of the export activities are focused on EU, around 57% in 2010. Most of them were realized in Italy and Germany. Besides EU, export activities include CEFTA countries and the Russian Federation.

Most of the import comes from Russian Federation (13%), EU and China. Serbia has favorable foreign trade arrangements with many countries.

Problem is that export hasn't been able do "cover" import, which caused increase of deficit. In 2008, for instance, the deficit outreached export by 22%.

Covering of import by export is still low. But, in recent years, the situation has improved. Covering rose from 40% in 2001 to 59% in 2010, which is an improvement of 48%.

Important contribution to Serbian foreign trade comes from agriculture. In 2010, export of agricultural goods exceeded 2 billion and surplus reached 650 million US $. But, that is still far from actual potential in this field. Serbian export of agricultural goods per hectare of arable land is 477 US $, which is one of the lowest in Europe.

Internal imbalance is shown through budget deficit. Except for 2005, in entire last decade the revenues couldn't cover the expenditures. With minor variations, the deficit has had a trend of constant growth, especially since 2006. In 2010 it exceeded a billion € and its share is 3.6% in GDP. This budget imbalance was covered by new indebtedness, thus increasing the level of public debt.

As a consequence, external and internal imbalance had a negative influence to macroeconomic stability, causing inflation, depreciation of domestic currency, increase of interest rates, etc.

1.4. Indebtedness and Public Debt

The levels of indebtedness and public debt are still potential limitation factors of economic growth. They are more related to developing countries, although some developed countries are facing these problems, too.

Indebtedness is one of the serious problems in our country, and the situation is getting worse. Only in the last ten years external debt was enlarged by 2.5 times.

Tab. 2: State of indebtedness, in million €

Year	External debt	Share of external debt in GDP, %	Short-term external debt	Servicing of external debt	External debt/export of goods and services	Foreign exchange reserves
2001	9,561	74.6	1,163	102	497	1,325
2002	9,402	58.7	606	218	427	2,186
2003	9,678	55.9	529	348	396	2,836
2004	9,466	49.8	442	736	334	3,104
2005	12,196	60.1	948	945	338	4,921
2006	14,182	60.9	958	1,635	278	9,020
2007	17,139	60.2	1,050	2,885	266	9,634
2008	21,088	64.6	2,143	3,453	284	8,162
2009	22,487	77.9	2,005	3,314	377	10,602
2010	23,786	82.1	1,830	3,403	322	10,002

Source: National Bank of Serbia

By the end of 2010 external debt reached 23,786 million €, or 82.1 % GDP. It means that each resident of Serbia has a debt of 3,341 €. Since the debt exceeds 80 %, our country belongs to a group of highly – indebted countries by methodology of the World Bank. Similar evaluation could be gained from the aspect of debt servicing. Annual debt service reaches 15 % of GDP, which is 5 % over the limit for highly indebted countries. With current indebtedness and export level, it would take three years to completely repay the debt. These facts lead us to a conclusion that indebtedness is one of the most important limiting factors of growth and development. Positive side is the amount of foreign exchange reserves and their tendency of constant increase.

Share of Public Debt (external and internal) in GDP has been in constant decrease till 2008, when it raises rapidly. Economic crisis in recent years has forced the Government to get into new indebtednesses.

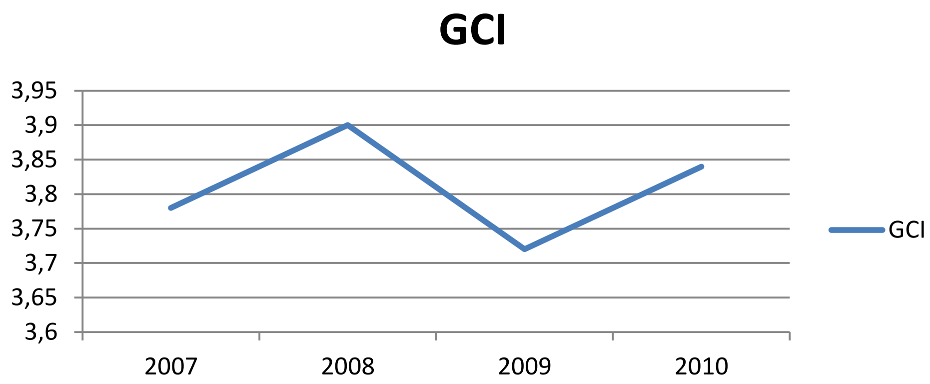
In 2010, Public Debt reaches 12 billion €, or 41.9 % of GDP, with the tendency of further growth. At least, it is still lower than the limit of 45 % GDP.

1.5. Competitiveness of economy

Modern times and globalization require a high level of competitiveness. Each country tries to increase its share in international trade. That is especially important for the countries going through a transition process, trying to improve their business environment.

