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Income convergence of the Western Balkan States on their path to accession to the European Union

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***Abstract**: The common and main strategic goal of all Western Balkan States is integration into the European Union. Therefore, the transition of the Western Balkan region, as in the case with other Central European transition countries, must be seen as a part of the European integration process. The aim of this research is to tests whether income convergence exists between Western Balkan States and the developed European Union countries, with a comparison with New Member States. In order to test this assumption, regression analysis is used. The results did not confirm that income convergence existed from 1995 to 2019. However, the results indicate a strong impact of the Global Economic Crisis on income convergence, so it existed in the years before and after the Global Economic Crisis. Results also showed faster growth of the New Member States than the Western Balkan States.*

***Keywords**: income convergence, European economic integration, Western Balkan States, New Member States, Global Economic Crisis*

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Dohodovna konvergencija zemalja Zapadnog Balkana na putu pristupanja Evropskoj uniji

***Apstrakt**: Zajednički i glavni strateški cilj svih država Zapadnog Balkana je integracija u Evropsku uniju. Stoga se tranzicija regiona Zapadnog Balkana, kao i u slučaju drugih tranzicionih zemalja Centralne Evrope, mora posmatrati kao deo procesa evropskih integracija. Cilj ovog istraživanja je ispitivanje postojanja dohodovne konvergencije među zemljama Zapadnog Balkana i razvijenih članicama Evropske unije, uz uporednu analizu novih zemalja članica. Kako bi se proverila ova pretpostavka, koristi se regresiona analiza. Rezultati analize nisu potvrdili postojanje dohodovne konvergencije od 1995 do 2019. Međutim, rezultati ukazuju na snažan uticaj globalne ekonomske krize na konvergenciju dohotka, pa je ona postojala u godinama pre i posle globalne ekonomske krize. Rezultati su, takođe, pokazali brži rast novih država članica od zemalja Zapadnog Balkana.*

***Ključne reči**: dohodovna konvergencija, evropska ekonomska integracija, zemlje Zapadnog Balkana, nove države članice, globalna ekonomska kriza*

1. Introduction

European post-communist countries undertook transition from a planned to a market economy in a relatively short period of time. This transition represents a unique political, economic and social transformation. It implies privatization and deregulation of economic activities, liberalization of international economy and reduction of the state's role in economic activities (Filipović & Miljković, 2014). In the last 20-30 years, the inhabitants of these countries have been in the process of comprehensive structural changes of “their public and social institutions, the emergence of a new private sector and their reintegration into the global economy” (EBRD, 2016-17, p. 31). Unfortunately, at the beginning of transition process, economic recession was present in many of these countries. Some of these countries experienced short-term recession, but others were struck with deep recession that lasted for many years. However, the benefits of transition are not evenly distributed, resulting in reduced support for market economies and democracies in many countries. In some cases, there have been major upheavals, both economic and political.

The transition process took place at the same time as technological globalization. Since the beginning of the transition process, European countries have achieved impressive income convergence. In addition, these countries made significant progress in reducing poverty. During this period of time, inequality between countries narrowed, as the income levels of developing

countries increased relative to those in developed economies. On the other hand, within countries, inequality has increased. “As a result of these two conflicting trends, the Gini coefficient, which measures income inequality worldwide, has been stable over the past 30 years and has begun to decline gradually” (EBRD, 2016-17, p. 12).

Numerous factors have contributed to changes in the global income distribution. Long periods of relatively high commodity prices that generated export benefits in developing countries, improved macroeconomic policies in developing countries and globalization of production have contributed to income convergence. At the same time, “routine job automation and new technologies, which have increased productivity gaps between higher and lower skilled workers, have led to increased inequalities in countries” (EBRD, 2016-17, p. 12).

