

# **SOCIO - ECONOMIC CONSEQUENCES OF POPULATION EMIGRATION FROM CROATIA, BOSNIA AND HERZEGOVINA AND SERBIA - CURRENT SITUATION AND PERSPECTIVES**

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## **Abstract**

The countries of the Western Balkans, through population emigration, are losing their long-term potential for economic growth. Official data show that countries such as Bosnia and Herzegovina and Serbia have lost 181.034 of their citizens in the period 2014 - 2019, who have received residence permits in other EU countries.

With the emigration of the population, primarily young people in the age group 25-45, countries lose many times over. This category represents the largest consumer in a economy, which directly affects the gross domestic product. In addition, society loses by investing in education, which creates a direct economic loss due to emigration. Finally, emigration of this category limits the economic potential for long-term development of these countries.

The hypothesis we want to prove in the paper is that the emigration of the population reduces the number of enrolled pupils in schools and universities, limits the long-term economic potential for growth and development and puts long-term pressure on the segment of social services.

In this paper, in order to prove the hypothesis, we will analyze the level of economic activity through GDP growth during the period 2014 - 2019 in order to measure the achieved level of total product, and monitor the emigration of the population from Bosnia and Herzegovina, Croatia and Serbia. We will also calculate the reduction in potential output measured through GDP as a result of labor emigration, and the negative effects on the education and social service sectors.

**Key words:** Emigration, GDP, Economy, Demography

**JEL:** J11

## INTRODUCTION

The EU faces a difficult demographic situation caused by falling fertility, ageing of the working-age population and one-way migration from the EU periphery to the EU core. Furthermore, illegal migration is a great challenge for the EU. This demographic change will affect everybody. At the same time, this demographic change is shrinking the geopolitical significance of the EU.<sup>1</sup>

The EU is challenging with issues to maintain the working-age population necessary to support the retired population, whilst at the same time, the solutions should avoid social and political tensions. Emigration trends from the EU periphery to the EU core announces serious political issues. These demographic challenges in the EU and further demographic change can seriously threaten the foundations of liberal democracy. However, the EU does not address this issue effectively.

As much as the neoliberal doctrine according to which developed countries have always attracted young people is economically understandable, from the aspect of EU cohesion policy and solidarity, such policies lead towards further stratification and prevent economic and social convergence. In the broader region of Southeast Europe (SEE), negative demographic trends, including natural depopulation and emigration, encouraged by this policy, have already led to the economic and biological decline. Therefore, demographic change and migration of the working-age population should be understood as a mainstream issue that must be considered in all EU policies, from pension and employment, regional planning, family and education policies as well as immigration and integration policies.

This trend creates a social perception of injustice within the EU felt in both the poor and the wealthy EU members. In the poor Member States and the European periphery, negative effects of freedom of movement affect their further economic and social impoverishment. In rich Member states, this process can worsen labour market conditions (social dumping) and fear of misuse of social benefits. It can also create problems with immigrant integration and lead to an increase in animosity.<sup>2</sup> Ultimately, such processes could create a climate prone to nationalist and anti-European sentiments, prone to growing violations of the rule of law and other European Union values. Finally, neglect of injustice always ends in a threat to liberal democracy. Therefore, all Member States and EU institutions should reduce the harmful effects of freedom of movement.<sup>3</sup>

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<sup>1</sup> Tado Jurić, *Gastarbeiter Millennials. Exploring the past, present and future of migration from Southeast Europe to Germany and Austria with approaches to classical, historical and digital demography*, Verlag Dr. Kovač, Hamburg 2021, p. 21.

<sup>2</sup> Goldner Lang, Iris; Lang, Maroje, 2019, <https://doi.org/10.11567/met.35.1.4>

<sup>3</sup> Tado Jurić, *Gastarbeiter Millennials*, Hamburg 2021, 23.

## DEMOGRAPHIC CHANGE IN THE EU

Together with the green and digital transitions, demographic change is the third transformation shaping the future of Europe.<sup>4</sup> Demographic change in the EU will affect everybody.

In addition to the demographic problem, there is a serious challenge related to illegal migration. Ivan Krastev stated<sup>5</sup> that the 2015 refugee crisis led to a kind of 9/11 in the politics of the European Union. Different geopolitical concerns, national attitudes and fears, as well as polarising and populist rhetoric regarding illegal migration, created a new division, especially between eastern and western states.<sup>6</sup> Some see illegal migration as an opportunity to rebuild their labour market, while others see it as a threat to their own identity and nation-state.

The working-age population in Europe is projected to shrink by 18 % between 2021 and 2070. The number of people potentially in need of long-term care is expected to increase from 19.5 million in 2016 to 23.6 million in 2030 and 30.5 million in 2050 in the EU.<sup>7</sup> Low birth rates and higher life expectancy will lead to an older population structure, a development already apparent in the several EU-27 Member States.<sup>8</sup> Young people (0 to 14 years old) made up 15.2 % of the EU-27's population, while persons considered to be of working age (15 to 64 years old) accounted for 64.6 % of the population.

Older persons (aged 65 or over) had a 20.3 % share (an increase of 2.9 percentage points compared with ten years earlier).<sup>9</sup> Those aged 65 years or over will account for 31.3 % of the EU-27's population by 2100, compared with 20.2 % in 2019.<sup>10</sup> Furthermore, in 2019 31 million Europeans lived in regions with a rapidly shrinking population.<sup>11</sup>

This demographic structure cannot be improved only by pro-natal measures, but the key is to keep populations in regions with a rapidly shrinking population and revive the EU periphery.

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<sup>4</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy./impact-demographic-change-europe\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy./impact-demographic-change-europe_en) (14.12.2020)

<sup>5</sup> Ivan Krastev, *After Europe*, 2017

<sup>6</sup> See: KAS, *Multilateraler Dialog KAS Wien, Central European Perspectives on Migration*, 2021.

<sup>7</sup> Ibid.

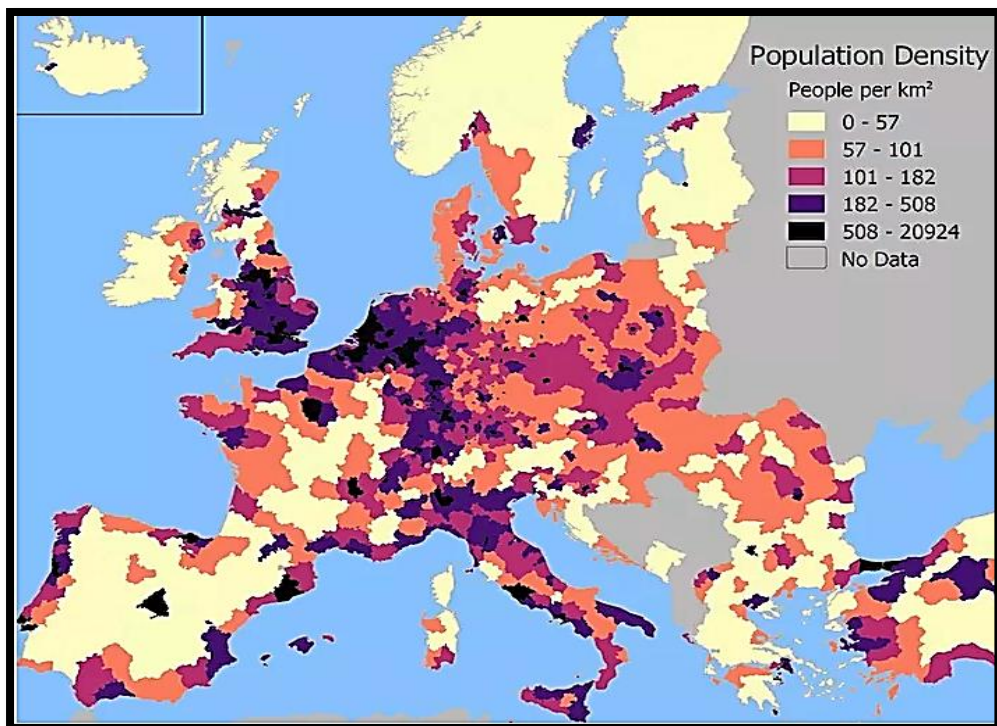
<sup>8</sup> Europa.eu, [https://ec.europa.eu/eurostat/statistics-explained/index.php/Population\\_structure\\_and\\_ageing](https://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing) access 14.12.2020, as cited in Tado Jurić, *Deep demographic ageing ...*, 2021.

