
PUBLIC DEBT AS A DETERMINANT OF THE CONVERGENCE OF BOSNIA AND HERZEGOVINA IN THE EU ACCESSION PROCESS

Review paper

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Abstract

The debt crisis, as one of the significant causes of disruptions in economies, is no longer reserved only for underdeveloped and developing countries, but it is a global economic problem that we are currently witnessing. The concept of debt crisis stems from excessive borrowing, which, by its increase, causes negative economic consequences. The realized deficit of transition countries over the past decade has had a significant impact on the increase in public sector debt, and these countries are faced with the great challenge of consolidating public finances and trying to reduce public debt while preserving economic growth. This paper provides an analysis of the state of the public debt of Bosnia and Herzegovina and its implications for the economy, which, with its movement and inadequate structure, causes negative economic consequences, making the process of convergence in the EU more difficult.

Keywords: public debt, EU convergence, fiscal policy

1. INTRODUCTION

The goal of a country's economic policy is to achieve stable growth with low inflation, and we can highlight monetary and fiscal policy as the two main tools for achieving that goal. Monetary and fiscal policy represent two national strategic policies and the issue of their relationship is one of the most significant problems of the contemporary state and economic research. The conduct of economic policy, i.e. the coordination of monetary and fiscal policy in order to manage the public debt, is an increasingly crucial instrument for achieving macroeconomic stability and growth and an indispensable part of EU integration.

Public debt as a measure of the debt crisis represents state borrowing for the purpose of financing the resulting budget deficits. The public debt is, therefore, the accumulated surplus of spending over the revenues that were realized in the previous period (Rosen, 1999.) On the other hand, the budget deficit indicates that government expenditures are greater than government revenues, so the amount of the deficit increases the debt that must be financed by borrowing. (Kolačević, Hreljac, 2011). That is, the public debt represents the cumulative past budget deficits (Jurković, 2002). It is precisely in the segment of public debt that the connections between monetary and fiscal policy are best reflected, so today the policy and management of public debt in developed countries is a very important part of the overall financial market and the most important area of conceptualizing and implementing monetary policy. (Perišin, Šokman, Lovrinović, 2001).

Bosnia and Herzegovina, a country under a fixed exchange rate regime, i.e. without monetary independence and with a narrow scope of fiscal policy, is unable to make a quality choice of economic policy. The anti-cyclical effect of monetary policy is limited, on the contrary, monetary policy is pro-cyclical. On the other hand, the anti-cyclical impact of fiscal policy is limited by sources of financing (the monetary sphere may not finance the state directly) and additionally potentially limited by EU fiscal rules. A descriptive analysis of public debt as a determinant of convergence in the countries of the Western Balkans was carried out in this paper. The analysis is based on secondary data collected from relevant European and international databases (Eurostat and the World Bank) and central banks of selected countries. The analysis, considering the availability of data, covers the period from 2012 to 2021.

The aim of this research is to try to further clarify the terms of public debt convergence of Bosnia and Herzegovina in the EU accession process and to provide some guidelines that will help in practice and debt management.

The remainder of this paper is structured as follows: Section 2 describes the existing theory on the problem of indebtedness and the consequences of high public debt and presents the past and current situation of public debt of Bosnia and Herzegovina as a determinant of convergence, Section 3 discusses conclusions and guidelines.

2. THE PROBLEM OF INDEBTEDNESS AND THE CONSEQUENCES OF HIGH PUBLIC DEBT

The experience of the transition process of the candidate countries for the EU, and therefore of Bosnia and Herzegovina, pointed to a continuous deficit problem, which is caused by the slowdown of economic activity and the impossibility of balancing the budget. The reduction of economic activity through the reduction of demand and the slowdown of the business cycle has affected all countries in recent years, causing unachievable projected budgets and a large drop in the scope of key revenue instruments such as value added tax, excise duties and customs, as well as causing strong disruptions in the labour market resulting in a reduction of related benefits.

