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PUBLIC DEBT AND ECONOMIC GROWTH NEXUS: DYNAMICS IN BOSNIA AND HERZEGOVINA

ABSTRACT

It is well known that the economic growth of the country is a complex phenomenon and that it is influenced by a large number of different factors. The intensity of the influence of each factor is important, as well as their mutual relationship. Almost every decision concerning economic growth is long-term, that is, it has long-term effects on the citizens of a certain country. The main goal of this research is to investigate determinants of economic growth in Bosnia and Herzegovina with an emphasis on the effects of public debt. In order to determine the mutual influence of these two phenomena, correlation and partial correlation coefficients will be used on the available data for public debt, gross domestic product (hereinafter referred to as GDP) and gross national income (hereinafter referred to as GNI) of Bosnia and Herzegovina. The research results suggest to a positive correlation between public debt and gross national income of Bosnia and Herzegovina, and to an inversely proportional relationship between public debt and gross domestic product. Research findings may help decision-makers when designing policies and strategies, that is, when making decisions regarding future internal and external borrowing and directing the economic growth of Bosnia and Herzegovina. Policy implication in BiH should accentuate growth-oriented policy measures with care regarding future public borrowing.

Key words: *economic growth, gross national product, public debt, Bosnia and Hercegovina.*

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1. INTRODUCTION

Every country needs funds for its smooth functioning. In a situation where a country spends more funds than it collects through government revenues, it is often decided to borrow. The debit can be internal (from domestic creditors) and external (from foreign creditors), therefore, internal and external public debt can be distinguished. The total sum of internal and external public debt implies the total public debt. Total public debt is the focus of this work. It is important to analyze this phenomena because it is important instrument of economic policy that influences the economic growth and development of the country.

Public debt may be simply defined as "accumulated surplus of spending over revenues that were realized in the previous period" (Rosen & Gayer, 2010, p. 458). Public debt may also be defined as "the total indebtedness of a state that it records towards its domestic or foreign creditors at a certain time" (Kesner-Škreb, 1994, p.669). Public loan is often mentioned in literature and practice, so it is necessary to make a distinction between public debt and public loan. Public debt is a broader term and it may arise on the basis of a public loan, but also on other grounds. "Public debt means the obligation and burden of the state and other public bodies and, as a result, expenditures from the state budget. On the contrary, a public loan represents a cash receipt for the state, while the expenditure, that is, the repayment of the public loan, will occur only after a certain time" (Dautbašić, 2001, p.307).

Surely, the size, that is, the amount of the public debt is important, as is the rate of its change, but the method of investing the borrowed funds also plays a very important role. It is very important that borrowed funds are invested efficiently and that the country adheres to the principle of economic growth, which states that "Investment of public loan funds may receive a positive evaluation if these investments affect the increase of social productivity at least as much as the effectiveness of investing in the private sector. This means investing in science and its technological applicability, improving the qualification structure of employees, realizing a policy of full employment, achieving economic growth in stable conditions and such" (Dautbašić, 2001, p.315). The question of which level of debt is optimal is often asked. There are no clear boundaries; they vary from country to country, and mostly it is the level of debt that enables the normal functioning of the state while achieving desirable economic and social goals without jeopardizing future economic and social growth and development.

The eyes of the world's economic public, and especially of economists dealing with development, have always been focused on the problems and opportunities of economic growth and development. Babajić et al. (2021) researched and analyzed the most frequently occurring keywords to cover very popular topics in the field of economic development and poverty in the period 1970 to 2019. In 4372 publications

from the Scopus database, with 7997 keywords, among the most frequently occurring keywords is "economic growth" with a frequency of 1082 (Babajić et al., 2022, p.10). Economic growth and development belong to social development and are considered an integral part of it, and are dynamic rather than static categories. Until recently, economic development was considered through the category of economic growth, and even today, those are often treated as synonyms. Nevertheless, economic development includes socio-economic changes and is a broader concept than economic growth, which refers to changes in the level of material production of the country. Economic growth terms to quantitative increase of the success of an economy, regarding an increase in the amount of goods and services produced, meaning, real income in the total or per capita amount, in a certain period of time. "Economic growth is related to the ability of a society to increase its human capital, physical capital, and to improve its technology" (Acemoglu & Robinson, 2008, p.1). Many different factors influence economic growth, and this research has in focus only one of them that determine it - the public debt.

