

INFRASTRUCTURE AS A COMPETITIVENESS FACTOR IN THE WESTERN BALKAN COUNTRIES

UDC 339.137.2(497-15)

Danijela Despotović¹, Milorad Filipović², Vojislav Ilić³

¹Faculty of Economics, University of Kragujevac, Serbia

²Faculty of Economics, University of Belgrade, Serbia

³OŠ MDT, Kragujevac, Serbia

Abstract. *The concept of a country's competitiveness has increasingly gained in importance recently, although it is still contested in theory. Well developed and interconnected transport and energy infrastructures are the key drivers of economic growth and employment as well as important factors for attracting new investments and improving competitiveness. By using the GCI (WEF) dataset, the paper considers the global competitiveness of the six countries of the Western Balkans (Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania and Macedonia) for the period 2006-2014, with particular emphasis on the importance of the second GCI pillar (Infrastructure) for improving competitiveness in these countries. The paper demonstrates a weak trend in infrastructure development of the region and a lack of balance among the countries in terms of the observed indicators. Hence there is a need for comprehensive infrastructure strategies in every individual country observed and also through joint regional approach to this problem.*

Key words: *country's competitiveness, Global Competitiveness Index, infrastructure, the Western Balkans*

INTRODUCTION

In theory there are diametrically opposed views on the relevance of the concept of competitiveness. Because of 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 sometimes it is even confusing (Snieska & Bruneckienė, 2009). This is evidenced by the fact that some economic analysts believe that competitiveness has characteristics of “the natural law of modern capitalist economy” (Kitson et al., 2004),

Received January 25, 2016/ Accepted March 20, 2016

Corresponding author: Danijela Despotović

Faculty of Economics, University of Kragujevac, Djure Pucara Starog street 3, 34000 Kragujevac, Serbia

E-mail: ddespotovic@kg.ac.rs

while others think that definition of competitiveness refers to productivity which measures the value of goods and services per factor unit, produced in a particular territory (Krugman, 1996 and Ketels, 2003).

We should distinguish between *microeconomic* and *macroeconomic* aspects of competitiveness. At a micro level, competitiveness is the ability of companies to compete, grow and be profitable (Martin, 2006). So, micro-competitiveness refers to the ability of a company to consistently and profitably produce output that meets the requirements of an open market in terms of price, quality, etc. (The World Competitiveness Yearbook, 2000). A company that is more competitive than its rivals will have better chances to gain larger market share. In contrast, firms that are not competitive will be characterized by a drop in market share. Eventually, due to a drop in competitiveness these firms might disappear from the market.

Unlike the competitiveness of enterprises, the concept of a country's competitiveness (*macro-competitiveness*) is a controversial phenomenon theoretically. The competitiveness of a country is defined as the set of institutions, policies and factors that affects the national level of productivity (Marginen, 2006). On the other hand, productivity growth is the level of progress that an economy can reach. Productivity level also determines the rates of return on investments which are the fundamental drivers of economic development. In other words, a more competitive economy will probably grow faster in the future.

There is a consensus that the progress in economic performance of a country does not have to come at the expense of another country (i.e. there are no winners and losers) and that productivity is the central problem of competitiveness. Therefore, understanding, quantification and analysis of the competitiveness factors of a country become an important dimension of the development policy, which seeks to improve the quality of key macroeconomic performances. While it is obvious that theorists essentially associate a country's competitiveness to its economic performance, the fact is that this phenomenon is increasingly considered in relation to the country's position relative to other countries, rather than in relation to its accumulated wealth (Nijkamp, & Siedschlag, 2011).

The paper provides a comparative analysis of the Western Balkans competitiveness with special emphasis on *Infrastructure*¹ as a competitiveness factor. The initial assumption is that *infrastructure* development leads to productivity growth and higher living standards (Agbelie, 2014; Cvetanović, Zlatković, Cvetanović, 2012; Filipović and Njegovan, 2012; Erber, 1995; Gainova et al. 2013; Kumar, 2001; Vickerman, 1989). After all, in addition to human capital, physical capital and knowledge, the Porter list of competitiveness factors contained national infrastructure as well (Porter, 1998, 74-81).

In addition to the introduction, conclusion and list of literature consulted, the paper consists of three parts. First of all, the paper describes methodology and explains metrics of a country's competitiveness according to the WEF's GCI framework. Then the paper provides a comparative review of the Western Balkan countries competitiveness. Finally, there is a special reference to the infrastructure component of competitiveness expressed by using selected indicators of the Western Balkans, which are crucial (in our opinion) for research defined in the paper.

¹ The paper includes the Republic of Croatia as the Western Balkan country, although on 1 July 2013 Croatia became a full-fledged member of the European Union.

1. COUNTRY’S COMPETITIVENESS

1.1. The WEF’s methodology

There is still no unique methodology for measuring a country’s competitiveness. In practice there are several methodological tools for measuring competitiveness. However, only the World Economic Forum explicitly uses the term *competitiveness* in its index. The Global Competitiveness Index is a composite index, which is formed as the weighted average of the twelve pillars’ values. Each of these pillars is a composite index by itself, and is formed as the weighted average of three sub-indicator groups whose values are obtained from primary and secondary sources (Figure 1).