These are mostly countries under a fixed exchange rate regime, i.e. without monetary sovereignty and a narrow scope of fiscal policy action. The anti-cyclical effect of monetary policy is limited, in fact, monetary policy is pro-cyclical. On the other hand, the countercyclical impact of fiscal policy is limited by sources of financing (the monetary sphere must not finance the state directly). The interaction of the country's economic policies when creating a stable and sustainable borrowing policy without jeopardizing long-term economic growth encounters certain limitations in terms of:

- The exchange rate and interest rate policy limits the amount of debt in foreign currency and debt that can be issued at a variable interest rate
- A bad debt structure can threaten the central bank's ability to keep interest rates under control
- High inflation and interest rates can affect the reduction of state revenues through the slowdown of the economic activity of the private sector. Sterilization and quasi-fiscal deficit can directly affect debt growth
- Poor governance and high debt levels can increase inflationary expectations and influence the increase in interest rates and/or currency depreciation
- The structure of the debt affects the fiscal costs of servicing it and may threaten fiscal sustainability
- The level of fiscal revenues and expenditures determines the level of sustainable public debt

Economic theory suggests that developing countries need a certain level of external debt in order to accelerate economic growth (Pattillo; Ricci; Poirson, 2002). Governments borrow in order to invest and raise the level of public services. However, if the external debt grows above a certain limit, then the external and total public debt puts pressure on private investments, lowers the

competitiveness of the real economy, reduces output and wages (Stiglitz, 2000.). Public debts' sustainability is a concern in public finance parlance as it tends to lead to financial crises especially when external debt is on the high side. The external debt sustainability is more relevant based on a forward-looking concept. It means that the measurement of external debt sustainability stresses the future value of the budget balance or solvency to pay the external debt in the long-run (Debrun, Ostry et al., 2020). Misztal (2010) determined that for the member countries, on average during the period 2000-2010, an increase in public debt of 1% caused a decrease in GDP by 0.3%, while a 1% increase in GDP led to a decrease in public debt by 0.4%. The level of government debt is of concern: if the growth rate of output is below the real interest rate part of the deficit is due to interest repayment on the debt and therefore the larger the debt, the larger is the repayment for interest due. The debt ratio increases without limit. Although in the case where the debt ratio converges to a stable value, a large debt ratio makes the government vulnerable, should the real interest rate rise above the growth rate. Because of this possibility, a risk premium may emerge for government borrowing which, in turn, triggers the adverse shift toward an unstable debt path (Carlin and Soskice, 2015). Regardless of its nexus with economic growth, public debt needs to be "sustainable". Public debt sustainability is a complex concept and there are various definitions for it. Arguably one of the most complete definitions, covering both solvency and liquidity requirements, is that of the IMF: public debt can be regarded as sustainable when the primary balance needed to at least stabilise debt under both the baseline and realistic shock scenarios is economically and politically feasible, such that the level of debt is consistent with an acceptably low rollover risk and with preserving potential growth at a satisfactory level". Put differently, if stabilising the public debt ratio requires that, over an extended period, the government needs to achieve fiscal surpluses that are so large that they would not be acceptable to citizens and/or financial markets, or would imply austerity that significantly shrinks the economy, then public debt is considered unsustainable. Of course, the assessment of debt sustainability is more art than science. It is an inherently forward-looking exercise involving judgement, which depends on the government's strategic choices and fickle financial market beliefs; a broad, hard-to-model constellation of potential shocks hitting the government's balance sheets; and the composition and ownership of debts (Debrun, Ostry et al., 2020). Mencinger et al. (2014) proved that the economic growth rates of 25 EU countries that were affected by the debt crisis during the period 1995-2010 (for new member states) and 1980-2010 (for old member states) are in a non-linear relationship with public debt (inverse U curve) where the turning point is higher for older and more developed members, at levels of 80-94% of GDP, while for less developed countries, i.e. new members, it is around 53%-54%. Časni et al. (2014) determine the existence of a significant negative impact on economic growth in the short and long term, pointing to the necessity of encouraging exports, long-term investments, as well as fiscal consolidation in order to achieve economic growth. Numerous empirical studies on the countries of Central and Eastern Europe have shown that there is a linear negative relationship between public debt and economic growth, proving that the negative effects appear only after reaching a certain debt threshold.

The analysis of the economic effects of public debt and its amount includes a comparative analysis of five EU countries in Central and Eastern Europe (Croatia, Poland, Hungary, Slovakia and the Czech Republic), and Bosnia and Herzegovina as a country with a signed EU stabilization and accession agreement.

