

Aleksandra Tošović-Stevanović

Megatrend University, Serbia

ORCID: 0000-0002-1927-500X, atosovic@megatrend.edu.rs

Analysis of factors which impact on a country's economic development and competitive advantages

Abstract: Competitiveness, as one of the key factors in a country's development, enables improvement of the overall atmosphere for individuals and for firms, and for the country itself when compared with other similar entities. Since change is not just desired but required, it becomes clear that change is one of the preconditions for survival in world markets. This paper examines the theory of competitiveness, according to which the competencies of certain countries were not inherited, but created through strategic choices and their implementation, based on knowledge and developed infrastructure, high technology and innovation. In this context, analyses of competitiveness indicators are of great importance. Based on these it is possible to evaluate business success at company and industry level, by comparing numerous macroeconomic (macroeconomic policy, market infrastructure, institutional development) and microeconomic factors (business environment, sophistication of company operations and strategies). For the purposes of this study, we analyzed the World Economic Forum methodology, which contributes to a better understanding of the competitiveness profile of certain countries and how they can improve and specialize. Certain rankings help the creators of economic policy to shape and evaluate national results in terms of competitiveness, which further assists firms in improving their competitiveness in relation to other firms. The creation of a highly competitive economy is a complex and continuous task for any country that wishes to develop, and in that context the role of the state in creating an environment that will stimulate competitiveness is paramount, as this is a way to mitigate the effects of recession and determine the speed of economic recovery.

Keywords: competitiveness, economic development, Global Competitiveness Index

JEL: F6, F12

Introduction

In a global economy, the need for the realization of business activities in the international market in order to achieve and increase competitive advantage is the priority and concern of all economies – developed, developing and transition. The globalization of the business world becomes a market in

which the companies operate from various parts of the world, and increasing competitiveness is the process of improving the business environment and its successful adjustment to emerging changes [Tošović-Stevanović, Jurčić, Rabrenović, 2017]. In this context, the analyses of competitiveness indicators are of great importance, based on which the success of company and industry business can be shown, by comparing numerous macroeconomic (macroeconomic policy, market infrastructure, institutional development) and microeconomic factors (business environment, sophistication of company operations and strategies). For the purposes of this study, we analyzed the methodology of World Economic Forum that contributes to a better understanding of the competitiveness profile of certain countries and how they can improve and specialize. The indicators of international organizations such as the World Economic Forum allow the analysis of factors that best represent the performance of economies and the competitive advantages of analyzed countries.

Starting from the theory and practice of creating competitive advantages for companies in countries with a developed market economy, we can see that a competitive advantage is a development phenomenon and a subject of special interest in economic and business circles. "Competitiveness is the aggregate expression of global characteristics – micro, meso and macro – that are specific for each national economy. Competitive advantages are a combination of corporate and sector-specific and general national characteristics" [Porter, 2008]. The models that are used for measuring the competitiveness of different countries are based on this definition. The greatest difficulties are posed when comparisons, estimates and evaluations of national characteristics are conducted. Among the most sophisticated models for measuring countries' international competitiveness are those developed by the Institute for Management Development, the World Economic Forum and the World Bank. In order to perform a competitiveness analysis adequately and reliably, it is of the utmost importance that the concept of competitiveness is well conceived. According to Manić (2008), if the competitiveness analysis is valid, then the index of competitiveness can help determine standards of comparison between countries. Certain rankings help economic policy creators to shape and evaluate national results in terms of competitiveness, which further help companies to improve their competitiveness in relation to other companies. In a globalised world of today, for small open economies characterised by several productive factors, a few sectors, and imperfect competitiveness the achieving of external economies of scale (EES) is of critical importance [Risanović, Barjaktarević, Cogoljević, 2017].

