COMPETITIVENESS OF THE SOUTHEAST EUROPEAN COUNTRIES IN THE CONDITIONS OF THE GLOBALIZATION

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Abstract: Globalization is a process often identified with the economic integration of countries, the creation of a single market while neglecting other aspects of globalization. Besides its economic dimension, the KOF index of globalization includes the social and political dimensions. One of the questions is how the countries manage to strengthen their competitive position in the international market in the age of globalization. Is it challenging to maintain a stable competitive position in the conditions of greater connection of countries and in what form? For this reason, the paper deals with the change of the Global Competitiveness Index, a renowned measure of the competitiveness of national economies according to the methodology of the World Economic Forum, under the influence of increased economic globalization of Southeast European countries. It also estimates the impact of globalization, or its economic, social and political dimension on the economic growth of Southeast European countries, which is one of the requirements for successful positioning on the international economic scene.

Keywords: competitiveness, economic growth, globalization, economic globalization, Southeast Europe, KOF Globalization Index, Global Competitiveness Index

JEL classification: F60, F63, O11

1. Introduction

The contemporary flows of the countries’ functioning around the world have led to their increasing connection in economic, political, sociological, and cultural terms. Globalization is a process that has been talked about for decades and it is more or

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less present in various spheres of life. Increased integration of countries, as a consequence of the process of globalization and liberalization, also contributed to the establishment of stronger economic cooperation between countries. Namely, it is a complex process whose positive effects are multifaceted, in addition to the benefits it brings, states also face many challenges. The need for better positioning on the international economic scene has led countries to make great efforts to improve national competitiveness. Of course, the further economic progress of the country depends on national competitiveness.

When it comes to globalization the most often it refers to the process of creating a single market for goods and capital markets, and the removal of barriers to international trade and reduction of protectionism. Besides, globalization involves removing both geographical and temporal barriers by introducing modern technology, as well as disseminating knowledge. In this way, the proponents of globalization point out that it is possible to stimulate competition to strengthen competitive position and advance economic development.

In any case, there is no agreement on the effects of globalization in the literature. Globalization causes financial development, improves trade volume, increases investment, effectiveness and competition control. On the other hand, there are arguments that the main drivers of globalization, multinationals, are altering the market structure by preventing smaller companies from entering the market because of their earned capital and the power they enjoy, thus limiting competition. Globalization also has expanded wage imbalance, led to some deterioration in natural and social benchmarks, expanded the risk of financial emergency, caused growing inequalities between countries and marginalization of the impact of labour versus capital. In this way, globalization influenced the welfare of countries negatively. To avoid or at least reduce the negative side of global connectedness requires cooperation and agreement between the countries. It is necessary because the fact globalization is the main characteristic of the 21st century. The connection of countries also contributes to a more expressed "competition" on the world stage that is the efforts of states to achieve a dominant position in international affairs.

The process of globalization is especially important for developing countries that are lagging behind in the level of economic development, because of their limited resources. Their opportunities for advancement derive from cooperation with developed countries, foreign trade and foreign investment. For this reason, countries need to adjust their national policies to be as involved as possible in world affairs. Macroeconomic stability is important because it creates a competitive economy. In the international market, the focus is on effective specialization and competition consequently.

This paper aims to analyze the impact of the achieved degree of globalization and economic globalization of the Southeast European countries on their
competitive position and economic growth. The subject of the paper refers to the impact of the achieved degree of economic globalization, measured by the KOF Economic Globalization Index, on the competitive positions of Southeast European countries, measured by the Global Competitiveness Index, as well as the impact of the achieved degree of globalization of these countries, measured by the KOF Globalization Index, on their gross domestic product per capita growth. According to the defined aim and subject of the research, the paper assumes the following hypotheses:

**H1**: Increasing the economic globalization level has a statistically significant positive impact on improving the competitive position of Southeast European countries.

**H2**: Increasing the globalization level has a statistically significant positive impact on the gross domestic product per capita growth in Southeast European countries.