Although the similarity of the chosen countries of Central and Eastern Europe can be assumed, certain differences in development still exist. It is enough to mention that the GDP per inhabitant of the Republic of Croatia is more than two and a half times that of Bosnia and Herzegovina, while it is almost four times lower than that of the more developed sample country, the Czech Republic. It is also necessary to note that certain countries are members of the European Monetary Union, so the heterogeneity of economic factors leads to the assessment of selected fixed effects that are individual for each country.

Table 1 GDP by resident in USD

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bosnia and Herzegovina	4.688,38	5.025,07	5.196,86	4.599,90	4.858,78	5.255,81	5.936,10	6.011,37	6.012,06	7.143,31
Czechia	19.870,80	20.133,17	19.890,92	17.829,70	18.575,23	20.636,20	23.424,48	23.664,85	22.992,88	26.821,25
Croatia	13.443,14	13.871,33	13.784,48	11.952,31	12.552,26	13.655,82	15.244,43	15.331,88	14.198,75	17.685,33
Hungary	12.984,84	13.715,07	14.294,26	12.717,04	13.104,70	14.621,24	16.425,10	16.782,95	16.120,99	18.728,12
Poland	13.010,92	13.558,41	14.182,14	12.560,05	12.378,76	13.815,62	15.504,58	15.699,91	15.816,99	17.999,91
Slovak Republic	17.498,35	18.276,01	18.719,99	16.390,88	16.563,44	17.585,20	19.486,39	19.383,48	19.545,74	21.391,93

Source: World Bank, 2022.

The slowdown in economic growth in addition to the realized deficit over the past period of the observed countries had a significant impact on the increase in public sector debt. The uncontrolled growth of deficits in transitional countries imposed the challenge of consolidating public finances and an attempt to reduce the negative budget balance while preserving economic growth.

Table 2 %GDP growth rate

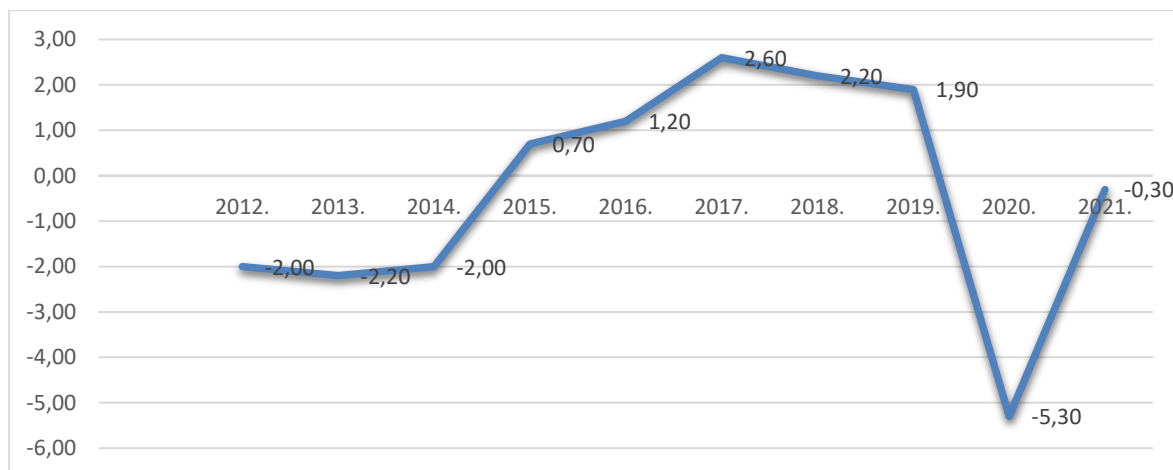
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bosnia and Herzegovina	-0,82	2,35	1,15	3,09	3,15	3,17	3,74	2,83	-3,12	7,55
Czechia	-0,79	-0,05	2,26	5,39	2,54	5,17	3,22	3,03	-5,50	3,54
Croatia	-2,33	-0,40	-0,43	2,52	3,56	3,41	2,80	3,42	-8,58	13,07
Hungary	-1,25	1,80	4,23	3,71	2,20	4,27	5,36	4,86	-4,55	7,12
Poland	1,55	0,86	3,84	4,38	2,95	5,14	5,95	4,45	-2,02	6,85
Slovak Republic	1,32	0,63	2,70	5,17	1,94	2,94	4,03	2,52	-3,37	3,01

Source: World Bank, 2022.

