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### IMPROVEMENT OF MACROECONOMIC PERFORMANCES IN ORDER TO RAISE THE LEVEL OF COMPETITIVENESS OF SERBIAN ECONOMY

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**Abstract:** *Indications of a global recovery from the crisis facing the Republic of Serbia two key issues: first, how to ensure a sufficient inflow of foreign direct investments, and secondly, how to increase export. The common prerequisite for both issues is to raise the competitiveness of the country. According to the Global Competitiveness Index defined by the World Economic Forum, Serbia, competing from 142 countries, is in an unenviable 95th place, which indicates the necessity of raising the level of competitiveness. The analysis of components of the Global Competitiveness Index should focus on improving those components in which observed the evident weaknesses.*

**Keywords:** *competitiveness, Global Competitiveness Index (GCI), World Economic Forum, economic crisis, Republic of Serbia*

#### 1. Introduction

The Republic of Serbia in the past few years has recorded a growth based on the business of financial intermediation, trade, transportation, and telecommunication sectors. Since these sectors have the service character, we can say that the actual growth based on domestic demand. The expansion of domestic demand was not accompanied by increased production, as reflected in the increase of trade deficit which is pushing the country into a new, unfavorable borrowing. One way out of situation in which the national economy is starting an export-oriented production, which can be realized by attracting foreign direct investments. In making investment decisions, investors take into account, inter alia, the level of competitiveness of the country, and authentic information about this provides a Global Competitiveness Index which is the subject of this paper.

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The aim of paper is that on the analysis of this index indicates on the competitive advantages and disadvantages of the Republic of Serbia, which could serve as the basis for the selection of the future development strategy of the national economy.

Consistent with the laid objective the structure of this paper is as follows. After brief introduction, in the second part of the paper the attention will be routed towards the explaining the main pillars of competitiveness by the Global Competitiveness Index. The third part of the paper is devoted to analysis of the key trends in macroeconomic indicators in Serbia over the last eleven years. In the fourth part of the paper will be discussed the level of competitiveness of Serbian economy according to the Global Competitiveness Index. In the conclusion will be summarized the main findings of the research.

## **2. The Main Pillars of Competitiveness by the Global Competitiveness Index**

The World Economic Forum defines competitiveness as the set of institutions, regulations, and other factors that determine the level of productivity of countries. Indicator of the level of competition is called the Global Competitiveness Index (GCI) and deals with the measurement of the average of more microeconomic and macroeconomic components, which are individually valued on a scale of 1 to 7. All measured parameters were grouped into twelve pillars and reflect different aspects of the complex economic reality.

*The first pillar - institutions.* The institutional environment is determined by legal and administrative frameworks within which individuals, businesses and governments in interact with each other generate revenue and provide economic prosperity. The quality of institutions has a strong impact on competitiveness and economic growth. It affects investment decisions and the organization of production, and plays a key role in the way in which the state distributes the benefits and costs of development strategies and policies. In addition to public institutions, private institutions are of great importance in the process of wealth creation too. Regulation of the institutional environment is extremely complex task. First of all, it means providing protection for all forms of property, because it is a basic prerequisite for attracting foreign investments. It is also very important institutional support for the development of market freedom, determining the optimal level of regulation, preventing corruption, freeing the judiciary from political dependence, environmental protection, etc. While these activities create a significant economic costs, thus slowing economic growth, it is necessary to strive for creating an institutional environment that allows fair and honest business.

*The second pillar - infrastructure.* Developed and efficient infrastructure is important for the effective functioning of the economy because it determines the location of economic activity and sector profile that can be developed. Well developed infrastructure reduces the effect of distance between the regions and the costs of integration of national markets to other regions and countries. The quality and development of infrastructure network has a significant impact on economic growth, reducing income inequality and poverty. Developed transport infrastructure enables transport and timely placement of products and services, as well as efficient transport workers to their jobs. Contemporary economies require well-developed energy infrastructure, which will prevent shortages and disruptions in the distribution. Also, it is extremely important development of telecommunication infrastructure, because the fast and free flow of information is necessary for making better decisions and increase overall economic efficiency.

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*The third pillar - macroeconomic environment.* The stability of the macroeconomic environment is extremely important to competitiveness, which means higher economic growth, reduce unemployment, price stability (low inflation) and avoid balance of payments deficits. All goals of macroeconomic policy are in mutual conflict or complementary relationships depended on the aggregate demand and changes in the economic cycle. The general conclusion is that macroeconomic stability supports to raise competitiveness, and every government needs to work on its maintenance, while trying to reduce regulation costs to a minimum.