The paper is structured from several parts. After introduction the next section refers to the theoretical foundations of globalization and competitiveness. The applied methodology will be presented in the Section 3. The following section presents the analysis results of impact of the achieved level of globalization in the countries of Southeastern Europe measured by the KOF index of economic globalization, on the realized competitiveness level observed through the Global Competitiveness Index. There will also be presented the analysis results of the impact of globalization measured by KOF Globalization Index on the GDP per capita in Southeast Europe.

2. Theoretical background

There is no unanimous opinion about the emergence of globalization itself, as well as its accelerated development. Also, the researchers do not agree on the cause, the consequences and the positive or negative effects of globalization. Besides, it is not possible to see the overall effects, given the fact that globalization processes are still ongoing and appear to be accelerating. The IMF defines globalization as a historical process that is the result of innovation and technological progress. It refers to the growing integration of economies around the world, especially through trade and financial flows. The term also refers to migration that is the movement of labor and knowledge (technology) across borders. There are broader cultural and political dimensions of globalization (IMF, 2000).

Dreher defines globalization as the process of creating networks between actors across continental and multicontinental distances through various forms of flows of people, information and ideas, and capital and goods. Globalization is a process that erodes national borders, integrates national economies, cultures, technology, and governance and produces complex interdependencies (Dreher, 2006. p. 1094). Also, Dreher (2006) examined the link between globalization and economic growth...
by a panel analysis covering 123 countries from 1970 to 2000 and concluded that globalization accelerated growth but that the impact of political integration was not noticeable. The study, which also confirmed the positive impact of globalization, measured by foreign direct investment and the volume of international trade, on economic growth is one that covered EU27 countries from 2001 to 2006 (Polasek & Sellner, 2011). Research on the effects of economic, social and political globalization on economic growth of 74 countries from 1981 to 2011 showed that the economic growth in selected countries fueled by economic and political globalization, while the social dimension of globalization negatively affects economic growth (Kilic, 2015). If it will be observed on the time horizon, it is significant to mention the study conducted by Chang and Lee (2010). They analyzed the link between the overall index of globalization and its sub-indices; and economic growth in 23 OECD countries from 1970 to 2006 and found that there is a weak relationship between the observed variables in the short term, while in the long term there is an overall, economic and social globalization impact on economic growth. Radulović and Kostić (2020) analyzed globalization impact on economic growth in 19 EMU members from 1970 to 2016. They concluded that economic globalization positively affects economic growth in the short-run and long run.

According to Stiglitz (2002), globalization stimulates demand, investment and enhances the technological capabilities of countries while at the same time a greater degree of integration leads the risk of instability in the global capital market and it can weaken the financial system in less developed countries. Stiglitz (2003) examined the effects of the positive and negative aspects of globalization and the results of the study supported the fact that each country has its models of integration into the world economy. Also, the globalization can be a strong driver of economic growth, owing to right governance and adequate macroeconomic policy. The most frequent links between countries are financial channels, so low-income countries are not successful in the global market because of the asymmetry of information (Kazar & Kazar, 2016, p. 583). This link was also confirmed by Zhuang and Koo (2007), who explored the effects of globalization on the economic growth of 56 countries from 1991 to 2004. Also, Fischer (2003) has linked the openness of economies to economic growth higher rates. However, there have also been different approaches that are inconsistent with these studies (Rodriguez & Rodrik, 1999). Concerns approximately globalization have expanded in later a long time due to the impacts of financial development, destitution, disparity, regional differences, social mastery, natural or economic integration (Heshmati & Lee, 2010. p. 87). In this way, the effects of globalization have ended up one of the foremost disputable issues, as they have multifaceted suggestions. Bergh and Karlsson (2010) inspected the globalization effects on economic growth from 1970 to 1995 and from 1970 to 2005 in 29 OECD countries. The KOF Globalization Index was used as an independent variable in their model. The study showed that there were no statistically significant effects of globalization level on the economic growth of the OECD nations. The difference between studies is reflected in
measuring the level of globalization through the openness of the economy in terms of foreign trade or foreign direct investment rather than through more complex indices that would take into account other factors of globalization.