The economic growth shown in Table 2, i.e. the GDP growth during the observed period, experienced significant oscillations in the subject period in most of the selected countries, primarily as a result of global restrictive measures caused by long-term closures of economies in the wake of corona measures. After a multi-year positive trend during which macroeconomic imbalances progressively decreased, the pandemic caused the risk of new imbalances. In addition to the extremely negative impact on health, it also had a significant impact on restrictions on the movement of people, trade, foreign trade, travel, causing a weakening of economic activities and a significant slowdown and jeopardy of economic development, and thus a significant tendency towards increased indebtedness and the remediation of resulting budget deficits.

2.1. Public debt of Bosnia and Herzegovina as a determinant of convergence

Bosnia and Herzegovina in a situation of monetary non-sovereignty, i.e. a fixed exchange rate, in accordance with the IS-LM model of a small open economy, bases its active influence on fiscal policy. Due to the endogenous creation of money, i.e. the debt sector of the economy, the central bank, in order to maintain monetary stability, limits the growth of credit by macro-prudential measures, preventing the creation of bubbles. On the other hand, a fixed exchange rate, usually appreciated in real terms, leads to a deficit in the current balance of payments and a budget deficit, which affect the growth of public debt. In a situation of exogenous disturbances and a decline in economic activity, the public debt becomes unsustainable, and the cost of servicing becomes high. Due to the procyclicality of monetary policy, the revival of economic activity cannot go through a reduction in interest rates but through cuts in the budget, which further leads the country into recession. Economic growth is the only long-term source of servicing the public debt, but any increase in public debt should be paid for by tax increases in the future, which leads to a further decline in economic activity.



Graph 1 Trends in the budget balance of Bosnia and Herzegovina 2012-2021

Source: Central Bank of Bosnia and Herzegovina, 2022.

The reduced economic activity of the economy of Bosnia and Herzegovina caused by domestic and foreign instability in the markets strongly influenced the creation of the budget balance during the past period, causing mostly negative trends during the observed period from -2.00% of GDP, during 2012, to positive 2,60% of GDP during 2017, and after a slight decline during the following years, it experienced a steep decline during 2020 and the beginning of aggravating circumstances for business due to the closure of the economy caused by the pandemic. Financing of the consolidated budget deficit becomes more difficult since the limited sources of financing are limited to financial institutions such as the IMF and the domestic capital market. The underdeveloped financial market conditioned the undefined structure and legislative framework of borrowing, which further complicates the management of public debt, so management goals are set mainly in the function of market development and support for monetary policy. In times of financial instability, many countries have limited opportunities for foreign financing, which is why there is a need for active public debt management with clearly defined goals and the definition of an institutional framework that will help control it. Despite the approach of raising the rate of indirect taxation as a solution for repairing the increased budget deficit of neighbouring countries, Bosnia and Herzegovina, in order to avoid an additional burden on the already low standard, started to create a stand-by arrangement with the IMF, which was also a significant source of public debt financing throughout the past period.

The analysis of defined indicators of public debt and their threshold values are determined by the Maastricht criteria, the International Monetary Fund and the World Bank, and they point to the dangers to which the economy is exposed, i.e. the inability to repay debt and service obligations after exceeding certain thresholds. An overview of the basic indicators of the acceptability of public debt determinants is given in Table 3.

Table 3 Criteria for assessing the stability of public debt

Criteria	Description of criteria	Control amounts
The ratio of public debt to GDP	Ensures economic stability	≤60% GDP (Maastricht Treaty)
The ratio between external debt and GDP	Assessment of the state's debt repayment capacity	≤ 30% (Criterion of the International Monetary Fund)
The relationship between interest paid and government revenue	Assessment of the debt burden	≤ 10% (Criterion of the International Monetary Fund)
The relationship between the budget deficit and GDP	Assessment of the state's financial situation	≥3% (Maastricht Treaty)
The relationship between external debt and exports	Assessment of the state's repayment capacity	>220% (Criterion of the World Bank)