<sup>9</sup> EUROSTAT 2019 [<https://ec.europa.eu/eurostat>, access 19.12.2020]

<sup>10</sup> Ibid.

<sup>11</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy./impact-demographic-change-europe\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/new-push-european-democracy./impact-demographic-change-europe_en) (14.12.2020)

**Figure 1. - Population density, Europe 2020, NUTS 3**



Source: <http://aestheticdata.eu/2018/01/27/population-density-in-europe/>

The Population Density map of Europe, NUTS 3, shows that the EU periphery is especially faced with demographic decline, but also that many inner EU countries have been demographically devastated.<sup>12</sup>

According to the United Nations (2020) estimates, Croatia and the Western Balkans (WB) are losing so much population that this area has become one of the most demographically endangered areas in the world.<sup>13</sup> During the past 30 years, nearly 8 million people have emigrated from South-Eastern Europe (about 17 % of the early-1990s population). As a result, populations in most countries in the region have been shrinking.<sup>14</sup> Within the wider SEE region (58 million people), Croatia and the WB are particularly affected. In addition, these countries are affected by the rapid emigration of young people, with an intensity never before witnessed in history. Despite this, this topic is in science mostly forgotten and in national and EU politics marginalised. The problems that have led to the mass emigration of young people from Croatia and the WB are not just related to the war and political and economic instability of the past three decades.<sup>15</sup> They are part of a structural nature and are the result of the systematic negligence of this issue.<sup>16</sup>

<sup>12</sup> Tado Jurić, *Gastarbeiter Millennials*, Hamburg 2021.

<sup>13</sup> UN, IOM, *World Migration Report 2020*, Geneva 2019, p. 110

<sup>14</sup> Atoyán et al., 2016, "Emigration and Its Economic Impact on Eastern Europe." *Staff Discussion Notes 16 (7): 1.*, <https://www.imf.org/external/pubs/ft/sdn/2016/sdn1607.pdf> (20.10.2020).

<sup>15</sup> Tado Jurić, *Gastarbeiter Millennials*, Hamburg 2021, 23.

<sup>16</sup> For example, in 2021 none of the countries of the Western Balkans has a migration strategy.

The EU could address this problem in three ways in terms of demographic measures as a solution for the European periphery.

1) The most obvious (and most likely) solution is for the EU and its Member States to facilitate the immigration of third-country nationals, which would fill vacancies and improve the demographic structure. However, this is a very controversial solution that raises many new questions and encounters disapproval from the member states of Eastern and South-Eastern Europe.

2) Another approach would be to strengthen fiscal transfers to the Member States and countries of the European periphery that are most affected by the negative effects of freedom of movement - a kind of compensation.

This could be achieved by increasing transfers from existing funds and establishing new funds like an EU-wide unemployment fund.<sup>17</sup> However, the current situation does not give much hope in this direction. Most importantly, fiscal transfers can never fully compensate for the loss of population. For example, financial compensation cannot fully compensate for a nurse who left, for example, a Croatian hospital and now works in Germany - until a Croatian hospital finds a replacement.<sup>18</sup>

3) Finally, a third option would be to reconceptualise the citizenship of the Union. This concept implied a common pension and health system in the EU, which is also unrealistic to expect in the current constellation of political powers.<sup>19</sup>

On the other hand, the pro-natalist measures in most EU member states have not led to a demographic improvement in the expected effect. Since all possibilities for the demographic revitalisation of Europe are either unrealistic or politically unacceptable to all members, we believe that the measure we propose below is the only realistic option that could lead to an improvement in the demographic picture of the EU in the short term.

## **SOCIO - ECONOMIC CONSEQUENCES OF POPULATION EMIGRATION**

The countries of the Western Balkans, through population emigration, are losing their long-term potential for economic growth. Official data show that countries such as Bosnia and Herzegovina and Serbia have lost 181.034 of their citizens in the last five years, who have received residence permits in other EU countries. Official data for Croatia are hard to validate because Croatia is already member of the EU, and their citizens don't need to have residence permit in any EU country.<sup>20</sup>

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<sup>17</sup> Goldner Lang, Iris i Lang, Maroje, *Mračna strana slobode kretanja: kada su u koliziji interesi pojedinca i društva, Migracijske i etničke teme*, 2019, 1, 89–116.

<sup>18</sup> Tado Jurić, *Gastarbeiter Millennials*, Hamburg 2021, 364-370.

<sup>19</sup> Tado Jurić, *Gastarbeiter Millennials*, Hamburg 2021, 367.

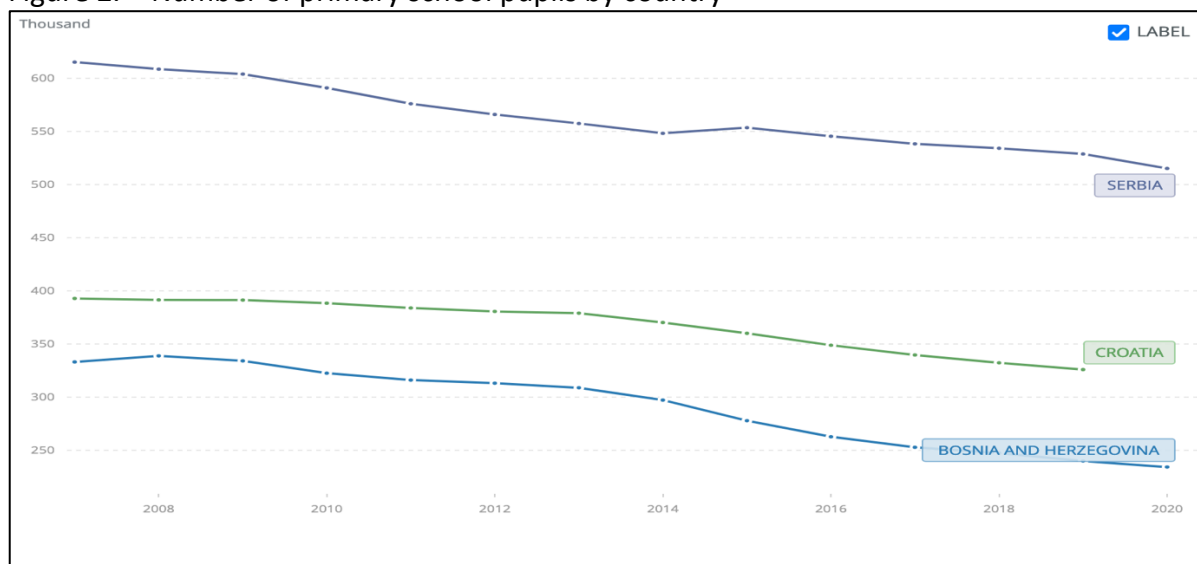
<sup>20</sup> Tado Jurić, Faruk Hadžić, *The consequences of recent emigration on the educational and workforce system of Bosnia and Herzegovina, Serbia, and Croatia*, 2021