Different concepts of interpreting the competitiveness of economies derive from the lack of a single definition of national competitiveness. National competitiveness depends on the competitiveness of enterprises and companies operating in the country, so when analyzing the competitiveness of an economy, one must start with the factors that affect micro competitiveness. There is a difference between business competitiveness and national competitiveness. Porter asserts that companies are competing to win as much market share and greater profitability as states strive to create an environment that will increase productivity, and invest in those activities and industries that provide high returns on capital, as well as high wages (Snowdon & Stonehouse, 2006, p. 165). The World Economic Forum, which deals with the calculation of the Global Competitiveness Index, defines competitiveness as a set of institutions, policies and factors that determine the level of national productivity (WEF, 2017, p. 11). Organisation for Economic Co-operation and Development (OECD, 1992) defines national competitiveness as the degree to which it is possible to produce goods and services that respond to the requirements of the international market in free and fair conditions while maintaining and increasing domestic real income for the long term.

The basic elements of macroeconomic competitiveness are an increase in the standard of living and real income of the population, a free market and a settled international exchange of goods and services, and the balance and sustainability of economic policy. Competitiveness is a country's ability to optimize its resources so that it can compete in the global market, and to adapt to the changes that occur in these markets. A country's capacity reflects the outcome of its activity, which is reflected in an increase in the country's income or an improvement in the living standard (EC, 2003, p. 3). Haque et al. accepted the definition of competitiveness proposed by the U.S. Council on Competitiveness, which defines a country's ability to produce goods and services that can pass the international market while increasing real income for citizens (Haque et al., 1996, p. 4). However, Krugman argues that this would mean that national competitiveness for economies with a smaller international trade volume convert into productivity and has nothing to do with international competition (Krugman, 1996, p. 32). Specifically, Krugman criticizes the concept of national competitiveness where domestic factors predominantly contribute to higher gross domestic product per capita and to the promotion of well-being. These are not related to the international market assessment of forces. Nevertheless, the broadest definition of competitiveness is given by Michael Storper because he connected micro competitiveness with living standard, and by whom it represents "the ability of an economy to attract and retain firms with stable or growing market shares in economic activity with a sustainable or rising standard of living" (Storper, 1997, p. 20).
The emphasis on the competitiveness of nations is important because of their connections with developed countries and the growth of the living standards (Porter et al., 2001). Porter contemplates that the productivity is the only logical concept of global competitiveness. Explanation is the fact that the main aim of each country is to assure high and constantly rising living standards. Its ability to achieve that depends on productivity (Porter, 1990, p. 76). It is necessary for the country to first identify the source of its competitiveness or productivity. Productivity growth is driving GDP per capita growth, while productivity growth is stimulating by innovation. Innovations depend on the functioning of the famous Porter diamond of competitiveness. For these reasons, it is important to identify all productivity factors in the industries with the highest potential (Porter, 2008). For these reasons, improving competitiveness in the context of globalization has become a key goal of the economic policy of many countries (Ogrean & Herciu, 2014). In economic theory and practice and within the globalization process the importance of national competitiveness is increased. The most address of this examination is to clarify why some countries achieve a competitive advantage, have faster development and have sizeable wealth, but others do not (Stanković, et al., 2019, 416). Countries can strengthen their economy in a relatively short period, increase productivity, trade and create a basis for further economic development in the long run only if they recognize the importance of constantly improving competitiveness (Jovović, 2017, 320).

A study in a sample of 35 developed countries showed that there is a link between the level of globalization and the competitive position of a country using the KOF Globalization Index and the Global Competitiveness Index. Also, a link between social and political globalization with competitiveness was recognized, while no statistically significant link was found between economic globalization and global competitiveness (Bednářová, 2013). Đorđević et. al (2016) analyzed the level of globalization and national competitiveness of most countries of Central Europe and the Balkan countries by the KOF Globalization Index and Global Competitiveness Index. Results showed that a higher globalization level will not always lead to a higher level of competitiveness. So we cannot confirm a relationship between these two economic phenomena in selected countries. The connection of globalization and competitiveness was examined by correlation coefficient using the sample of 132 countries. Results imply there is a strong correlation between the globalization level and the competitiveness level. Also, the study shows that the great impact this connection has on the stage of a country's development. In countries in a transition stage, there are no statistically significant results between globalization and competitiveness. In countries in the other three development stages (factor-driven; efficiency-driven, and innovation-driven), a higher globalization level implies higher competitiveness (Zeibote et. al, 2019). The globalization impact on the competitiveness of less developed countries is quite large unclear. On the one side, it opens up new possibilities for its improvement. On the other side, it can limit countries that have not devised
appropriate strategies to improve national competitiveness in an increasingly changing world (Jovović, 2021).