While analyzing international competitiveness index, two approaches stand out: a microeconomic and a macroeconomic approach to competitiveness. A microeconomic approach, formulated on the basis of the Porter Theory of competitive advantages, concentrates on the microeconomic fac-

tors of competitiveness, based on analyzing the quality of microeconomic business environment, sophistication of company's business and strategy and the degree of cluster development. For the purposes of a more detailed analysis of this approach, the paper presents the methodology of the World Economic Forum. The macroeconomic approach pertains to macroeconomic competitiveness index, where results of competitiveness are reflected in economic growth that ensures increases in employment and quality of life. At the macro level, competitiveness is defined as a country's ability to achieve economic growth more rapidly than other countries and to increase wealth, so that its economic structure changes and adjusts to international trade flows with increasing success [Bienkowski, 2006]. In order to adequately understand certain countries' competitiveness profiles and the way in which they improve and specialize, we will give an overview of methodologies of the World Economic Forum.

According to Cantwell (2006) competitiveness derives from the creation of locally differentiated capabilities needed to sustain growth in an internationally competitive selection environment. Such capabilities are created through innovation, since capabilities are varied and differentiated, and the creative learning processes for generating capabilities are open-ended and generally allow multiple potential avenues to succeed, a range of different actors may improve their competitiveness together. The efforts to promote competitiveness through innovation can rarely be understood in isolation from what others are achieving at the same time. This applies whether one is speaking of countries, of national groups of firms in an industry, of subnational regions, or of individual companies. Indeed, it is worth emphasizing that the degree of interaction between innovators in search of competitiveness has had tendency to rise substantially historically, and has attained new heights in recent years [Cantwell, 2006].

Operationally, innovation is generally assessed through R&D expenses (input) or through the number of registered patents (the product of R&D activity). However, as Porter and van der Linde (1995, 98) make it clear, innovation is not just a technological change and can take various forms, including "a product's or service's design, the segments it serves, how it is produced, how it is marketed and how it is supported" [Ambec and..., 2011]. Innovation represents not just the driving force of a firm's development, but also the driving force of the entire economic development in a country. The key differences in understanding innovation, present in modern economics, are in close relation to innovation and the role of the government. At macro level, the innovation problem is defined by the quality of interaction between research and development, the need for innovation, absorption capacities, and diffusion of knowledge and innovation via market and non-market cooperation.

1. National competitiveness defined by the World Economic Forum

According to many eminent experts that deal with the influence and analysis of the competitiveness of economies and companies, such as M. Porter, X. Sala-i-Martin and others, the World Economic Forum (WEF) stands out as the institution that deals with the topic of competitiveness, both on the macro and the micro levels, in the most encompassing way. World Economic Forum reports are based on companies' surveys and the same format is used in all countries encompassed by the survey. On the basis of the survey and additional secondary data, countries are ranked by their international competitiveness. In addition to a general index, the study also ranks countries by components that are significant for international competitiveness. This allows a precise identification of the specific advantages and problems of individual countries in a broader context. National competitiveness is defined by the World Economic Forum (2010) as a set of factors, policies and institutions that determine the level of a country's economic prosperity and productivity, with productivity increase being linked to better use of available factors and resources. In the words of the WEF's leading figures (2009), this institution has been researching and measuring complex competitiveness phenomena for the past thirty years, and strives to apply the latest theoretical achievements and available practical knowledge at all times. Simply put, at the end of the 20th century there was no critical mass of clear theoretical views and necessary empirical results that would allow such an all-encompassing integration. The World Economic Forum bases its competitiveness analysis on the Global Competitiveness Index (GCI), which encompasses both micro and macroeconomic bases of national competitiveness. The Global Competitiveness Index starts from the theory that competitiveness is a complex phenomenon, influenced by a lot of factors, which are grouped into 12 pillars of competitiveness (institutions, infrastructure, macrostability, health and primary education, higher education and training, market efficiency, technological readiness, company sophistication and innovation), organized into three groups (basic, factors of efficiency and innovation). The significance of individual groups of competitiveness pillars depends on the degree of country development, while for middle developed countries (including Serbia), besides the basic factors, efficiency factors are of great importance.