Economic reforms have stagnated in the transition region since the mid-2000s. The exception was the Western Balkan region, where reform was supported in the process of European Union (EU) accession. Transition progress is closely linked to political systems, whereby more democratic countries made more progress in terms of reform, than their less democratic partners. However, public opinion has turned against market reform following the Global Economic Crisis, especially in democracies. This is reflected in a more intensive decrease in the value of EBRD transition indicators since 2010, especially in EU countries. The transition region is burdened by the consequences of the Global Economic Crisis and the Eurozone crisis (2011-2012). In addition to their short-term impacts related to the collapse in production, followed by stagnation or a slow recovery, these shocks have raised doubts about the ability of the transition region to return to the path of income convergence. The main reason for such doubts is the reduction of international capital flows in the region, which are an important element of the growth model of transition countries (EBRD, 2013).

In order to continue income convergence towards developed economies in the post-crisis period, Central European transition countries will have to “rely more on exports as a source of innovation and growth” (EBRD, 2010, p. 76). This will become even harder as the one-off effects of entering free trade areas diminish, which is why certain measures will be necessary in order to maintain the sharp export growth. For example, in order to support greater export orientation, policy makers could reduce non-tariff trade barriers that hinder new, and major existing export markets. Furthermore, “they can improve key aspects of domestic business climate by reducing corruption and improving the rule of law and customs procedures” (EBRD, 2010, p. 76).

The subject of this paper is income convergence between Western Balkan States (WBS) and developed EU countries. The aim of this research is to determine whether, the speed of income convergence between developed EU countries, on the one hand, and WBS and New Member States (NMS), on the other hand, differs. For analysis purposes, all countries were divided into three groups as shown in Table 1. The motive for conducting the analysis is the lack of literature that deals with income convergence among WBS and EU, so this paper aims to address this shortcoming. In addition, the aim is to investigate the Global Economic Crisis' effect on income convergence.

Table 1: Observed countries divided into three groups: developed EU countries (EU15), New Member States (NMS), Western Balkan States (WBS)

EU15	NMS	WBS
• Belgium • France • Germany • Italy • Luxembourg • Netherlands • Denmark • Ireland • United Kingdom • Greece • Portugal • Spain • Austria • Finland • Sweden	• Cyprus • Czech Republic • Estonia • Hungary • Latvia • Lithuania • Malta • Poland • Slovakia • Slovenia • Bulgaria • Romania • Croatia	• Albania • Bosnia and Herzegovina • North Macedonia • Montenegro • Serbia

Source: authors

Using regression analysis, the following hypotheses will be tested in the paper:

Hypothesis 1: *The income level of WBS is converging towards average income level of EU15.*

Hypothesis 2: *The speed of income convergence towards the average income level of EU15 differs between NMS and the WBS.*

The paper is structured as follows. The introduction is followed by the second part, which analyzes the economic growth and the growth of the living standard of the WBS, with comparison of EU member states. Followed by theoretical background and literature review of income convergence in the third part. The regression model is introduced in the fourth part, and fifth part presents results of the analysis. The sixth part concludes.

2. Economic growth in the Western Balkan States

The beginning of the 1990s was very turbulent for the WBS - the collapse of socialist regimes, conflicts in the region and the emergence of new countries caused great disturbances and a drop in gross domestic product (GDP) per capita and living standard. In the second half of the 1990s, the pace of recovery was uneven. Some countries, such as Croatia and Bosnia and Herzegovina, have experienced a sharp reversal in growth, while others, such as Serbia and Albania, have faced high volatility in growth. However, despite a long recession, by the end of the last decade of the 20th century, GDP per capita in the region had recovered to pre-1990s levels. The exceptions are Serbia and Montenegro, which in 1999 recorded a decline of GDP per capita growth rate, as a result of the NATO bombing that year. However, the next year, both countries recorded a GDP per capita growth rate, Serbia 8.1% and Montenegro 3.28% (The World Bank).

