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Management of external component of the public debt of the Western Balkan countries

Upravljanje eksternom komponentom javog duga zemalja Zapadnog Balkana

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Abstract

The paper examines the external position of the countries of the Western Balkans using the movement of external liquidity indicators (Debt service/Export good and services and Debt service/gross national product (GNI)) and external solvency indicators (External debt/GNI and External debt/Export good and services)) in the period 1999-2021. according to the criteria of the World Bank. In order to assess the external position of these countries, the level of the calculated external liquidity and external solvency indicators is compared with the identical indicators of Bulgaria, also a Balkan country but a member of the European Union since 2007. The paper noted a certain improvement in the external liquidity and external solvency of the countries of the Western Balkans, from 2010 to 2021, except for Montenegro, where in recent years there has been a multiple increase in the Eternal debt / GDP indicator. Also, based on the observed indicators, it was concluded from the perspective of the limits of external liquidity and external solvency determined by the World Bank that the Western Balkan countries are not threatened by the possibility of external illiquidity and external insolvency, except in Montenegro.
Keywords*: external debt, external position of countries, external liquidity, external solvency, Western Balkan countries.*

Sažetak

U radu se sagledava eksterna pozicija zemalja Zapadnog Balkana pomoću kretanja indikatora eksterne likvidnosti (Debt service/Export good and services and Debt service/gross national product (GNI)) i indikatora eksterne solventnosti (Spoljni dug/GNI i Spoljni dug /Export good and services) u periodu 1999-2021. shodno kriterijumima Svetske Banke. U cilju ocene eksterne pozicije ovih zemalja, visina izračunatih indikatora eksterne likvidnosti i eksterne solventnosti se uporedjuje sa identičnim indikatorima Bugarske, takođe balkanske zemlje ali članice Evropske unije od 2007.godine. Konstatovano je određeno poboljšanje eksterne likvidnosti i eksterne solventnosti zemalja Zapadnog Balkana, od 2010. do 2021.godine, sem kod Crne Gore u kojoj je tokom zadnjih godina došlo do višestrukog povećanja indikatora Eternal debt / GDP. Takođe, na bazi sagledavanih indikatora konstatovano iz perspektive granica eksterne likvidnosti i eksterne solventnosti određenih od strane Svetske banke zemljama Zapadnog Balkana ne preti mogućnost ispoljavanja eksterne nelikvidnosti i eksterne nesolventnoti, sem u Crnoj Gori.
Ključne reči: *eksterni dug, eksterna pozicija zemalja, eksterna likvidnost, eksterna solventnost, zemlje Zapanog Balkana.*

1. Introduction

Public debt represents the sum of all budget deficits of the state from previous years. In other words, debt is stock, the sum owed by the state due to budget deficits in the past. On the other hand, the budget deficit is a flow, or the amount which the state borrows in a certain year in order to finance its own needs (Blanšar, 2012, p. 561). Public debt is a part of a rich set of macroeconomic variables, where it is either influenced or it influences a wide web of interwoven economic interdependencies. There are opinions that lines of interdependence are much easier to identify than cause-and-effect relationships due to the fact that the existence of a large number of feedback loops conditions mutual influences. (Madžar, 2019; Navarro-Ortiz, & Sapena, 2020).

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The two components of the public debt category (Trklja, 2015) are *internal and external public debt*. *The internal part* of the public debt whose creditors are the citizens of the country, mainly consists of obligations, bonds and notes owned by the citizens or companies of the observed country. *Eternal debt* refers to the part of the public debt that, unlike the internal debt, is in the hands of foreign creditors (Bulatova, et al., 2020).

Due to the fact that it is easier to trade in the local currency, *internal debt* is a much more favorable option for government borrowing than *external debt*. There is an opinion that the *internal debt* does not represent a problem for a country in the same way as the *external public debt*. For example, Japan is a country with an extremely high *Eternal debt*/GNI[1] indicator - about 220%. However, bearing in mind the fact that more than 90% of the total Japanese public debt is internal public debt, the problem of excessive indebtedness of the Japanese state almost does not arise.

The subject of this paper is an overview of the external position of the countries of the Western Balkans. The research is based on the following questions: a) are the countries of the Western Balkans threatened by external illiquidity and insolvency, according to the liquidity and solvency criteria of the World Bank? and b) did the economic crises of 2008 and 2019 have a negative impact on the quality of their external position?

