



**YOUNG PEOPLE, MIGRATION AND THE DEMOGRAPHIC CHALLENGE
IN THE WESTERN BALKANS**
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BACKGROUND PAPER¹

**THE COST OF EMIGRATION FROM THE WESTERN BALKANS –
THE CASE OF LOST INVESTMENTS IN EDUCATION**

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¹ The responsibility for the views set out in this paper lies with the author. It does not necessarily reflect the official policy or position of the German Federal Foreign Office, the Aspen Institute Germany or the Southeast Europe Association.

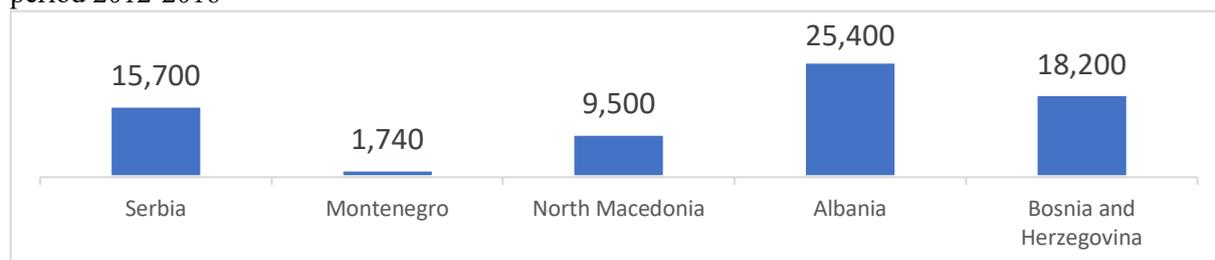
THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

Introduction

In the Western Balkans region, there is an aging population and a declining population growth rate. The cause of this trend is the joint influence of a negative natural increase and an increasing emigration flow. However, the statistics bureaus in Western Balkan countries do not have data on the volume and characteristics of emigration. There is also no organization in the countries or abroad that has precise records on migration, so the respective age and education backgrounds of migrants cannot be determined. Data of the Western Balkans migrants used in this paper are the estimates provided by the Organisation for Economic Co-operation and Development (OECD).²

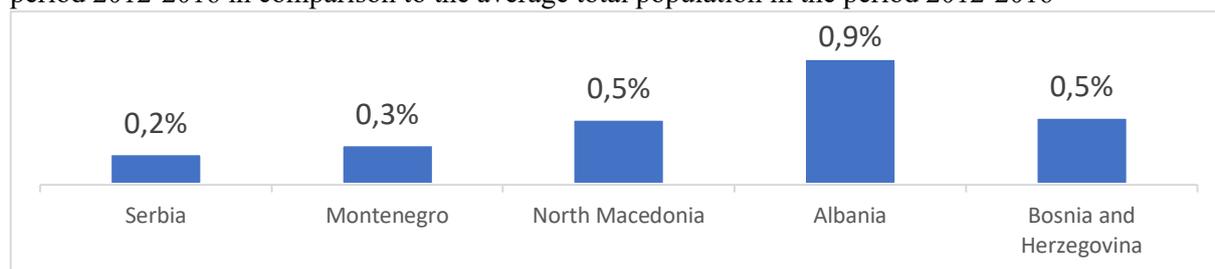
In its International Migration Report, the OECD estimates that in the five years from 2012 to 2016 and from 2013 to 2017, on average approximately 155,000 people left the Western Balkans annually. It is important to note that the data includes all people who left the country, including those who left the country to work temporarily, to educate themselves, or those who were sent on intercompany transfers, as well as other forms of temporary labor migration.⁴ If we correct the average annual outflow of 155,000 people with the average number of people who return to the Western Balkans annually (around 83,000), we get a net annual outflow of around 70,000 people.

Figure 1. Average annual net population outflow to OECD countries from the Western Balkans in the period 2012-2016



Source: Author calculation based on OECD data (see footnote 2)

Figure 2. Average annual net population outflow to OECD countries from the Western Balkans in the period 2012-2016 in comparison to the average total population in the period 2012-2016



Source: Author calculation based on OECD and Eurostat data (see footnote 2)

If we observe the average annual net population outflow to OECD countries in comparison to the average total population in the Western Balkans countries in the period between 2012 and 2016, the emigration rate was highest in Albania with on average 0.9% of the total population emigrating to OECD countries every year, while the rate was lowest in Serbia.

