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COMPETITIVENESS OF THE SERBIAN MEASURED GLOBAL INDEX

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Abstract—The Global index of competitiveness is determined by a set of institutions, policies and factors that determine the level of productivity in the country. It is interpreted as an indicator of the likelihood that the country is able to have a sustainable economic growth. The key question to be asked in the next period is the growth and competitiveness of companies and, consequently, higher exports and higher rates of real and sustained economic growth. Sources of modern microeconomic competitiveness of the sector, which only contributes to the creation of national competitiveness in the long-term basis can be found in the area of increased productivity, high product quality and efficient and innovative business strategies. How many businessmen in Serbia today have the conditions to develop these basic principles of modern competition, is very debatable and subject of this paper is, first of all, the first and basic requirement of Serbia that is competitiveness - institutions, infrastructure, macro-economy, since according to a new report of World Economic Forum ranked it the place that they only allow a comparison with African and Asian countries, as it is located at the rear of the EU.

Keywords—index of competitiveness, economic development, microeconomics, phases of development.

I. INTRODUCTION

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 competitiveness is called the GCI (Global Competitiveness Index) and deals with the measurement of the average of several microeconomic and macroeconomic components that are individually evaluated on a scale of 1 to 7. All measured data are grouped into twelve pillars, reflecting various aspects of the complex economic reality. A new analysis of the competitiveness index identifies several interrelated factors as sources of risk. The great economic crisis, slow economic growth and the crisis in the monetary union are slowing down the growth of Europe. The risk of fiscal tightening associated with a weak recovery also stops the economic growth, especially in the United States; while large economies of China and India exhibit signs of economic slowdown, because it is difficult to assume which region or economic segment will be the engine of economic growth in the next phase of the economic cycle.

The World Economic Forum today, along with the World Bank, is the largest, most cited and therefore the most important institution that deals with the analysis and measurement of competitiveness. During the decades of the existence the World Economic Forum has created several indexes to measure and compare the competitiveness of national economies, so with certainty it can be concluded that its composite indexes are nowadays the most widely used indices of competitiveness. Although having a rich tradition, the World Economic Forum has been wandering a long time in the formation of the corresponding competitiveness index of countries, which is partly justified given the dynamic growth and structural changes in the world economy in the last three decades. With the help of the world's leading economists from Harvard, Columbia and other leading universities first two indices of competitiveness were constructed: (1) Growth Competitiveness Index and (2) Business Competitiveness Index.

Growth Competitiveness Index has been evaluated since 2000 often with the annual review and methodology improvement. During the whole period of existence it was used to show the competitiveness at the macro level (in accordance with how we defined above) in a theoretically-based empirical research.

Business Competitiveness Index was evaluated from 1998 as an index that aimed to assess the microeconomic competitiveness of the national economies. This index was originally defined by M. Klein, and later got its shape under the guidance of team of analysts led by M. Porter. Establishment of a separate index of competitiveness at the micro level was the result of beliefs of the Competitiveness Index makers from these institutions that micro and macro aspects of competitiveness, due to their essential specifics, cannot be joined into one index. Later, however, this approach was abandoned.

Due to various deficiencies that were identified during the time the growth competitiveness index has ceded its place to much more powerful global competitiveness index constructed under the leadership of Professor Javier Sala-i-Martin, one of the leading development economist in the world today. New index included an additional number of factors which by complementing the range of factors established in the earlier, also tried to explain to a greater extent the measure of the competitiveness between countries.

As a result of these innovations, today's global competitiveness index is based on the following assumptions. The Global Competitiveness Index is based on the assumption that in today's globalized economy there are a number of factors that explain the competitiveness of the national economies. This is a big improvement over the previous state, but primarily in relation to current theories of economic growth, which too generally try to simplify the complex reality through models with fewer variables.

Another important feature of the global competitiveness index is that all factors of competitiveness are divided into 12 categories ("12 pillars of competitiveness"), which are shown in Figure and Table 1. In this way, the index authors have tried to perform the degree of aggregating the factors so that the key areas of competitiveness activity can be more clearly seen.