In order to find the answers to the previously asked questions, first of all, an explanation of the theoretical views on the possible influence of the growing external borrowing of countries was given, as well as a presentation of the most common indicators used by the World Bank when assessing the external position of countries. Then, a graphic explanation of the movement of two indicators of external liquidity and two indicators of external solvency of the countries of the Western Balkans in the period 1999-2021 was given. Finally, the change in the value during the economic crisis of 2008 and 2019 is specifically indicated on the graphic explanations of the movement of the values of these parameters.

The structure of the work consists of five interconnected parts. After the introductory remarks, the second section of the paper provides a brief analysis of the reasons that justify and indicate the possible negative consequences of excessive external indebtedness of countries. In the third section of the paper, the research methodology applied in this paper is presented. In this context, the countries that make up the object of the research are listed and the length of the time series for which the necessary data is available in the World Bank database is indicated. The fourth section of the paper is dedicated to the graphic presentation of indicators of external solvency, and the fifth to the analysis of two indicators of external liquidity of the Western Balkans in the period 199-2021. The concluding part is presented in the sixth section of the paper.

2. Theoretical considerations regarding the justification of external borrowing

The reasons for public borrowing by the state are very different. In the most basic sense, they can be investment and consumption. Situations in which the country has attractive investment options and has the capacity for their successful realization are mentioned as arguments that justify external borrowing in the financing of investments, which should ultimately be in the function of improving the country's foreign trade competitiveness. “The country's ability to be internationally competitive is determined through a number of internal and external factors, such as: human and natural resources, infrastructure, management, capital, government interventions and the technological capability of enterprises. It is based on high-quality production performance and the economic ability to produce outputs with the highest possible productivity, which in turn generates a high level of real earnings. Competitiveness is closely linked to rising living standards, greater employment opportunities, and the country's ability to meet its international obligations“ (Stojanović, 2021, p. 51). Public borrowing is economically justified when it arises from structural reasons resulting from the limited mobility of investment funds. Borrowing enables the implementation of above-average efficient projects in financially deficient sectors. Thus, the gap in marginal efficiency between individual sectors and their projects is reduced, which evidently increases the efficiency of investments obtained through borrowing.

In the context of looking at the sustainability of public debt, a number of potential problems are mentioned, among which the following stand out for their importance: 1) difficulties in servicing high public debt, 2) loss of business efficiency due to the inevitability of increasing taxation of economic actors and 3) slowing down of economic growth as an inevitable consequence of reducing capital accumulation caused by large public debt (Cvetanović & Novaković, 2019).

Payment of interest and part of the principal of external borrowing in the past by the deadline implies the use of a large part of the newly created product of the country. Payment of interest calculated on the basis of public debt implies the necessity of reducing current consumption due to the need to increase the import of goods and services. In order to raise the funds to repay the interest, taxes must be imposed. Logically, taxes reduce disposable income and have a disincentive effect on entrepreneurial activities.

The most serious negative consequence of public debt on economic development is the fact that it acts to crowd out