Fig. 1 The GCI structure

Source: modified according to the WEF, 2014, p. 9

Institutions are determined by the legal and administrative framework within which individuals, firms and governments work together to generate wealth. The importance of sound institutions has become an even more obvious factor of competitiveness during the latest economic and financial crisis.

Infrastructure is very important for the efficient functioning of the economy and is an important factor in determining the location of certain economic activities in certain geographic areas. Well-developed infrastructure minimizes the impact of spatial distance, integrating the national market and connecting it at low cost to markets in other countries and regions. In addition, the quality of infrastructure significantly affects the economic growth and reduces income inequality.

Macroeconomic environment is important to the business and therefore to the country's competitiveness. A stable macroeconomic environment *per se* cannot increase the productivity of the nation, but an unstable macroeconomic environment is harmful to the functioning of the economy.

Health and primary education are vital to improving competitiveness. Unhealthy workers will be less productive. Poor health leads to increased costs to the company, because ill workers are often absent or work less efficiently. Therefore, investment in health care is critical in economic and social terms. Primary education increases the efficiency of workers. As a rule, workers with low levels of formal education are able to carry out only simple manual tasks and they find it much more difficult to adapt to more advanced production processes and techniques. In other words, the lack of primary education can become a constraint on the development of the company because it cannot make progress by producing more sophisticated and higher-quality products with existing human resources.

Higher education and training are particularly important for economies that want to develop more complex production processes, in technological terms. A modern global economy requires nurturing of well-educated workers who are able to carry out complex tasks and adapt quickly to the changing environment and the evolving needs of the production.

Goods market efficiency ensures efficient trade of goods, in accordance with the supply and demand conditions. Healthy market competition, both domestic and foreign, is important for the market efficiency and hence for the productivity improvement process.

Labor market efficiency ensures that workers give their best in their jobs. Labor markets must therefore have the flexibility to shift workers quickly from one economic activity to another. Also, labor market must have the flexibility to allow for wage fluctuations without major social disturbances.

Financial market development implies that an efficient financial sector allocates resources to the most productive activities. A thorough and proper risk assessment is the key factor of a sound financial market. Economic development implies the existence of sophisticated financial markets that enable private sector investments.

Technological readiness measures the agility with which an economy adopts existing technologies in order to improve productivity. Whether the technology used has or has not been developed within national borders is irrelevant for a country's ability to improve productivity. It is crucial that companies operating in the country have access to advanced technologies.

Market size affects productivity. Large markets allow companies to exploit the effects of the economies of scale. In the globalization era, international markets to some extent can be a substitute for domestic markets, especially in the case of small countries. Empirical research shows that trade openness is positively associated with economic growth.

Business sophistication generates higher efficiency in the production of goods and services. Business sophistication refers to two intertwined elements: the quality of a country's overall business networks and the quality of individual firms' operations and strategies. These factors are especially important for countries at higher stages of economic development when basic sources of productivity improvements have been exhausted.

Innovation can be the result of new technological and non-technological knowledge. Non-technological innovations are closely related to practical knowledge, skills, and working conditions within the organization. Although significant gains can be obtained by improving institutions, building infrastructure, reducing macroeconomic instability or improving human capital, all these factors eventually lead to diminishing returns. The same is true for the efficiency of the financial, goods and labor markets. In the long run, innovation can improve living standards to a great extent.

1.2. Metrics

The values of the 12 pillars of the Global Competitiveness Index are derived from *primary* and *secondary* sources. Primary data are obtained on the basis of standardized surveys (the Survey) that are conducted every year in the covered countries. The Survey captures the opinions of the highest-level executives in companies that constitute a representative sample. These data are called *soft data*. The number of companies included in the sample varies from country to country and depends primarily on the country's size. The sample consists of small- and medium-sized enterprises and large companies. The WEF's guidelines precisely define each company's share (by its size) in the sample. It is worth noting that each year a half of the sample consists of the companies from the previous year sample, while the other half is selected randomly from the defined sampling frame. Retaining the elements from the previous year sample contributes to greater stability of the Survey results and gives validity to numerous panel analyses. Primary data from the Survey are necessary for calculating those sub-indicators for which there are no secondary, quantitative datasets for all countries included in the WEF's rankings. The Survey covers a wide range of issues related to the business conditions, legal regulations, market climate, political situation, etc. It is evident that only the Survey can provide data for the above-mentioned issues and many other issues that are important for creating a country's international competitiveness profile.

Calculation of sub-indicators of competitiveness (such as the level of taxes, inflation rate, budget deficit, number of telephone lines, number of procedures for starting a business, etc.) uses data from internationally comparable datasets (e.g. datasets of the IMF, the World Bank, the WTO, the UN, etc.). These data are called *hard data*.