The Western Balkan States had sustainable economic growth since 2000 until the Global Economic Crisis, whose GDP per capita grew, on average, by 40% or more (The World Bank). However, this growth in the WBS was more due to trends in “the global economy, deeper financial and trade integration with the rest of Europe, high capital inflows, rapid credit expansion and productivity growth, than real progress in economic reforms” (IMF, 2015, p. 16). A clear indicator of the poor economic model in the WBS is very high unemployment rate of over 20%, which is a consequence of the “incomplete use of available human resources, even in the pre-crisis period of solid economic growth” (Stanišić, 2016, p. 5-6). The imperfections of the current economic system, which relate to the chosen economic growth model that was primary based on domestic aggregate demand, instability of political system and economic policy of coalition governments, came to the surface with the outbreak of the Global Economic Crisis (Prašćević, 2013).

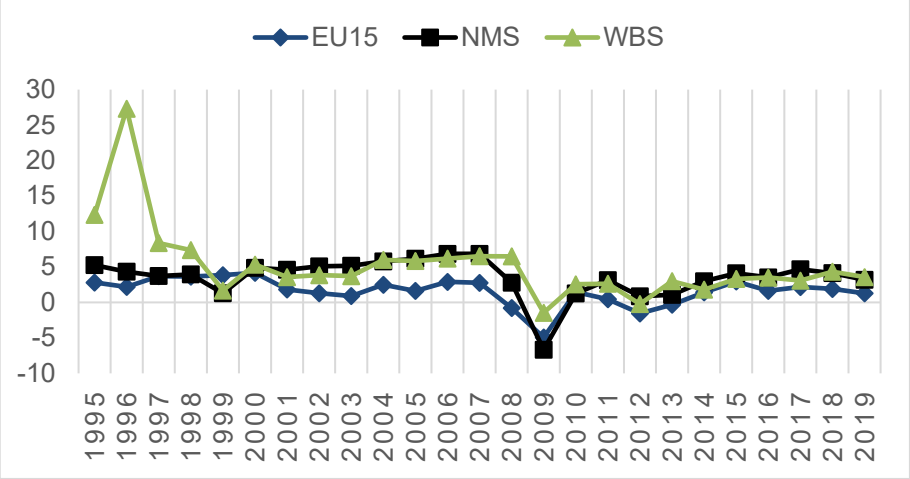
After the Global Economic Crisis, there was an increase in the GDP per capita growth rate in 2010. Figure 1 shows the average GDP per capita growth rates for EU15, NMS and WBS. Figure 1 shows that in each of the observed groups of countries, average GDP per capita growth rate in 2010, compared to 2009, increased for the EU15 from -4.94 to 1.46, for the NMS group from -6.66 to 1.26 and for the WBS group from -1.45 to 2.55 percent.

The most affected with the Global Economic Crisis is the EU15 group. Portugal, Ireland, Italy, Greece and Spain were in the most difficult situation, struck with “internal and external debts and high and rising unemployment” (Savić & Mićić, 2015, p. 353). In these countries, public debt has reached dramatic proportions, which is why those countries have almost gone bankrupt, threatening to

collapse the eurozone and the entire EU financial system. The public debt crisis has escalated with the global recession, which is best illustrated by the fact that the public debt of Ireland and Spain in 2007 was around 40% of GDP. The public debt crisis in Greece and Italy was mainly the result of internal factors, i.e., long-term, excessive and irrational public spending, which was not accompanied by real sector growth, also because the growth of these economies was mainly based on foreign capital inflows. The unemployment rate in the years following Global Economic Crisis were very high in some EU economies. For example, in 2014 unemployment rate in twelve EU countries was higher than 10%. Moreover, Greece and Spain had unemployment rate more than 20% (26.5% and 24.5%, respectively). Only in Germany, Austria and Malta unemployment was lower than 6% (Novak & Darmo, 2019).

In the years that follow, as can be seen in Figure 1, GDP per capita growth rate has generally stagnated. Weak growth in the euro area, as the main export market in the region, has a negative impact on the WBS as well. Additionally, as the rapid global economic growth ended, problems linked with the stagnation of domestic reforms in the Western Balkan region have revealed. Although economic transformation of the WBS is largely complete in some areas, especially in terms of price liberalization and trade and the foreign exchange system, more efforts are needed to upgrade institutions, improve the business environment, build infrastructure and develop financing markets.