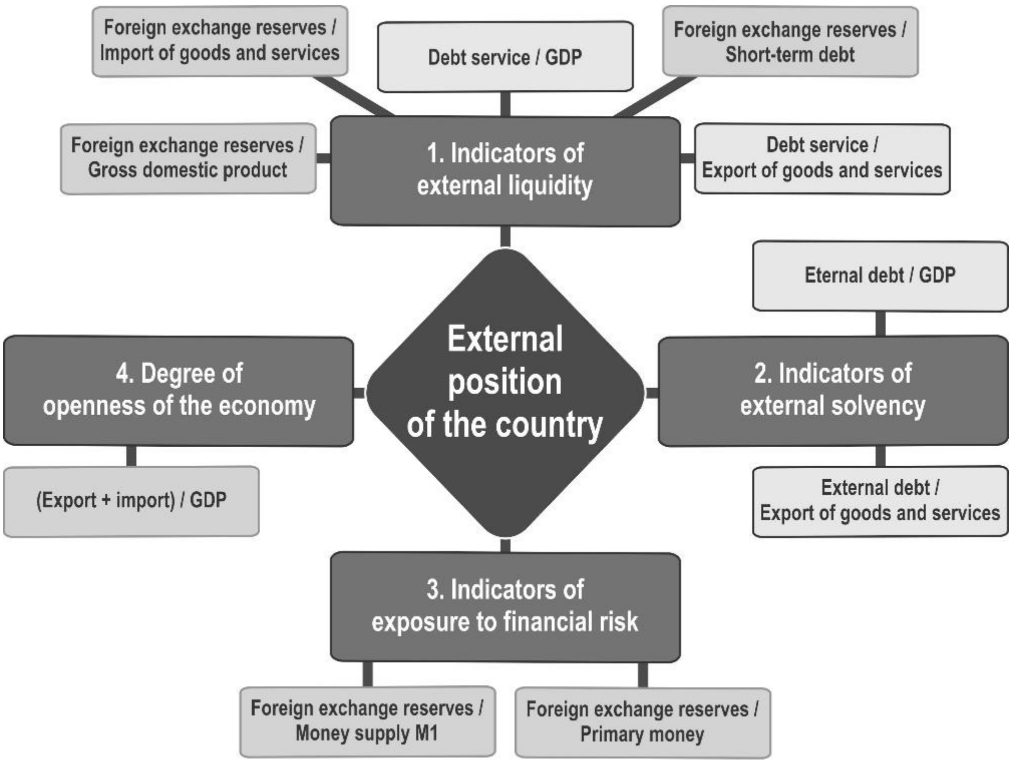
[1]Since 2010, the World Bank has been using the Gross National Income - GNI indicator instead of the Gross Domestic Product - GDP. GNI is calculated by adding the domestic product and foreign income a nation receives. It is the total of GDP and the income that foreign residents earn, less the income that non-residents earn in the local currency. In this paper, the size of the GNI indicator is always used.

private capital from the financial market. “The external dependency of many industries and the corresponding low value added generated in production create high external deficits and growing debt to GDP ratios in several open economies” (Amaral, et al., 2011, p. 1). The transfer of financial resources on the financial market to public consumption leads to a decrease in investments and an increase in interest rates. The consequence is slow economic growth and a decline in living standards. In the long run, an increase in the interest rate causes a decrease in private investment and a decrease in the rate of economic growth. In this way, long-term fiscal policy can affect the reduction of the real gross domestic product. The growth of the public debt can also affect the reduction of the population's tendency to save, because the growth of the public debt implies an increase in taxes for the repayment of the public debt. A question of particular importance is whether the financing of government expenditures through loans represents a greater burden for future generations compared to taxes that represent a financial burden for current generations.

3. Research methodology

The external position of countries can be evaluated using a number of indicators. Besides the value of absolute and external debt per capita, which do not reveal a precise picture of debt sustainability, the indicators of the external position of countries defined by the World Bank are most often used, classified into four groups: a) indicators of external liquidity, b) indicators of external solvency, c) indicators of exposure to financial risk and d) degree of openness of the economy (**Figure 1**).

Figure 1. Indicators of the external position of the country



Source: Autors based on Dugalić et al, 2023, p. 147-148.

The indicators presented in Figure 1 summarize the impacts of many partial indicators, relevant for the external position of the observed country. For example, the indicator *Debt service/GNI*, as an illustration of external liquidity, can be decomposed into the ratio of interest and the ratio of principal to the same *GNI*. Also, the indicator of solvency - *Eternal debt/GNI* can be viewed according to maturity, into long-term *external debt/GNI* and *short-term external debt/GNI* (Vuković, 2006).

The paper will use the indicators shown in **Table 1** to assess the external position of the countries of the Western Balkans.

Table 1. Observed Indicators of the external position of the country

Indicators of external liquidity	Indicators of external solvency
Debt service / GDP	Eternal debt / GDP
Debt service / Export of goods and services	External debt / Export of goods and services

The World Bank also defined the limits of the risk of external illiquidity and insolvency of countries (An, H., et al., 2022). The limits of external liquidity appear when the amount exceeds 80%, while the risk of insolvency means that the value of External Debt exceeds 220% (**Table 2**).

Table 2. Criteria for assessing the degree of indebtedness

Indicator	The degree of indebtedness		
	Low indebted countries	**Moderately indebted countries**	**Highly indebted countries**
Eternal debt / GDP	less than48%	between 48 and80%	over 80%.
External debt / Export of goods and services	less than132%	between 132 and 220 %	over 220%.

Source: World Bank. (n.d.)