Emigration of citizens to EU countries leads to direct economic and educational loss for those countries. Research results in some studies have provided estimated cost of emigration from Bosnia and Herzegovina and Serbia. According to this study, the cost of one person's education, who completes high school, is 20.219 EUR, while the cost of one person with a university education is 28.934 EUR. Additionally study, the average cost of each emigrant from Bosnia and Herzegovina is 25,000 euros. Similar research conducted in Serbia ultimately quantified the net loss due to emigration. It is estimated that the cost of education of one person who completes high school is in Serbia is 20.854 EUR, and university-educated 34.139 EUR (WFD, 2019).<sup>21</sup>

In order to prove the hypothesis, we will analyze the level of economic activity through GDP growth during the period 2014 - 2019 in order to measure the achieved level of total product, and monitor the emigration of the population from Bosnia and Herzegovina, Croatia and Serbia.

We will present the movement of the number of pupils in primary and secondary schools in Bosnia and Herzegovina, Croatia, and Serbia with the purpose to show the consequences of emigration. To monitor the movement of data, the World Bank data were used, which show that the number of pupils in primary schools decreased in the observed period from 2007 to 2020. Data for Bosnia and Herzegovina show that in the observed period there was a decrease in the number of pupils in primary schools in total of 98,807, a decrease of 66,857 for Croatia and 99,957 pupils in Serbia. The number of pupils in primary and secondary schools is very important for the level of the workforce in the future for these countries. Details are shown in Figure 2.

Figure 2. – Number of primary school pupils by country

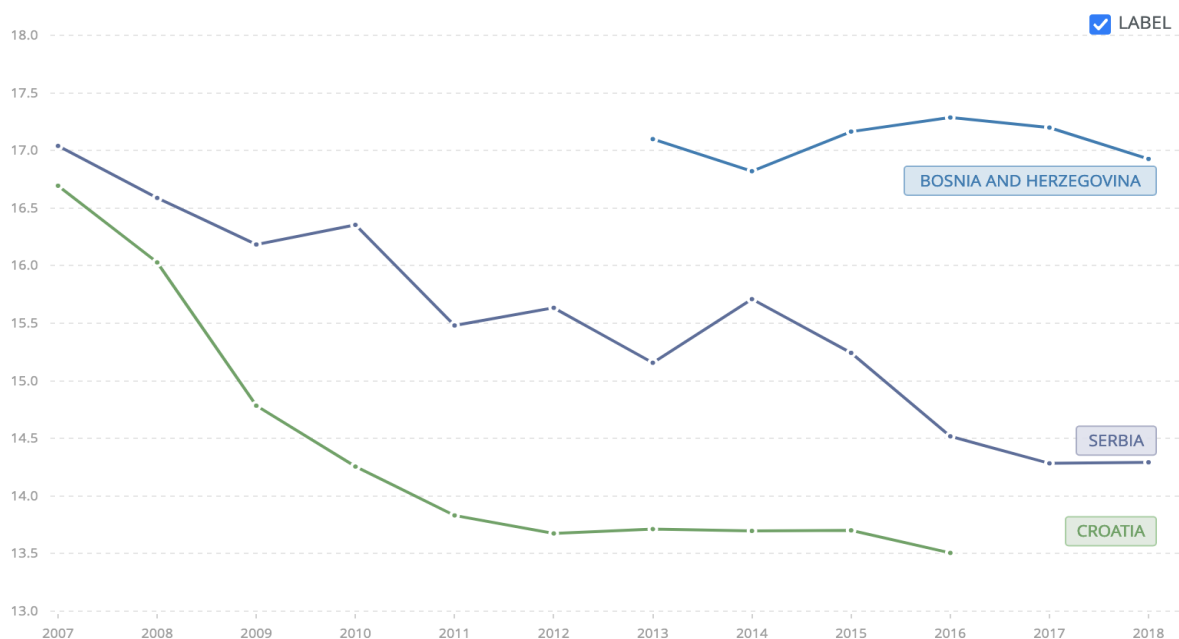


Source: <https://data.worldbank.org/indicator/SE.SEC.ENRL?end=2020&locations=BA-HR-RS&start=2007>

<sup>21</sup> Tado Jurić, Faruk Hadžić, The consequences of recent emigration on the educational and workforce system of Bosnia and Herzegovina, Serbia, and Croatia, 2021

The decrease in the number of pupils in primary schools was also reflected in the ratio of pupils per teacher. According to the World Bank data for the period 2007-2018, which are shown in Figure 3. it can be seen that the ratio of the number of pupils and teachers in primary schools was different by country. Data for Bosnia and Herzegovina are available for a shorter time series, more precisely for the period 2013-2018, where it can be seen that the ratio remained almost the same, although there were changes during the period. At the beginning of the period, this ratio was 17.1 to decrease to 16.9. Unlike Bosnia and Herzegovina, this ratio is significantly reduced for Croatia and Serbia. In Croatia, at the beginning of the period, this ratio was 16.7, to decrease at the end of 2016 to 13.5, which is a decrease of 3.2 pupils per teacher. The decline was slightly less for Serbia, where the ratio was 17 at the beginning of 2007, and at the end of 2018, it decreased to 14.3, which is a net decrease of 2.7 pupils per teacher.

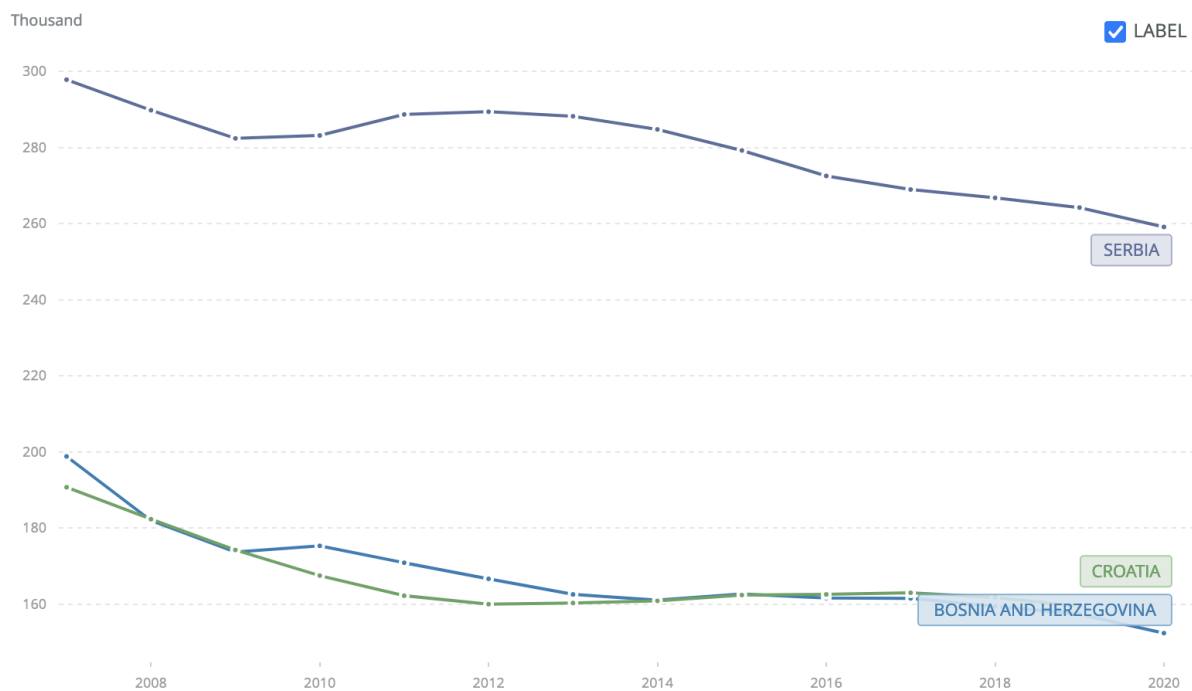
Figure 3. - Ratio of the number of pupils and teachers in primary schools by country