Source: created by the author

The strong impact of the financial crisis on the public finances of the observed countries caused great pressure on the budget balances of the observed countries. Excessive budget spending and a drastic drop in tax revenues caused a disproportion in covering expenditures with revenues and the emergence of a continuous budget deficit, which, in accordance with the rules of the European Union Commission, introduced many countries into the corrective procedure of excessive deficit (EDP), the goal of which is to stabilize public finances and introduce additional controls in order to achieve a sustainable deficit of less than 3% of GDP. Table 4 shows the trend of realized budget deficits of the selected countries in the observed period, with underlined excessive deficits in accordance with the criteria of the European Commission.

Table 4 The budget balance of the selected countries in the period 2012-2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bosnia and Herzegovina	-2,00	-2,20	-2,00	0,70	1,20	2,60	2,20	1,90	<u>-5,30</u>	-0,30
Croatia	<u>-5,30</u>	<u>-5,50</u>	<u>-5,20</u>	<u>-3,50</u>	<u>-1,00</u>	<u>0,60</u>	<u>-0,10</u>	0,20	<u>-7,30</u>	-2,60
Czechia	<u>-3,90</u>	<u>-1,30</u>	-2,10	<u>-0,60</u>	0,70	1,50	0,90	0,30	<u>-5,80</u>	<u>-5,10</u>
Hungary	-2,30	-2,60	-2,80	-2,00	-1,80	-2,50	-2,10	-2,10	<u>-7,80</u>	<u>-6,80</u>
Poland	<u>-3,70</u>	<u>-4,20</u>	<u>-3,60</u>	<u>-2,60</u>	<u>-2,40</u>	<u>-1,50</u>	<u>-0,20</u>	<u>-0,70</u>	<u>-6,90</u>	<u>-1,80</u>
Slovak Republic	-4,30	-2,90	<u>-3,10</u>	-2,70	-2,60	-1,00	-1,00	-1,20	<u>-5,40</u>	-5,50

Source: World Bank, 2022.

In all observed countries, during the observed period, an increased budget deficit is evident, especially during the years of the pandemic and economic closure, where special deviations are expressed in the most developed members of the sample, which reached a deficit amount of about 8% of GDP. The realized deficit over the past decade of the selected countries was significantly reflected in the increase in public sector debt, the trend of which is shown through the indicator of the amount of public debt.

The amount of public debt of Bosnia and Herzegovina in the period 2012-2021 and its comparative analysis with the selected countries is shown in Table 5. Critical values reached in individual countries and in certain time periods compared to the previously defined criteria are specially underlined.

Table 5 Public debt of selected countries as % of GDP for the period 2012-2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bosnia and Herzegovina	42,21	42,50	45,86	45,53	44,08	37,95	34,27	32,53	36,53	35,43
Croatia	<u>68,16</u>	<u>78,77</u>	<u>82,23</u>	<u>81,79</u>	<u>78,42</u>	<u>75,38</u>	<u>71,81</u>	<u>69,60</u>	<u>85,31</u>	<u>77,74</u>
Czech Republic	41,52	41,85	39,43	37,62	35,73	33,94	32,39	30,96	38,93	43,56
Hungary	<u>74,00</u>	<u>74,73</u>	<u>75,20</u>	<u>73,83</u>	<u>73,33</u>	<u>71,35</u>	<u>69,20</u>	<u>65,37</u>	<u>78,73</u>	<u>75,20</u>
Poland	48,90	50,89	45,58	46,34	49,83	46,66	44,98	42,44	46,92	43,40
Slovak Republic	58,00	57,90	57,11	56,13	57,28	56,08	54,31	52,67	<u>65,24</u>	<u>67,37</u>

Source: World Bank, 2022.

Descriptive statistics of the basic sample variable of public debt as % GDP showed a certain volatility, primarily in countries that were under the influence of low or negative growth rates throughout the observed period. The growth of the ratio of public debt to GDP was mostly felt in transition economies that suffered longer cycles of negative economic growth rates. After a slight recovery due to the financial crisis in the period from 2016 to 2019 and a reduction in the budget deficits of the observed countries, during 2020 there was an accelerated growth in borrowing for the purpose of repairing the deficits caused by the pandemic and various support measures that the state has made possible so that the economic closure measures would be amortized and jobs would be preserved. For example, in the Republic of Croatia, Hungary and Slovakia, there is a significant

increase in the share of indebtedness in the observed period, where these growth rates amounted to over 15 pp., in contrast to the other observed countries of the analysis that managed to keep their indebtedness within sustainable limits, which was caused by a smaller slowdown of economic activities.