Taking into consideration the foregoing, the main goal of this work is to explore whether public debt affects the economic growth of Bosnia and Herzegovina. The relationship between public debt and economic growth is undoubted in economic literature and practice. It is necessary to point out that in this research public debt is viewed only as one of the factors that affects economic growth under the ceteris paribus assumption. The central hypothesis relates that public debt and economic growth in Bosnia and Herzegovina nexus is negative and significant.

When analysing the nexus between public debt and economic growth, the opinions of economists are contrary. The first part of research gives an overview of the literature on the connection, that is, the mutual influence of these two phenomena. In the second part of the paper we shed light on the methodology of the empirical research, while the third part of the work presents the results and discussion of the empirical research on the impact of public debt on the economic growth of Bosnia and Herzegovina. This paper can be seen as filling a literature gap of empirical research on the debt-growth nexus in Bosnia and Herzegovina.

2. THEORETICAL BACKGROUND AND LITERATURE REVIEW

It is complicated to define relationship between public debt and economic growth, given that it is a cause-and-effect connection in nature. Many scientists point out that debt has no positive effect on economic growth, but the question arises to what extent and whether this influence varies from country to country, that is, from group to group of countries - what is the impact of public debt on the economic growth for different development groups of countries (developed and less developed countries). Many authors have presented in their studies that a high rate of public debt has negative implications for economic growth.

We researched SCOPUS database to get number of published publication correlated to public debt – economic growth nexus in the period of 1984 to 2023. Publication are classified according next areas: "Social sciences", "Economy, Econometry and Finance" and "Business, Managament and Accounting". It is important to mention thad every publication may be included in more categories (research areas) according to SCOPUS rules.





Source: Authors' research from the SCOPUS database

It is interesting to note that research interest in the relationship between public debt and economic growth began to grow intensively in 2013 and that it will reach its peak in 2021 and 2022. From total 258 publications 207 were in the research area of: Economics, Econometrics and Finance. The most cited publication is "Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff" with 370 citations, and "The impact of high government debt on economic growth and its channels: An empirical investigation for the euro area" with 300 citations. Countries with the largest number of published papers are: Germany (23), USA (23), South Africa (20), India (15), United Kingdom (15), etc.

Reinhart and Rogoff investigated the relationship between indebtedness and growth in developed and developing countries, analyzing data from 44 countries over 200 years. In their research, they found similarities in the relationship between public debt and economic growth in developed and developing countries. Their main conclusion "is that whereas the link between growth and debt seems relatively weak at "normal" debt levels, median growth rates for countries with public debt over roughly 90 percent of GDP are about one percent lower than otherwise; average (mean) growth rates are several percent lower" (Reinhart & Rogoff, 2010). In their work "Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff" Herndon, Ash and Pollin replicated the research of Reinhard and Rogoff ('Growth in a Time of Debt', two versions, 2010). Their aim was to reconsider research methodology and the main findings of publications that had a significant impact on the world economic scene. They described in detail problems that they identified with Reinhart and Rogoff research in their works from 2010: "their selective data exclusions, coding errors and inappropriate weighting methodology". They properly calculated data (the average real GDP growth rates for period from 1946 to 2009) and concluded that there is "no evidence for a dramatic drop-off in average GDP growth when countries public debt levels rise above 90% of their GDP" (Herndon et al., 2014, p.259).

Checherita-Westphal and Rother explored the average influence of government debt on GDP growth p.c. in 12 countries of euro area in period of 40 years with starting year in 1970 with main focus on countries that doubled on average government debt in observed period. Their research "unveils a concave (inverted U-shape) relationship between the public debt ratio and the economic growth rate with the debt turning point at about 90–100% of GDP. This means that public debt is associated, on average, with lower long-term growth rates at debt levels above the range of 90– 100% of GDP" (Checherita-Westphal and Rother, 2012, p.1403). The paper determined the key borrowing threshold of advanced European countries and gives significant guidance to the authorities in the context of future borrowing.

In their work, Panizza and Presbitero researched the impact of public debt on the economic growth of developed countries. They presented that "debt has a negative influence on economic growth through the "crowding out effect", but that this influence is quantitatively small" (Panizza & Presbitero 2013, p.175). Specifically, their research indicates that "increasing debt by 100 percent of GDP would reduce annual GDP growth by approximately 20 basis points in the first twenty years" (Panizza & Presbitero, 2013, p.175-177). Besides, they emphasize that the debt and growth nexus is heterogeneous across countries and over time.