2. Competitiveness analysis of Global Competitiveness Report 2017-2018

At the end of the 20th century, series of research project aimed at defining and analyzing competitive advantage were carried out. In order to rank countries on the basis of national innovation capacity, the data from The Global Competitiveness Report (GCR) were used. Important elements for

achieving competitive advantage of certain countries were analyzed by the World Economic Forum. While forming the national competitive strategy, it is important to classify three phases: economy established on the basis of basic requirements, efficiency enhancers and innovation factors.

The above mentioned phases differ in their basic sources and, consequently, overwhelming ways for reaching competitive advantages, thus creating differences between capabilities and advantages of growth and development of certain countries. It starts with cheap labor, continues with investments in modernization of production process for standardized products, it further continues with the ability for innovation of products and services by using modern technologies, what becomes the key factor of competitive advantages.

Ten years on from the global financial crisis, the prospects for a sustained economic recovery remain at risk due to a widespread failure on the part of leaders and policy-makers to put in place reforms necessary to underpin competitiveness and bring about much-needed increases in productivity, according to data from the World Economic Forum's Global Competitiveness Report 2017-2018.

The top ten countries on the list are ranked in the following order by the Global Competitiveness Index for 2017/2018: Switzerland, United States, Singapore, Netherlands, Germany, Hong Kong SAR, Sweden, United Kingdom, Japan i Finland (see table 1).

Table 1. Global Competitiveness Index – The Top 10 Economies

Rank/137	Country/Economy	Score
1	Switzerland	5,9
2	United States	5,9
3	Singapore	5,7
4	Netherlands	5,7
5	Germany	5,7
6	Hong Kong SAR	5,5
7	Sweden	5,5
8	United Kingdom	5,5
9	Japan	5,5
10	Finland	5,5

Source: World Economic Forum, The Global Competitiveness Report 2017–2018.

The ranking of the *basic requirements* (1) and *innovation and sophistication factors* (1) are the most significant factors for Switzerland. The best ranking was achieved within the business sophistication (1), innovation (1), labor market efficiency (1). The worst results were recorded in the field of market size – 39 and financial market development – 8 (see table 2).

Table 2. Global Competitiveness Index – Switzerland

Index Component	Rank/137	Score (1-7)
Global Competitiveness Index	1	5,9
<i>Subindex A: Basic requirements</i>	1	6,4
1st pillar: Institutions	4	5,9
2ed pillar: Infrastructure	6	6,3
3rd pillar: Macroeconomic environment	3	6,6
4th pillar: Health and primary education	2	6,8
<i>Subindex B. Efficiency enhancers</i>	3	5,6
5th pillar: Higher education and training	5	6,1
6th pillar: Goods market efficiency	6	5,5
7th pillar: Labor market efficiency	1	5,9
8th pillar: Financial market development	8	5,3
9th pillar: Technological readiness	2	6,4
10th pillar: Market size	39	4,7
<i>Subindex C: Innovation and sophistication factors</i>	1	5,9
11th pillar: Business sophistication	1	5,9
12th pillar: Innovation	1	5,8

Source: World Economic Forum, The Global Competitiveness Report 2017–2018.

According to the Global Competitiveness Report 2017-2018 performance of the European region – which includes the EU28, the Balkans, Iceland, Norway, Switzerland, and Turkey – is stable overall compared to last year. The region's top performers remain at the competitiveness frontier, with six European countries in the top 10: Switzerland (1), the Netherlands (4), Germany (5), Sweden (7), the United Kingdom (8), and Finland (10). However, there is little sign of the region's southeastern economies closing the gap with its northwestern ones. Iceland, Estonia, and the Czech Republic continue to occupy the middle ground between these two blocks.

This is the ninth consecutive year where Switzerland has topped this list. Switzerland (1st) continues to top the overall rankings, with strong results evenly balanced across the different components of competitiveness [WEF, 2017]. According to the Global Competitiveness Report 2017-2018 economic performance benefits from extremely strong fundamentals including public health, primary education, and a comparatively solid macroeconomic environment. Its economy has a high level of flexibility, with its labor markets being ranked as the best-functioning globally. Absorptive capacity for new technologies is high, with an overall 2nd place ranking in the tech readiness of citizens and businesses. Switzerland further improves its scores for business

sector sophistication and its innovation environment, thereby defending its top global ranking on those two important pillars [WEF, 2017].