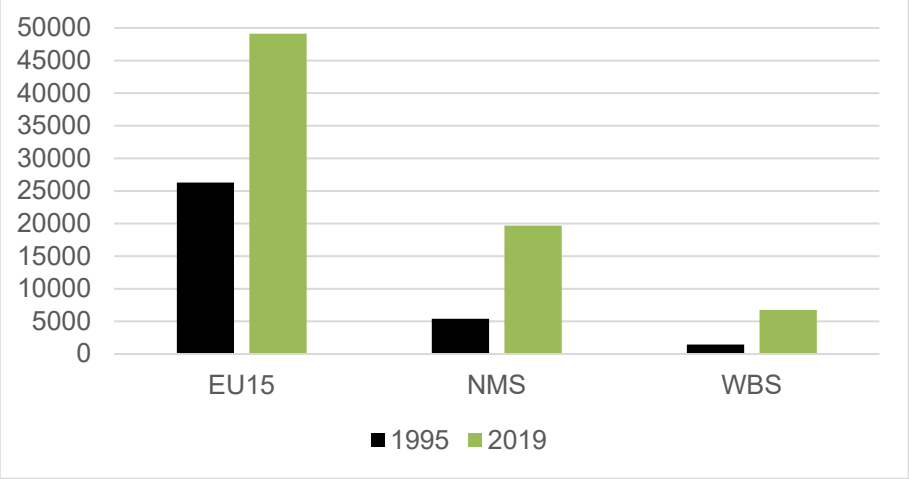
Figure 1 Movement of the average GDP per capita growth rate in the EU15, NMS and WBS (1995-2019)



Source: authors based on The World Bank

The average GDP per capita growth rate from 1995 to 2019 in the group of EU15 countries was 1.6%, in the group of NMS 3.6%, while in the group of WBS was 5.2%. These average growth rates allowed GDP per capita to rise from $ 26,298 to $ 49,127 for the EU15, $ 5,406 to $ 19,690 for the NMS, and 1,451 to $ 6,751 for the WBS (Figure 2).

Figure 2 Average GDP per capita in the EU15, NMS and WBS in 1995 in 2019, in current dollars



Source: authors based on The World Bank

Based on the data presented in the figures so far, conclusion can be made that poorer countries converge towards income level of developed countries over time. However, regression analysis presented in fifth part reveals more precise results.

3. Theoretical background and literature review of income convergence

Income convergence represents the process of reducing the GDP per capita difference between countries over time. That is, situations where poor countries, with lower initial levels of capital and GDP per capita, tend to catch up with richer countries, i.e., converge. Robert Solow was first who introduced the hypothesis of income convergence (Solow, 1956). This income

convergence hypothesis is based on the law of diminishing returns on capital. According to neoclassical growth model, long-term GDP per capita growth equals the rate of technological progress, whereby technology is assumed to grow exogenously. Basically, Solow's neoclassical growth theory claims that developed countries have a high level of production funds per capita. If two countries, with different development levels, have a similar system of preferences and approximately the same savings rates and investment in physical capital, the result will be slower economic growth of developed, than less developed countries. Moreover, economic growth implies a real increase in national income per capita, which further means an increase in wages, standard of living, an increase in accumulation, etc. (Pavlović & Čelić, 2020). In the long run, this fact, under other unchanged circumstances, leads to income convergence of countries of different levels of economic development. To maximize the effects, and in accordance with the law of diminishing returns, capital is moved from countries where it is an abundant factor, to countries where it is a less abundant production factor. Simultaneously, the labor force is moving from countries with lower, to countries with higher wages.