Kumar and Woo conducted an empirical study on the influence of high public debt on the growth of real GDP per capita in a panel of highly developed and developing countries for the period from 1970 to 2007. They proved an "inverse relationship between initial debt and subsequent growth, controlling for other determinants of growth: on average, a 10-percentage point increase in the initial debt-to-GDP ratio is associated with a slowdown in annual real per capita GDP growth of around 0.2 percentage points per year, with the impact being somewhat smaller in advanced economies" (Kumar & Woo, 2010, p.4). Besides, they showed that a lower level of public debt or debt below a certain threshold has a positive effect on economic growth. Similar conclusions were reached by other authors (Irons & Bivens, 2010; Mencinger et al., 2015; Woo & Kumar, 2015; Baxheti et al., 2020). There is not much empirical research on the impact of public debt on the economic growth of European countries, but recent research in European transition countries, such as (Mencinger et al., 2015; Baxheti et al., 2020 and Fetai et al., 2020), is emphasized. However, similar research has not been carried out in Bosnia and Herzegovina so far.

Mencinger et al. investigated the nexus between public debt and GDP and estimated the influence of public sector indebtedness on economic growth for a panel of 36 countries (31 OECD member states and 5 non-OECD EU member states). Their research showed that the threshold of public debt in developed countries is in the range from 90% to 94% (which means that debt growth above that threshold has a negative impact on economic growth, and debt below 90% will have a positive impact on economic growth). But, when they analyzed developing countries, they established a debt threshold between 44% and 45% (which means that public debt below this limit have a positive impact on economic growth, and public debt above the 45% limit will have a negative impact on economic growth) (Mencinger et al., 2015). Baxeti et al. made empirical research about the influence of public debt on the economic growth of the countries of the Western Balkans (Bexheti et al., 2020). Observed period was from 2003 to 2016. They concluded that the public debt has a weak negative correlation with the economic growth of the countries of the Western Balkans. Besides, their results reveal a maximum debt threshold of 50.87% of GDP (Baxheti et al., 2020). On the other hand, Radonjić et al., used an econometric model and confirmed a significant and negative relationship between GDP growth and public debt in the countries of the Western Balkans. In their research they covered and analysed data during period from 2006 to 2017 (Radonjić et al. 2020). Fetai et al. investigated public debt and economic growth nexus in European transition countries during the period 1995 - 2017. In these countries, they confirmed that lower levels of public debt does not have a negative effect on economic growth, while after a certain limit the negative effect of public debt on growth, that is, on GDP, prevails. In addition, this research concurred that "for less developed European transition countries the threshold values of the debt-to-GDP is lower than for more developed ones in the sample", results of this research show that "the debt-to- GDP ratio turning point are 81.60% of GDP in Central Europe countries, 71.90% of GDP in Eastern Europe countries, and 58.20% of GDP in Western Balkans countries" (Fetai et al., 2020, p. 382-383.).

3. PUBLIC DEBT AND ECONOMIC GROWTH OF BOSNIA AND HERZEGOVINA

Bosnia and Herzegovina, although a small open economy, does not hold back when it comes to public borrowing. Public debt records oscillations and constant growth in Bosnia and Herzegovina. Graph 2 shows its movement from 2008 onwards. There is visible growth since 2008, and a drop in 2016, only to grow again after that. In 2021, it amounts to 12.86 billion BAM, with a share in GDP of 34.21%.

A linear function (red color) whose equation is given in the graphic was fitted. This function, using the least squares method, best passes between the given data on the movement of public debt.



Graph 2. Public debt over time in Bosnia and Herzegovina

Source: Authors own work according to World Bank data

The total public debt in Bosnia and Herzegovina, due to its complex state structure, is composed of internal and external public debt, and it consists of the debt of the entities of the Federation of BiH and the Republic of Srpska, the Brčko District and the institutions of BiH. BiH's external debt includes external state debt, external debt of entities and districts, and external debt of local self-government units. External debt of local self-government units that is the subject of an international agreement concluded directly between the local self-government unit. Internal debt of BiH is the sum of direct and indirect internal state debt, internal debt of entities, internal debt of Districts, internal debt of cantons, cities, municipalities, social security funds and public enterprises. The public debt structure of Bosnia and Herzegovina includes both "old" debt and "new" debt. "Old" debt refers to external government debt includes before April 2, 1992, that is, the

debt that Bosnia and Herzegovina assumed as inherited international obligations, incurred before April 2, 1992, which were reconstructed and reprogrammed after negotiations with foreign creditors. "New" debt refers to external debt incurred after December 14, 1995 (Ministry of Finance and Treasury of Bosnia and Herzegovina, 2022).