The index is a composite score including 12 "pillars" of competitiveness index: Pillar 1 - Institutions; Pillar 2 - Infrastructure; Pillar 3 - Macroeconomic Environment; Pillar 4 - Health and Education; Pillar 5 - Higher education and professional training; Pillar 6 - The efficiency of goods markets; Pillar 7 - Efficiency of Labor Markets; Pillar 8 - Development financial markets; Pillar 9-Technological readiness; 10 Pillar - Market size; Pillar 11 - Business sophistication; Pillar 12 - Innovation.

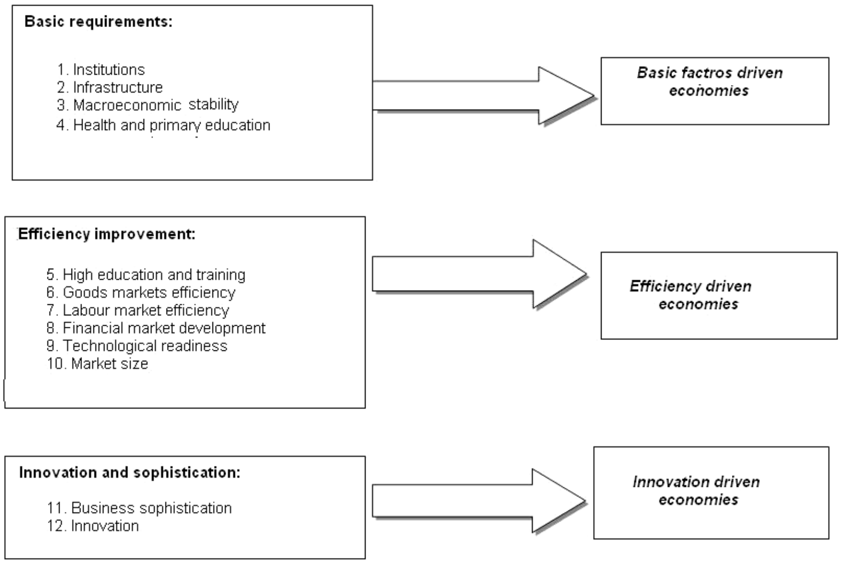

Figure 1. 12 pillars of competitiveness, the World Economic Forum [9]

Table 1. The ponders for the formulation of global competitiveness index [9]

	Factor driven economy	**Efficiency driven economy**	**Innovation driven economy**
Basic factors	60%	40%	20%
Factors key to efficiency	35%	50%	50%
Innovation factors	5%	10%	30%

In addition, the authors assume that the importance of certain factors of competitiveness depends on the level of economic development of particular country. Thus, for a country that is in the initial stage of development (economy driven by primary factors) of crucial importance are the so called basic factors of competitiveness (institutions, infrastructure, macroeconomic stability and health and primary education).

For a more mature stage of development, key factors for the efficiency (higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, knowledge and use of technology and market size) become the most important. In other words, after reaching basic factors of competitiveness for the further progress the development of the next most important market is important.

The third, most mature phase is characterized by competitive factors related to the development of innovation and the creation of innovation-driven economy. Given the stage in which a country's economy is at the factors divided into three groups receive different weights when calculating the global competitiveness index [2].

Table 2. Stages of economic development to GDP [7]

Development phases	***GDPpc (in U.S. dollars)***
Phase I - Factor driven economy	< 2000
Phase I to phase II transition	2000- 3000
Phase II - Efficiency-driven economy	3000- 9000
Phase II to phase III transition	9000- 17000
Phase III - Innovation driven economy	> 17000

In formulating global competitiveness index a total of 110 factors of competitiveness is used. Namely, the World Economic Forum includes most of the factors that are crucial for economic growth and development - institutions, macroeconomic factors, infrastructure, education, technology and more.

What is important, is that the data used in the study are obtained in two ways - by direct measurement (quantitative data), obtained from the relevant statistics and international institutions and by surveys, data obtained by interviewing representatives of the economic community i.e. their assessments of subjective phenomena.

On the other hand, what may be objectionable to some extent to the analysis of the competitiveness of the World Economic Forum, that is that some of the factors that may affect the competitiveness of some countries are not included in the analysis. First of all here the socio-psychological (economic) competitiveness factors are indicated, but also some others - participation in integration, proximity to economic centers, other macroeconomic factors (unit labor costs, exchange rate), etc. Further, another important objection to the analysis of the World economic Forum concerns the fact that to a greater extent it uses the data obtained in different surveys, which to some extent subjectivizes the rating and can affect the outcome of the research.