According to Uzochukwu (2003), if external debt exceeds 50% penetration in GDP, the economy becomes extremely sensitive to shocks of financial market instability and rising interest rates, debt servicing becomes a heavy burden, and countries enter a period of weakening economic growth. Buitier (2001) argues that an acceptable level of public debt in relation to GDP depends on many structural features of the economy, the foreign environment and the history of inherited conditions. Structural features include the propensity for private savings, the degree of financial development of the economy, the rate of productivity growth, the ability to expand the tax base and increase taxes, compress public spending and demographic development. This means that there is no universal debt-to-GDP ratio that is sustainable for each country. A certain level of indebtedness is certainly necessary in order to achieve economic growth where governments borrow to invest and raise the level of public services. A country with a high share of foreign currency debt in its total debt is more exposed to changes in financial markets, as is a country with a high share of debt with a variable interest rate. A country with a weak debt structure is vulnerable to external shocks and a liquidity crisis, which usually spills over into the private sector. Badly structured debt in terms of maturity, currency or interest rate can be an indicator of the emergence and development of an economic crisis. Well-structured debt means its long-term nature, denominated in local currency and contracted at a fixed interest rate. The interest rate, as a more important feature of public debt, largely determines its sustainability, because in a situation where interest rates are expected to rise on the world market, a high share of flexible interest rates creates an increased interest rate risk, so increasing the share of debt with a fixed interest rate is one of the priorities in order to reduce portfolio risk.

When analysing the public debt of Bosnia and Herzegovina, it is not enough to evaluate its amount and its relationship to GDP, it is also necessary to perform a more thorough analysis of the structure, dynamics and way of using the debt, because these factors are the potential reason for financial difficulties and the inability to service the same.

The defined indicator of the share of external debt in GDP for selected countries with underlined critical values are shown in table 5.

Table 6 External debt % of GDP of selected countries in the period 2012-2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bosnia and Herzegovina	27,50	28,20	30,85	30,40	29,60	25,90	24,50	23,00	25,40	24,40
Croatia	<u>109,50</u>	<u>113,40</u>	<u>103,00</u>	<u>105,60</u>	<u>90,60</u>	<u>93,30</u>	<u>78,70</u>	<u>72,80</u>	<u>88,20</u>	<u>77,50</u>
Czechia	<u>59,50</u>	<u>65,90</u>	<u>67,80</u>	<u>67,40</u>	<u>72,90</u>	<u>85,50</u>	<u>81,50</u>	<u>75,70</u>	<u>75,60</u>	<u>73,90</u>
Hungary	<u>157,80</u>	<u>144,10</u>	<u>146,60</u>	<u>30,10</u>	<u>119,10</u>	<u>101,50</u>	<u>100,40</u>	<u>98,80</u>	<u>156,50</u>	<u>157,60</u>
Poland	<u>70,90</u>	<u>71,10</u>	<u>73,60</u>	<u>72,00</u>	<u>76,70</u>	<u>67,20</u>	<u>64,10</u>	<u>58,90</u>	<u>60,60</u>	<u>56,60</u>
Slovak Republic	<u>74,80</u>	<u>82,00</u>	<u>90,00</u>	<u>84,40</u>	<u>92,50</u>	<u>108,40</u>	<u>114,80</u>	<u>112,10</u>	<u>120,40</u>	<u>137,00</u>

Source: World Bank, 2022.

The determined values of the observed countries showed significant instability in the structure of the share of external public debt and accelerated growth in all countries. The initially low levels of the share of Bosnia and Herzegovina's debt have tendency to keep on stable levels. The established high levels in most observed countries increase the repayment burden and call into question the ability to service the public debt.