Public debt BiH	2015	2016	2017	2018	2019	2020	2021
Republic of Srpska	5,280.59	5,444.81	4,956.65	5,181.10	5,382.95	5,834.59	6,163.37
Federation of BiH	6,582.22	6,570.04	5,935.57	5,798.97	5,703.24	6,238.90	6,580.96
Brčko District	30.51	29.21	40.28	52.62	56.00	53.05	49.26
Institutions in BiH	55.78	54.15	75.04	73.95	69.05	66.44	63.49
Total:	11,949.10	12,098.21	11,007.54	11,106.64	11,211.24	12,192.98	12,857.08

Table 1. State of public debt in Bosnia and Herzegovina (in mil BAM)

The Federation is the most indebted, followed by the Republic of Srpska, which may be seen from the following table with the recent data.

Even within the former Yugoslavia, Bosnia and Herzegovina was one of the poorest and most ethnically mixed member states. After the Second World War, it had the slowest pace of growth compared to neighboring countries. The next graph shows the movement of GDP in the period from 1995 to 2020, hence a significant growth of this indicator is visible. However, the growth of this indicator lags behind and is among the lowest when it comes to neighboring countries.





Source: Authors own work according to World Bank data

Bosnia and Herzegovina has recorded positive rates, that is, a constant growth of the gross national income since gaining independence. However, this growth is still insufficient to be an adequate generator of economic development, and it lags behind the growth rates of this indicator for neighboring countries such as Serbia, Croatia and Slovenia, which record significantly better GDP and GNI results.

Source: Ministry of Finance and Treasury of Bosnia and Herzegovina

4. RESEARCH METODOLOGY

Correlation coefficients and partial correlation coefficients were used to determine the relationship between public debt and economic growth in Bosnia and Herzegovina. Indicators for the period from 2008 to 2020 were taken into account, considering the impossibility of collecting data on the total public debt of Bosnia and Herzegovina for an earlier period because the Department for Internal Debt of the State Ministry of Finance was established in 2008 and has been publishing data since that year.

4.1 ANALYSIS AND DISCUSSION

Descriptive statistics of public debt for BiH for the period from 2008 to 2021 is presented in the following Table.

Statistic	Value
Sample size	14,00
Rang	5.455,70
Mean	10.708,99
Variance	2.352.030,35
Std. deviation	1.533,63
Coef. of variation	0,14
Std. Error	409,88
Skewness	-0,86
Excess Kurtosis	0,37

Table 2. Descriptive statistics of public debt for BiH for the period from 2008 to 2021

Percentile	Value		
Min	7.401,30		
5%	7.401,30		
10%	7.836,65		
25% (Q1)	9.844,38		
50% (Median)	11.057,50		
75% (Q3)	11.986,25		
90%	12.525,00		
95%	12.857,00		
Max	12.857,00		

Source: Authors own work

The public debt ranged from 7,401.25 million BAM in 2008 to 12,857 million BAM in 2021, whereby the mean value (median) is 11,057.5 million BAM.

Statistic	Value		
Sample size	28,00		
Rang	2,131571040E+10		
Mean	1,270051652E+10		
Variance	4,676195666E+19		
Std. deviation	6.838.271.467,00		
Coef. of variation	0,54		
Std. Error	1.292.311.836,00		
Skewness	-0,37		
Excess Kurtosis	-1,47		
Statistic	Value		
Sample size	28,00		
Rang	5,131934975E+10		
Mean	3,024345272E+10		
Variance	2,191270155E+20		
Variance Std. deviation	2,191270155E+20 1,480293942E+10		
Std. deviation	1,480293942E+10		
Std. deviation Coef. of variation	1,480293942E+10 0,49		