According to OECD data, the favorite destination country of people from the Western Balkans is Germany. For example, more than 65% of emigrants from North Macedonia and over 50% of emigrants

² Organization for Economic Co-operation and Development, International Migration Outlook 2019.

³ International Migration Database, OECD database <https://stats.oecd.org/Index.aspx?DataSetCode=MIG>.

⁴ For forms of temporary migration, please see the International Migration Outlook 2018, OECD, pages 25-34. Also, the detailed metadata for each OECD member country is shown on pages 315-319 of the report in question.

THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

from Bosnia and Herzegovina as well as from Montenegro went to Germany. Austria, Italy, Slovenia, and Switzerland were also popular destinations in the afore-mentioned period.

The Costs of Emigration

Due to emigration of young people, the economy and the society face both positive and negative effects. The loss of creative capital is one of the negative consequences which becomes significant in cases of the emigration of young people because they represent the source of future innovation, production and ideas. Another negative effect is the increased pressure on pension and health insurance, which is caused by the decrease of young people in a country, who would contribute to social insurance funds, as future potential employees.

The most direct cost that western Balkan society faces is the loss of invested funds in education. Depending on the level of education, society invests in the education of individuals for up to twenty years in some cases. With the emigration of young, educated people, those investments become losses, or they become investments in the destination countries, who gain educated individuals without spending any money.

The education costs occur over a longer period in the past and accumulate through this process. However, the departure of a certain number of people abroad has a strong, immediate effect, both direct and indirect, on the economy of Western Balkan countries. Such departures mean the loss of future gains, which is, conditionally speaking, the definition of opportunity costs, even though these costs are related to individuals' decisions. While leaving the recognition and description of migration flow effects on the aging of the population and the total social development to the demographers and sociologists, we focus on the identification of the influence on the economic component of the social development. With that intention, the number of people who, leave the Western Balkans per year is connected to GDP as a measure of economic activity in the countries.

What are the total education costs for 2018 graduates?

The methodology of the calculation and sources

In an attempt to answer this question, we are going to use the methodology developed and implemented in our previous analyses⁵ for Western Balkan countries. We started with the data provided by the Eurostat database, which shows the education costs by the education level, as well as by the finance sources. The starting point was the total yearly amount that the state and the households pay for education. It is important to note that the available data on these expenditures from the competent institutions was for a shorter period than necessary for a full calculation, which means that they needed to be combined with the data from the national education sector accounts. These statistics show public, private, and international expenses for education institutions per education level, with the data on the costs of higher education only available cumulatively for vocational schools, undergraduate studies, and postgraduate studies.

Keeping in mind that the average graduate spent five years on academic studies and 12 years on primary and secondary education, if they graduated in 2018, they would have started their education in 2000/2001. It was therefore necessary to establish annual costs for education in each separate year in the given period. The estimation of these costs was done by using the GDP production approach data,

⁵ Ćirić et al., 'Cost of Youth Emigration in Serbia', Institute for Development and Innovation, Belgrade, 2019, pp.20-21.

THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

and the output (value of performed services with regard to education) by education classification.⁶ The fact that the output of this activity was predominantly created by the public sector supports the application of this approach, and as such it is in accordance with international methodology calculated by the input-cost method or by the following formula:

$$\text{employee compensation} + \text{intermediate consumption} + \text{consumption of fixed assets} + \text{other consumption taxes (paid)} - \text{other production subsidies (received)} + \text{business surplus}.$$

Taking into consideration the components of the output calculation from the education sector, it becomes clear that this is a variable that is both conceptually and by its value very close to the total education costs that are available for the period 2013-2016 on the Eurostat website. This fact was used to compensate for the missing data in the whole time series. By comparing the data for those years where we have both sets of information, we confirmed that these values are very similar. With this comparison, we also defined the correcting coefficients that have then been applied to get as near as possible to the concept of total expenses for educational purposes.