The best economy performances for Netherlands are support of a strong education system and high levels of tech readiness among businesses and individuals. The Germany economy performs best in innovation capacity and business sophistication supported by high levels of technological readiness and high-quality infrastructure. The best performances for United Kingdom are high technological readiness and the sophistication of its business sector. Finally, for Finland the best economy performances are high levels of investment in human capital complemented by a sophisticated innovation.

3. Economy profiles of Serbia by GCI

In respect to Serbia's internal competitiveness, it has improved since the beginning of the 21st century but still remains at very low level. The GCI ranks Serbia at number 78 out of 137 countries covered by the survey. The value of Serbia's competitiveness index equals 4.14 out of possible 7. Compared to the previous year, the value of IGC for Serbia was increased by 0.17, which dominantly influenced the improvement of Serbia's position by 12 places (Serbia ranked 90th in the previous year).

The results of Serbian economy point out the important competitive advantages and weak points, grouped by the components of global competitiveness index. The results with the lowest value are in relation to factors of *innovation and sophistication factors* by which Serbia was ranked at the 104th position in the world in 2017, within which business sophistication had the lowest ranking – 110th position (in subcategories nature of competitive advantage Serbia ranked at 133rd; production process sophistication – 107th) and innovation ranks 95th (capacity for innovation – 117th; company spending on R&D – 107th).

With regards to *basic factors*, Serbia ranked at the 74th place, which was its best ranking. In subcategories such as health and primary education Serbia ranked at the 52nd place. But in subcategories such as institutions, Serbia ranked at the 104th place (protection of minority shareholders' interests – 132nd; property rights – 124th).

The ranking of the *efficiency factors* (82nd) are the most significant factors for the development of transition countries. The best ranking was achieved within the higher education and training – 59th and technological readiness – 72nd. The worst results were recorded in the field of goods market efficiency – 110th and financial market development – 101st.

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solid macroeconomic environment. Its economy has a high level of flexibility, with its labor markets being ranked as the best-functioning globally. Absorptive capacity for new technologies is high, with an overall 2nd place ranking in the tech readiness of citizens and businesses. Switzerland further improves its scores for business sector sophistication and its innovation environment, thereby defending its top global ranking on those two important pillars.

Of the countries in the region where the increase in the value of IGCs has been recorded, Hungary and Albania stand out, which, on average, had a change in pillar values of 3.1% and 2.96% compared to last year, which led to a change in their rank for 9th, or 5th positions on the list. At the same time, there was a decrease in the value of IGK by 0.02 in relation to the previous year or 0.47%, which led to a deterioration of the country's placements for six positions.

According to the value of the Global Competitiveness Index, in 2017 Serbia was only better placed than Bosnia and Herzegovina, which ranks 103rd in the SEF ranking list. Of the other countries in the region, Montenegro has improved the value of IGK by 0.1, and it was located right in front of Serbia in the 77th position (last year it occupied 82nd position), while Croatia, with an increase in IGK value of 0.04, retained the same 74 place ranked as the previous year. Albania was also ahead in the list for five places, now at the 75th position with an increase in the value of IGK from 0.12 points. Among the best placed economies in the region are Romania, which is this year's 68th with a deterioration of 6 rankings, followed by Hungary, which improved its position by 9 points with the growth of the IGK of 0.13 points and Slovenia, which again improved its position and occupied 48th place on the SEF list.