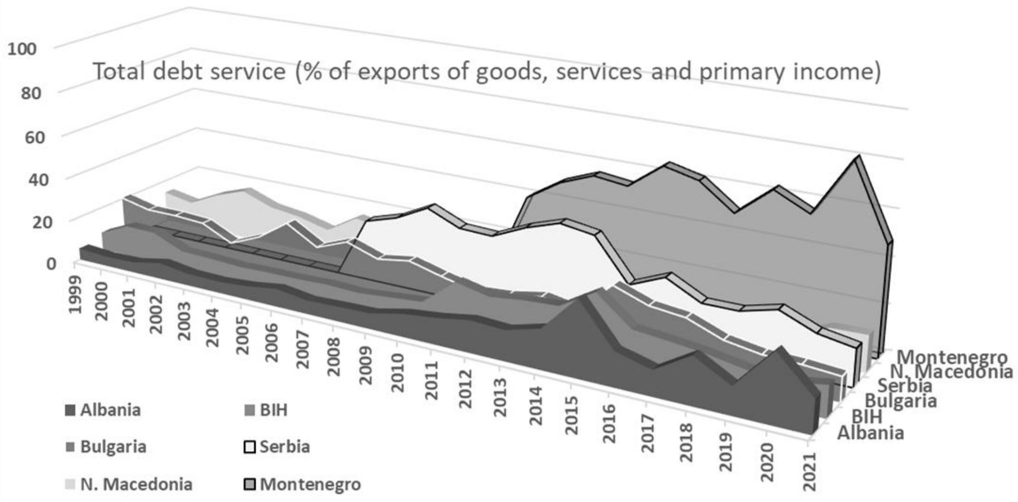
In addition to the indicators of the external position of the countries of the Western Balkans, identical indicators will be analyzed for Bulgaria, as a country from the immediate environment of the considered Balkan countries, a current member of the EU since 2007.

3. Analysis of the external liquidity of the countries of the Western Balkans

3.1. Debt service/exports of goods and services

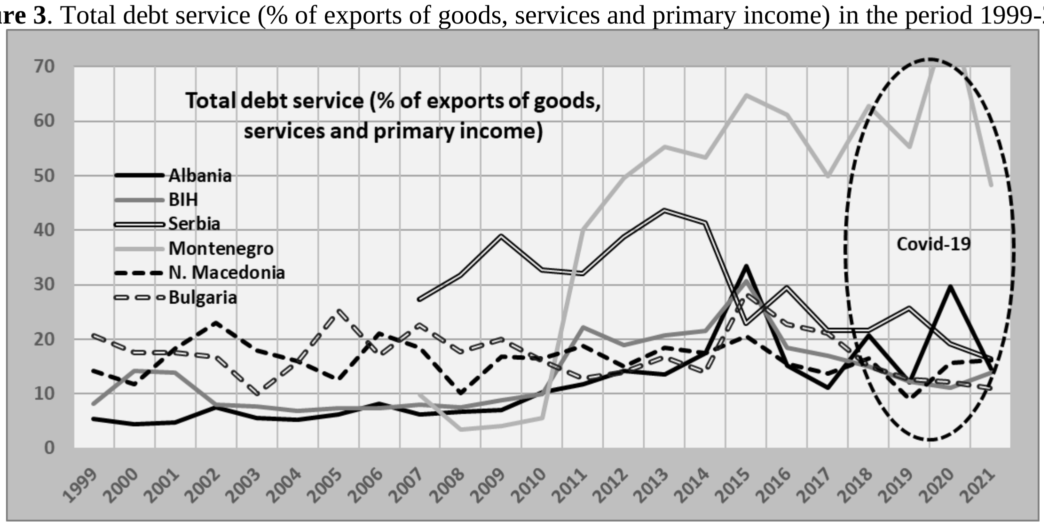
Total *Debt Service* is the sum of principal and interest payments actually paid in currency, goods or services on long-term debt, interest paid on short-term debt and repayments (redemption and compensation) to the IMF. The value of income, transfers, as well as the creation of assets and liabilities in relation to the rest of the world (primary income) is included here. The trend of Total debt service (*% of exports of goods, services and primary income*) is presented in **Figure 2**. The highest coefficient in 2021 among the five countries of the Western Balkans was Montenegro - 48.23%, followed by Albania with 13.81%. As can be seen, the growth trend of this parameter was especially intensified in Montenegro after 2012.

Figure 2. Total debt service (% of exports of goods, services and primary income) in the period 1999-2021.



Source: Authors according to World Bank. (n.d.)