It is important to note that the statistics from the national education sector accounts estimate the so-called “non-realized economy.” In the stated amounts, there is also the part of costs for the education activities that occur outside of the regular flows (e.g., private lessons costs, translation costs, additional courses, etc.). In the next iteration, the output of education is increased by the accompanying costs, which are methodologically not included in the initial education output data, but are directly or indirectly linked to education. This refers first to the costs incurred by the students’ and pupils’ accommodation provided by the state and local governments, which are also connected to the students’ and pupils’ loans and scholarships. The annual amounts are then discounted to equalize all the costs in the monitored 18-year period with the current monetary value.

At the same time, the statistics institutions in charge provide the data on the number of students for each year in the stated period, to calculate the amounts allocated per each observed unit. This dataset enabled us to estimate education costs per education levels, and to answer the question: how much on average did primary, secondary and tertiary education cost the countries per individual who graduated in 2018.

It is also important to note that this is the average, which should not have significant deviations in primary and secondary education. In contrast, there are higher deviations in tertiary education, which is the synthetic cost indicator for education because it consists of all three academic levels. Estimates that are more precise are also possible for individual faculties and colleges, experts’ profiles, and post-graduate levels, which will be a topic for future papers.

Results

Results gained from the application of the stated methodology show that the education of an individual in the Western Balkans from primary school through four-year secondary school and five years (on average) of university studies finishing in 2018, cost between around 18,000 EUR in Albania and 34,000 EUR in Serbia. A secondary education (including 8 or 9 years of primary education) that ended in 2018 cost approximately 21,000 EUR in Serbia and 9,000 EUR in Albania. The estimate of education costs for people with Ph.D. degrees is not easily obtainable due to the lack of available information. Still, on average approximately 45,000 EUR are spent on a Ph.D. in the Western Balkans countries.⁷ The main reasons for differences in costs of education between Western Balkan countries are differences in average wages in the education sector and general price level differences between countries.

⁶ European Union (EU) NACE Rev2

⁷ Author calculation

THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

Figure 3. The education costs for individuals, per educational level, 2018 graduates in EUR

	Finished secondary school	Finished higher education	Finished PhD studies
Serbia	20,854	34,139	54,576
Montenegro	16,467	31,180	51,120
North Macedonia	14,432	28,934	47,753
Albania	9,267	18,283	31,925
Bosnia and Herzegovina	20,219	28,934	43,135
AVERAGE	16,248	28,294	45,702

Sources: Author's calculation based on Eurostat, World Bank⁸ and national statistics offices data⁹

Although using only an average in the data analysis can cloud the bigger picture, or be interpreted in different ways, these amounts represent only the first step towards the quantification of the lost investments in education in the Western Balkans. The group of people with academic diplomas is quite heterogeneous in terms of costs per individual program, length of studies, degree level, follow up education costs, etc. In that sense, the existence of data on the annual number of people who emigrated, their age, educational level, return plans, and whether they are individuals or families, would significantly improve this calculation. From a macroeconomic viewpoint however, the deviation from the current quantification to a more precise one would not lead to a more dramatic change in the conclusions that this method has provided. Also, by looking at the annual costs, we have noticed that the data series is quite stable, which lets us draw similar conclusions for those who graduated before 2018.

To quantify the total effects, we have used the OECD data mentioned in the section on statistics of migration from the Western Balkans. As previously stated, according to the OECD data, the average annual outflow of people from the Western Balkans was 155,000 and the average net annual outflow was around 70,000 people.¹⁰ The detailed age and educational structures of this group are not known or are not publicly available, not even in the Western Balkan countries. In order to estimate the cost, we first excluded those aged 0-5 and people with incomplete primary or secondary school education. In terms of the cost generated, for example, a child in sixth grade and a child in third grade are counted cumulatively as one graduate of primary school (9 years), as well as a child in the first and one in the third year of secondary school, are added up to account for a secondary school education (4 years). As a frame for this estimate, we used the modified age structure, with the assumption that the number of children in the emigration flow is lower by half than the total amount in the population.