For this reason, the paper examines the correlation between these variables, given that a sample of countries predominantly belonging to developing countries.

3. Research methodology

Starting from the affirmed aim and subject of the research, and taking into account the previous theoretical assumptions, the conducted research relates to the impact of the globalization level on the global competitiveness of countries as well as their economic growth. The following study covered nine countries from the SEE region: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, North Macedonia, Montenegro, Romania, Serbia and Slovenia covering 10 years from 2008 to 2017. The KOF Swiss Economic Institute's data of the KOF Globalization Index and the KOF Economic Globalization Index, Global Competitiveness Index by World Economic Forum and data about GDP per capita from the UNCTAD database of countries covered in the survey, were used.

In this case, the application of correlation analysis and corresponding regression analysis models are chosen to investigate the nature of the association between these variables. Therefore, to measure the impact of economic globalization on the competitiveness of the country, using appropriate tests, the model of regression analysis (Pooled OLS) was chosen in the following form:

\[ GCI_{i,t} = \beta_0 + \beta_1 KOF_{eci,t} + \beta_2 GCI_{i,t-1} + u_{i,t} \]  

where \( GCI_{i,t} \) is Global Competitiveness Index for country \( i \) in year \( t \), \( KOF_{eci,t} \) KOF Economic Globalization Index for \( i \) country in year \( t \); \( GCI_{i,t-1} \) Global Competitiveness Index for \( i \) country in previous year. The dependent variable is the Global Competitiveness Index, and the independent variables are the KOF Economic Globalization Index and the Global Competitiveness Index in the previous year. The model includes variables from the previous year because national competitiveness depends on competitiveness in the past among other factors.

When measuring the globalization impact on the GDP per capita of selected countries, a regression analysis (Fixed Effects) model was applied with the following equation:

\[ GDP_{pc_{i,t}} = \beta_0 + \beta_1 KOF_{i,t} + \beta_2 GDP_{pc_{i,t-1}} + u_{i,t} \]  

where \( GDP_{pc_{i,t}} \) gross domestic product per capita for country \( i \) in year \( t \); \( KOF_{i,t} \) Globalization Index for \( i \) country in year \( t \); \( GDP_{pc_{i,t-1}} \) gross domestic product per capita for country \( i \) in year \( t-1 \).
capita for \( i \) country in year \( t-1 \). The coefficient \( \beta_0 \) indicates the unknown intercept for each state, while the coefficients \( \beta_1 \) and \( \beta_2 \) represent the regression coefficients with independent variables. \( u_{i,t} \) symbolizes random errors. The dependent variable in this model is GDP per capita, and the independent variables are KOF Globalization Index and GDP per capita in the past year. Namely, the model involves the variable in the previous year because of economic growth in the past conditions economic growth in the present.

When it comes to globalization, one of the challenges is how to measure it considering its complexity. As globalization combines economic, sociological, and political perspectives, it is difficult to find an indicator that would introduce all its aspects. It is challenging to find an indicator that will deal with this process more deeply than its identification with open trade between countries or the movement of capital. To this purpose, several indices have been constructed that may be considered relevant, but the KOF Globalization Index of the Swiss Economic Institute is most frequently used in economic studies of globalization. The index was followed in 2002 and measures the economic, political, and social dimensions of globalization. The KOF Globalization Index is characterized by dividing between de facto and de jure globalization in all three categories: economic, social, and political category. Index calculation involves normalization of data where each variable is transformed into a scale from 1 to 100, where a value of 100 corresponds to the maximum value of a determined variable for perceived countries over the entire period. Also, the analysis of the most important components over ten years is done to assign adequate weights to all variables. The weights adapt to the importance of particular variables of globalization over time. According to the latest KOF methodology, the globalization index measures 42 variables that are determined using proper weights. Data are available for 195 countries from 1970 to 2018.