Source: <https://data.worldbank.org/indicator/SE.PRM.ENRL.TC.ZS?end=2018&locations=BA-HR-RS&start=2007>

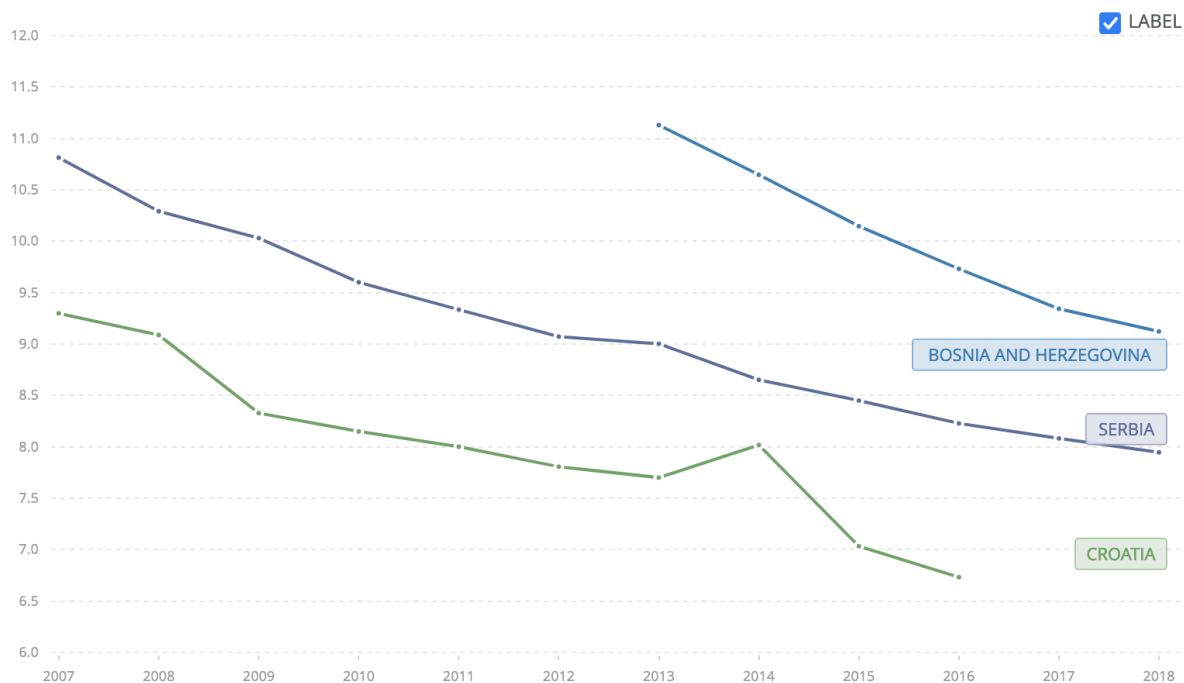
The decrease in the number of pupils is also visible in high schools. Data for the three observed countries show in the period 2007-2020 that the decline in relative proportions was even greater than in secondary schools. According to countries, the decrease in the number of pupils in secondary schools in Bosnia and Herzegovina was 46,467, which is a decrease from 198,800 to 152,333. In Croatia, the number of high school pupils decreased from 190,693 to 159,336 in 2019, a decrease of 31,357 pupils. In Serbia, there was also a decrease, where the number of pupils at the beginning of the period decreased from 297,816 to 259,112, which is a decrease of 38,704. If we analyze the relative decrease by countries, then the largest decrease was in Bosnia and Herzegovina of 23.4%, then in Croatia by 16.4%, while the decrease was the smallest in Serbia at 13%. Details are shown in Figure 4.

Figure 4. - Number of secondary school pupils by country



Source: <https://data.worldbank.org/indicator/SE.PRM.ENRL?end=2020&locations=BA-HR-RS&start=2007>

Figure 5. - The ratio of the number of pupils and teachers in secondary schools to countries

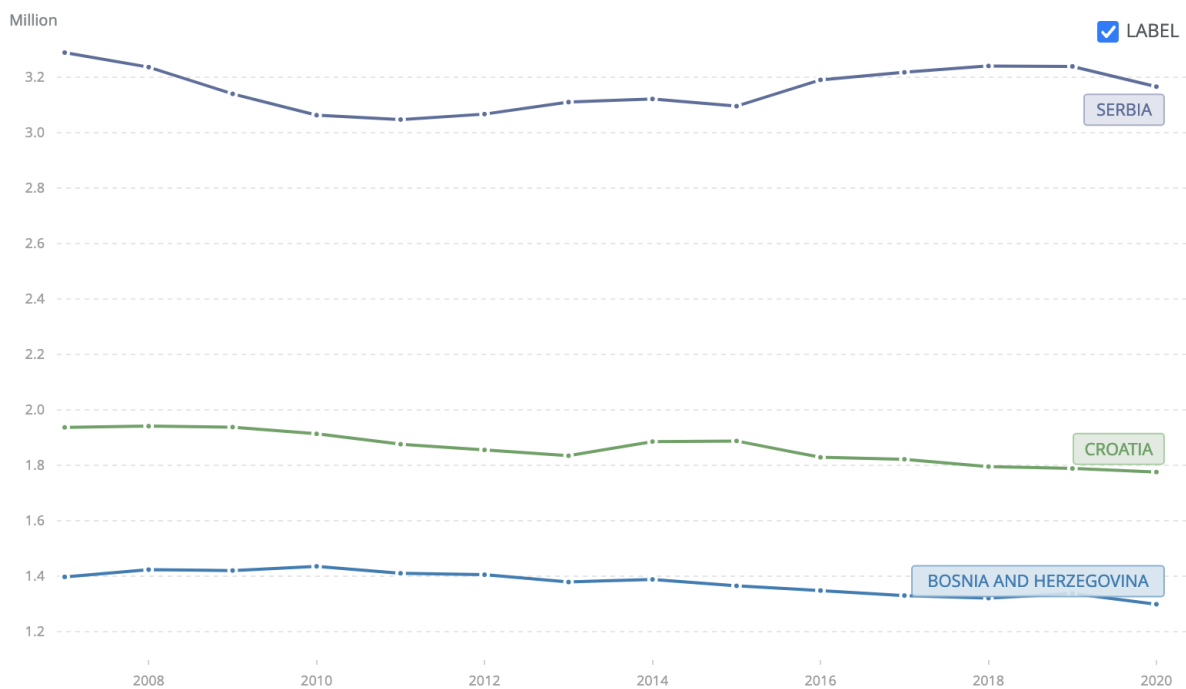


Source: <https://data.worldbank.org/indicator/SE.SEC.ENRL.TC.ZS?end=2018&locations=BA-HR-RS&start=2007>