For the educational structure of the migration group, we created three different scenarios. In *Scenario 1* we used the educational structure of people older than 15 according to the last census in Western Balkan countries as a basis. Since, in the last couple of years, the departure trend for the highly educated people has increased, we also *Scenario 2* where stratum of the highly educated has the most significant weight, 50%. Secondary school students in this scenario account for 30%, whereas emigrants with primary school education have the lowest weight with 20%. *Scenario 3* is based on the assumption that all education levels have the same influence in this group. Therefore, the latter two scenarios (*Scenarios 2 and 3*) are assumption-based and have the exact same assumed educational structure of the migrant group for each Western Balkan country. In contrast, Scenario 1 is based on real data.

⁸ Macro Poverty Outlook, Europe and Central Asia Spring Meetings, World Bank, 2019.

⁹ Household consumption survey, BIH Statistics office, 2018. http://www.bhas.ba/?option=com_content&view=article&id=113&lang=en; Labour Force Survey 2018, Statistics Office of BIH, 2013. http://www.bhas.ba/ankete/BHAS_Ars_BH_press.pdf; Thematic newsletter "Demographics", Statistics office of BIH, 2010. http://www.bhas.ba/tematskibilteni/DEM_2009_002_01-bh.pdf; Results of the 2013 Census Statistics office of BIH, 2016. http://www.popis.gov.ba/popis2013/doc/RezultatiPopisa_SR.pdf

¹⁰ For the difference between the annual and the net annual outflow see part 'Statistics of migration from Western Balkans'

THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

Figure 4. Illustration of scenarios used for calculation

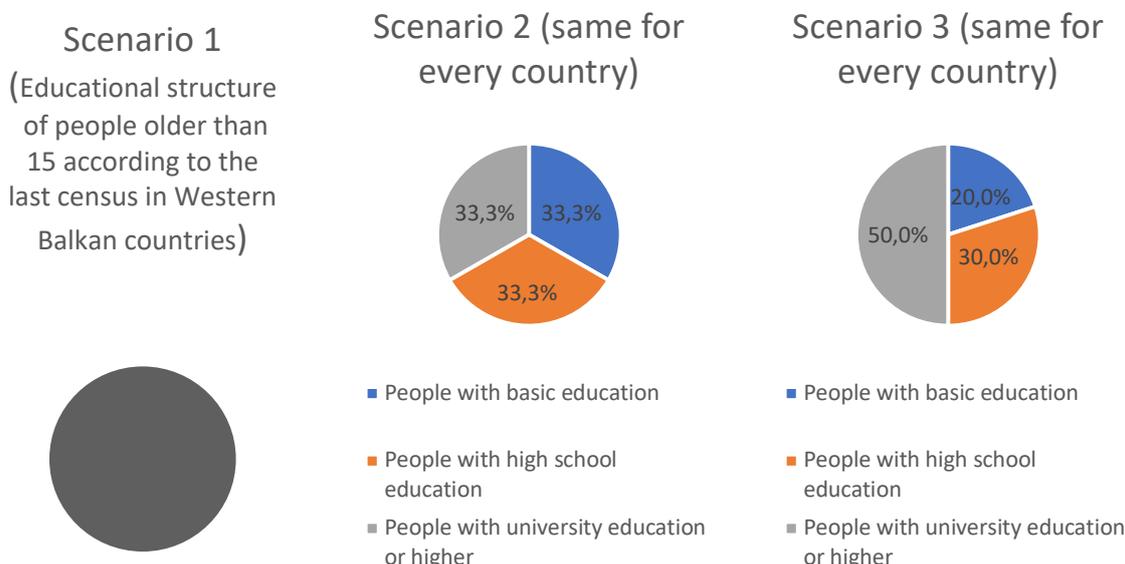


Figure 5. Education costs in Western Balkan countries per scenario for people who emigrated, in million EUR

