

Slobodan Cvetanović, PhD¹
University of Niš, Faculty of Economics, Niš
Mirosljub Nikolić, PhD²
Dragoslava Sredojević, MSc³

ORIGINAL SCIENTIFIC ARTICLE
Received: October 17, 2014
Accepted: December 01, 2014

COMPETITIVELY LEADING AND LAGGING EUROPEAN COUNTRIES⁴

Abstract

The concept of a country's competitiveness, in addition to numerous challenges, has risen in importance in recent years. Relying on the data obtained from the Global Competitiveness Report of the World Economic Forum, the paper analyses competitiveness of the most competitive countries and the least competitive countries in the EU. Visualisation of data on competitiveness and GDP per capita of the analysed group of countries in 2013 enabled the identification of the most critical factors of competitiveness of the EU countries. Furthermore, based on the evaluated competitiveness trend line for the observed groups of countries in the period 2006-2013, it has been concluded that it is not realistic to expect significant convergence of the analysed groups of countries in respect of competitiveness in the near future.

Key words: competitiveness, most competitive EU countries, least competitive EU countries

JEL classification: O310, 0520

КОНКУРЕНТСКИ ВОДЕЋЕ И ЗАОСТАЈУЋЕ ЗЕМЉЕ ЕВРОПЕ

Апстракт

Концепт конкурентности земље, поред многобројних оспоравања, добија на значењу током последњих година. У раду је на основу података из Global Competitiveness Report, World Economic Forum sagledavana konkurentnost the EU most competitive countries and the EU last competitive countries. Визуелизацијом података о конкурентности и GDP per capita анализираних група земаља у 2013. години идентификовани су најкритичнији фактори конкурентности земаља ЕУ. Такође, на бази оцењених линија тренда конкурентности за посматране групе земаља у периоду 2006-2013. године дошло се до одговора да није реално очекивати знатније приближавања конкурентности између анализираних група земаља у непосредној будућности.

Кључне речи: конкурентност земље, конкурентски водеће земље ЕУ, најмање конкурентне земље ЕУ.

¹ slobodan.cvetanovic@eknfak.ni.ac.rs

² mirosljubnk@gmail.com

³ dragoslava.sredojevic@vipos.edu.rs

⁴ The paper emerged within the project: 179074 "Tradition, modernisation, and national identity in Serbia and the Balkans in the process of European integrations", supported by the Ministry of Education, Science, and Technology of the Republic of Serbia.

Introduction

The research subject of competitively oriented economic reality is reflected in the intention of the researchers to focus on successful companies, branches, certain parts of countries, countries as a whole, groups of countries. Theoretical understanding of this phenomenon is inevitably associated with large reductions and simplification of the content. A small number of differences among the participants, leading to differences in the levels of competitiveness of countries, industries or companies, can be taken into account. The most frequently used differences in explaining the causes of competitiveness lie in different offer of factors of production, such as labour and physical capital, unequal availability of technologies, the use of effects of economies of scale, the appearance of externalities, etc. The real question in the analysis of competitiveness, regardless of the level of analysis, refers to the identification of factors that explain this phenomenon. In short, competitiveness is a very complex phenomenon, and a country's efforts to be competitive involve synergistic action of different factors that determine this complex.

Competitiveness is the ability of a country to produce goods and services that meet the increasingly stringent demands of the international market under free and equal market conditions, while maintaining and increasing the real income of the population on a long-term basis (OECD, 2001). A particular country may be considered competitive only if it has an important role in the production and marketing of goods or services on the world market, and if its inhabitants achieve higher living standard in the observed time interval. The country's competitiveness cannot be achieved without local companies that retain or increase their share on the global market. The country cannot be competitive without high-quality products, services, and successful companies, which requires the existence of a favourable business environment, institutions that regulate the market and infrastructure (Skufflić & Stoković, 2004).

Competitiveness is the area of economic knowledge which analyses facts and policies that shape the country's ability to establish and maintain a framework for creating greater value for companies and increasing prosperity of people (IMD, 2003). In accordance with the context of this definition, it should be noted that it is impossible to achieve a higher level of competitiveness of the country on the basis of the quality of one factor that determines the competitiveness. In fact, joint action of a number of factors is required. The only question is which of the many factors has stronger and which of them has weaker contribution to the creation of greater value for the companies and higher prosperity of people, i.e. in achieving greater competitiveness.