The World Economic Forum has been calculating the Global Competitiveness Index for years. Specifically, in 2018 there was a change in methodology. However, as the survey deals with the period from 2008 to 2017, it will be taken into account earlier methodology. The Global Competitiveness Index is comprehensive indicator considers the microeconomic and macroeconomic viewpoints of national competitiveness (Petrović Randelović & Radukić, 2013, 751). It was calculated based on 114 indicators divided into 12 pillars of competitiveness: Institutions, Infrastructure, Macroeconomic environment, Health and primary education, Higher education and training, Good market efficiency, Labor market efficiency, Financial market development, Technological readiness, Market size, Business sophistication, and Innovation. The index is determined on a scale of 1 to 7, where a higher score implies a higher degree of competitiveness. The pillars are organized into three subindexes: Basic requirements subindex, Efficiency enhancers subindex, Innovation and sophistication factors subindex. Each subindex has a different influence on the calculation of Global
Competitiveness Index for countries depending on their achieved economic development measured by GDP per capita. Therefore, for the least developed countries with a GDP per capita less than $2,000, Basic requirements subindex is the most significant subindex with a weight of 60%; Efficiency enhancers subindex is the most significant for medium-developed countries whose economic development is driven by economic efficiency, but the Basic requirements subindex (40%) is still of high importance; and Efficiency enhancers subindex (50%) is important for countries with the highest levels of economic development based on innovation with a GDP per capita more than $17,000 are important, but also Innovation and sophistication factors subindex (30%) (WEF, 2017, p. 320).

From 2018 the Global Competitive Index is calculated based on indicators that are divided into 12 pillars which are classified into four categories: Enabling Environment, Human Capital, Markets and Innovation Ecosystem. Their positions, structure and calculation method have changed. Their reorganization has taken place due to changed conditions of the competition at the global level and the availability of new data sources. The new methodology of the Global Competitiveness Index calculation contains 64 new indicators and 34 existing indicators. All pillars are equally weighted by 8.3%. It is a no longer relevant stage of development for determining a country's competitiveness. The importance of individual factors depending on the amount of gross domestic product is no longer used. Namely, the fourth industrial revolution will impact all competitiveness factors similarly regardless of the country's income level. The novelty is also the scale of the Global Competitiveness Index, and it can range between 0 and 100 points. The maximum points reflect the ideal situation to which all countries aspire.

4. Impact of globalization on competitiveness and economic growth of SEE countries

According to the KOF Swiss Economic Institute, the globalization level has lately increased slightly. In particular, in some parts of the world, protectionism continues to have limited effect. Speaking of the highest level of globalization measured by this index, it has reached by Switzerland, the Netherlands and Belgium. Figure 1 shows the top ten countries by KOF Globalization Index in 2017. When examining economic globalization only, there is slight progress compared to 2008, after the start of the global economic crisis. At the same time, it is necessary to distinguish between financial globalization and trade integration, whose particular indicators determine both de facto and de jure economic globalization. Specifically, international financial flows (de facto economic globalization) have been increasing over the last few years, while underlying conditions (de jure economic globalization) have remained unchanged, and trade growth has slowed. However, as the data on the KOF Globalisation Index is available until 2017, it is not possible to estimate the current state of trade integration, since trade problems between
countries, such as the USA, China, the European Union, are not captured by this methodology (https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html, accessed on 8/1/2020).

If we compare the beginning and end of the period for which data are available using the global average KOF Globalisation Index, it is noticeable that the degree of globalization has increased significantly. As can be seen in Figure 2, the world average index value increased from about 40 to 63 points. The highest growth was recorded between 1990 and 2010. It is characteristic that smaller countries attend to have stronger globalization because of their stronger relations with neighbouring countries. Namely, large and powerful economies have done a significant part of their business within their borders. Interestingly, the most globalized countries are those in Europe, which can be explained by their high level of economic, social, and political cohesion within the European Union. The progress in economic globalization is also shown in Figure 2. We can see that it increased significantly in the end compared to the beginning of the observed period. However, the difference between de facto and de jure economic globalization is noticeable, especially between 1975 and 1995. The KOF Economic Globalisation Index distinguishes between de facto and de jure economic globalization in both categories: trade globalization and financial globalization. Thus, de facto economic globalization is determined based on trade in goods and services, as well as foreign direct investment flows, while de jure economic globalization follows trade taxes, tariffs, and trade restrictions, as well as investment restrictions, opening of the capital account, as well as international investment agreements. Because large and strong economies have higher levels of economic independence, the United States is ranked 59th in economic globalization, and China ranked only 80th and Japan,
although the third economy in the world, ranks 37th in the list of 195 countries by the KOF Economic Globalisation Index.