Table 3. Descriptive statistics for GDP and GNI of BiH from 1994 to 2021

Percentile	Value			
Min	1.255.802.469,00			
5%	1.530.649.187,00			
10%	2.694.098.085,00			
25% (Q1)	5.625.747.881,00			
50% (Median)	1,599929321E+10			
75% (Q3)	1,846372999E+10			
90%	2,017980074E+10			
95%	2,150492754E+10			
Max	2,257151287E+10			
Percentile	Value			
Min	3.143.124.742,00			
50/	,			
5%	3.476.128.332,00			
5%	3.476.128.332,00 7.442.078.584,00			
-	· · · · · · · · · · · · · · · · · · ·			
10%	7.442.078.584,00			
10% 25% (Q1)	7.442.078.584,00 1,903686200E+10			
10% 25% (Q1) 50% (Median)	7.442.078.584,00 1,903686200E+10 3,339380081E+10			
10% 25% (Q1) 50% (Median) 75% (Q3)	7.442.078.584,00 1,903686200E+10 3,339380081E+10 4,113683484E+10			

Source: Authors own work according to World Bank data

The minimum value of GDP was in 1994 at \$1.25 billion, and the maximum in 2021 at \$22.57 billion. The average value of GDP was \$15.99 billion. The relationship between public debt and GDP is shown in the next graph. Correlation coefficients showed that there is a positive relationship between GNI and public debt.



Graph 4. Relationship between public debt and GDP

Source: Authors own work according to World Bank data

It has been established that there is a correlation, a quadratic dependence (arm of the parabola). The equation and the fitting results are shown in the following table.

Linear model Poly2:	Goodness of fit:		
	SSE:	2.142e+20	
$f(x) = p1^*x^2 + p2^*x + p3$	R-square:	0.6403	
	Adjusted R-square:	0.5749	
	RMSE:	4.412e+09	
Coefficients (with 95% confidence bounds):	Correlation tests:		
p1 = 591.4 (-464.1, 1647)	Pearson's test:	p = 0.0013219	
p2 = -8.607e + 06(-3.009e + 07, 1.288e + 07)	Spearman's test:	p = 9.8292e-05	
p3 = 6.572e+10 (-4.193e+10, 1.734e+11)	Kendall's test:	p= 7.7243e-05	

Table 4. Correlation coefficients

Source: Authors own work

The above tests confirm a significant correlation between public debt and GNI BiH. The correlation equation is: GNI=591.4 *public_debt^2 -8.607e+06 *public_debt + 6.572e+10.

A plot matrix that was created shows the correlation between pairs of variables in the matrix. Histograms of variables appear on the diagonal of the matrix, scatter plots of pairs of variables appear off the diagonal. The least squares slope is equal to the correlation coefficient shown. A Pearson correlation test was performed between pairs of variables. Variable 1 is public debt, Variable 2 is GDP, Variable 3 is GDP growth, and Variable 4 is GNI.



Graph 5. Correlation Matrix

Source. Authors own work

After ranking the correlation of parameters of economic growth and public debt of Bosnia and Herzegovina, the following was determined: 1. Public debt has the highest correlation with gross national income 1) R=0.768; 2) with gross domestic product, R=0.281; 3) with the growth of gross domestic product, R=0.186. However, correlations 2 and 3 are negligible positive correlations. It is possible to determine with certainty that there is a correlation between public debt and gross national income, namely a quadratic dependence, for which the equation was previously presented.

To establish the nexus between public debt and economic growth in Bosnia and Herzegovina, partial correlation was used, which returns linear coefficients between pairs of variables, controlling/excluding the remaining variables. Partial correlation was used for the reason that gross domestic product is an indicator implicated by a large number of factors, and the *ceteris paribus* assumption was introduced. The findings of the partial correlation are shown in the following Table.

Rho- partial correlation coefficients	Public debt	GDP	GDP growth	GNI
Public debt	1	-0.56436	0.017504	0.83602
GDP	-0.56436	1	0.19781	0.77124
GDP growth	0.017504	0.19781	1	0.036362
GNI	0.83602	0.77124	0.036362	1

 Table 5. Partial correlation results

Source: Authors own work

The partial correlation R=-0.56436 showed a negative relationship between public debt and gross domestic product, which confirms the inverse relationship, that is, when public debt in Bosnia and Herzegovina increases, GDP decreases and vice versa. This is in accordance with the hypothesis set forth in this paper. So, it can be

concluded that the public debt has a negative influence on the economic growth of Bosnia and Herzegovina.