Regardless to numerous reforms in many segments, Serbia failed to improve its competitiveness parameters. In recent years Global Competitiveness Index (GCI) has varied, and in 2010 it reached 3.84.

Fig. 3. GCI flow in Serbia



According to the World Economic Forum, Serbia is 96th out of 139 ranked countries by GCI. Most of the west Balkan countries have a higher ranking.

The situation is not much better in business environment ranking. Serbia takes 88th place out of 183 countries. In the region, only Bosnia and Herzegovina has a lower ranking, while FYR Macedonia and Montenegro are the most successful.

Tab.3: Business environment of the west Balkan countries

Segment of reform	Albania	Bosnia and Herzegovina	Croatia	FYR Macedonia	Montenegro	Serbia
Business startup	61	162	67	6	47	92
Obtaining building permit	183	163	143	61	173	175
Electricity supply	15	157	56	121	71	79
Registration of ownership	118	100	102	49	108	39
Crediting	24	67	48	24	8	24
Investment protection	16	97	133	17	29	79
Paying taxes	152	110	32	26	108	143
Foreign trade	76	108	100	76	34	79
Contract implementation	85	125	48	60	133	104
Insolvency management	64	80	94	55	52	113
Overall ranking	82	125	80	22	56	88

Source: World Bank

The results show that business environment in Serbia is not satisfactory. Excluding a registration of the ownership and crediting, the values of parameters are worse than for other countries in the region. It means that competitiveness is low and it causes a low level of direct investments.

2. New model of economic growth and development

Previous analyses have shown that economical reality of Serbia is very unfavorable. Huge stagnation in the 90's couldn't be compensated in relatively short period of time. Besides, new challenges and risks occurred. Reforms and transition to market economy didn't bring expected improvements. The effects of privatization are insignificant, many people lost their jobs, unemployment increased, as well as external and internal imbalance, indebtedness and the level of Public Debt have drastically decreased the life standard, etc. Also, there are two major macroeconomic imbalances:

- Faster increase of expenditure (personal and public) than GDP, and
- High share of non-tradable goods in GDP.

Such a situation is not sustainable. Existing economic model is exhausted and what we need is a radical turnover to a new economic model. It should be focused to investments and export. One of the main goals should be increase of production and export of tradable goods. The current model encouraged growth of services as a base of economic growth, and it was proved wrong.

2.1. Production and export of tradable goods

In the transition period, production of tradable goods decreased heavily. It is especially obvious in processing industry and agriculture. Descent of production led to descent of supply and increase of demand for imported products, thus causing foreign trade deficit, and furthermore, disturbance of macroeconomic balance. We should add that at the same time we had higher growth of demand than growth of GDP. In the period between 2001 and 2008, growth of demand reached 7.5%, growth of expenditure 7.3% and growth of GDP 5.4%. In 2008, demand exceeded GDP by 23%. Almost 19% of domestic demand was covered by excessive import.

A leading position in production of tradable goods belongs to industry. In the considered period, it didn't provide significant contribution to GDP growth. That is why re-industrialization has to be one of the main goals. According to the new model of growth and development, in the period 2011 to 2020 industrial production growth rate should be 6.9% per year, and 7.3% for the processing industry. It would provide a share of 19.1% of GDP for entire industry and 14.7% for processing industry. Industrial sectors which could provide more added value would be more encouraged in development, such as chemical industry, industry of agricultural machines, production of means of transport and electronic industry. Considering the level of development and resources, food industry should be added to this list, too. To achieve these goals, it is necessary to establish favorable environment for development of industry, primarily processing industry, where the Government has to take most of the responsibility. Another important prerequisite is foreign investments, which should reach at least 9 billion €.

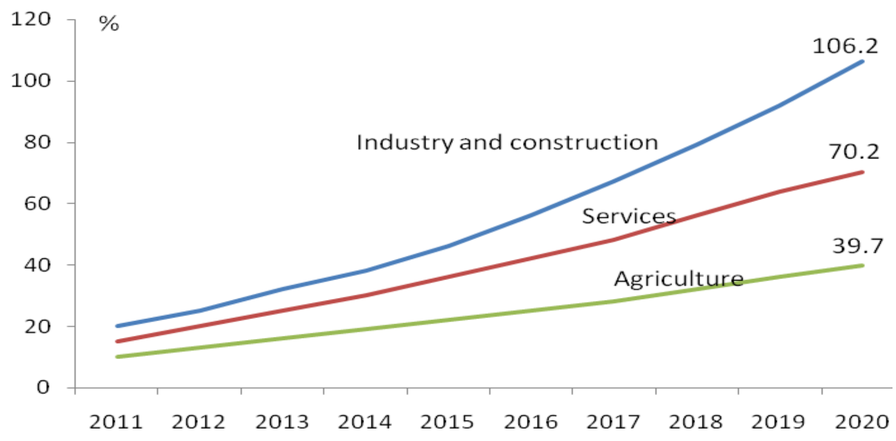
Second important industrial segment is agriculture. In the last decade, growth rate of agricultural production reached 1.3%, and gross value 1.9%, which is much lower than in the 80's. Effects of agriculture on GDP and national economy are far bellow its possibilities.