**Figure 2. World average values of the KOF Globalization Index and the KOF Economic Globalization Index from 1970 to 2017**


The left side of Figure 3 shows the value of the Global Competitiveness Index for SEE countries in 2008 and 2017, while the right shows the ranking of these countries by the Global Competitiveness Index at the beginning and the end of the observed period. Albania, Bosnia and Herzegovina, Bulgaria, Serbia and Romania have made progress in the Global Competitiveness Index, while Croatia and Slovenia have remained unchanged. However, when looking at the ranking, it can be seen that Croatia and Slovenia, as well as Montenegro, fell in the list of ranked countries. Other countries are making progress in the ranking, except Romania, which is in the same position. It should be carried in mind that the change in the index value indicates the country’s performance, whether it has improved its competitiveness or not, while the ranking on the list depends on the results of other countries as well as on the total number of countries ranked.

To detect the relationship between observed phenomena, the correlation analysis was made. As can be seen from the correlation matrix, it is clear that there is a positive correlation between the KOF Globalization Index, the Global Competitiveness Index, the KOF Economic Globalization Index and the GDP per capita. The analysis shows that all correlation coefficients are statistically significant. When there is an increase in the KOF Economic Globalization Index, whose higher value indicates the achieved higher level of economic globalization, there is an increase in the Global Competitiveness Index in the observed countries. Namely, a strong link was also detected between the KOF Globalization Index and GDP per capita, which indicates that it is precisely countries that are more open to the world have a higher level of development. In accomplishing that, the value of GDP per capita is taken in constant prices, where the base year is 2010. A moderate correlation exists between the KOF Economic Globalization Index and GDP per capita.
Accurately, higher correlation of GDP per capita with the KOF Globalization Index relative to the link with the KOF Economic Globalization Index indicates that GDP per capita is also linked to other dimensions of globalization, social and political.

Figure 3. Global Competitiveness Index (score and rank) of Southeast European countries in 2008 and 2017

* data for North Macedonia is from 2016 (country is not ranked in 2017)

Source: author's calculations based on various Global Competitiveness Reports

Table 1. Relationship between the KOF Globalization Index, KOF Economic Globalization Index, the Global Competitiveness Index and GDP per capita in SEE countries

<table>
<thead>
<tr>
<th></th>
<th>KOF Globalization Index</th>
<th>Global Competitiveness Index</th>
<th>KOF Economic Globalization Index</th>
<th>GDP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOF Globalization Index</td>
<td>Pearson coefficient</td>
<td>1</td>
<td>0,609**</td>
<td>0,524**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0,000</td>
<td>0,000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>90</td>
<td>88</td>
<td>90</td>
</tr>
<tr>
<td>Global Competitiveness</td>
<td>Pearson coefficient</td>
<td>0,609**</td>
<td>1</td>
<td>0,712**</td>
</tr>
<tr>
<td>Index</td>
<td>Sig. (2-tailed)</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>KOF Economic Globalization Index</td>
<td>Pearson coefficient</td>
<td>0,524**</td>
<td>0,712**</td>
<td>0,423**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>90</td>
<td>88</td>
<td>90</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>Pearson coefficient</td>
<td>0,685**</td>
<td>0,583**</td>
<td>0,423**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0,000</td>
<td>0,000</td>
<td>0,000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>90</td>
<td>88</td>
<td>90</td>
</tr>
</tbody>
</table>

** correlation is significant at the 0.01 level
Source: author's calculation-Gretl output
To examine in more detail the nature of the connection between the globalization of the country and its progress in global competitiveness, a regression analysis was performed. Applying the Breusch-Pagan test and the Hausman test, the appropriate pooled OLS model was selected, where the dependent variable is the Global Competitiveness Index and the impact of the KOF Economic Globalization Index on it are covered, including the Global Competitiveness Index of the previous period. This model shows that a one-point increase in the KOF Economic Globalization Index leads to a 0.007 point increase in the Global Competitiveness Index, while eliminating the entity-specific correlation between uncovered heterogeneity with the observed independent variable or the KOF Economic Globalization Index. The model is representative since as much as 83.39% of changes in the dependent variable can be explained by changes in the independent variables. Results indicating the direction and intensity of the impact of the KOF Economic Globalization Index on the Global Competitiveness Index by analyzing the countries covered from 2008 to 2017 are presented in Table 2.