All data, whether primary or secondary, are standardized on a 1-to-7 scale (1 – the worst score, 7 – the best score), which is also a range of possible values for all sub-indicators, pillars of competitiveness and even the GCI. Regarding the Survey, there is no need to normalize most of the questions because the Survey uses a balanced 7-point Likert scale. Contribution of the Survey data to the GCI calculation is approximately 70%, while the share of secondary data is approximately 30%.

1.3. Stages of development

The GCI assumes that countries experience *3 stages of development*. In the *first stage*, basic factors of competitiveness (well-functioning public and private institutions, well-developed infrastructure, stable macroeconomic environment and good, healthy workforce that has received at least a basic education) are important for growth and productivity.

Further, countries move into the *second stage* of development, when they develop more efficient production processes and increase product quality. At this stage, competitiveness growth is influenced by higher education and training, efficient goods market, well-functioning labor market, developed financial market, large domestic or foreign markets and the ability to harness the benefits of existing technologies.

Finally, countries move into the *third stage* where the growth of productivity and competitiveness is possible primarily due to innovations. Knowledge-based economy is the dominant model of economy in the 21st century, while the global economy development is becoming innovation-driven. Innovations and knowledge in the broadest sense are increasingly becoming development factors and hence competitiveness factors.

The significance of the pillars within the group for an individual country depends on its development level. A relatively precise and simple criterion is used for grouping countries by their development levels. The criterion starts from the realized level of GDP per capita, denominated in US dollars. There are three basic and two transitional stages of economic development. The weights that are assigned to pillars groups that form the GCI value depend on the stage of the country.

For every development stage the key drivers of competitiveness are pillars from different groups. Hence, in the composite GCI value calculation, the participation rate of basic requirements is 40%, efficiency enhancers 50%, while innovation and sophistication factors participate with 10%. Accordingly, the values of the pillars in the “Efficiency enhancers” group, have proportionately the greatest influence on the total GCI value calculation.

By using the GCI (WEF) dataset, the paper considers the global competitiveness of six countries of the Western Balkans (Croatia, Bosnia and Herzegovina, Serbia, Montenegro, Albania and Macedonia) (Figure 2) with a special reference to the infrastructure component of competitiveness.



Fig. 2 The Western Balkans

Five out of six analyzed countries of the Western Balkans are in the second stage of development, with the exception of Croatia which is in transitional stage between the second and the third stage of economic development (Despotovic, Cvetanović & Nedić, 2014).

2. COMPARATIVE ANALYSIS OF THE WESTERN BALKAN COUNTRIES COMPETITIVENESS

Tables 1 and 2 provide data on the GCI values and rankings of Serbia and the Western Balkan countries for the period 2006-2014.

According to the WEF's Report 2014-2015, Serbia is ranked as 94th out of the total of 144 countries according to GCI value (3.90). Macedonia recorded the highest GCI value (4.26) in 2014-2015, while Albania had the lowest value (3.84). Historically, Serbia achieved the highest GCI value (3.90) on the eve of the first crisis wave in 2008, but in 2009 the GCI value noticeably declined to 3.77. A mild recovery trend followed, and in 2014-2015 it returned to the pre-crisis level.

Table 1 The GCI of the Western Balkan countries, 2006-2014

Edition of report	Country					
	Albania	Bosnia and Herzegovina	Croatia	Macedonia, FYR	Montenegro	Serbia
2006-2007	3.56	3.82	4.16	3.81	/	/
2007-2008	3.48	3.55	4.20	3.73	3.91	3.78
2008-2009	3.55	3.56	4.22	3.87	4.11	3.90
2009-2010	3.72	3.53	4.03	3.95	4.16	3.77
2010-2011	3.94	3.70	4.04	4.02	4.36	3.84
2011-2012	4.06	3.83	4.08	4.05	4.27	3.88
2012-2013	3.91	3.93	4.04	4.04	4.14	3.87
2013-2014	3.85	4.02	4.13	4.14	4.20	3.77
2014-2015	3.84	/	4.13	4.26	4.23	3.90

Source: Competitiveness Dataset, WEF (Geiger, 2015).

Table 2 The ranking of the Western Balkan countries according to GCI, 2006-2014

Edition of report	Country	GCI rank					
		Number of country	Albania	Bosnia & Herzegovina	Croatia	Macedonia, FYR	Montenegro
2006-2007		122	98	82	56	84	
2007-2008		131	109	106	57	94	82
2008-2009		134	108	107	61	89	65
2009-2010		133	96	109	72	84	62
2010-2011		139	88	102	77	79	49
2011-2012		142	78	100	76	79	60
2012-2013		144	89	88	81	80	72
2013-2014		148	95	87	75	73	67
2014-2015		144	97		77	63	67

Source: Competitiveness Dataset, WEF (Geiger, 2015).

Figure 3 is based on the data from Table 1 and illustrates the GCI trends for Serbia and the Western Balkans in the period 2006-2014.