Starting from the above-mentioned facts, the aim of the research is to point to the differences in competitiveness performance, quantified by the indicator Global Competitiveness Index (GCI) of the World Economic Forum, among the most competitive EU countries and the least competitive EU countries, as well as to identify the most critical factors of competitiveness of the EU countries in 2013. In addition, an attempt will be made to use the evaluated trend lines of competitiveness of the observed group of countries in the time period 2006-2013, in order to reach answer to the question whether it is realistic to expect convergence of the analysed groups of countries in relation to the level of competitiveness in the foreseeable future.

In an attempt to get answers to the questions, we used the method of visualisation of data on the competitiveness and GDP per capita of the analysed groups of countries in 2013, as well as the time diagrams of the average global competitiveness index and the average gross domestic product per capita of the analysed groups of countries for the period 2006-2013.

The structure of the work has been adapted to the defined research subject and objectives. After the introduction, a brief overview of research on the phenomenon

of competitiveness is presented. Then, the empirical part focuses on: a) Global Competitiveness Index Framework, World Economic Forum, b) the levels of competitiveness of the most competitive EU countries and the least competitive EU countries in 2013, c) the elements of competitiveness of the most competitive EU countries and the least competitive EU countries in 2013 and d) the time diagrams of GCI and GDP per capita of the most competitive EU countries and the least competitive EU countries in the period 2006-2013.

Overview of literature

In theory, there are conflicting views on the relevance of the concept of competitiveness. Due to the number and complexity of factors, as well as the very nature of the competitive processes, the concept of competitiveness is often very difficult to understand and often confusing (Snieška & Bruneckienė, 2009). A number of economists believe that competitiveness has the traits of “natural law of modern capitalist economy” (Kitson et al., 2004). Another group, however, believes that it is reasonable to think exclusively about the concept of competitiveness at the level of companies, and that the category of a country’s competitiveness is absolutely wrong (Krugman, 1994). Anyway, despite numerous challenges, the concept of the country’s competitiveness has been continually receiving significance over the past ten years. Although some theorists believe that competitiveness is nothing else than the measurement of a country’s wealth in other way, it is very important that the high competitiveness, in turn, contributes to the improvement of innovativeness of the economy as a whole, and to acceleration of economic growth. However, if the competitiveness on the global market is weak, then the national economy suffers. This usually leads to protectionism, non-transparent government subsidies, and barriers to market entry.

The country’s competitiveness is most commonly identified with the ability to produce and market goods and services on the foreign markets (OECD, 1996), and it is expressed by the dynamics of growth of real gross domestic product per capita, or the capacity to increase wealth. World Economic Forum defines competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity determines the level of prosperity that the country can reach and maintain over a long period of time (Schwab, 2009).

The competitiveness of a country is a measure of production of goods and services, which, under free and fair market conditions, meets international market criteria and at the same time affects the increase in real income of people. This competitiveness is based on high-quality production performance and economic ability of companies to produce outputs with the highest possible productivity, which, in turn, generates a high level of real income. Competitiveness is closely related to the rise in living standards, greater employment opportunities, as well as the country’s ability to fulfil its international obligations (The Report of the President’s Commission on Competitiveness, 1984).

Analysis of factors affecting competitiveness of the country is becoming a increasingly pronounced component of policies aimed at improving the quality of key macroeconomic performance (economic growth, employment, price stability, balanced balance of payments). While it is clear that the country’s competitiveness is essentially linked to the quality of its economic performance, the fact is that this complex is more and more observed in relation to the relative position of the observed economy in comparison to other countries, and far less in relation to its accumulated wealth (Nijkamp & Siedschlag, 2011). Improving competitiveness must be the basic idea in the development and implementation of economic policy. Only well-targeted policies,

aimed at improving national competitiveness, can ensure the desired development and overall social welfare.

The shaping of indicators of competitiveness of the country is affected by a very large number of direct and indirect factors, among which the competitiveness of companies is the most important, as companies stand for holders of economic activity and creation of economic values. Factors affecting the competitiveness of the company are: high costs of operations, high taxes, poor overall competition that does not encourage companies to improve innovativeness, poorly regulated system of environmental protection and waste management, quality or low quality of transport infrastructure, non-harmonised legislation, poor public administration, and so on.

The biggest obstacles to competitiveness are caused by national or local authorities, not the companies. Obstacles can come from businesses too, but the state may intervene and remove them. When talking about classical obstacles, which adversely affect the competitiveness, they can be: horizontal restraints, vertical restraints, and abuse of state domination. Horizontal restraints are reflected in the fixing of purchase and selling prices, the division of market of resources and goods, limited or controlled research and development, production and marketing. Vertical restraints can be in the form of long-term exclusive (monopoly) contracts. The country's competitiveness in particular can be affected by short-term national interests, ex ante price control, legalised monopoly, competition between the institutions themselves, non-transparent state aid policy, and excessive, unjustified market protection.