Figure 3. Total debt service (% of exports of goods, services and primary income) in the period 1999-2021



Source: Authors according to World Bank. (n.d.)

In order to gain a visual representation of the impact of crisis disturbances on the movement of this external liquidity parameter, **Figure 3** shows the impact of the economic crisis and the crisis caused by the *Covid virus* on the percentage of total debt service in the value of exports of goods and services and primary income. The impact of crisis disturbances in 2008 and 2019 on the growth of the parameter *total debt service/export of goods*, and *primary income* was noticeable, which had the effect of significantly reducing the external liquidity of the countries of the Western Balkans in that year.

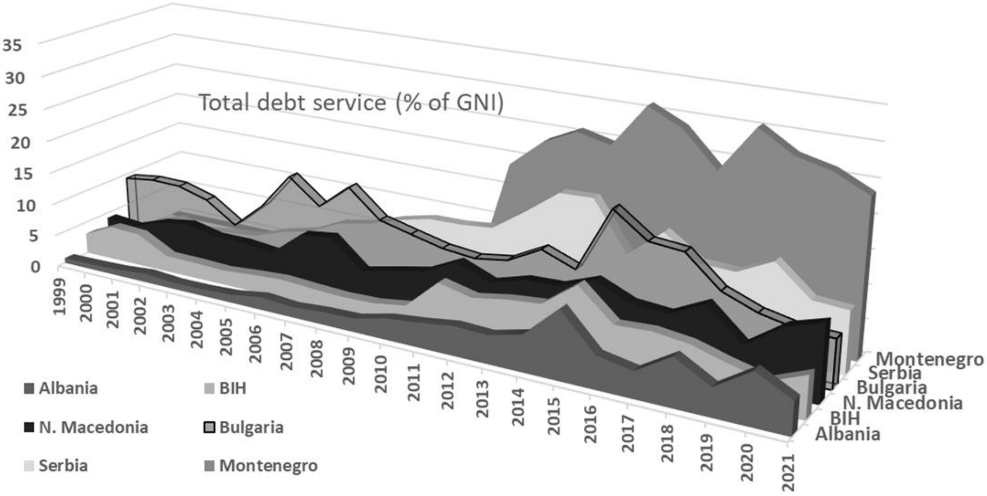
The World Bank's indicator ***"Total debt service (% of exports of goods, services and primary income)"*** measures the amount of income from exports of goods and services of the observed country that is used to repay external debts. Specifically, the indicator refers to total debt repayments (interest and principal) made by a country during a given period, and divides them by the value of its exports of goods, services and primary income during the same period. The resulting ratio illustrates the external debt burden that a country bears in relation to its ability to generate income from exports.

A high ratio indicates that a significant portion of a country's export earnings is used to service its debts, potentially limiting its ability to invest in other areas such as infrastructure, education and health care. A low ratio, on the other hand, suggests that a country is managing its debts well and is able to use its export earnings to stimulate economic growth. Overall, the indicator provides valuable insight into a country's fiscal health and its ability to manage its external debt obligations.

3.2 Debt service /GNI

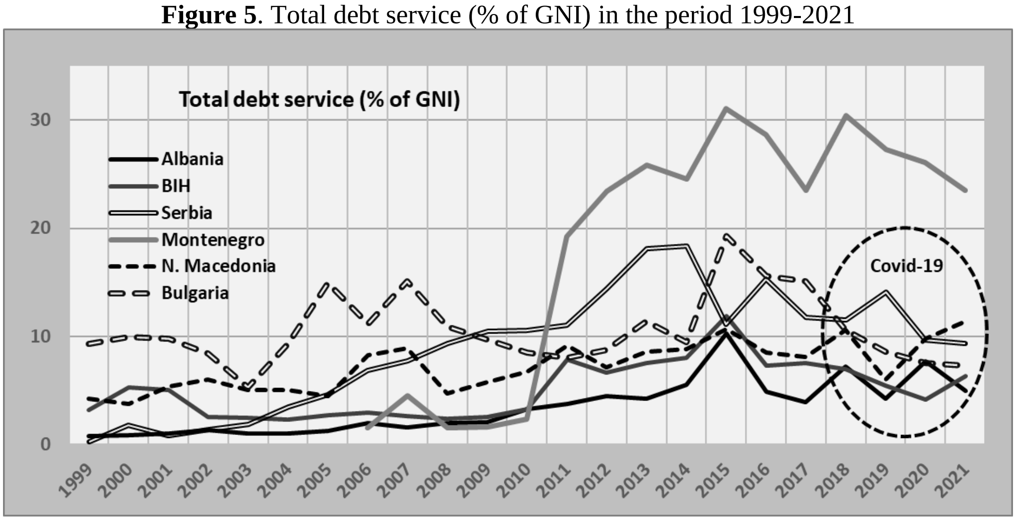
At the end of 2021, the state's obligations based on due annuities and interest on external borrowing had a share in the GNI structure of 4.91% in Albania to 23.54% in Montenegro (**Figure 4**).