II. (NON)COMPETITIVENESS OF SERBIA

Serbia, according to the World Economic Forum (WEF) for year 2012 is at the 95th position in terms of competitiveness in the world which is the unchanged position relative to last year, the Foundation for the Advancement of Economics (FREN) which is the local partner of WEF [7] announced on 5th September. Serbia has retrogressed in the macroeconomic environment, health and primary education, innovation and financial market sophistication, but the decrease was mostly offset by advances in the area of technological equipment, labor market efficiency and infrastructure. Of the countries in the region, only Greece is worse positioned than Serbia, but economists warn that a better position of these countries is based on the unfounded optimism of their entrepreneurs when it comes to national competitiveness as the opinion of top management influences the formation of 65% of the index of the country.

The Global Competitiveness Index (GCI) of the World Economic Forum for Serbia is 3.87 as compared to 2011 is a negligible decrease of only 0.01.

Switzerland is the world leader in competitiveness among 144 countries with a score of 5.72, while the worst positioned is Burundi with the index of 2.78 at the last, 144 position. Global competitiveness index ranges from 1 to 7 (1 – the worst score, 7 - the best score).

In terms of individual indicators in relation to 2011 Serbia has retrogressed in the macroeconomic environment, health and primary education, innovation and financial market sophistication, but the decrease was mostly offset by advances in the area of technological equipment, labor market efficiency and infrastructure.

In FREN analysis of the competitiveness of Serbia it is stated that the macroeconomic environment has deteriorated due to the intensification of inflation, budget deficits and overall indebtedness.

Serbia has realized the highest value of 3.90 GCI Serbia on the eve of the first wave of the crisis in 2008 but already in the next 2009 the GCI value noticeably dropped to 3.77. Already in 2010 the index rose to 3.84, and in 2011 at 3.88. The decline in the index can be explained by the fact that the competitiveness of the economy declined due to the negative expectations of businessmen affected by the first strong wave of global crisis (see Table. 3.).

Table 3: Absolute ranking of countries of former Yugoslavia

	Slovenia	Montenegro	Macedonia	Croatia	BIH	Serbia
Ranking 2012	56	72	80	81	88	95
Ranking 2011	57	60	79	80	87	94

It is evident that in 2012 of the neighboring countries only Greece recorded a slightly worse result than Serbia, and is positioned on the 96th place at SEF's list, just behind Serbia. As a result of intensified political and financial crisis Greece for one year dropped 6 places and compared to 2007 by as much as for 31st place, estimated by FREN. Better positioned than Serbia are Albania which is on the 89th position which is a drop of 11 places compared to 2011, Bosnia and Herzegovina on 88th position which is 12 places up better than in the report in 2011. Croatia has also dropped four places to 81st position, and Macedonia is down from 79th to 80th position. Montenegro is ranked at 72nd position while in 2011 it was ranked at 60th position. Except for Greece, another extreme example of the movement of the index is Bosnia and Herzegovina in which case it can be observed that the competition within one year has been improved by 12 positions, which has included this country on the WEF list ahead of Serbia, for the first time since the start of measurement and publication of the Global Competitiveness Index, according to the analysis.

III. INSTEAD OF CONCLUSION

According to the level of competitiveness of Serbia occupies the last place in the region, especially when one takes into account the reached GDP level. At the same time there is a huge space for improving the competitiveness. As the analysis showed Serbia expresses a range of competitive disadvantages and almost negligible competitive advantages.

To improve the competitiveness Serbia must improve the factor conditions, including above all the infrastructure and institutions. Demonstrated weaknesses in this area, especially in the area of logistics, administrative, innovation and infrastructure have led Serbia to the tail of Europe.

For Serbia, there is no easy or quick way to remove numerous and large determinants of non-competitiveness. Since the creation of competitive advantages takes a lot of time, investment and knowledge, and here a severe shortage of all three elements is present, Serbia is left to be more oriented to comparative rather than competitive advantages. For our poorly equipped country I it all there remains a lot to be done.

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