Empirical Analysis

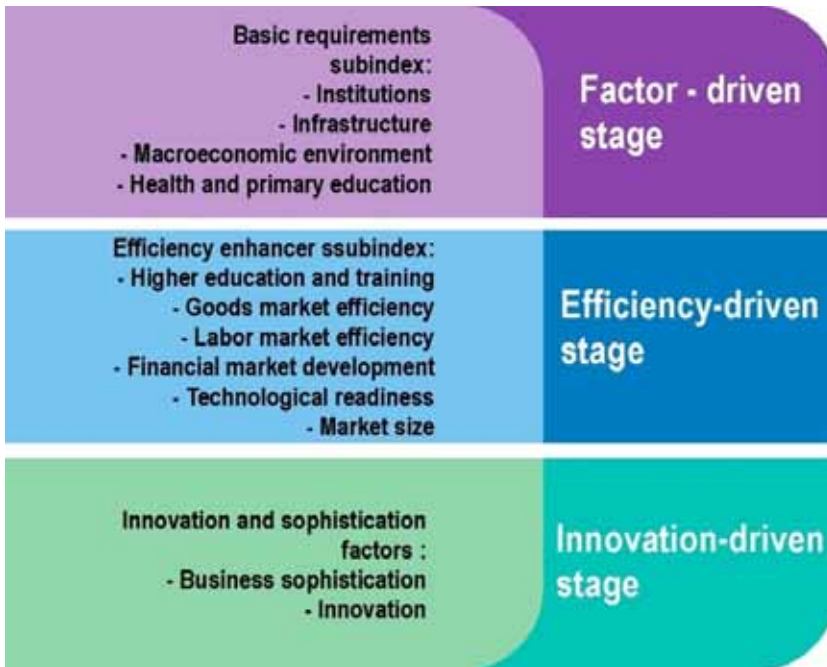
a) Global Competitiveness Index Framework, World Economic Forum

The Report groups the factors of competitiveness into 12 pillars (Figure 1). Global Competitiveness Index (GCI) is calculated as a weighted average of the values of all pillars of competitiveness, depending on the level of development of the observed country (Figure 2).



Modified according to: The Global Competitiveness Report 2013-2014.

Figure 2: Three stages of economic development



Modified according to: The Global Competitiveness Report 2013-2014.

Figure 2 shows that GCI consists of a set of 12 factors of competitiveness, which are grouped into three subgroups, and which are typical for one of the three stages of development: factor-driven, efficiency-driven, and innovation-driven stage.

Based on the data from the Global Competitiveness Report 2013-2014, 15 most competitive EU countries and 15 least competitive EU countries have been singled out (Table 1 and Table 2).

Table 1: European GCI leaders in 2013

Country/Economy	Global Competitiveness Index		GDP per capita (US\$)	
	Rank (out of 148)	Score 1-7	Rank (out of 148)	Score
Switzerland	1	5.67	4	79,033
Finland	3	5.54	15	46,098
Germany	4	5.51	21	41,513
Sweden	6	5.48	8	55,158
Netherlands	8	5.42	14	46,142
Denmark	10	5.37	23	38,589
Norway	11	5.33	3	99,462

United Kingdom	15	5.18	7	56,202
Austria	16	5.15	12	47,083
Belgium	17	5.13	18	43,686
Luxembourg	22	5.09	1	107,206
France	23	5.05	22	41,141
Ireland	28	4.92	16	45,888
Iceland	31	4.66	19	41,739
Portugal	51	4.4	39	20,179

Source: Global Competitiveness Report 2013-2014.

Table 2: European GCI learners in 2013.

Country/Economy	Global Competitiveness Index		GDP per capita (US\$)	
	Rank (out of 148)	Score 1-7	Rank (out of 148)	Score
Poland	42	4.46	54	12,538
Turkey	44	4.45	60	10,609
Latvia	52	4.40	49	13,900
Bulgaria	57	4.31	74	7,033
Cyprus	58	4.30	30	26,389
Russian Federation	64	4.25	47	14,247
Montenegro	67	4.20	75	6,882
Macedonia, FYR	73	4.14	87	4,683
Croatia	75	4.13	50	12,972
Romania	76	4.13	69	7,935
Slovak Republic	78	4.10	42	16,899
Ukraine	84	4.05	92	3,877
Bosnia and Herzegovina	87	4.02	88	4,461
Greece	91	3.93	36	22,055
Serbia	101	3.77	85	4,943

Source: Global Competitiveness Report 2013-2014.