The decrease in the number of pupils in secondary schools was also reflected, similarly to the ratio in primary schools and to the ratio of pupils per teacher. By reducing the number of pupils in secondary schools and maintaining the level of teachers, this ratio has decreased even further. According to the World Bank in the period 2007-2018, the ratio of reductions varies between countries. For Bosnia and Herzegovina, the time series for this period is not complete, so the available data for the period 2013-2018 indicate that the ratio has decreased from 11.13 pupils per teacher to 9.12. In Croatia, this ratio is slightly worse because there was a decrease from 9.3 to 6.7 pupils per teacher, noting that the period 2007-2016 was observed. The ratio also decreased in Serbia, where there was a decrease in the ratio with 10.8 to 7.9 pupils per teacher. Details are shown in Figure 5.

Figure 6. - Movements in labor force by country

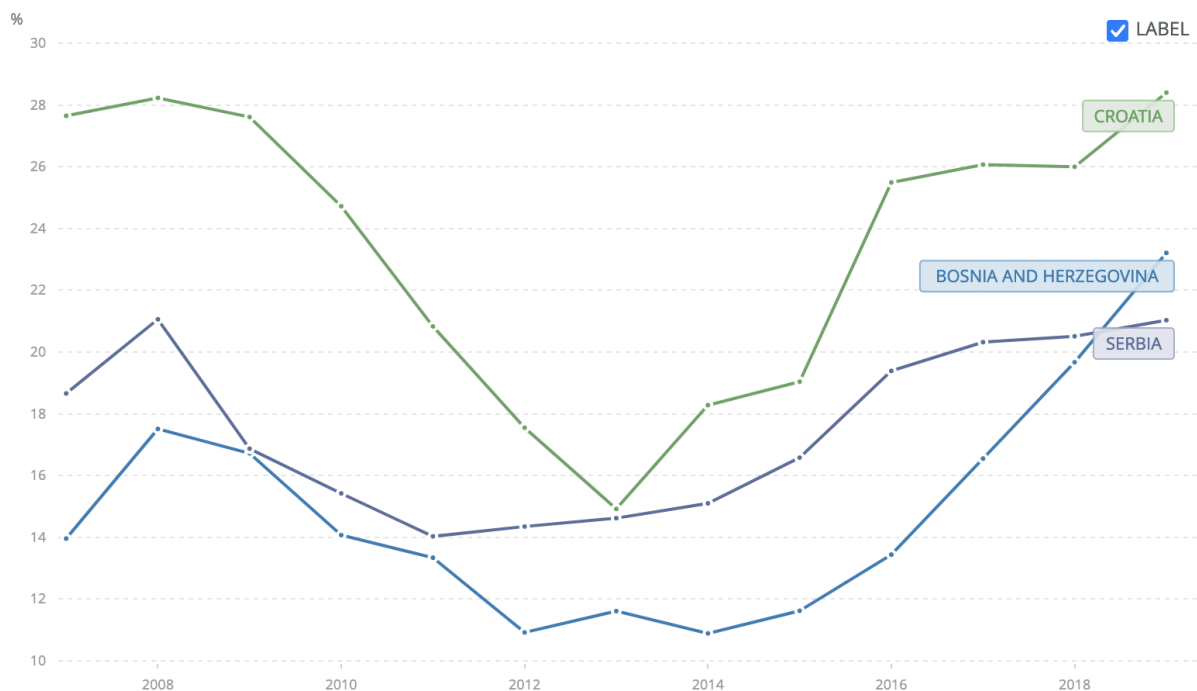


Source: <https://data.worldbank.org/indicator/SL.TLF.TOTL.IN?end=2020&locations=BA-HR-RS&start=2007>

The labor force, which is perhaps the most important economic production factor for achieving long-term economic growth, also decreased in all three countries during the observed period from 2007 to 2020, as shown in Figure 6. Two periods can be observed in Bosnia and Herzegovina. First period was until 2014, after which there is a significant reduction in the number of labor force. In this period from 2014 to 2020, the labor force was reduced by 89,753 workers, primarily due to the emigration of the population from Bosnia and Herzegovina. Unlike Bosnia and Herzegovina, Croatia recorded a decrease in the labor force during the entire observed period, so that in 2020, compared to 2007, there was a decrease in the labor force of 161,372 workers. The data for Serbia also show two periods when there was first a significant reduction in the level of the labor force, only to increase in the end, and to decrease again in recent years. At the end of the period, the net reduction in the number of labor in Serbia was 122,965.

In order to investigate the effect of youth employment in the total population, especially in the period of significant migration trends in the period 2014 - 2019, data on the level of youth employment in the group 15 - 24 were analyzed. According to the data shown in Figure 7. It can be seen that the share of employed young people increased significantly in the period 2014-2019, in which there were more intensive migration trends for all three countries. Compared to 2014, this ratio for Bosnia and Herzegovina is from 10.9 to 23.1%, for Serbia from 15.1 to 21.3%, and for Croatia from 18.3 to 28.4%. This phenomenon can also be explained by pronounced migration trends in the mentioned period, where the number of this population decreased, and therefore the share in relation to the total population increased.