**Table 2. Regression analysis results of the impact of the KOF Economic Globalization Index on the Global Competitiveness Index in SEE countries from 2008 to 2017**

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>const</td>
<td>0.635485</td>
<td>0.168663</td>
<td>3.768</td>
</tr>
<tr>
<td>KOF Economic Globalization Index</td>
<td>0.00686806</td>
<td>0.00247732</td>
<td>2.772</td>
</tr>
<tr>
<td>Global Competitiveness Index (previous period)</td>
<td>0.733866</td>
<td>0.0560886</td>
<td>13.08</td>
</tr>
<tr>
<td>Mean dependent var</td>
<td>4.093103</td>
<td>S.D. dependent var</td>
<td>0.220355</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.693436</td>
<td>S.E. of regression</td>
<td>0.090858</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.833942</td>
<td>Adjusted R-squared</td>
<td>0.829988</td>
</tr>
<tr>
<td>F(2, 84)</td>
<td>210.9236</td>
<td>P-value(F)</td>
<td>1.78e-33</td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>86.74456</td>
<td>Akaike criterion</td>
<td>167.4891</td>
</tr>
<tr>
<td>Schwarz criterion</td>
<td>-160.0914</td>
<td>Hannan-Quinn</td>
<td>-164.5103</td>
</tr>
<tr>
<td>rho</td>
<td>0.084034</td>
<td>Durbin-Watson</td>
<td>1.686406</td>
</tr>
</tbody>
</table>

*Source: author's calculation-Gretl output*

The study also discusses the globalization impact measured by the KOF Globalization Index on the economic growth measured by GDP per capita of Southeast European countries from 2008 to 2017. In this case, GDP per capita from the base year 2010 were used. The relationship between these variables is observed.
because the country's GDP is an important category in calculating the Global Competitiveness Index. Figure 4 shows the average annual GDP per capita growth rates of the observed countries. As can be perceived, Albania, Romania, Bosnia and Herzegovina and Bulgaria have the highest average GDP per capita growth rates. Also, average GDP per capita values for selected countries over the observed period are shown. Slovenia has the highest average GDP per capita, which is several times higher than in other countries in the region. Also, Croatia stands out with an average GDP per capita value of $14,120.5 while other countries have a GDP per capita lower than $10,000 and some even as low as $5,000.

Figure 4. Average annual growth rates and average values of GDP per capita of Southeast European countries from 2008 to 2017

* average GDP per capita is shown in USD

Source: author, based on UNCTAD data

By testing the adequacy of the model and selecting the Fixed Effects model of the impact of KOF Globalization Index on GDP per capita of selected countries in the observed period with measuring the impact of GDP per capita from the previous year, it can be concluded that increasing KOF Globalization Index by 1 point leads to GDP per capita growth for about $110. It is suggesting that economic, financial and social and political cohesion with other countries of the world is important for the economic growth of countries. The model can be considered representative because 99.69% of the changes in GDP per capita can be explained by changes in the KOF Globalization Index in and GDP per capita from the previous period. The results of the regression analysis are shown in Table 3.