In the next step, the number of selected countries has been reduced to 10 leading and 10 lagging countries in respect of competitiveness (Figure 3). After the decision to perform 10+10 analysis, the last five countries (Luxembourg, France, Ireland, Iceland, and Portugal) have been removed from the group of 15 leading countries. The ten most competitive countries in Europe are in the third phase of development (*innovation-driven stage*). From the list of 15 lagging countries Europe, based on the criterion of competitiveness, Russian Federation, Ukraine, and Turkey, as large economies, have not

been taken into account, nor the very small economies, Montenegro and Cyprus. Six countries from the list of the least competitive countries are in *efficiency-driven stage*. Croatia, Slovakia, and Poland are in *transition from stage 2 to stage 3*, while Greece is in *innovation-driven stage of development*.

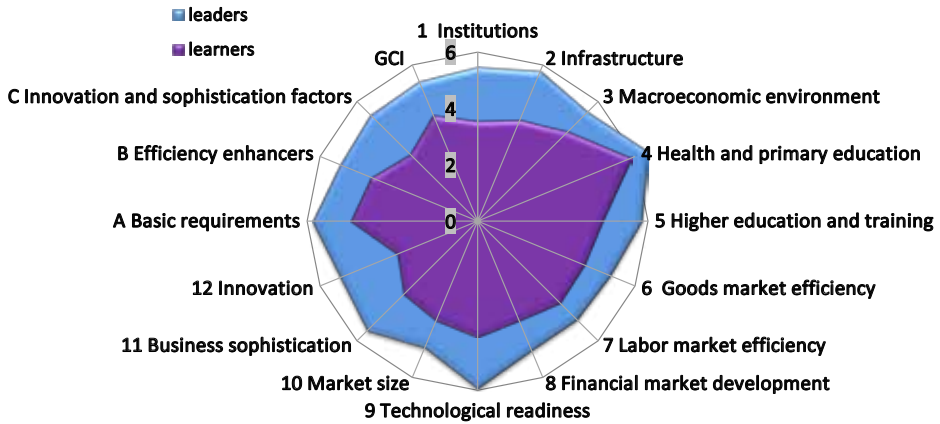
Figure 3: Observed groups of countries



- b) Comparative presentation of the most competitive EU countries and the least competitive EU countries in 2013

Comparative overview of competitiveness, based on all pillars, for the observed groups of countries shows that GCI learners are lagging behind GCI leaders mostly in respect of the *12th pillar, Innovation*, and the *1st column, Institutions* (Figure 4). Given that the category Institutions includes assessment of political stability and the rule of law, then these differences are expected. Political instability with many open internal issues is the characteristics of this region. In addition, the region is characterised by underdevelopment of basic institutions and inefficiency of the legal system, particularly in the area of intellectual property protection. The observed characteristics have been identified as the average of the results of the groups of most competitive and least competitive European countries.

Figure 4: Comparison by elements of competitiveness in 2013.



The differences that exist between the most competitive EU countries and the least competitive EU countries are obvious. However, the above-mentioned graphical display provides only partial information on the competitiveness of the observed groups of countries for 2013. It is obvious that the gap in terms of the values of the GCI pillars between the most competitive EU countries and the least competitive EU countries is very high. Therefore, a more thorough analysis is required.

c) Time diagrams of GCI and GDP per capita

Further course of the research has included the time dimension and analysed the trend of competitiveness and GDP per capita of the observed groups of countries (data available for a time period of eight years). Time series diagrams by the indicators for GCI and GDP per capita have been constructed, with average values by observed groups of countries, showing also trend lines for each of the groups (Figures 5 and 6).