Figure 4. Total debt service (% of GNI) in the period 1999-2021



Source: Authors according to World Bank. (n.d.)

Figure 5. Total debt service (% of GNI) in the period 1999-2021



Source: Authors according to World Bank. (n.d.)

In Bosnia and Herzegovina, it was 6.33% and in Serbia it was 9.32% (Kovačević & Stevović, 2022). If we compare them, it is noticeable that the total debt service-GDI ratio for Bulgaria was at the level of 7.27% in the same year.

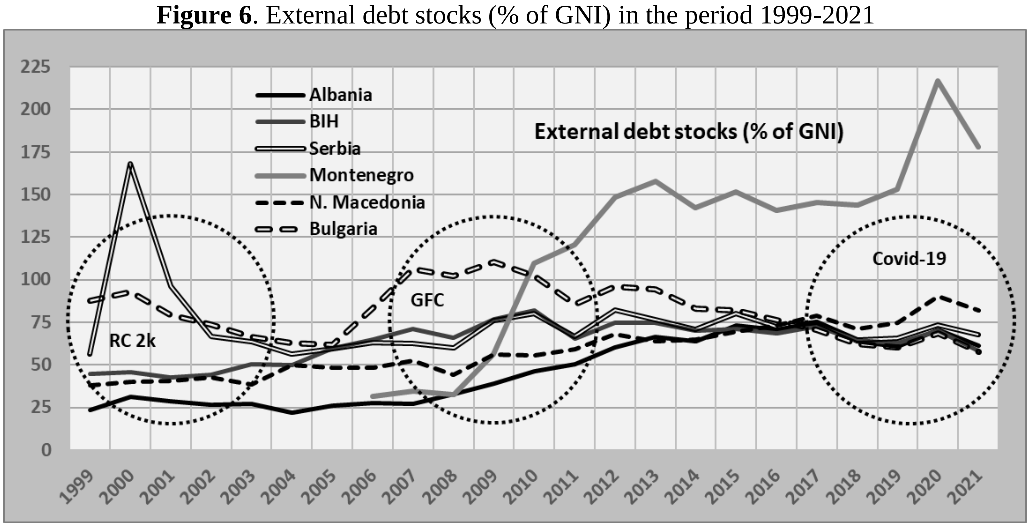
Figure 5 shows the dynamics of this parameter individually for all Balkan countries included in the research.

4. Analysis of the external solvency of the countries of the Western Balkans

4.1 External debt stocks / Gross national income (GNI)

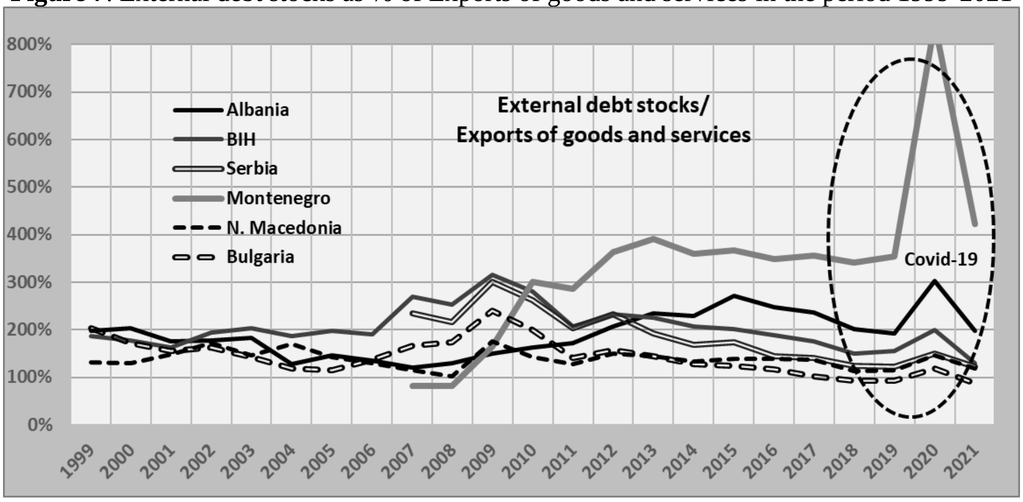
The relationship between external debt and GNI represents the most general indicator of the country's insolvency risk (Ćosović, 2020). This indicator will be higher if the interest rate on the debt is higher than the rate of economic growth and if the current account tends to a deficit. It is considered that more than 50% of debt crises occurred when external debt reached 60% of GDP, while 70% of debt crises occurred when the level of external debt reached around 80% of GDP (Ćosović, 2020). Graphic explanation of the parameter *External debt stocks/ GNI* of the analyzed Balkan countries in the period 1999-2021 it is presented in **Figure 6**. The growing trend of this parameter in Montenegro after 2010 is particularly noticeable. Figure 7 shows the deterioration of this parameter in the period of circular disturbances. This deterioration is particularly pronounced in Montenegro.