For the 2011-2020 period, projected growth rate for agricultural production is 3.4%. Such optimistic design is based on available resources, increase of productivity and changes in production structure. Crop production relies on increase of yield in production of grains, fruit and vegetables, as well as increase of arable areas for industrial plants, fruit and grapes. Also, an increase of share of animal husbandry in overall total production is expected, through preventing cattle population decrease and production of meat.

In construction industry, projected annual growth rate is 9.7%, and its share in GDP in 2020 should reach 6.9%.

Finally, growth rate of services should be 5.5%, in order to gradually reduce their share in GDP to 52.9% in 2020.

Fig. 4: Cumulative growth of production and services



In the period between 2011 and 2020, cumulative growth of industry and construction should reach 106.52%, services 70.2% and agriculture 39.7%.

Increase of production of tradable goods would provide increase of export and share of tradable goods in GDP. The main goals in export till 2020 are as follows:

- Average annual growth rate of export of goods and services should reach 13.5%;
- Share of goods and services in GDP at the level of 65%;
- Value of export should reach 34.2 billion € in 2020;
- Share of tradable goods at 72.5%;
- Foreign trade deficit at 12% in 2020.

Model of economic growth and development based on production and export should eliminate, or at least reduce negative trends currently present in national economy, such as: huge foreign trade deficit, indebtedness, difficult debt servicing, depreciation of domestic currency, etc.

2.2. Macroeconomic stability

Macroeconomic stability has a strong influence on economy of any country and it is an important prerequisite for its successful functioning. Instability in this segment has a negative influence on competitiveness, investments and economic growth and development.

Regardless of some positive signs, macroeconomic stability in Serbia is still on a low level. Main problems are external and internal imbalance, high inflation, fluctuation of exchange rate, depreciation of domestic currency, etc. Macroeconomic stability sub-index shows these trends.

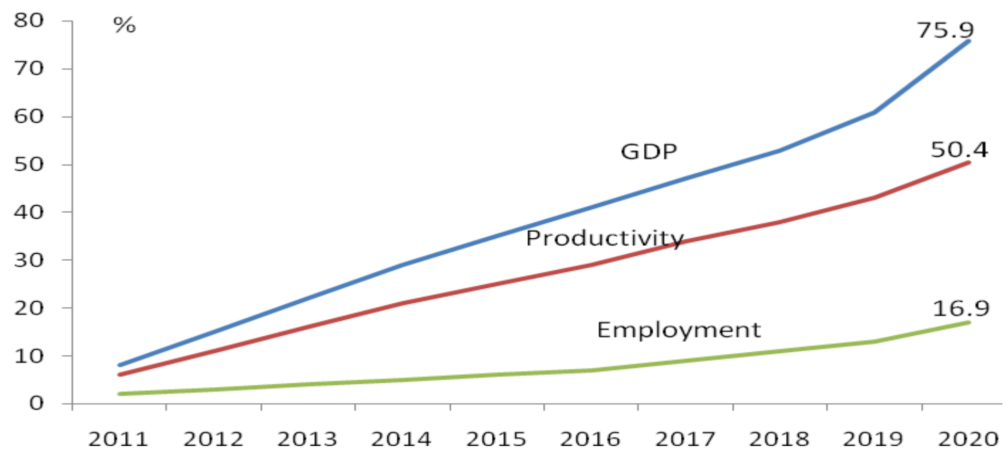
Table 4. Macroeconomic stability sub-index flow

Year	2007	2008	2009	2010	2011
Macroeconomic stability sub-index	4.61	4.72	3.88	4.05	4.5

Till 2008 and the world economic crisis, sub-index increases, then it has a strong decrease in 2009 and a new growth since 2010. In 2011, according to macroeconomic stability, Serbia takes 91st place out of 142 ranked countries.

The new model of economic growth and development includes significant changes in macroeconomics. The average annual growth rate of final domestic demand should reach 4.7%, which is way bellow GDP growth rate of 5.8%. Furthermore, significant share of tradable goods demand would be covered by the increased domestic production, instead of import. The predicted GDP in 2020 is 52.7 billion €, and per capita 7,500 €. The predicted cumulative increase of productivity is 50.4%, employment 16.9%, or 440,000 new employees, so the total number of employees in the country would reach 3 million.