Figure 7. - Share of employment of persons 15-24 by country

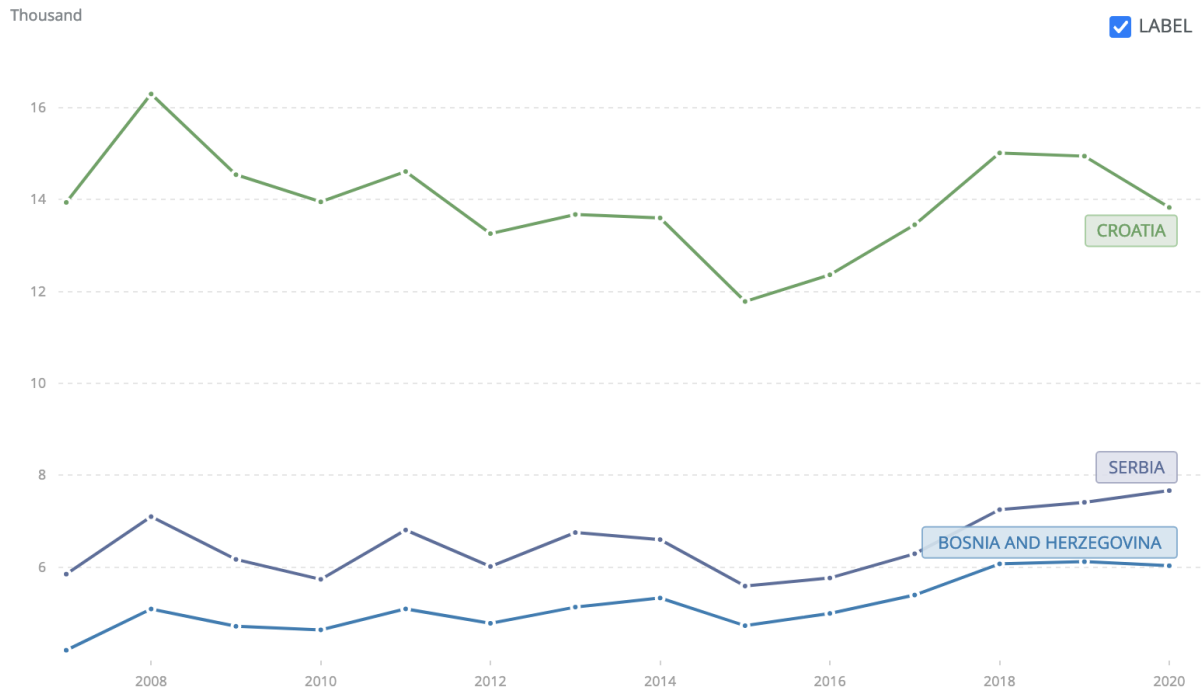


Source: <https://data.worldbank.org/indicator/SL.EMP.1524.SP.ZS?end=2019&locations=BA-HR-RS&start=2007>

As a consequence of the reduction in the number of pupils in primary and secondary schools and the reduction in the number of the labor force, we have stagnant economic growth for all three countries. The indicator we have observed for this period was GDP per capita. GDP in absolute values shows the level of products and services produced in one year in certain country. In order to obtain the level of GDP per capita, it is necessary to divide the amount of absolute GDP by the number of inhabitants. Given the steady decline in population levels through emigration, GDP per capita, as shown in Figure 8, did not grow significantly during the observed period. Data for Bosnia and Herzegovina indicate that in the period 2007-2020, GDP per capita increased by \$ 1,838, an increase of 43.8%. In the same period, the increase for Serbia was \$ 1,818, an increase of 31.1%. This amount of increase is not enough for Bosnia and Herzegovina and Serbia because it is a very small base. Data for Croatia show that in the same period, GDP per capita decreased by \$ 109, although it should be said that during the

period there was both growth and decline. However, such trends indicate a stagnant level of trends, which can be explained by the loss of residents, which should be a potential for economic growth.

Figure 8. - GDP per capita by country



Source: <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?end=2020&locations=BA-HR-RS&start=2007>

The analysis we conducted to calculate the real and potential GDP for Bosnia and Herzegovina, Croatia and Serbia, shows that all three observed countries since 2013 have lower economic growth than potential and are within the potential range, which is partly can also be explained by the reduction of the labor force, as a factor of production, which is especially pronounced in this period when a smaller growth than possible was recorded. For demonstration and display, we used the IMF Diagnostic Tools for Estimating Potential Output and Output Gap Using Linear Time Trend, which is shown in the Appendix of our paper with Figures 9, 10 and 11. The data we used in the calculation are data from national agencies. statistics, where quarterly values of GDP at constant prices for the period 1995-2021 were used for Croatia and Serbia. While quarterly values of GDP at constant prices for the period 2000-2021 were used for Bosnia and Herzegovina.

## THE BENEFITS OF REMOTE WORKS REGARDING DEMOGRAPHIC REVITALISATION

The benefits of remote works regarding demographic revitalisation are as follows:

*a) Working-from-home economy is environmentally friendly.*

Research of Global workplace analytics<sup>22</sup> shows that businesses in the USA are losing 600 billion dollars a year to workplace distractions. The pandemic has shown that human behaviour that has led to deforestation, air pollution, and water pollution worldwide can be changed.

When 3.9 million employees work from home at least half the time, they are reducing greenhouse gas emissions by the equivalent of taking more than 600,000 cars off the road for an entire year.<sup>23</sup> According to Emily Courtney, remote workers have the same potential impact on air quality as planting an entire forest of 91 million trees.<sup>24</sup>

*b) Remote workers are more productive*

According to Research of Global workplace analytics,<sup>25</sup> remote workers are 35% to 40% more productive than their in-office counterparts. According to performance-based remote work statistics in 2020, 94% of surveyed employers report that company productivity has been the same (67%) or higher (27%) since employees started working from home during the pandemic.

According to *FlexJobs'* survey, 95% of respondents say their productivity has been higher or the same working from home, and 51% report being more productive when working remotely. Top reasons for increased productivity include fewer interruptions, more focused time, a quieter work environment; a more comfortable workspace; not being involved in office politics.<sup>26</sup> Despite pandemic challenges, working parents also report increased productivity, with 49% of working mothers and 50% of working fathers saying they are more productive working from home.<sup>27</sup>

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<sup>22</sup> Costs And Benefit, Advantages of Agile Work Strategies For Companies, <https://global.workplaceanalytics.com/resources/costs-benefits> (05.07.2021)

<sup>23</sup> Remote Work Statistics: Navigating the New Normal By Emily Courtney, <https://www.flexjobs.com/blog/post./remote-work-statistics/>(05.07.2021)

<sup>24</sup> Ibid.

<sup>25</sup> Costs And Benefit, Advantages of Agile Work Strategies For Companies, <https://global.workplaceanalytics.com/resources/costs-benefits> /(05.07.2021)

<sup>26</sup> Ibid.

<sup>27</sup> Ibid.

*c) Remote work increases job satisfaction*

In 2020, remote workers reported a Workforce Happiness Index<sup>28</sup> of 75 out of 100, compared to 71 for in-office employees. According to this research, remote employees are more likely to be satisfied with their jobs than office-based workers (57% vs 50%).

Those working from home reported more positive measurements on almost every question related to job satisfaction.<sup>29</sup>

*d) Remote work leads to better mental health*

A survey by *Mental Health America*<sup>30</sup> has found that respondents with remote work options report better mental health. The study reported that employees without access to flexible work were nearly two times more likely to have poor or very poor mental health.<sup>31</sup>

*e) Remote work is impacting real estate*

With companies allowing employees to work from home permanently, remote workers are taking advantage of their new location independence, including the 27% of respondents considering a move, according to *FlexJobs* survey.<sup>32</sup> In this way, remote work gives people more options for where they live, reducing the necessity to live near large metropolitan city centres to maximise career potential.

Remote work offers workers to flee cities with a high cost of living or find more space to spread out.<sup>33</sup> Bloom is predicting that the growth of city centres will stall because offices in cities will no longer be needed in such a proportion.<sup>34</sup> According to his projections, a boom is expected for suburbs and rural areas. Instead of building more office skyscrapers, COVID-19 will dramatically shift the trend to industrial parks, suburbs and rural areas with low-rise buildings. This would undoubtedly achieve a better distribution of the population in the area, both in Croatia and the Western Balkans and at the level of the entire EU.<sup>35</sup>

*f) No fear of Population substitution*

The only hope for the growth of the working-age population in Western Europe is immigration. However, a large proportion of Europeans do not want a significant increase in foreign immigration.<sup>36</sup> In this regard too, remote work is proving to be a good alternative.