	Scenario 1	Scenario 2	Scenario 3
Serbia	308.9	345.2	393.3
Montenegro	28.2	36.6	31.5
North Macedonia	116.5	181.8	154.2
Albania	201.4	306.7	261.6
Bosnia and Herzegovina	317.0	355.1	388.0
TOTAL	972.0	1225.4	1228.6

Sources: Author's calculation based on IMF, Eurostat and national statistics offices data¹¹

The results show that the loss of funds invested in the education of people who leave the Western Balkans in a single year (an average net annual outflow of around 70,000 people), depending on the educational structure, varies from 972 to 1,229 million EUR. If viewed by country, in Serbia these costs range from 309 million to almost 400 million EUR, which are approximately around 4% of the budget for 2020. In Bosnia and Herzegovina, they range from 317 to 388 million EUR. In Montenegro, the education costs of emigrating people are between 28 and 31 million EUR.

Considering that the average outflow of people from the Western Balkans who emigrated, permanently or temporarily is about 155,000 people according to OECD data, the education costs in the Western Balkans, applied to this quantity of emigrants are around 2.3-2.9 billion euros. Detailed structures and statistics of those who leave permanently or return do not exist on the country level. We cannot know if

¹¹ Household consumption survey, BIH Statistics office, 2018. http://www.bhas.ba/?option=com_content&view=article&id=113&lang=en; Labour Force Survey 2018, Statistics Office of BIH, 2013. http://www.bhas.ba/ankete/BHAS_Ars_BH_press.pdf; Thematic newsletter "Demographics", Statistics office of BIH, 2010. http://www.bhas.ba/tematskibilteni/DEM_2009_002_01-bh.pdf; Results of the 2013 Census Statistics office of BIH, 2016. http://www.popis.gov.ba/popis2013/doc/RezultatiPopisa_SR.pdf

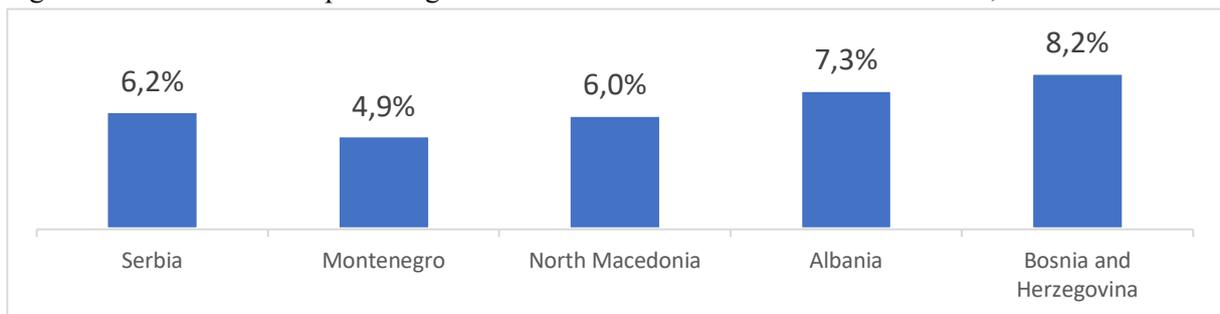
THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

these are temporary workers, returning pensioners, or people temporarily moving for specializations, etc. This limitation makes it difficult to quantify the final effect of the migration flow. However, we believe that the effect of the total outflow should be considered seriously, no matter what the current temporary nature of these departures, because they are often merely a step towards permanent emigration, especially if we consider the policies and measures of the developed countries.

The economic benefit of population emigration

In addition to costs of emigration, there are also potential financial benefits. The most important benefit of the emigration flow is the remittances. Remittances are the money transferred by emigrants to family or friends who remained in the home country. This income improves the life quality of the recipients, but it also considerably influences the Western Balkans economies. Western Balkans economies are on top among European countries in the contribution of remittances to the GDP. They share first place in Europe, with five to eight per cent of GDP (Figure 6). If other sources of foreign income in addition to remittances are considered, such as foreign pensions, other personal transfers and the taxes from temporary workers, this contribution increases.