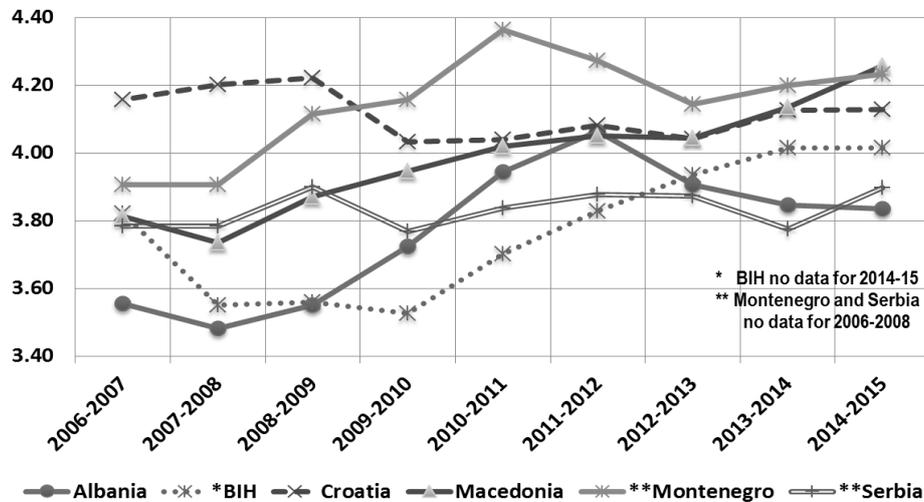


Fig. 3 The GCI trend, 2006-2014

Source: Authors' calculation based on Competitiveness Dataset. WEF 2015

It is notable that in the observed period Croatia and Montenegro show the best scores according to the criterion of competitiveness. Macedonia has the most favorable upward trend. Albania and Bosnia and Herzegovina show excessive oscillation in the index values and consequently in the rankings. As an illustration, you can notice that in 2012 Bosnia and Herzegovina improved its competitiveness by 12 positions within a year. So this country was ranked higher than Serbia on the WEF's list, for the first time since the beginning of the GCI calculating and publishing. In 2009 Albania also improved its global competitiveness by 12 positions, within a year (Table 2). Serbia shows the smallest oscillations in the index value and consequently in the ranking. Regarding competitiveness, after mild increase in the GCI values in 2010 and 2011, the trend has been stagnant since 2012. Figure 3 shows that the highest level of convergence of the GCI values for the selected countries group was reached in 2012-2013.

The following 3D area chart (Figure 4) shows the GCI structure for the observed region of the Western Balkans as a whole, by main pillars of competitiveness for the period 2006-2014.

It can be concluded from the figure that *Macroeconomic environment* and *Technological readiness* show significant divergence in the observed period. Other relatively significant characteristics are: stable and high level of *Health and primary education* pillar; alarmingly low value of *Innovation* pillar (despite a slight improvement); *Infrastructure* pillar showed a significant upward trend in the last decade, on a regional basis.

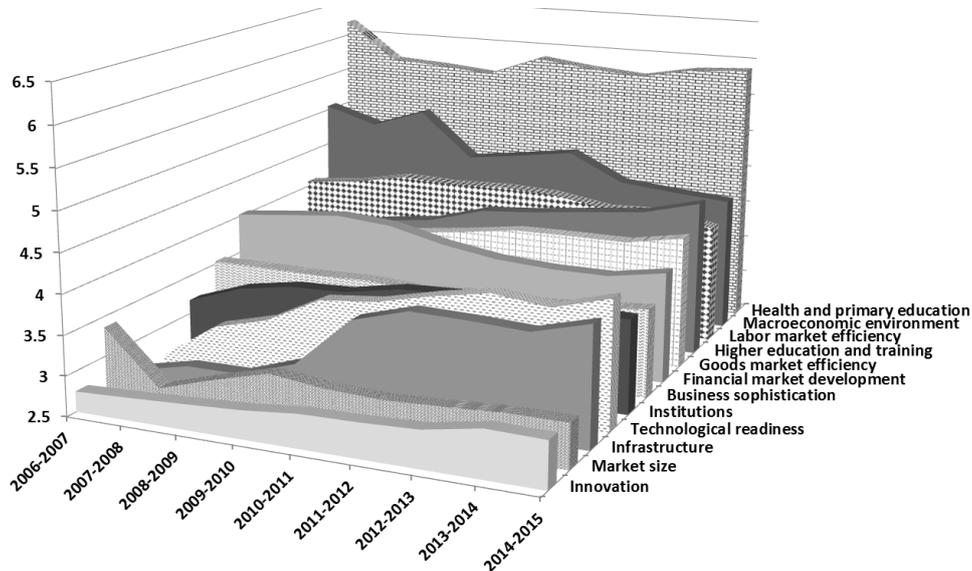


Fig. 4 Time series of the values of the GCI pillars – the Western Balkans
 Source: Authors' calculation based on Competitiveness Dataset. WEF 2015

3. INFRASTRUCTURE AS AN ELEMENT OF THE GCI

Transport infrastructure and transport costs significantly affect the competitiveness of individual areas. Among all infrastructure sectors, transport is the most important for increasing a country's competitive ability to attract new investments (Farhadi, 2015; Cvetanović, Zlatković, Cvetanović, 2011).