*The fourth pillar - health and primary education.* Health and education are much higher in developed countries, due to increased investment opportunities in these areas. Poor health of workers increases the labor costs, due to the frequent absence of ill workers and the low efficiency of their work, which negatively affects the productivity and competitiveness. Because the investments that raise the level of health care are important, both in economic and moral terms. Also, education is important for raising the quality of life and ensuring social and economic progress by adapting to advanced production processes and technologies. It is therefore very important to take into account the quantity and quality of basic education received by the population.

*The fifth pillar - higher education and training.* All countries that tend to increase prosperity, they must increase the quality of higher education and training. The global economy means that employees are educated and able to adapt to an environment that is changing rapidly. Therefore, it is important ongoing professional training of employees consistent with the needs of the economy.

*The sixth pillar - goods market efficiency.* Goods market efficiency implies the ability to produce a wide range of products and services in a given relationship of supply and demand. A healthy market competition is important to achieve market efficiency and productivity. Favorable environment for the exchange of goods requires minimal barriers to business activities by government intervention. The market efficiency depends on demand conditions, which are determined by the orientation towards customers and their sophistication which corresponds to purchasing power. On the other hand, higher tax rates or restrictive and discriminatory rules related to foreign direct investments can largely decrease the goods market efficiency and thus competitiveness. Therefore, the global economy highlights the importance of open markets, because protectionist measures are counterproductive by reducing the level of aggregate economic activity.

*The seventh pillar - labor market efficiency.* Efficiency and flexibility of labor market are very important for the competitiveness of each economy. Efficient labor market must provide that workers are allocated most effectively in the economy and thus will make the greatest effort on the job. Also, efficient labor market must offer employees the possibility of fluctuations, i.e. flexibility to shift workers from one economic activity to another quickly, at low cost and without causing larger social disorder. Further, an efficient labor market must provide a clear link between the incentives of workers and promotion meritocracy, the attractiveness for talents, and the equality between men and women.

*The eighth pillar - financial market development.* Sophisticated financial market provides efficient routing of financial resources to the best entrepreneurs and investment projects, and includes savings, as well as domestic and foreign investments. Accurate risk

assessment is a key element of sound financial markets. The economy needed the sophisticated financial markets that will provide capital for investment of the private sector with adequate regulation to protect investors. In addition to a stable and transparent banking sector, the efficient financial market implies developed and alternative ways of financing, including a secondary market for a wide range of financial instruments and derivatives.

*The ninth pillar - technological readiness.* In a globalized world, technology becomes a key element in creating and sustaining competitive advantage. States must be prepared to adopt new technologies and to provide the necessary conditions for their effective use. Special emphasis should be placed on the ability to use information and communication technology (ICT) and their implementation in business processes. Also, it is important to provide access to the modern technologies, which is among less developed countries is primarily achieved through foreign direct investments. On the other hand, developed countries to set technological standards, must rely on innovation and investment in their own research and development.

*The tenth pillar - market size.* Market size is very important for increasing competitiveness, because countries with large markets can use the effects of economy of scale and to ensure their companies to increase production with lower costs per unit. There are numerous empirical evidence that trade openness is positively correlated with economic growth, especially when it comes to countries with small national markets. Thus, export can be seen as a substitute for domestic demand in terms of market size for companies of the country. From this point, it should be borne in mind the export-driven economies and geographic areas (such as the EU) that have a single common market.

*The eleventh pillar - business sophistication.* The productivity of a country depends on the productivity of companies that operate in it. The business sophistication of the country means the quality of overall business networks of country through strategies and operational practices of firms. It is therefore essential that every company continuously improves operational efficiency, while it is desirable to implement a differentiation strategy, which involves the development of innovation. Choice of alternative strategies that focus on leadership in costs, leading market actors in the so-called "price-war", which often results in lower quality products, and hence, reduced competitiveness. Also, networking companies (incubators, clusters, strategic alliances) is an inevitable link in the development of competitiveness due to the synergistic effects that can be achieved in many business segments (growth of bargaining power, penetrate of new markets, acquiring new knowledge, etc.), which affect to increase efficiency, greater opportunities for the development process and product innovations, and reducing barriers to entry of new firms.