Fig. 5: The predicted cumulative growth of GDP, productivity and employment in a period between 2011 and 2020



Such a dynamic GDP growth can be achieved only with huge investments. The predicted annual investment growth till 2020 is 9.7%, in order to reach 15 billion € in 2020, with a share of gross domestic savings in gross investments of 61%. The expected investments in this period reach 22.7 billion €.

However, many predictions haven't been fulfilled in first years of the period. GDP growth in 2011 reached 1.6%, while a new prediction for 2012 is 0.5%, with a possibility of even negative GDP rate. This means that other related parameters also have to be corrected.

Considering the inflation, its presence is still expected like in other transition countries (Barlow, 2010), but it should be reduced to acceptable level by elimination of its generators. Predicted inflation in 2020 is 3%. Such a low level of inflation should have a positive effect on investments and economic growth.

Also, the depreciation of domestic currency would be continued, but with very low depreciation rate, 2% per year till 2015, and after that only by the level of inflation.

One of the important sources of instability is budget deficit, due to very high public expenditure. Most of the expenses go to wages, pensions and public procurements. More than one third of employees in Serbia are employed in public sector. Although there was a general opinion that a number of employees has to be reduced, it has not happened yet. Besides, half of the amount needed for payment of pensions comes from the budget. The relation between the number of employees and pensioners is one to one. Sometimes the amount of pension payments exceeds the amount of wages. The reform of pension system has not been done yet. Also, there are many problems with public procurements.

In the previous period, deficit has been covered from incomes gained by privatization and by debts. When there were no more incomes, and public debt reached its limit, the only remaining way of decreasing deficit was reducing expenditure. Of course, this reduction can not include capital investments financed from the budget. The only way to achieve this is to reform this area.

Finally, according to new model of economic growth and development, the predicted fiscal deficit should decrease to 1% by 2020. This is optimistic, but possible.

Conclusion

In economy, like in life, it is necessary to always change something, even if it works well, because it could always work better. But in case of the Republic of Serbia, radical changes are necessary and obligatory. Current model of economy has exhausted all of its possibilities, so further forcing of such a model could only bring more agony and deeper crisis.

New model of economic growth and development is a huge turn in economic politics of the country. Current orientation to expenditure is replaced by new approach based on the increase of production and export of tradable goods, increase of investments and reducing of public expenditure. The expected growth rate of GDP in the period between 2011 and 2020 is 5.8%, investments growth rate 9.7% and export growth rate 13.5%. It would enable reducing of foreign trade deficit to 12% and fiscal deficit to 1%, while cumulative employment growth should reach 16.9%. All of that would be followed by solid macroeconomic stability.

Serbia has very favorable development potentials, but hasn't been able to successfully valorize them yet. Many circumstances had made it difficult. That is why there are huge expectations from new economic model. First of all, to enable getting out of crisis, then to provide stable and sustainable economic growth and development. It should be possible since the model is adjusted according to modern economic logic and business environment.

References

1. Nikolic, R., Fedajev, A., Svrkota, I., (2012). Serbian economy in transition period, *EMIT*, pp. 1-19.
2. Urošević, S., Fedajev, A., Nikolić, R., (2011). Significance and perspectives of textile industry in Republic of Serbia, in transitional environment. *Industria textilă*, pp. 134-140.
3. Uvalić, M. (2010). Transition in Southeast Europe. Understanding Economic Development and Institutional Change, World Institute for Development Economic Research, Working Paper, No. 41.
4. Barlow, D., (2010). How did structural reform influence inflation in transition economies? *Economic Systems*,Vol. 34, pp. 198-210.
5. Cerović, B., Nojković, A. (2009). Transition and growth: What was taught and what happened, *Economic Annals*, Vol. 54, No.183, pp .7-30.
6. Jakšić, M., Praščević, A. (2011). The New Political Macroeconomics in Modern Macroeconomics and Its Appliance to Transition Processes in Serbia, *Panoeconomicus*, Vol. 4, pp. 545-557.
7. Documentation of National Bank of Serbia, Belgrade.
8. Documentation of National Bureau of Statistics, Belgrade.
9. Documentation of Serbian Ministry of Finance, Belgrade.
10. Documentation of Serbian Privatization Agency, Belgrade.

11. Documentation of World Bank, Washington.

Contact

Radmilo Nikolic

University of Belgrade, Technical faculty in Bor

Vojske Jugoslavije 12, 19210 Bor, Serbia

rnikolic@tf.bor.ac.rs

Aleksandra Fedajev
University of Belgrade, Technical faculty in Bor
Vojske Jugoslavije 12, 19210 Bor, Serbia
afedajev@tf.bor.ac.rs

Dejan Riznic
University of Belgrade, Technical faculty in Bor
Vojske Jugoslavije 12, 19210 Bor, Serbia
driznic@tf.bor.ac.rs