In this paper, evaluation of the infrastructure development levels in the observed countries is based on the comparative analysis of the values of 6 out of 9 indicators covered by the second GCI pillar – *Infrastructure* (from the sub-indices of the first stage – *factor-driven stage* – which are darkened in Figure 5). These parameters are: 1) Overall infrastructure, 2) Roads infrastructure, 3) Railroad infrastructure, 4) Port infrastructure, 5) Air transport infrastructure and 6) Electricity supply infrastructure.

Well-developed transport and communication networks are important preconditions for less developed communities to have access to crucial economic activities (Gavanas and Pitsiava, 2011). Efficient transport, including high-quality roads, railways, ports and air transport enable entrepreneurs to deliver their goods and services to the market safely and timely and enable workers to commute. The economy also depends on the continuous electricity supply so that companies can operate without disturbances.

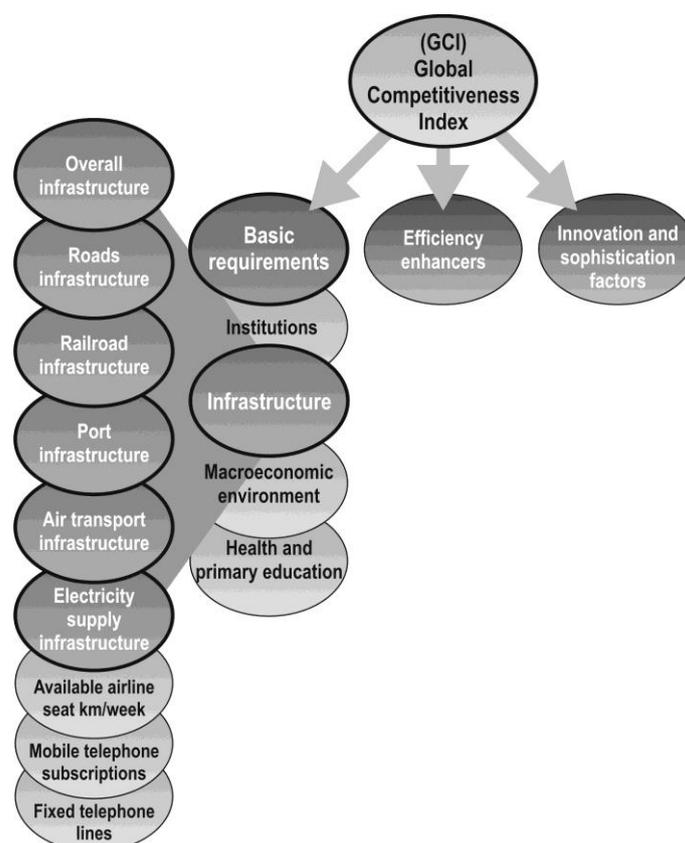


Fig. 5 Observed indicators of the second GCI pillar – Infrastructure
Source: modified according to the WEF, 2014, p. 9 & p. 50

Table 3 provides data on the value of *Infrastructure* for the Western Balkan countries in the period 2006-2014.

Table 3 Infrastructure

Edition of report	Country					
	GCI 2nd pillar: Infrastructure (value 1-7)					
	Albania	Bosnia and Herzegovina	Croatia	Macedonia, FYR	Montenegro	Serbia
2007-2008	2.05	2.26	3.95	2.90	2.79	2.72
2008-2009	2.22	2.20	3.98	2.90	2.72	2.68
2009-2010	2.84	2.18	4.26	3.05	3.00	2.75
2010-2011	3.46	3.16	4.63	3.45	3.85	3.39
2011-2012	3.87	3.24	4.73	3.66	4.01	3.67
2012-2013	3.48	3.44	4.65	3.65	4.06	3.78
2013-2014	3.33	3.67	4.66	3.63	4.04	3.51
2014-2015	3.52		4.72	3.73	4.10	3.93

Source: Competitiveness Dataset, WEF (Geiger, 2015)

Figure 6 illustrates the *Infrastructure* trend.