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<sup>28</sup> Who is the happiest working from home? Here's what latest jobs market data says, [https://www.cnbc.com/2020/05/26/who-is-happiest-working-from-home-heres-what-latest-jobs-data-says.html/\(05.07.2021\)](https://www.cnbc.com/2020/05/26/who-is-happiest-working-from-home-heres-what-latest-jobs-data-says.html/(05.07.2021))

<sup>29</sup> Remote Work Statistics: Navigating the New Normal By Emily Courtney, <https://www.flexjobs.com/blog/post/remote-work-statistics/> (05.07.2021)

<sup>30</sup> FlexJobs, Mental Health America Survey: Those With Flexible Work Report Better Mental Health, <https://www.flexjobs.com/blog/post/flexjobs-mha-survey-flexible-work-improves-mental-health/> (05.07.2021)

<sup>31</sup> Remote Work Statistics: Navigating the New Normal By Emily Courtney, <https://www.flexjobs.com/blog/post/remote-work-statistics/> (05.07.2021)

<sup>32</sup> Ibid.

<sup>33</sup> Ibid.

<sup>34</sup> <https://news.stanford.edu/2020/06/29/snapshot-new-working-home-economy/>

<sup>35</sup> Tado Jurić, *Gastarbeiter Millennials*, Hamburg 2021.

<sup>36</sup> See: Douglas Murray, *Čudna smrt Europe*, 2018.

Among the peoples of South-Eastern Europe, there is an extreme fear of the so-called „population substitution“. According to that thesis, the domestic population will be substituted by migrations from Africa and Asia<sup>37</sup>, and this fear is particularly pronounced after the great migration crisis of 2015 and repeated during 2021.

Many Croatian citizens observe the current migration phenomenon through the thesis that the EU is turning Croatia into a „European holiday house“ in peacetime and its „shield“ against mass illegal migration from Asia and Africa. In addition to the „shield of Europe“ metaphor, the metaphor of the „European Nursing Home“ is common in these countries in the context that many believe that their country is rapidly ageing naturally, while returnees are only pensioners. The perception of the majority of citizens is focused primarily on the negative role of Germany in the whole process, according to which Germany extracting a young labour force from Croatia, Serbia, and B&H and returns pensioners.

#### *g) Remote work slows the brain-drain*

Employees are looking for remote positions that come with flexibility and the security and benefits that come with traditional office-based jobs. According to the survey of Global workplaces analytics<sup>38</sup>, the top three benefits employees want are healthcare, professional development and coaching, at 69%, 63% and 54%, respectively. While not included in this survey, another popular option among Millennials and Gen Z are student loan repayments.<sup>39</sup> Having a choice of work environment and location is now the key factor for many job seekers when searching for a better work-life balance and evaluating new career opportunities.<sup>40</sup>

## CONCLUSIONS

If for no other reason, because populated areas are one of the main guarantors of the security of external borders, the EU should not be interested in having depopulated peripheral areas. Namely, there is a causal link between the increased emigration from the EU periphery and increased illegal migration.

Depopulation of the EU periphery is not just a problem of SEE. If the EU wants to have a strong EU external border in Croatia and the WB, it should pay much more attention to the depopulation of its periphery and migration from the periphery to the EU core. The emptying of the EU border areas is a security risk for the whole EU.

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<sup>37</sup> See: Šterc, Komušanec, 2012; see: Ministarstvo sigurnosti BiH, Informacija o stanju sigurnosti u Bosni i Hercegovini u 2018. i 2019., <http://www.msb.gov.ba/PDF/250220211.pdf>

<sup>38</sup> Costs And Benefit, Advantages of Agile Work Strategies For Companies, <https://global.workplaceanalytics.com/resources/costs-benefits/> (05.07.2021)

<sup>39</sup> Forbes, 2021, 5 Statistics Employers Need To Know About The Remote Workforce by Ashira Prossack, <https://www.forbes.com/sites/ashiraprossack1/2021/02/10/5-statistics-employers-need-to-know-about-the-remote-workforce/?sh=33db8326655d> (05.07.2021)

<sup>40</sup> Ibid.

Data for Bosnia and Herzegovina show that in the observed period there was a decrease in the number of pupils in primary schools in total of 98,807, a decrease of 66,857 for Croatia and 99,957 pupils in Serbia.

The decrease in the number of pupils in primary schools was also reflected in the ratio of pupils per teacher. For Bosnia and Herzegovina this ratio was 17.1 to decrease to 16.9. In Croatia, at the beginning of the period, this ratio was 16.7, to decrease at the end of 2016 to 13.5. The decline was slightly less for Serbia, where the ratio was 17 at the beginning of 2007, and at the end of 2018, it decreased to 14.3.

The decrease in the number of pupils is also visible in high schools. According to countries, the decrease in the number of pupils in secondary schools in Bosnia and Herzegovina was 46,467, in Croatia 31,357 pupils, and in Serbia 38,704.

The decrease in the number of pupils in secondary schools was also noted. For Bosnia and Herzegovina, the ratio has decreased from 11.13 pupils per teacher to 9.12, in Croatia, from 9.3 to 6.7 pupils per teacher and in Serbia, this ratio decreased from 10.8 to 7.9 pupils per teacher.

The labor force also decreased in all three countries during the observed period from 2007 to 2020. Labor force was reduced by 89,753 workers in Bosnia and Herzegovina, primarily due to the emigration of the population. In Croatia, there was a decrease in the labor force of 161,372 workers, while in Serbia there was 122,965 decrease in labor force.

As a consequence of the reduction in the number of pupils in primary and secondary schools and the reduction in the number of the labor force, we have stagnant economic growth for all three countries.

The analysis we conducted to calculate the real and potential GDP for Bosnia and Herzegovina, Croatia and Serbia, shows that all three observed countries since 2013 have lower economic growth than potential and are within the potential range, which is partly can also be explained by the reduction of the labor force, as a factor of production.

Remote work could be a proper demographic answer on facing the EU demographic challenges and reduce the migration flows from EU periphery.