Table 3. Global Competitiveness Index – Serbia

Index Component	Rank/137	Score (1-7)
Global Competitiveness Index	78	4,1
<i>Subindex A: Basic requirements</i>	74	4,5
1st pillar: Institutions	104	3,4
2ed pillar: Infrastructure	75	4.1
3rd pillar: Macroeconomic environment	72	4,6
4th pillar: Health and primary education	52	6,0
<i>Subindex B: Efficiency enhancers</i>	82	4,0
5th pillar: Higher education and training	59	4,6
6th pillar: Goods market efficiency	110	4,0
7th pillar: Labor market efficiency	92	4,0
8th pillar: Financial market development	101	3,6

Index Component	Rank/137	Score (1-7)
9th pillar: Technological readiness	72	4,2
10th pillar: Market size	74	3,7
<i>Subindex C: Innovation and sophistication factors</i>	104	3,3
11th pillar: Business sophistication	110	3,5
12th pillar: Innovation	95	3,1

Source: World Economic Forum, The Global Competitiveness Report 2017-2018.

Conclusion

All the presented results indicate as well as obligate countries, especially transition countries and developing countries, to identify problems, to analyze and to try to find solutions that affirm the economy and enterprise and stimulate faster economic growth.

The creation of a highly competitive economy is a complex and continuing task for each country that wishes to develop and, in that context, the role of the state in creating an environment that will stimulate competitiveness is paramount, as that is the way to soften the effects of recession and set the speed of economic recovery.

There is a tendency of constant improvement of Serbia's position in the world competitiveness list (in 2013 it occupied 101st position). However, there are several areas that have been ranked low for a long period of time and represent a limitation for further improvement of competitiveness – sophistication of business, efficiency in the goods market, institutions and development of the financial market, which is why Serbia continues to be badly positioned.

We can conclude that, for the sake of business success in Serbia, it is necessary to perform more active comparisons with the best practices of developed countries and to be oriented towards raising the level of company innovation and productivity, as well as recognizing the potential and the development of one's own competitive strengths and abilities, which stimulate and support international trade and investment in the domestic economy.

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Analiza czynników wpływających na rozwój gospodarczy i przewagę konkurencyjną kraju

Streszczenie: Konkurencyjność, jako jeden z kluczowych czynników rozwoju kraju, umożliwia poprawę ogólnej atmosfery gospodarczej zarówno dla jednostek, jak i dla samych przedsiębiorstw oraz dla całego kraju. Ponieważ zmiana jest nie tylko pożądana, ale wręcz wymagana, staje się jasne, że jest ona jednym z warunków przetrwania na rynkach światowych. W niniejszym artykule przeanalizowano teorię konkurencyjności, zgodnie z którą kompetencje niektórych krajów nie były dziedziczone, lecz tworzone strategicznymi wyborami i realizacją celów, w oparciu o wiedzę i rozwiniętą infrastrukturę, zaawansowane technologie i innowacje. W tym kontekście duże znaczenie mają analizy wskaźników konkurencyjności, na podstawie których można wykazać sukces

przedsiębiorstwa i branży przemysłowej, porównując liczne aspekty makroekonomiczne (polityka makroekonomiczna, infrastruktura rynkowa, rozwój instytucjonalny) i czynniki mikroekonomiczne (otoczenie biznesu, zaawansowanie operacji i strategii firmy). Na potrzeby tego badania wykorzystano metodologię Światowego Forum Ekonomicznego, która przyczynia się do lepszego zrozumienia profilu konkurencyjności niektórych krajów oraz sposobów ich poprawy i specjalizacji. Określone rankingi pomagają twórcom polityki gospodarczej kształtować i oceniać wyniki krajowe pod względem konkurencyjności, co dodatkowo pomaga firmom w poprawie ich konkurencyjności w stosunku do innych podmiotów. Stworzenie wysoce konkurencyjnej gospodarki jest złożonym i ciągłym zadaniem dla każdego kraju, który chce się rozwijać, i w tym kontekście rola państwa w tworzeniu środowiska, które pobudzi konkurencyjność, jest najważniejsza, ponieważ jest to sposób na złagodzenie skutków recesji i ożywienie gospodarcze.

Słowa kluczowe: konkurencyjność, rozwój gospodarczy, wskaźnik globalnej konkurencyjności

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