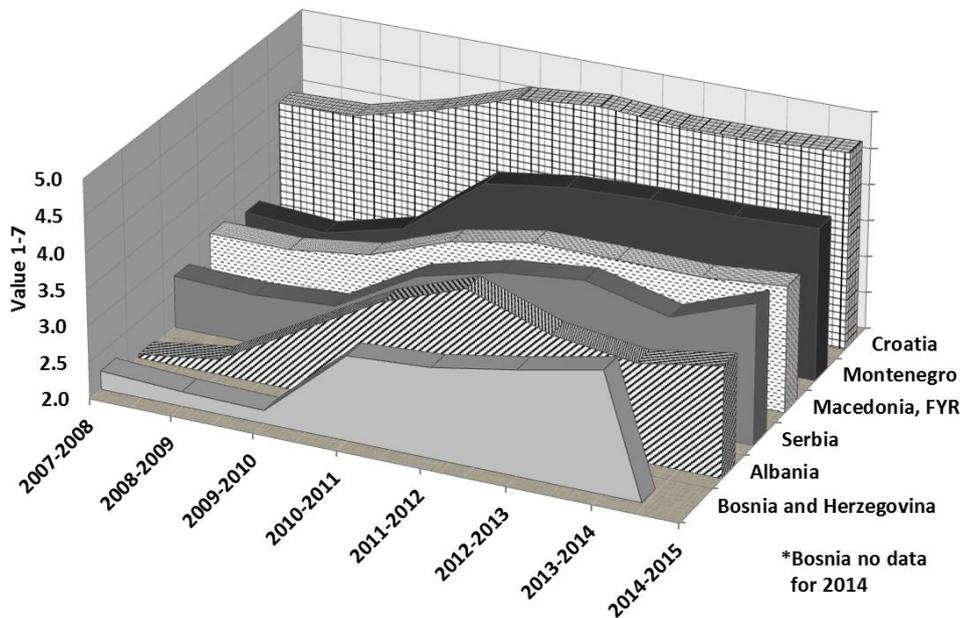


Fig. 6 Trend in Infrastructure

Source: Authors' calculation based on Competitiveness Dataset. WEF 2015

From the analysis of the presented data, it is possible to formulate the following conclusions:

- Firstly, all six countries of the Western Balkans reported significant improvement of Infrastructure indicators in the period 2006-2014. Surely, this is one of few pillars of competitiveness in which the analyzed countries had significant success.
- Secondly, according to the criterion of infrastructure development among the six observed countries, Croatia is significantly ahead of other countries. In 2014 Croatia was ranked 44th out of 144 analyzed countries (the value of the indicator of 4.72).
- Thirdly, Albania had by far the highest intensity of Infrastructure improvement (from 2.05 in 2007-2008 to 3.52 in 2014-2015). Montenegro also made a substantial qualitative progress in this area (from 2.79 in 2007-2008 to 4.10 in 2014-2015).
- Fourthly, Serbia demonstrated a significant increase in the value of Infrastructure indicators in 2014. The realization of projects of road infrastructure in 2012 (construction of local and regional roads as well as finalization of construction and reconstruction of major bridges and overpasses in Belgrade and on Corridor 10) significantly affected the change in estimation of the competitiveness pillar which measures the quality of national infrastructure.

After a summary review of trends in values of the composite pillar – *Infrastructure*, in further research it is important to look at the trends in its individual components. Therefore Figure 7 shows trend in the average values of 6 observed indicators of the second pillar – *Infrastructure*.

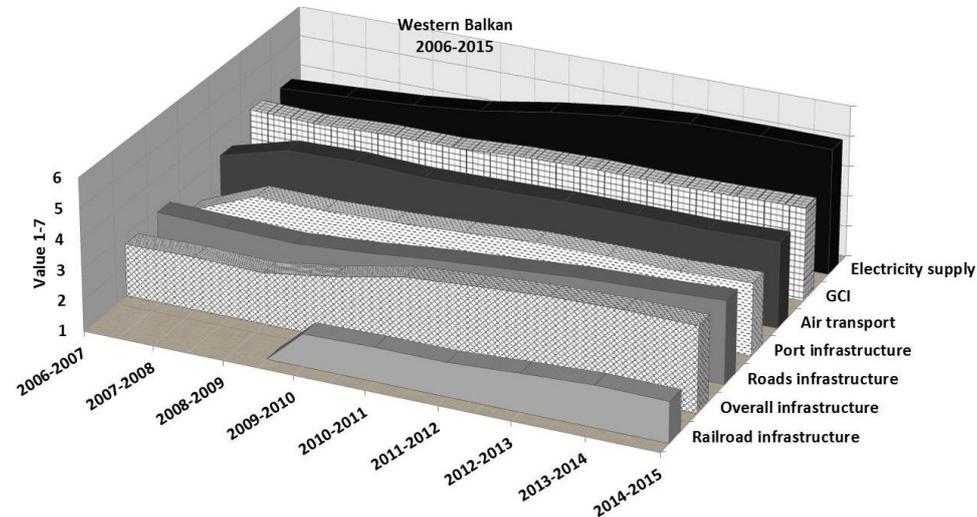


Fig. 7 The observed indicators of Infrastructure

Source: *Competitiveness Dataset, WEF (Geiger, 2015)*

Based on Figure 7, it is possible to formulate the following conclusions:

- The observed indicators showed significant upward trends until 2011-2012, but since then all indicators have shown stagnant trends.
- Indicator – *Electricity supply infrastructure* – shows the most impressive positive trend and absolute values, and this can be a significant competitive advantage of the region (although we believe it is an echo of former integrative processes, because with the exception of Albania all other countries of the region were parts of the same federal state until the 1990s).
- Indicators – *Overall infrastructure* and *Road infrastructure* – also show noticeable positive trends. The worst situation by far is detected in *Railroad infrastructure*, which shows low values and a stagnant trend as well. This is a major problem in the region because the railway is an important infrastructural prerequisite for economic development of the Western Balkans.