*The twelfth pillar - innovation.* In the long run, the living standards can be increased only with technological innovations. Developing countries have the privilege that their productivity can improve by adopting existing technologies, but companies in developed countries must themselves to design and develop new products and processes, in order to maintain competitive advantage. This requires an environment that supports the development of innovation by the public and private sectors, including investment in research and development, establishment of cooperation between universities and economy, intellectual property protection, etc.

The twelve pillars of competitiveness are grouped into three separate units, which are the key for the different ways of management of the economy, namely:

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1. Factor-driven economies
  - Institutions
  - Infrastructure
  - Macroeconomic environment and
  - Health and primary education.
2. Efficiency-driven economies
  - Higher education and training
  - Goods market efficiency
  - Labor market efficiency
  - Financial market development
  - Technological readiness and
  - Market size.
3. Innovation-driven economies
  - Business sophistication and
  - Innovation.

Development stage in which the economy of a country is, determines the level of annual gross domestic product per capita (GDPpc). The economy of a country is classified in the first stage of development, if its annual GDPpc is less than \$ 2,000. Such countries to improve competitiveness should improve institutions, infrastructure, macroeconomic stability, health and basic education, because they are basic factor-driven economies. Countries with annual GDPpc between 3,000 and 9,000 USD are in the second stage of development (efficiency-driven economies), while developed countries have an annual GDPpc greater than 17,000 USD and are called the innovation-driven economies. Between each stage in the economic development are the transitional stages.

Therefore, based on GDPpc is possible to locate areas that are key to achieving economic growth and improving competitiveness. Any country that aspires to greater prosperity must objectively examine own capabilities and weaknesses, and by combination of adequate policy-mix measures, to maintain and improve own competitiveness.

### **3. A Brief Review on the Trends of the Key Macroeconomic Indicators in Serbia**

On the threshold of the third millennium, the Serbian economy and society, under the burden of the negative legacy of the last decade of the 20th century, was additionally burdened with the problem of finding the right strategic response to two major challenges: first, (re) intensification of the transition process in all segment, and second, the successful integration in the European and global economic trends.

Unlike the other countries in transition which are during the nineties of the 20th century with success implemented in parallel first and second generation of the reform processes, at the beginning of the 21st century the Serbian economy found at the very bottom in terms of the realization of this process. This is particularly because “the last decade of the 20th century for the economy of Serbia will be remembered as a lost decade of development. Although the start of the decade it meets with in the conditions of the

relatively good integration into the world economy and with higher standard of living in regard to other countries in transition, Serbia is from a country that has had the greatest chance for quick and successful transition, has become the most difficult transition case in the region. In the conditions of impressive internal instability, caused by the action of economic sanctions, hyperinflation and the NATO bombing, there was a slowdown of all economic processes, and the transition process” (Petrović – Randelović, Miletić, 2011, 190). Time delay in the commencement of the implementation of the transition process of the Serbian economy certainly has made a big impact on the dynamics of its implementation and profiling the main results in the first decade of the 21st century.

The transition process to a market economy after two failed attempts to initiate its implementation, resumed in Serbia since 2000 with the main goal of building adequate market institutions and the development of democratic relations in society, in order to entering of the economy into a new, higher stage of development has made it possible“ (Petrović-Randelović, Miletić, 2010, 105). Regarding from the aspect of the present time distance, attempted measures of economic reforms, which are at the very beginning aimed to create a modern market economy, in the period from 2001 to 2008 have as a consequence a relatively satisfactory results. In fact, the period from 2001 to 2008 can be characterized as a period in which there is an effectuation of positive results of the measures of overall reforms. After a decade of stagnation and decline of the economy for the first time was achieved a relatively high rate of economic growth (average annual economic growth rate during this period was 5.4%), macroeconomic stability has been established, which is along with the progress in the implementation of the liberalization measures (in the area of price and foreign trade) and the implementation of structural reforms resulted in the creation of an enabling business environment and accelerating the dynamics of inward foreign direct investment flows in the economy of Serbia.