Table 3: Regression analysis results of the impact of the KOF Globalization Index on GDP per capita of SEE countries from 2008 to 2017

<p>| Model: Fixed-effects, using 88 observations |
| Included 9 cross-sectional units |
| Time-series length: minimum 9, maximum 10 |
| Dependent variable: GDP per capita |</p>
<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>const</td>
<td>−6200,28</td>
<td>1938,21</td>
<td>−3,199</td>
<td>0,0020  ***</td>
</tr>
<tr>
<td>KOF Globalization Index</td>
<td>110,774</td>
<td>26,9096</td>
<td>4,117</td>
<td>&lt;0,0001 ***</td>
</tr>
<tr>
<td>GDP per capita (previous period)</td>
<td>0,786375</td>
<td>0,0837370</td>
<td>9,391</td>
<td>&lt;0,0001 ***</td>
</tr>
</tbody>
</table>

Mean dependent var 9014,909 S.D. dependent var 6090,706
Sum squared resid 9926234 S.E. of regression 359,0434
LSDV R-squared 0,996924 P-value(F) 0,637350
LSDV F(10, 77) 2495,875 
Log-likelihood −636,7342 Aikake criterion 1295,468
Schwarz criterion 1322,719 Hannan-Quinn 1306,447
rho −0,115025 Durbin-Watson 1,696688

Source: author's calculation-Gretl output

5. Conclusion

Globalization has become an integral part of the economic activities of countries around the world. In addition to realizing the various benefits derived from connecting with the world and the availability of new opportunities and resources, at the same time, countries are facing new problems and risks that were not present to such an extent before. The analysis showed that there is a positive impact of the increased degree of economic globalization of Southeast European countries on their competitive position. This confirms the view that greater openness of countries in both trade and financial terms, actually affects better international positioning of countries.

An important indicator of the country's economic development is GDP per capita, which depends on the macroeconomic situation in the country, as well as on the country's foreign policy, especially foreign trade relations and the balance of payments. These are categories that are significantly determined by the processes of globalization. Also, these indicators are included in the calculation of the Global Competitiveness Index, which significantly depends on the economic relationships of countries. Specifically, the results of the analysis showed that there is a positive impact of increased globalization on the economic growth of the examined group of countries, as well as on their competitive position. In this regard, the set research hypotheses can be confirmed based on all the above.

Possible directions for further research may be examinations related to which of the pillars of competitiveness included in the Global Competitiveness Index are most affected by economic globalization, as well as which dimensions of globalization most stimulate economic growth in Southeast Europe.
References


Živković / Economic Themes, 59(4): 479-496


Rezime: Globalizacija je proces koji se često poistovećuje sa ekonomskom integracijom zemalja, odnosno stvaranjem jedinstvenog tržišta, pri tome zanemarujući ostale aspekte globalizacije. Upravo, KOF indeks globalizacije pored njene ekonomske dimenzije, uključuje i socijalnu i političku dimenziju. Jedno od pitanja je na koji način zemlje uspevaju da ojačaju svoju konkurentska poziciju na međunarodnom tržištu u eri globalizacije. Da li je i na koji način otežano održavanje dobre konkurentne pozicije u uslovima veće povezanosti država? Iz tog razloga, rad se bavi promenom Indeksa globalne konkurentnosti, renomiranom merom konkurentsnosti nacionalnih privreda pod uticajem povećane ekonomske globalizacije zemalja Jugoistočne Evrope. Iako među zemljama Jugoistočne Evrope postoje razlike u stepenu privrednog razvoja i nivoa evropskih integracija, one su dostigle približno sličan nivo globalizacije. Takođe, procenjuje se uticaj globalizacije, odnosno njene ekonomske, socijalne i političke dimenzije, na privredni rast zemalja Jugoistočne Evrope, merenog BDP-om per capita, koji je jedan od preduslova uspešnog pozicioniranja na međunarodnoj ekonomskoj sceni.

Ključne reči: konkurentnost, ekonomski rast, globalizacija, ekonomska globalizacija, Jugoistočna Evropa, KOF indeks globalizacije, Indeks globalne konkurentnosti

Author’s biography

Jelena Živković is a junior researcher on Faculty of Economics, University of Kragujevac. After finished Bachelor and Master academic studies, she enrolled in postgraduate studies also on Faculty of Economics, University of Kragujevac; module: Macroeconomics; scientific field: General Economics and Economic Development. Jelena is scholarship winner from the Ministry of Education, Science and Technological Development of Republic of Serbia and she is engaged in a project number III 41010 supported by the Ministry of Education, Science and Technological Development of Republic of Serbia. The previous scientific work is characterized by the presence at scientific conferences which resulted in the publication in scientific collections.