After overview of trends in individual infrastructure indicators for the whole Western Balkan region, what follows is their overview by individual economies in the region for the last available year (Figure 8).

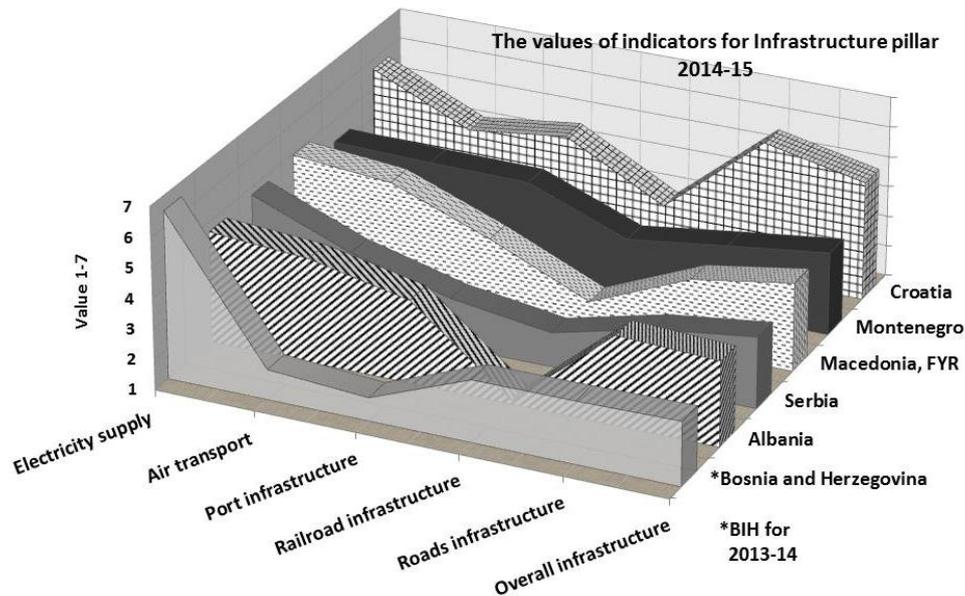


Fig. 8 Indicators of Infrastructure, by individual countries (latest available data)
 Source: Authors' calculation based on Competitiveness Dataset. WEF 2015

The results follow the previous discussion and show even greater imbalance for the most impressive indicator of the group – *Electricity supply infrastructure*. The imbalance is the most noticeable in Bosnia and Herzegovina. Other infrastructure indicators in this country are very weak, but on this indicator Bosnia and Herzegovina is by far the best in the group. We can also notice group imbalance for the weakest indicator – *Railroad infrastructure*. Regarding this indicator Bosnia and Herzegovina shows the best scores in the observed region (we mentioned before that in our opinion it was an echo effect of the former federal entity). Generally, Croatia shows the best scores on all other indicators (except the two mentioned above), while Bosnia and Herzegovina and Serbia are at the very bottom.

CONCLUSION

Investments in infrastructure undoubtedly lead to higher productivity, increased economic output and improved national competitiveness. In addition to reduced transport costs and improved access to markets and raw materials, there are also benefits from better regional and global cooperation and improvement of the overall economic and social environment. These benefits represent a significant potential that can help countries to improve their comparative advantage.

Time series analysis of individual infrastructure indicators and composite pillar – *Infrastructure* (one of the 12 pillars of the GCI) showed significant variability at the level of the Western Balkan region and also at the level of individual economies in the

observed group. General conclusion is that development of infrastructure indicators at the regional level is mutually uncoordinated and not as rapid as it should be. Also there is a significant imbalance among these indicators. This reflects the lack of a regional strategy for infrastructure development as a necessary condition for further sustainable improvement of competitiveness of the observed region. For better understanding of infrastructure impact on competitiveness level of the national economy, further research should explore the relationship between infrastructure investment costs and economic growth rate measured (for instance) by GDP per capita (for instance).

General imbalance of the *Infrastructure* pillar as well as imbalance among individual indicators undermine further harmonization processes in the region and represent a huge obstacle to economic cooperation among countries in the region and to economic cooperation between the entire region and the European or global environments.