However, despite the fact that there has been a significant shift in transitory path and progress according the issues of European integration, Serbia, regarding by EBRD transition indicators and WEF competitiveness indicators are still lagging behind the successful transition countries. The general assessment is that in Serbia the high average annual growth rate is more due to the low start position, to the factors on the demand side, growth in domestic demand and exports, and high inflows of foreign direct investment through the privatization channel, rather than owing to the reforms carried out and international competitiveness. Besides, a relatively satisfactory macroeconomic performance of the Serbian economy in the observed transitory period was accompanied by internal and external macroeconomic imbalances, as confirmed by the data in Table 1, and which are related to:

- High levels of inflation and the presence of inflation expectations.
- Deterioration of the external position of Serbia because of pronounced deficit of the current balance of payments deficit caused by high deficit in the trade balance. For illustration, the deficit in trade balance increased from 2.837 million EUR in 2001, to 9050 million EUR in 2008, while the deficit of the current account of balance of payments from 370 million EUR to 7217 million EUR.
- Sounds paradoxical, but "in the period from 2001 to 2008, in which a relatively high average annual growth rate of GDP (5.4%) was achieved, number of registered persons seeking employment increased for 13.5% (97,751 persons),

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representing average annual growth of 1.6% (Republika Srbija, Ministarstvo finansija, 2010, p. 31)” (Petrović-Randelović, 2012, 348).

- Throughout the observed period the unemployment rate rises, which in addition to reducing employment repute as a key structural problem since the beginning of the transition process.
- “Average net wage increased from 102 euro (6.078 dinars) in 2001, to 400 Euros (32.746 dinars) in 2008, apropos the achieved average annual growth in real wages at a rate of 13,7% is far faster than GDP growth (5,4%) and productivity (6,0%)” (Petrović-Randelović, 2012, 349). In fact, the rapid growth of average net earnings from the growth of GDP and productivity can not provide neither desired developmental dynamics, nor to help raise the competitiveness of the Serbian economy.

Upward development path and relatively good transitory results of the Serbian economy achieved in the period from 2001 to 2008 interrupt a negative exertion of the factors from the external environment. At the end of 2008, with the manifestation of the first negative effects of the global financial and economic crisis, the Serbian economy is entering into a critical stage of development. Slowing and then stopping of the economic activities in 2009, it became clear that the global financial and economic crisis has prevented the achievement of the objectives set out in the National strategy of economic development 2006-2012 and further confirmed unsustainable and embedded weaknesses of the previous model of growth and development of the Serbian economy.

Whereas that one of the key problems of low competitiveness of the Serbian economy lies in the inadequate structure and insufficient volume of exports, of key importance to achieving the objectives of the post-crisis model of growth and development is to encourage the inflows of foreign direct investment, primarily export-oriented greenfield, into the real, above all sector of tradable goods in order to the objectives of pro-investment and export-oriented growth become realistically achievable in the future.

Providing that foreign direct investment serve as an engine of growth of the Serbian economy and one of the key sources (in addition to borrowing abroad) for financing the deficit of the current account balance in the pre-crisis period, the analysis of the dynamics of the trends in inward flows of foreign direct investment deserves special attention. It can be explain by the fact that in the new post-crisis growth model of growth and development foreign direct investment is attributed a significant role in the acceleration of the pace of economic growth and increase the competitiveness of Serbian exports.

**Table 1. The trends of the key macroeconomic indicators, 2001-2011**

Indicator	2001.	2002.	2003.	2004.	2005.	2006.	2007.	2008.	2009.	2010.	2011.
GDP, in EUR mill.	12.820,9	16.028,4	17.305,9	19.026,2	20.305,6	23.304,9	28.467,9	32.668,2	28.956,1	28.006,1	31.1433
GDP per capita, in EUR	1.708,7	2.137,1	2.313,4	2.549,4	2.729,0	3.144,4	3.856,61	4.444,51	3.9551	3.8411	4.2883
GDP, real growth, %	5,3	4,3	2,5	9,3	5,4	3,6	5,4	3,8	-3,5	1,0	1,62