Figure 5: Time diagram of the average GCI for the observed groups of countries

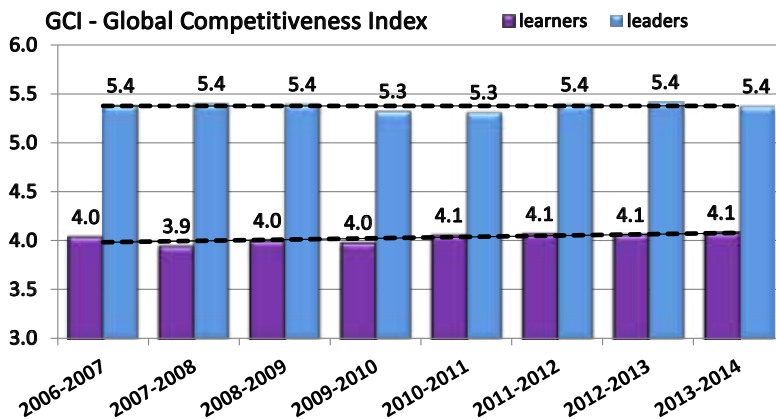


Figure 6: Trends in average GDP per capita

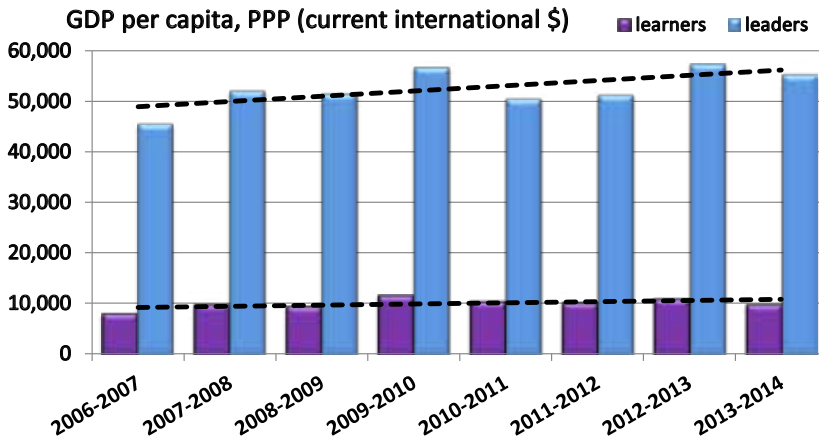


Figure 6 shows that GDP per capita is in the case of *the most competitive EU countries* at a much higher level in relation to the group of GCI learners. In addition, the movement of GDP per capita in the group of most competitive countries by years shows a growing tendency. The tendency of growth of GDP per capita is characteristic of *the least competitive EU countries*, but obviously it is a much slower growth than in the first case. If similar tendencies continue in the future, convergence of GDP per capita of the analysed groups of countries should not be expected.

Although economically less developed countries can continue to improve their competitiveness by adopting technologies, for countries that have reached the innovation stage of development it is no longer sufficient for further productivity growth. Companies in these countries need to create and continuously improve products and processes, in order to maintain their competitiveness and achieve economic progress with the help of value-added activities. This requires the existence of an environment that is conducive to innovative activities, and which supports both the private and the public sector. That means plenty of investment in research and development, especially on the part of the private sector, the availability of high-quality scientific research institutions that possess the knowledge necessary to create and diffuse innovation, broad cooperation in research and technological development between universities and industry, as well as an efficient system of protection of intellectual property rights.

Conclusion

The gap in terms of competitiveness performance (based on all GCI pillars) between the most competitive EU countries and the least competitive EU countries is very high. In addition, it has been shown that innovation and institutions are the most critical factors of competitiveness of the EU countries.

Based on the evaluated trend line of competitiveness of two groups of countries, tendency towards mild convergence has been observed. Despite the fact that there is a tendency of growth within the cluster of the most competitive EU countries and the least competitive EU countries, known as GCI learners, significant convergence in respect of competitiveness between the analysed groups of countries should not be expected.

References

- IMD World Competitiveness Yearbook 2003, Lausanne, Switzerland.
- Kitson, M., Martin, R., & Tyler, P. (2004). Regional Competitiveness: An Elusive yet Key Concept?, *Regional Studies*, 38(9), 991–999.
- Krugman, P. (1994) Competitiveness: A Dangerous Obsession, *Foreign Affairs*, Vol 73, Nr 2, March/April , pp. 28-44.
- Nijkamp, P. Siedschlag, I. (2011), *Innovation, Growth and Competitiveness, Dynamic Regions in the Knowledge-Based World Economy*, Springer Heidelberg Dordrecht , London , New York.
- OECD (1996) *Technology an Industrial Performance*, Paris, OECD.
- OECD (2001). OECD Manual: Measuring Productivity. Measurement of aggregate and industry - level productivity growth. <http://www.oecd.org/dataoecd/59/29/2352458.pdf>
- Schwab K. (2009) The Global Competitiveness Report 2009-2010, World Economic Forum, Geneva.
- Snieska, V. Bruneckienė, J. (2009) Measurement of Lithuanian regions by regional competitiveness index. *Engineering economics*, 1(61).
- The Global Competitiveness Report 2006-2007; 2007-2008; 2008-2009; 2009-2010; 2010-2011; 2011-2012; 2012-2013, 2013-2014, World Economic Forum.
- Škuflić, L. Štoković, I. (2004) How to measure and improve external and internal competitiveness: Theoretical and empirical assessment, *Revija za pravo i ekonomiju*, Mostar, Vol 5. br. 1.