At the time, debate of income convergence caused great controversy and was rejected by many other theories, mainly due to rejection of the presumption of diminishing returns on capital (Romer 1986, 1990; Lucas 1988). Also, when it comes to long-term growth, neoclassical growth model does not consider the internal characteristics of the economy that would lead to it, but sees exogenous technological progress as the only source of long-term growth (Milutinović, 2021). Solow's model leaves, for the most part, an unexplained long-term growth rate, as well as how technology progress is being made. In the mid-1980s, new research emerged to explain the complex process of long-term economic growth. Contrary to the neoclassical growth theory, newer models see economic growth as an endogenous product of the economic system and seek to explain the rate of technological change that is the source of long-term GDP per capita growth. So-called endogenous growth models "endogenize" technological change and make it dependent on other parameters in the model, such as investment rate in physical and human capital. Regardless of the criticisms that followed, it can be said that income convergence represents "one of the most important discoveries in the Solow's neoclassical growth model" (Akinci & Yilmaz, 2012, p. 42).

The biggest distinction among neoclassical and new growth theories is that the latter do not predict diminishing returns on capital, which is the most significant argument of neoclassical growth model for income convergence (Vojinović, Acharya & Prochniak, 2009). "All endogenous models imply constant, or increasing returns on capital, which ultimately means rejecting the income convergence hypothesis" (Milutinović, 2016, p. 10). Namely, there is a possibility that investments in physical and human capital will create positive

externalities and improvements in the productivity of the entire system, which are greater than the initial, individual increase, and which are sufficient to compensate for diminishing returns (Todaro & Smith, 2013). The end result is reflected in long-term growth, which is another contrast to the neoclassical growth theory.

However, new theories of international economic integration have given proves in favor of income convergence. For instance, due to the higher rate of return on capital, capital moves from developed to less developed countries. Also, according to Heckscher-Ohlin factor price equalization theory, international trade should equalize the prices of production factors among countries.

A large number of empirical research of income convergence among EU countries emerged when new EU members accessed in the early 2000s. Authors research the presence of income convergence among "new" and "old" EU countries (Matkowski & Prochniak, 2004; Matkowski & Prochniak, 2007; Matkowski, Prochniak & Rapacki, 2016; Prochniak, 2008; Prochniak & Witkowski, 2016; Cavenaile & Dubois 2011; Stanisic, 2012, Gligorić, 2014). The results of these papers support the income convergence hypothesis, that is, it has been proven that the NMS are catching up with EU15 income per capita level.

Matkowski and Prochniak (2004) proved income convergence between Central and Eastern European transition countries (CEE8), and among groups CEE8 and EU15, in the period 1993-2003. Authors conclude that there is a large development level gap among the CEE8 and the EU15. However, this gap is decreasing over time. Similar study was conducted by the same authors analyzing longer period of time. In the latter study, Matkowski and Prochniak (2007) proved that income convergence existed between the European Union member states, in particular between "old" and "new" members. In another study by Matkowski et al. (2016) income convergence was found between CEE and EU15, and was the strongest in the period 2000-2007, while in the period 2007-2015 divergence was found, suggesting the effect of Global Economic Crisis.

Income convergence existed among the NMS and the EU15, but also indicated significant differences of income convergence speed between the countries of the NMS group (Cavenaile & Dubois, 2011). The presence of income convergence (sigma and beta), and the effect of Global Economic Crisis on it was tested by Stanisic (2012). The results proved the assumption of faster growth of CEE than the EU15. However, as a consequence of the Global Economic Crisis, results were inverse in the developed EU countries and in the group of CEE8 countries. Since 2007, convergence existed in the first group of countries, while in the CEE8 divergence was recorded.

Gligorić (2014) confirms that NMS have converged towards developed European countries, emphasizing that catching up began significantly before they joined the EU. The process of pre-accession harmonization, with the implementation of major economic reforms, primarily leads to rapid integration and rapid growth towards a developed Europe.

Despite the fact that there exists a plenty of research that examine income convergence among European Union member states, a little of them include Western Balkan region in the analysis. Tsanana, Katrakilidis & Pantelidis (2012) conducted one such study for the period 1989-2009 and have found the presence of income convergence only in Slovenia and Greece. The analysis showed that the initial momentum of development in the late 1990s and stability after 2000, contributed to reduce the differences between the WBS. However, the income gap with the EU15 remains significant for most Balkan countries. In this sense, the results indicate that the process of European integration can be one of the main generators of reforms aimed at growth and development.