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Inflation – total, end of the period, %	40,7	14,8	7,8	13,7	17,7	6,6	11,0	8,6	6,6	10,3	7
No. of employees, av. in 000	2.102	2.067	2.041	2.051	2.069	2.026	2.002	1.999	1.889	1.796	1.746
Active unemploy. persons, end of the period in 000	-	-	-	-	896	916	785	728	730	730	745
Unemploy. rate, MOR	-	-	-	18,5	20,8	20,9	18,1	14,0	16,6	19,2	23,7
Net wages, average for the period, in RSD	6.078	9.208	11.500	14.108	17.443	21.707	27.759	32.746	31.733	34.142	37.976
Comm. exports, in EUR mill.	1.922,2	2.201,7	2.441,3	2.831,6	3.608,3	5.102,4	6.431,9	7.428,9	5.961,3	7.393,4	8.441,4
Comm. imports, in EUR mill.	4.759,2	5.956,8	6.585,5	8.623,3	8.439,2	10.462,6	13.951,0	16.478,1	11.504,7	12.622,0	14.250,0
Deficit of the trade balance in EUR mill.	-2.837,0	-3.755,1	-4.144,3	-5.791,7	-4.831,0	-5.360,1	-7.519,1	-9.049,2	-5.543,4	-5.228,6	-5.808,6
Deficit of the current account balance (without donation)	-370	-1.190	-1.770	-3.001	-2.046	-2.541	-5.219	-7.217	-2.282	-2.275	-3.174,0
FDI net, EUR mill.	184	500	1.194	774	1.250	3.323	1.821	1.824	1.373	860	1.826,9
FDI as a % GDP	1,4	3,1	6,9	4,1	6,2	14,3	6,3	5,5	4,7	3	5,8
Public debt (external + internal), EUR mill.	14.167,1	13.433,9	11.529,2	11.023,2	9.675,8	10.282,7	9.352,1	8.875,3	8.781,5	9.849,4	12.157,0

Source: Ministarstvo finansija i privrede Republike Srbije,  
<http://www.mfp.gov.rs/pages/issue.php?id=3>, Narodna Banka Srbije,  
<http://www.nbs.rs/internet/cirilica/80/index.html> (10.08.2012.)

Comparative analysis of the dynamics of the inward flows of foreign direct investment in the economy of Serbia provides an opportunity to make the following conclusions.

Firstly, comparing the data on the annual net inflows of foreign direct investment it can be clearly perceived that in the period that is marked as a relatively dynamic period of development of the Serbian economy, from 2001 to 2008, the inflows of foreign direct investment shows an uneven pace.



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Second, the uneven pace of inflows of foreign direct investment represents a phenomenal manifestation of the sensitivity of inward foreign direct investment flows on macroeconomic and political aspects of the stability of the investment climate.

Third, by analyzing the data in Table 1 it could be seen that the periods of high growth of inward foreign direct investment flows coincide with periods of high percentage share of foreign direct investment in the creation of GDP. Thus, 2003 and 2006 are considered to be periods in which it was recorded to date the highest annual inflow of foreign direct investments (in amount of 1.194 million EUR and 3.323 million EUR, respectively) and the largest share of foreign direct investment in the creation of GDP (6.9% and 14.3 %, respectively).

Fourth, whereas that the largest inflows of foreign direct investment in the Serbian economy came through the privatization channel, undisputed are allegations of high-level interconnectivity and mutual interdependence between the inward flows of foreign direct investment and dynamic of implementation of the privatization process. Periods of high growth of inward foreign direct investment coincides with the period in which were sold most of the companies and achieved the highest revenue from privatization. Conversely, improving the institutional basis for implementation of the privatization process seemed to improve the investment environment and stimulate greater inflows of foreign direct investment. Namely, after the adoption of the amendments to the Law on privatization and upgrading of legislation on foreign investment, the permeability of the investment environment increased which consequently reflected on the acceleration of foreign direct investment inflows dynamics and the acceleration of the privatization process in 2003. Besides, a large inflow of foreign direct investment in 2006 is a consequence of the delayed effects of the government's measures attempted towards removing legal barriers for the implementation of the privatization process in 2005.

Fifth, since 2007 the dynamics of foreign direct investment inflows shows descending tendency, so in that year is recorded also a significant decline in the participation of foreign direct investment in the creation of GDP. Such negative tendencies in the trends of inward foreign direct investment flows are owing not only to the exertion of the internal factors, macroeconomic instability due to the deepening inflationary tendencies and political risk in 2007, but also to external factors.

Sixth, in addition to the slowdown of economic growth in the second half of 2008, the global financial and economic crisis has additionally contributed to increased instability of the current investment environment and influence on slowing and declining in foreign direct investment inflows during 2009 and 2010. "The worsening of global financial conditions has as a consequence decreased the value of foreign direct investment in Serbia and proportional reduction of their participation in the creation of GDP in 2009 and 2010 (4.4% and 2.9%, respectively). In other words, the investment environment was strongly influenced by the global economic and financial crisis, which caused a greater degree of caution investors in making investment decisions and, on that basis, reducing the inflows of foreign capital, further increasing exchange rate volatility and strengthening of inflationary pressure" (Arandelović, Petrović-Randelović, 2011, 150).