According to Fetai et al. (2020), public debt in Bosnia and Herzegovina, as part of the GDP, is below the threshold value (in their research they showed that it is 58.20% of GDP for Western Balkan countries). In this paper we confirmed a negative impact of the public debt on economic growth. This should certainly be viewed holistically, in the light of other macroeconomic indicators, as well as in the light of the final purpose of the borrowed funds. According to the World Bank's assessment, the greatest economic problems of the countries of the Western Balkans relate to low productivity, small investments, weak institutions and an unfavorable business environment (World Bank Group, 2017). The public debt in Bosnia and Herzegovina has not yet reached the critical limit, but the country is struggling with a multitude of macroeconomic problems, first and foremost with high unemployment (especially unemployment of youth), a high rate of migration from the country of the workingage population, an unfavorable entrepreneurial environment, small domestic production, high corruption, as well as major political problems. In this light, the holders of economic power should be careful with the future borrowing so that the public debt does not become an obstacle on economic growth. In addition, many accounts must be devoted to the investment of funds acquired on the basis of public debt in order for these investments to be efficient and not used for current consumption.

5. CONCLUSION

This research investigated the influence of public debt on the economic growth of Bosnia and Herzegovina. Public debt, gross national income, gross domestic product and gross domestic product growth for the period from 2008 to 2020 were analyzed, and correlation and partial correlation coefficients were calculated. Correlation coefficients confirmed that there is a correlation between public debt and gross national income. The partial correlation coefficients confirmed the negative relationship between public debt and gross domestic product, which confirms the inverse relationship, that is, when public debt in Bosnia and Herzegovina increases, gross domestic product decreases and vice versa, which confirmed the hypothesis set in the paper. Thus, the paper findings confirm a significant and negative nexus between public debt and gross domestic product, suggesting that lower levels of public debt stimulate economic growth.

The paper findings are a small contribution, that is, a supplement to the fund of existing research on the nexus between public debt and economic growth. It was established that when it comes to Bosnia and Herzegovina, which belongs to the group of developing countries, public debt has a disincentive effect on the economic growth. Surely, this statement must be viewed in the light of other macroeconomic

performances of the country: high unemployment, migration, unfavorable business environment, disruptions in the goods and services market, inflation, small investments, low productivity, high corruption, pronounced political risk, and such. Besides, an important role is played by the purpose, that is, the investment of borrowed funds, their purpose and end users.

Western Balkan countries, which include Bosnia and Herzegovina, are particularly sensitive to external shocks. The prolonged effects of Russian aggression on Ukraine have a negative impact on the labor market, the market for goods and services, and the inflation in these countries. Additionally, in Bosnia and Herzegovina, there is also a significant geopolitical risk that has negative implications when it comes to structural reforms that are necessary to join the European Union. Considering all of the above, the counefftry should focus on economic policy measures that influence the improvement of macroeconomic performance with increased caution in future public borrowing.

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ODNOS IZMEĐU JAVNOG DUGA I EKONOMSKOG RASTA: DINAMIKA U BOSNI I HERCEGOVINI

SAŽETAK

Poznato je da je ekonomski rast zemlje složen fenomen i da na njega utiče veliki broj faktora. Bitan je intenzitet uticaja svakog faktora, kao i njihov međusobni odnos. Skoro svaka odluka koja se tiče ekonomskog rasta je dugoročna, odnosno ima dugoročne refleksije na građane određene zemlje. Glavni cilj ovog istraživaje je da istraži determinante ekonomskog rasta u Bosni i Hercegovini, sa posebnim fokusom na javni dug. Kako bi se utvrdio međusobni uticaj ova dva fenomena bit će korišteni koeficijenti korelacije i parcijalne korelacije nad dostupnim podacima za javni dug, bruto domaći proizvod (u daljem tekstu GDP) i bruto nacionalni dohodak (u daljem tekstu GNI) Bosne i Hercegovine. Rezultati istraživanja upućuju na pozitivnu korelaciju između javnog duga i bruto nacionalnog dohotka Bosne i Hercegovine, te obrnuto proporcionalnu vezu između javnog duga i bruto domaćeg proizvoda. Nalazi istraživanja mogu pomoći donosicima odluka kod koncipiranja politika i strategija, odnosno kod donošenja odluka koje se tiču budućeg unutrašnjeg i vanjskog zaduživanja i usmjeravanja ekonomskog rasta Bosne i Hercegovine. Implikacije politike u BiH trebale bi naglasiti mjere politike usmjerene na rast uz oprez u pogledu budućeg javnog zaduživanja.

Ključne riječi: ekonomski rast, bruto nacionalni proizvod, javni dug, Bosne i Hercegovina

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