Income convergence hypothesis was also tested on a sample that included EU countries and WBS, in the period 1989-2008 (El Ouardighi & Somun-Kapetanović, 2009). According to the results income convergence existed in the WBS. However, the results indicate significant differences in income convergence patterns in the subperiods. Namely, in the case of the EU countries income convergence was more present in the 2000s, while WBS mostly converged in the second half of the 1990s.

In another study conducted by International Monetary Fund, differences in the rate of income convergence were tested among developed EU countries, on the one hand, and the NMS and the WBS, on the other (IMF, 2015). The authors divided the period into the period pre (until 2007) and the period after the Global Economic Crisis (2000-2007). In the first period the authors confirm income convergence among EU15 and NMS, but weak income convergence among EU15 and WBS. Although the WBS showed income convergence in the post-crisis period, it was significantly slower than in the NMS. Examining the reasons for the slower convergence of WBS incomes relative to the NMS, the authors came up with several possible explanations. One of them is the geographical proximity of most NMS to developed EU countries compared to WBS. Geographical proximity allows them easier access to the market, investments and knowledge transfer. The authors also analyzed the influence of various factors on income convergence. Market- oriented institutions, higher quality of governance, developed financial system and strong human base reduces the development gap between poor and rich countries. Contrary, the catching-up process can be slowed by public sector dominance, right where WBS lags behind the NMS.

Stanišić (2016) conducted the same study as International Monetary Fund (2015). The results show that the income convergence exists among EU15 and WBS. However, the results were hindered by the Global Economic Crisis, which increased GDP gap among the NMS and the WBS. The existence of stochastic income convergence was tested between WBS and CEE countries in comparison with EU15 (Stanišić, Makojević & Ćurčić Tubić, 2018). Results suggest that income convergence existed in 7 CEE states, but was not proven in any of the WBS. Income convergence among WBS and EU was also proven in the research conducted by Milutinović and Durkalić (2018). Research results conformed existence of income convergence, both sigma and beta, between WBS and EU, between EU member states, and between WBS and EU15. However, sigma convergence does not exist when WBS and EU15 were compared. Income convergence was hindered by the Global Economic Crisis. Namely, in the years following the Global Economic Crisis (2008-2011) the increase of the coefficient of variation was recorded, indicating divergence.

4. Data and model

In order to test the hypotheses, the following regression equation will be used:

$$\mathrm{GRGDP}i,t = \beta 0 + \beta 1\mathrm{DIST}i,t-1 + \beta 2\mathrm{DIST}i,t-1 \times \mathrm{WBS} + \beta 3\mathrm{WBS} + \mathrm{u}i,t, \quad (1)$$

where $GRGDP_{i,t}$ represents GDP per capita growth rate in current prices of the country *i* in year *t*, *t* = 1995 to 2019, and $DIST_{i,t-1}$ represents the GDP per capita gap among the country and the EU15 average in the preceding period. WBS is an artificial variable that takes value 1 if the country belongs to the WBS, and 0 if it belongs to the NMS. β_0 is constant, and $u_{i,t}$ standard error.

Income convergence between WBS and NMS, on the one hand, and the EU15, on the other exists when β_1 coefficient is positive. A higher value of this coefficient means faster convergence.

The β_2 coefficient measures the interaction of belonging to the WBS and the income gap. If the value of this coefficient is statistically significant and positive, WBS has higher rate of income convergence than NMS. A negative value of this coefficient means a lower rate of income convergence of WBS than the rate of income convergence of NMS.

The coefficient β_3 shows the difference degree of growth rates among WBS and NMS countries. Positive value of this coefficient shows that, with the same initial income gap with the EU15, the countries in the WBS group achieved higher growth rates compared to the countries in the NMS group, which means

faster income convergence. The reverse is for the negative value of this coefficient.

Data for regression analysis were obtained from The World Bank database (The World Bank).