Although during 2010 the Serbian economy is showing signs of recovery from the severe shock of the crises wave, which confirms the entry of the rate of economic growth in

the area of positive trends (1.0%), a key feature of the Serbian economy in 2011 is the expressed instability under the influence of the risk of a new wave of crisis and slower growth in the euro zone. Nevertheless, in 2011 is recorded a rise of foreign direct investment inflows, with a tendency to further increase.

It is widely known and well documented in practice that the political stability and economic predictability represent the factors of decisive influence on making the decision of the location of foreign direct investment. "A new model of economic growth and development in the next decade requires, in fact, two related shifts. The first shift is from consumer to pro-investment and export-oriented economic growth. The second shift is required in the acceleration of reform processes and European integration and appropriate macroeconomic and structural policies. It is about creating a much more attractive business environment, without which the implementation of a new model of growth and development would not be possible" (Ekonomski institut (MAT), Ekonomski fakultet (FREN), 2010, 13). In fact, the acceleration of the reform processes represents a prerequisite to increase the credibility of the country and minimize the risk of investment.

Therefore, in order to encourage the inflows of export-oriented greenfield foreign direct investment and increase competitiveness of the Serbian economy the efforts of the competent national authorities in the future should be directed towards improving the overall factors of competitiveness, such as the maintenance of macroeconomic stability and achieving dynamic and sustainable economic growth, continuing the process of European integration, the implementation of the structural reforms, improve the administrative and regulatory environment for businesses and improving the quality of economic infrastructure.

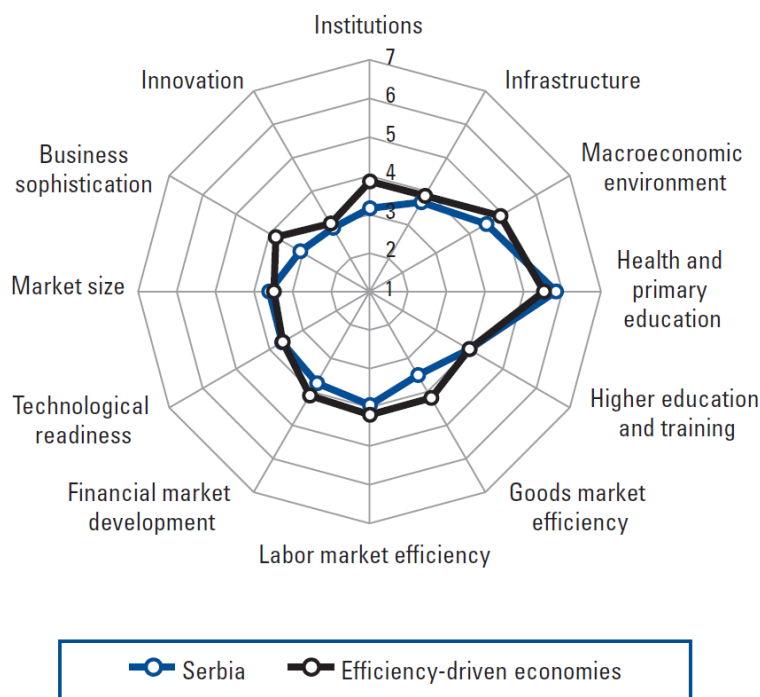
#### **4. The Rating the Level of Competitiveness of Serbian Economy According to the Global Competitiveness Index**

The competitiveness of each country is determined by the productivity of companies that operate in it. Based on the analysis of employee opinion in Serbia, the biggest problems affecting the decrease in productivity are: inefficient government bureaucracy (15%), corruption (14.2%), access to financing (10%), inflation (9.6%) and government instability (8.6%) (Schwab, K., Sala-i-Martin, X., Greenhill, R., 2011, 314).

Annual GDPpc of the Republic of Serbia, which is an indicator of productivity for the entire of economy was moving in the period from 2008 to 2011 in the range from €4.444 to €4.288 (Table 1). Based on this data and the methodology of the World Economic Forum, our economy is ranked in order of efficiency-driven economy (from 3,000 to 8,999 GDPpc (US\$)). Analysis of competitive advantage based on the level GDPpc by purchasing power parity (GDPpc(ppp)), by which in the end of 2011 our country was at the 78th place, which should correspond to the level of competitiveness. However, according to the GCI, Serbia is in a competition of 142 countries on the unenviable 95th place. The difference of 17 positions between GDPpc(ppp) and GCI witness of the wrong strategy for economic growth and prosperity, which was based on the expansion of domestic demand instead of saving and investment.