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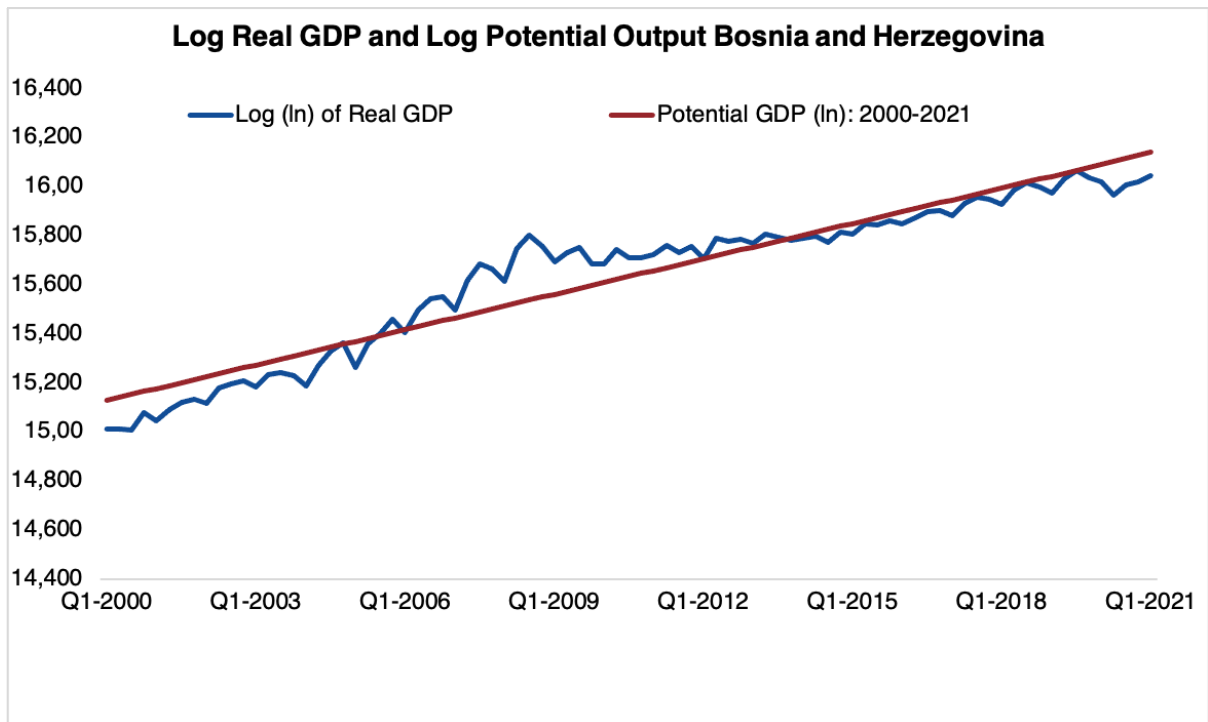
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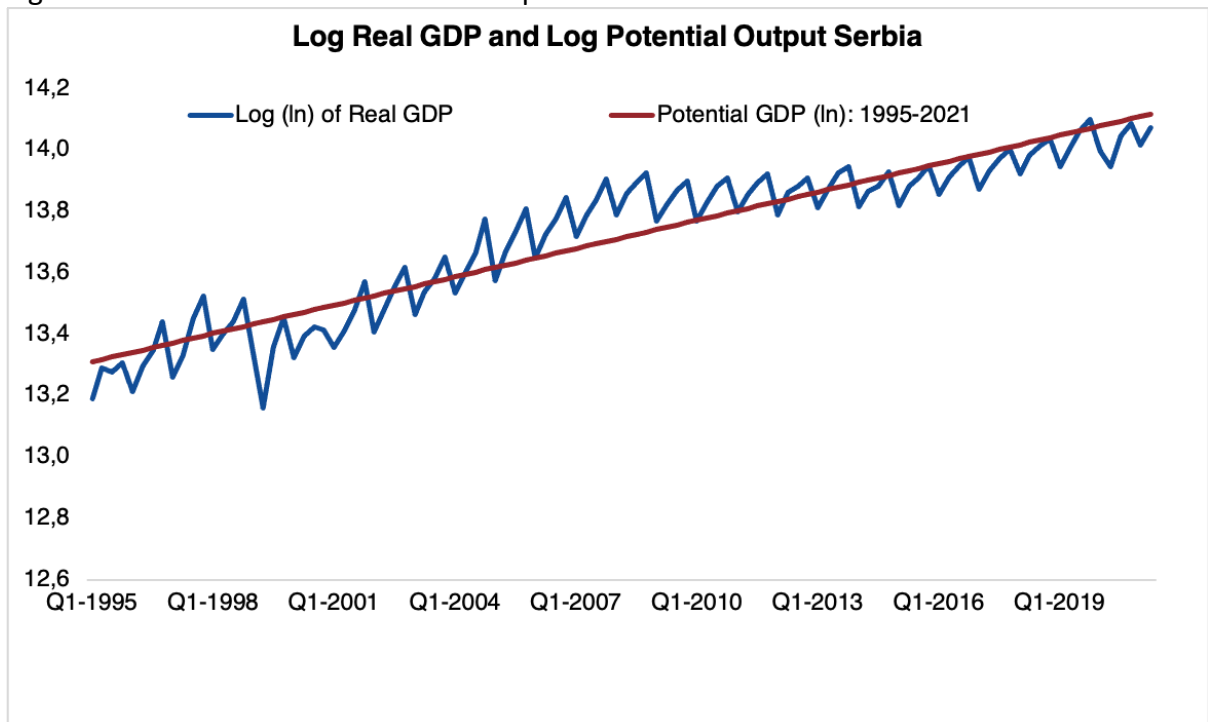
## APPENDIX

Figure 9. – Real GDP and Potential Output for Bosnia and Herzegovina



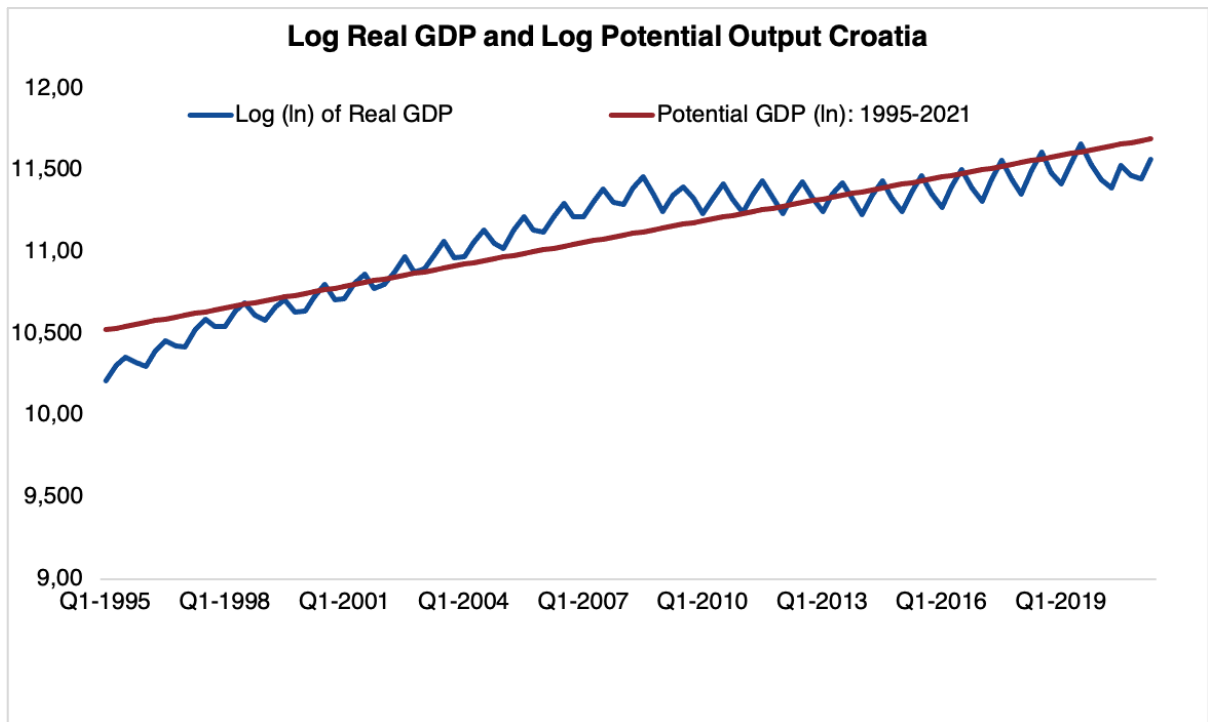
Source: Author's work

Figure 10. – Real GDP and Potential Output for Serbia



Source: Author's work

Figure 11. – Real GDP and Potential Output for Croatia



Source: Author's work