5. Results and discussion

The results of the regression analysis of the income convergence from 1995-2019 are shown in the Table 1. Same table presents the results for the six subperiods (1995-2000, 2001-2007, 2001-2010, 2001-2007, 2008-2010, 2011-2019). If the coefficient with the variable $DIST_{i,t-1}$ is positive, the speed of income convergence of the New Member States and Western Balkan States, compared to the EU15, is higher. That is, the larger the development gap between New Member States and Western Balkan States, on the one hand, and the EU15 average, on the other hand, the higher the GDP per capita growth rate is. The positive value of the coefficients with the variable $DIST_{i,t-1}$ × WBS and WBS shows that the countries of the WBS group had faster growth than the NMS countries.

Table 2: Results of the regression analysis of the income convergence

		$DIST_{i,t-1}$	$DIST_{i,t-1}$ × WBS	WBS	Constant	R^2
1995-2019	Coeff.	-0.02	-0.606	0.694	3.86	0.039
	p	0.758	0.006	0.001	0.002	
1995-2000	Coeff.	$3.066E^{-5}$	0.008	-187.492	3.181	0.233
	p	0.908	>0.0005	>0.0005	0.558	
1995-2007	Coeff.	0.165	-0.320	0.391	0.883	0.038
	p	0.05	0.276	0.155	0.665	
2001-2010	Coeff.	$-4.564E^{-5}$	$-4.017E^{-5}$	2.425	4.894	0.013
	p	0.398	0.694	0.493	0.002	
2001-2007	Coeff.	0.416	-0.063	-0.117	1.408	0.136
	p	>0.0005	0.878	0.764	0.21	
2008-2010	Coeff.	-0.059	-1.711	1.924	0.423	0.052
	p	0.754	0.387	0.325	0.912	
2011-2019	Coeff.	0.33	-2.777	2.482	0.178	0.07
	p	0.006	0.038	0.059	0.866	

Source: author's calculations

In the entire observed period (1995-2019), the coefficient with the independent variable $DIST_{i,t-1}$ is not statistically significant, which leads to the conclusion that the income convergence of NMS and WBS, on the one hand, and EU15, on the other, is not confirmed. In the first subperiod (1995-2000), covering the first five years of transition, income convergence was also not proven, as the statistical significance was at a level higher than 5%. However, when analyzing a slightly broader period, from the beginning of the transition to the beginning of the Global Economic Crisis (1995-2007), income convergence exists. Namely, from the beginning of the transition to the Global Economic Crisis, the NMS and WBS have achieved faster GDP per capita growth than the EU15.

Results did not confirm income convergence the first decade of the 21st century, because the statistical significance of the coefficient with the variable $DIST_{i,t-1}$ is at a level higher than 5%. If this period is divided into two periods, before and after the Global Economic Crisis, more realistic results are obtained. Namely, from 2001 to 2007, income convergence existed among the NMS and WBS countries, on the one hand, and the EU15, on the other. This means that NMS and WBS countries had faster per capita income growth than EU15 countries. In contrast, during the three years following the Global Economic Crisis (2008-2010), income convergence was absent.

The last analyzed period covers the years of recovery after the Global Economic Crisis (2011-2019). In this period, NMS and WBS countries achieved faster GDP per capita growth than the EU15, i.e., there is income convergence of NMS and WBS countries, on the one hand, and the EU15 average, on the other hand. It can be concluded that results are strongly effected by the Global Economic Crisis.

The coefficient with the variable $DIST_{i,t-1} \times$ WBS shows the degree to which the country's membership in the WBS changes the strength of the link that exists between the income gap and the achieved GDP per capita growth rate. If the coefficient with this variable is positive, the WBS country's growth, at the same level of the income gap, is faster than in the NMS group, and vice versa. In other words, catching up with the EU15 average income level is faster in the WBS than in the NMS. The coefficient with the mentioned variable is statistically significant in the entire observed period (1995-2019) and two subperiods (1995-2000 and 2011-2019). In the periods 1995-2019 and 2011-2019, this ratio was negative, meaning that, at the same level of the income gap, growth was faster in the NMS than in the WBS. In contrast, in the period 1995-2000, growth was faster in the WBS group than in the NMS group.