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**Figure 1. Ratings of the GCI pillars (Serbia vs. Efficiency-driven economies)**



*Source:* Schwab, K., Sala-i-Martin, X., Greenhill, R., 2011, 314

In support of this assertion is the fact that compared to the average value of all sub-indices of efficiency-driven economies (Figure 1), Serbia has a competitive advantage in the following areas:

- Primary health care infrastructures (range of sub-indices from 1 to 65 positions),
- Quality of primary education (range of sub-indices from 58 to 74 positions),
- Some segments of the communication infrastructure - the number of fixed telephone lines (26th position), subscriptions for mobile telephone (28th position) and the bandwidth of the Internet (34th position),
- Legal rights index (20th position), and,
- Higher education enrollment (5th pillar), total tax rate (6th pillar) and redundancy costs and weekly wages (7th pillar) take 50th position.

The competitiveness of Serbian economy can be analyzed further based on the GCI pillars as presented in Table 2. Within the segments of institutions and infrastructure (first and second pillar), Serbia has a competitive advantage only in the fixed and mobile telephony. Low values of sub-indices the administrative infrastructure and implementation of the legal state, indicate the many weaknesses that reduce competitiveness. First of all, there are thoughts to: weak protection of minority shareholders interests (140th position), inefficiency of the legal framework to resolve disputes (137th position), ineffectiveness of

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corporate boards (136th position), burden of government regulation (134th position), high government spending (130th position), unethical behavior of companies (130th position), and so on. Regarding infrastructure, the weakest competitive position (131st, 132nd and 133rd position respectively) is recorded in the field of quality of roads, air transport infrastructure, and port infrastructure.

**Table 2. The position of Serbia within the pillars of the GCI**

No.	Global Competitiveness Index (GCI)	Rank (out of 142)	Score (1-7)
	<b>GCI 2011- 2012 (out of 142)</b>	<b>95</b>	<b>3.9</b>
	GCI 2010- 2011 (out of 139)	96	3.8
	GCI 2009- 2010 (out of 133)	93	3.8
	<b>Basic requirements</b>	<b>88</b>	<b>4.3</b>
1.	Institutions	121	3.2
2.	Infrastructure	84	3.7
3.	Macroeconomic environment	91	4.5
4.	Health and primary education	52	5.8
	<b>Efficiency enhancers</b>	<b>90</b>	<b>3.7</b>
5.	Higher education and training	81	4.0
6.	Goods market efficiency	132	3.5
7.	Labor market efficiency	112	3.9
8.	Financial market development	96	3.7
9.	Technological readiness	71	3.6
10.	Market size	70	3.6
	<b>Innovation and sophistication factors</b>	<b>118</b>	<b>3.0</b>
11.	Business sophistication	130	3.1
12.	Innovation	97	2.9

*Source:* Schwab, K., Sala-i-Martin, X., Greenhill, R., 2011, 314-315

In the segment of the macroeconomic environment (third pillar), Serbia has not competitive advantages, which cannot be said for the segment of health and basic education (fourth pillar). Competitive advantage is present in the segments of the relatively small number of patients with tuberculosis (43rd position) and AIDS (21st position), and in segment the rate of infant mortality (40th position). Developed infrastructure of primary health care and quality of primary education are heritage from the socialist era in which Serbia was half a century. In the segment of higher education and training (fifth pillar), competitive advantage exists only in terms of higher education enrollment (50th position). However, an alarming is the percentage of highly educated people leaving the country (139th position). Regarding the training segment, it is evident low willingness of employers to train employees (132nd position).

In the area of goods market efficiency (sixth pillar), Serbia is competitive only in the area of tax rates (50th position). On the other hand, despite the expansion of demand, which is recorded in the past few years, the buyer sophistication has remained on very low level (136th position), as well as the degree of customer orientation (131st position).

In the field of labor market efficiency (seventh pillar), Serbia has a competitive advantage which refers only to the redundancy costs (50th position), that this whole segment of the market makes it uncompetitive, as evidenced by high unemployment and

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social tensions. Lack of adequate competitive advantage is also present in the capital market, where Serbia has recorded a competitive advantage only by legal rights index (20th position). Marketability in Serbia is very vulnerable, because there is a monopoly in many economic fields. This can be attributed to the low efficiency of antitrust policy (137th position), which affects the weakening of the intensity of local competition (136th position) and increase the volume of market dominance (139th position).