Figure 6: Remittances as a percentage of GDP in Western Balkan countries in 2018, in %



Sources: Statistics of national banks in Western Balkan countries

The money that emigrants have sent back to their families in the Western Balkan countries for decades is much greater than direct foreign investments. On average, remittances are a very important part of household incomes, but mostly used in personal consumption and to raising living standards. They are usually spent on food, clothing, and cosmetics. As an illustration, other personal incomes from abroad in Bosnia and Herzegovina constituted 8.5% of GDP in 2010 and 6.4% of GDP in 2018. The allocation of transferred funds compels the conclusion that they have an important role in the national economy, but cannot be considered a generator of future growth and development. For this to happen, the investment component would need to be increased considerably.

Additionally, the positive effects of foreign currency inflow in the form of remittances are expected to drop, because the connections between the diaspora and the home country can weaken due to the more frequent trend of the emigration of whole families.

Conclusion and proposed measures

The lack of human capital in the not so distant future can greatly affect the economic fate of a country and the standard of living of the citizens of the Western Balkans. If the emigration trend continues, it will bring a series of socio-economic problems, some of which are visible now: pressures on pension funds, healthcare services, and social care services, a decrease in potential GDP growth because of declining human capital factors, disturbances in labor markets, etc.

THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

Another important aspect, based on the theoretical foundations of the Nobel Prize winner George Akerlof¹², is the effect on the motivation of those who stay. According to Akerlof, the more people depart, the less attractive it is to stay. If this approach seems too philosophical, try to imagine how a nurse feels at work in Serbia (for example) after she has spent the night before talking to her former colleague, who now works in Norway. Or a laborer who checks out the Instagram profile of a former colleague, who now works in Germany, during his break. It is clear that the motivation of all those who stayed, who feel their qualifications are attractive and wanted abroad, and who are considering or preparing to leave, is negatively impacted which in turn harms productivity. The problem is very difficult to quantify, but undoubtedly there is a reverse proportional connection between emigration intensity and work motivation.¹³

Emigration cannot be stopped or overturned, but it can be mitigated to a certain degree and can even benefit a country in some ways. The multidimensionality of the migration phenomenon implies a series of positive factors which, if they are to take effect, must be ensured by active measures of the state:

- establishment of a database with precise records on migration from Western Balkan countries;
- the strengthening of bonds with the diaspora through new technologies and communication channels;
- the creation of interactive platforms for the exchange of experiences, ideas and business proposition;
- the attraction of investments in the economy of the home country;
- the transfer of knowledge and technologies.

Also, special strategies used against youth unemployment must consist of measures for:

- encouraging entrepreneurship;
- early career guidance;
- partnerships between employers and secondary schools.

The Western Balkans diaspora is large, but official institutions do not have data on the volume and characteristics of external migration. There is no organization in the Western Balkans or abroad that has precise records on migration, so the age and education of migrants cannot be determined.

Due to the non-existence of strong and well-developed connections between the diaspora and home countries, Western Balkans countries lose potential benefits. These could include the better investment of remittances, and transfer of knowledge and experience which the young gain abroad and can bring back. There are also warning signs that remittances will start to decrease due to changes in the form of migration.

To help develop strong connections between the diaspora and home countries, we propose a project of mapping the diaspora in every country, focusing on:

- Establishing a database of the diaspora with contacts and basic economic data with a focus on highly educated members of the diaspora in every country;
- Gaining insight into the financial situation and other characteristics of the diaspora to aid the creation of future policies aimed at the diaspora;
- Increasing communication between the diaspora and the country of origin (for example in Serbia there is the program Returning Point);
- Better informing the diaspora about government policies in Western Balkans related to the diaspora.

¹² Akerlof, George A. "The Missing Motivation in Macroeconomics, American Economic Association, Chicago, IL, January 6, 2007.

¹³ Ćirić et al., 'Cost of Youth Emigration in Serbia', Institute for Development and Innovation, Belgrade, 2019, pp 5.

THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

The policy proposal would consist of three phases. The first would be devoted to the preparation of the survey, the second to conducting mapping and the third to analyzing data and reporting.

THE COST OF EMIGRATION FROM THE WESTERN BALKANS – THE CASE OF LOST INVESTMENTS IN EDUCATION

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