The obtained results indicate that income convergence has not been confirmed in the entire observed period (1995-2019). However, the results also suggest that the Global Economic Crisis has had a strong effect on income

convergence. Such conclusions are made by analyzing income convergence in subperiods. Namely, in the periods 1995-2007, 2001-2007 and 2011-2019, income convergence was proven. That is, in the periods 1995-2007, 2001-2007 and 2011-2019, the NMS and WBS countries converged towards the average income level of the EU15. In the years following the Global Economic Crisis (2011-2019), income convergence was faster in NMS than in WBS. In other words, New Member States converged faster to the average GDP per capita EU15 level than in the WBS.

Taking into account results of the regression analysis, it can be concluded that Hypothesis 1 is confirmed, meaning that WBS and NMS converged towards average income per capita level of EU15 in periods before and after Global Economic Crisis (1995-2007, 2001-2007, 2011-2019). These results are under the strong influence of Global Economic Crisis. Hypothesis 2 is confirmed, meaning that the speed of income convergence towards the average income level of EU15 countries differs between New Member States and the Western Balkan States. Namely, average growth rates of NMS were faster then in the group of WBS.

6. Conclusion

The main strategic goal of the Western Balkan States is full membership in the European Union, due to many benefits that economic integration brings. One of the main expectations of the Central European transition states is the increase of the living standard, with catching up with income per capita level of EU developed countries. Almost thirty years have passed since the beginning of the transition, and many Central European transition states have become the EU members and notably increased their per capita income.

One of the reasons for the much slower growth of the WBS, compared to other European countries, is that in the 1990s, Western Balkan region was affected by war conflicts, which resulted in the collapse of the states and the formation of new ones. These disturbances have led to the postponement of the transitional reforms of the WBS until the end of the 20th and the beginning of the 21st century. From the beginning of the 2000s until today, WBS have achieved significant economic progress, which is a consequence of the transformation towards a market economy. As a result, the average gross domestic product per capita in the WBS rose from $ 1,398 in 2000 to $ 6,751 in 2019. Despite this growth, the transition process in the WBS is still incomplete, resulting in a lower-than-expected living standard.

Research on the speed of income convergence lies in an attempt to provide an answer to the question of how and whether European integration has

contributed to the economic growth of integrated countries. Although there is a plenty of research on income convergence in the EU, there is still a little of those that tests the existence of income convergence among the EU and the WBS. In this regard, the contribution of this paper is to reduce the gap in literature in the field of comparative development analysis, primarily in the field of income convergence among the EU and the WBS. Results of the paper contributes in resolving long lasting question weather less developed countries have faster income per capita growth than developed ones, i.e. weather less developed countries converge towards income level of developed ones.

In order to test the difference in the speed of income convergence among the New Member States and the Western Balkan States, on the one hand, and EU15, on the other, two hypotheses were set. Regression analysis of the entire observed period (1995-2019) did not prove existence of income convergence between NMS and WBS, on the one hand, and EU15, on the other. However, by breaking down the period into subperiods (1995-2000, 2001-2007, 2001-2010, 2001-2007, 2008-2010, 2011-2019), results showed strong influence of Global Economic Crisis. Namely, in the periods before and after the Global Economic Crisis (1995-2007, 2001-2007, 2011-2019), NMS and WBS, on the one hand, achieved faster income per capita growth than EU15. In other words, in the mentioned periods, the Central European transition countries converged towards average gross domestic product per capita growth rate of developed countries of EU. Therefore, it can be said that Hypothesis 1 is confirmed. Results of regression analysis confirmed Hypothesis 2, meaning that speed of income convergence differs among NMS and WBS. Namely, NMS converged faster than WBS towards average income per capita level of EU15.

The main limitation of this paper lies in the observation period. In that sense, future research should cover a longer period of observation, i.e., the entire last decade of the 20th century, in order to perceive the period from the beginning of the transition. The research results show the effect of the Global Economic Crisis, so that future research can be focused on the effects of the current health crisis caused by the COVID-19 virus.

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