REFERENCES

1. Agbelie, B. R. (2014) An empirical analysis of three econometric frameworks for evaluating economic impacts of transportation infrastructure expenditures across countries. *Transport Policy*, 35, 304-310.
2. Cvetanović, S. Zlatković, A., & Cvetanović, D. (2011) Putna infrastruktura kao komponenta fizičkog kapitala u modelima privrednog rasta, *Put i saobraćaj*, 57(4):35-40.
3. Cvetanović, S. Zlatković, A., & Cvetanović, D. (2012) Investicije u opremu i puteve i ekonomska konvergencija zemalja, *Put i saobraćaj*, 58(3): 21-28.
4. Despotovic, D. Z., Cvetanović, S. Ž., & Nedić, V. M. (2014) Innovativeness and competitiveness of the Western Balkan countries and selected EU member states. *Industrija*, 42(1), 27-45.
5. Erber, G. (1995) Public infrastructure, productivity and competitiveness: Analysis of relative differences and impacts with regard to US and German industries (No. 115). *DIW Discussion Papers*.
6. Farhadi, M. (2015) Transport infrastructure and long-run economic growth in OECD countries. *Transportation Research Part A: Policy and Practice*, 74, 73-90.
7. Filipović, M., & Njegovan, Z. (2012). Supporting local economic development by infrastructure debt financing in the Republic of Serbia. *Spatium*, (27), 8-11.
8. Gainova, R. A., Shaidullin, R. N., Safullin, L. N., & Maratkanova, E. M. (2013). Infrastructural Component in Maintenance of Competitiveness of Region. *World Applied Sciences Journal*, 27(13), 97-101.
9. Gavanas, N., & Pitsiava, M. (2011). Description of the new member states transport system in an era of convergence: Development of an indicator system. *Spatium*, (24), 37-44.
10. Geiger, T. (2015) Competitiveness Dataset. World Economic Forum. Retrieved July 26, 2015. (http://www3.weforum.org/docs/GCR2014-15/GCL_Dataset_2006-07-2014-15.xlsx)
11. Ketels, H. (2006) Michael Porter's Competitiveness Framework – Recent Learnings and New Research Priorities, *Journal of Industry Competition and Trade*, Vol. 6. Issue 2. pp. 115-136.
12. Kitson, M. (2004) Failure followed by success or success followed by failure? A re-examination of British economic growth since 1949, in Floud, R. and Johnson, P. (Eds) *The Cambridge Economic History of Modern Britain, Vol. III: Structural Change and Growth*, 27–56. Cambridge University Press, Cambridge.
13. Krugman, P. (1994) *Competitiveness: A Dangerous Obsession*, Foreign Affairs, 1994, 73(2): 28-44.
14. Kumar, N. (2001) Infrastructure availability, foreign direct investment inflows and their export-orientation: A cross-country exploration. *Research and Information System for Developing Countries*, New Delhi, 20.
15. Marginean, S. (2006) Competitiveness: From microeconomic foundations to national determinants, *Studies in Business and Economics*, Vol. 1. Issue 1, pp. 29-35.
16. Martin, R. (2004) A Study on the Factors of Regional Competitiveness, *A draft final report for the European Commission Directorate-General Regional Policy*, European Commission.
17. Nijkamp, P., & Siedschlag, I. (2010) *Innovation, growth and competitiveness: dynamic regions in the knowledge-based world economy*. Springer Science & Business Media.
18. Porter, M. (1998) Location, Clusters, and the "New" Microeconomics of Competition. *Business Economics* Vol. 33, No. 1 , pp. 7-13

19. Snieška, V. & Bruneckienė, J. (2009) Measurement of Lithuanian Regions by Regional Competitiveness Index. *Engineering economics*, No. 1 (61).
20. *The world competitiveness yearbook*. (2000). Switzerland: I.M.D.International.
21. Vickerman, R. W. (1989) Measuring changes in regional competitiveness: The effects of international infrastructure investments. *The Annals of Regional Science*, 23(4), 275-286.
22. WEF (2014) *The Global Competitiveness Report 2014-2015*. World Economic Forum, Geneva.

INFRASTRUKTURA KAO FAKTOR KONKURENTNOSTI ZEMALJA ZAPADNOG BALKANA

Iako u teoriji još uvek osporavan, koncept konkurentnosti zemlje je kontinuirano dobijao na značaju tokom poslednjih godina. Dobro razvijena i uzajamno povezana saobraćajna i energetska infrastruktura predstavlja ključni pokretač privrednog rasta i zaposlenosti kao i značajan faktor za privlačenje novih investicija i unapređenja konkurentnosti. U radu je koristeći podatke iz baze GCI (WEF), sagledavana globalna konkurentnost šest zemalja Zapadnog Balkana (Hrvatska, BiH, Srbija, Crna Gora, Albanija i Makedonija) u periodu 2006-2014., sa posebnim osvrtom na značaj drugog stuba GCI – Infrastruktura za unapređenje konkurentnosti ovih zemalja. Rad pokazuje nedovoljan trend razvoja infrastrukture regiona i neizbalansiranost među zemljama po posmatranim indikatorima. Time se nameće potreba za sveobuhvatnim infrastrukturnim strategijama kako kod svih posmatranih zemalja pojedinačno tako i kroz zajednički regionalni pristup ovom problemu.

Ključne reči: konkurentnost zemlje, globalni indeks konkurentnosti, infrastruktura, Zapadni Balkan