Regarding the level of technological readiness (ninth pillar), competitive advantage exists only in the area of Internet bandwidth (34th position), while the weaknesses observed in the fields of availability of new technologies (123rd position) and the volume of foreign direct investments and technology transfer (110th position), which directly affects the low level of absorption of new technologies by enterprises (136th position). Weak technological readiness resulting in uncompetitive products, which can hardly find their way to consumers, causing a decrease of the market and makes it uncompetitive. Another logical consequence is the lack of competitive advantages in the fields of business sophistication (eleventh pillar) and innovation (twelfth pillar). The low level of investment of companies in research and development (130th position) reduces the innovative capacity and prevents the improvement of operational efficiency and implementation the differentiation strategy.

### **5. Conclusion**

The analysis of the GCI is shown that Serbia has very poor results in terms of competitiveness. The positive is the fact that GDPpc(ppp) ranked higher than level of competitiveness (GCI) indicates that there is scope for improving competitiveness. Therefore, it is necessary to change the strategy of future growth and to turn to attracting foreign direct investments that would by transfer of advanced technologies have made domestic products more attractive to a wider market. Growth based on expanding of domestic demand, with the neglect of saving and investments, has resulted that the institutions and infrastructure are at the level of the factor-driven economies, although the Serbian economy is in the stage of the efficiency-driven economies. Also, the production scale that does not follow the achieved growth points to the necessity of reorganization and change of business processes of local companies.

According to the indicator GDPps, the Serbian economy is ranked in order of efficiency-driven economy (Phase II of development). Thereupon, achieving a high level of income and the transition to a higher stage of development indicates the need to route the efforts towards the design and implementation of such a strategy that find its basis in innovation, which today represent the key factor for achieving the competitive advantage and increase the competitive performance of a national economy on the global market.

Results of the performed analyzes provide an opportunity to make several key recommendations in terms of raising and maintaining the competitive advantages of Serbia in the future.

The most important recommendation for improving the competitiveness of Serbia is related to improve the factor conditions, which are primarily related to infrastructure and institutions. Demonstrated weaknesses in this area, in the field of administrative infrastructure and innovation, led Serbia to the bottom of Europe (95th place). State

responsibility, regarding to improving education and innovation infrastructure, as well as capital markets and financial system, must be shared with the educational and financial institutions.

The second recommendation relates to the context in which is implementing strategies of firms and rivalry which also demonstrated significant weaknesses. They are primarily associated with the regulation of markets for goods and services, and primarily with anti-trust policy, market dominance and intensity of local competition, in which is again the dominant role of the state, but for the part of the weaknesses in the area of corporate governance the responsibility must be attributed to the business sector (efficiency corporate boards, impact of audit reports, etc.).

Problems in these two segments are most pronounced, and are required to take urgent measures to improve the parameters of these segments. Also, we must not neglect the improvement of other parts of the domestic economy and solving their specific problems, because the export expansion and raise the competitiveness of the economy only can be achieved by synergistic improving of all segments.

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**POBOLJŠANJE MAKROEKONOMSKIH PERFORMANSI U CILJU  
PODIZANJA NIVOVA KONKURENTNOSTI SRPSKE PRIVREDE**

**Rezime:** Nagoveštaji globalnog oporavka od krize postavljaju pred Republiku Srbiju dva ključna pitanja: prvo, kako obezbediti dovoljan priliv stranih direktnih investicija, i drugo, kako povećati izvoz. Zajednički preduslov za obe stvari jeste podizanje nivoa konkurentnosti zemlje. Prema globalnom indeksu konkurentnosti definisanog od strane Svetskog ekonomskog foruma, Srbija se, u konkurenciji od 142 države, nalazi na nezavidnom 95. mestu, što ukazuje na neophodnost podizanja nivoa konkurentnosti. Analizom gradivnih komponenti globalnog indeksa konkurentnosti, treba se fokusirati na poboljšanje onih komponenti kod kojih su uočene evidentne slabosti.

**Ključne reči:** konkurentnost, Globalni indeks konkurentnosti, Svetski ekonomski forum, ekonomska kriza, Republika Srbija