Figure 6. External debt stocks (% of GNI) in the period 1999-2021



Source: Authors according to World Bank. (n.d.)

Figure 7. External debt stocks as % of Exports of goods and services in the period 1999-2021



Source: Authors according to World Bank. (n.d.)

It is noted that at the end of 2021, Montenegro had the highest percentage (177.88%) of external debt in GNI. In the same year, the external debt ratio of Western Macedonia was 82.1%, which means that according to the criteria of the World Bank, this country was in the group of highly indebted economies. The lowest coefficient of external indebtedness at the end of 2021 was recorded by Bosnia and Herzegovina (58.08%), followed by Albania (61.55%) and Serbia (67.3%), which indicates that they were in the group of medium-indebted economies according to the criteria of the World Bank. The average External debt stocks (% of GNI) of the countries of the Western Balkans, excluding Montenegro in 2021, was 67.37%. In the same year, this parameter of external indebtedness for Bulgaria, which was taken as a control variable in this paper, was 57.52%. The highest value of this parameter was at the end of 2020 in Montenegro (216.64%), while in Serbia the maximum was recorded in 2000 (168.32%), in North Macedonia (90.38%) in 2016, in Bosnia and Herzegovina (81.86%) in 2010, 2016, and in Albania (75.10%) in 2017.

4.2 External debt stocks / Exports of goods and services

The ratio of external debt to exports illustrates the possibility of debt repayment through the export of goods and services (Shabbir, 2013). Practically, there is no risk of a debt crisis if exports are greater than imports, that is, there will be no risk if the debt does not exceed the limit of 220% in relation to exports. **Figure 7** presents the movement of the *External debt stocks/GNI* parameter of the analyzed Balkan countries in the period 1999-2021. The growing trend of this parameter in Montenegro after 2010 is particularly noticeable.

Figure 7 clearly shows that the crisis caused by Covid-19 had a very pronounced impact on the deterioration of the value of the most important parameter of the external position of the countries of the Western Balkans. It can also be a kind of confirmation of their economic underdevelopment and the very pronounced vulnerability of the economic structure of these countries (García-Herrero, & Ribakova, 2020).

The crisis of 2019 had an impact on the deterioration of the solvency parameter of all considered Balkan countries, including Bulgaria. As with other parameters of the evaluation of the external position of countries, the deterioration of the external solvency parameter External debt stocks as % of Exports of goods and services is particularly pronounced in the economy of Montenegro. One of the undoubted causes of this phenomenon is certainly the cessation of tourist activities as a result of the closure of countries due to the corona virus pandemic.

5. Conclusion

Borrowing is a necessity, cause and effect in the period of transition, weak economic activity, deficit of current account transactions, budget deficit. However, what should be considered is the factthat bad management of borrowed funds can result in an endless transition or a lifetime of interest payments.

Based on the data presented, the following can be concluded: a) the countries of the Western Balkans, with the exception of Montenegro, are not currently in danger of external illiquidity and external insolvency, having the criteria of external liquidity and solvency of countries defined by the World Bank, and b) crisis disturbances from 2008 and 2019 had a particularly negative impact on the indicators of external liquidity and external solvency of the countries of the Western Balkans. Globally, this fact is an illustration of the reduction of their economic activities as a consequence of the crisis disturbances from 2008 and 2019.

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