According to Mihaljek and Tissot (2003), the following three factors can have a particularly strong and sudden effect on the ratio of public and external sector debt to GDP:

- 1) Long-term growth of interest rates, whereby the debt maturity structure plays a decisive role

- 2) A sharp depreciation of the exchange rate directly increases the debt-to-GDP ratio when most of the public liabilities are denominated in foreign currencies, or if the domestic debt is indexed to the exchange rate
- 3) Sudden recognition of unrecorded public obligations, when the state explicitly or implicitly guarantees the debt of other subjects

A mitigating circumstance on the international capital markets was the movement of interest rates at historically low levels, which significantly contributed to the reduction of interest rate uncertainty and more stable repayment, but the uncertainty of a potentially drastic tightening of monetary policy requires significant planning of foreign interest repayments, since their increased volatility can extremely increase servicing costs for external debt.

The analysis of transition countries and their way of borrowing showed the initial trend of external borrowing due to lower interest rates, which at the beginning of the last decade began to change significantly in favour of internal borrowing, which certainly contributes to the development of the domestic financial market, transparent business, and lower exposure to external risks such as change interest rates or exchange rates. This development is caused primarily by the increased accumulation of external debt. This accumulation made it impossible to increase the additional borrowing that the governments of the transition countries needed, instead redirecting it to the domestic market and increasing the internal debt.

According to Borensztein, Cowan, Eichengreen and Panizza (2007), crises that make access to external financing difficult and affect the development of the domestic financial market play an extremely large role. The increased use of external borrowing is also a consequence of attempts to create the best possible credit rating for the country, because with the country's exit to the international financial markets, audit firms create a country's credit rating that should contribute to attracting foreign capital and increasing foreign investments in the country.

Through the previously defined indicator, i.e. the ratio of paid interest on the public debt and realized state revenues, it is determined how much and to what extent the interest burden is covered by tax revenues.

Table 7 Interest paid on public debt as a % of the state income of the selected countries in the period 2012-2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bosnia and Herzegovina	1,74	1,73	1,97	2,16	2,02	1,72	1,72	1,63	1,81	1,74
Croatia	8,20	8,42	9,18	8,89	7,72	6,66	5,80	6,22	5,65	5,57
Czechia	4,20	3,94	3,89	3,16	2,74	2,22	2,18	2,08	2,26	2,15
Hungary	10,41	10,47	9,46	8,02	7,62	6,66	6,01	5,82	6,02	5,92
Poland	7,49	7,29	5,69	5,07	4,89	4,40	3,91	3,70	3,51	3,61
Slovak Republic	5,01	5,01	5,01	4,27	4,39	3,93	3,66	3,30	3,15	3,28

Source: World Bank, 2022.

The data of the observed countries showed a certain sustainability and a good coverage of the interest paid by the collected taxes. Bosnia and Herzegovina, although still at enviably low levels of the share of interest as a result of acceptable levels of public debt, still shows a growing trend of the share. Movement within the limit values is present in all countries, which was certainly contributed to by the situation on the world financial markets, causing low borrowing costs. However, the amount of public debt is not the only cause of the amount of interest, but in addition to it, the price of acquired capital has significant effects. The dominant share of debt with a fixed interest rate is an indicator that the observed countries strive to reduce the risk related to the interest rate, but in addition it is important to tie its maturity due to the fact that long-term debt with a fixed interest rate has advantages in terms of financial risks and is administratively easy to manage, which

makes it suitable for an organization with limited administrative resources. However, short-term debt can be expected to have lower costs due to the typically upward-sloping yield curve. The expected cost benefits must be weighed against the greater risk, i.e. cost variations. It is also necessary to mention that a large part of the borrowed money of the observed countries is not directed to investments, but intended to cover the budget deficit and service the interest costs of the public debt of earlier financing. Therefore, this type of outflow of funds significantly reduces the funds intended for potential investment in the observed economies and the achievement of economic growth.

Despite the frequency of use of the foreign debt-to-GDP ratio indicator, its usefulness for predicting financial instability remains questionable. Precisely in order to minimize this forecasting risk, it is necessary to look at the indicator of the ratio of external debt to exports, which provides information on the capacity of the state to pay off external debt with realized revenues from exports to other countries. A rising value of the ratio for a given rate indicates that the total value of the debt is growing faster than the basic external source of income, pointing to potential problems that the country may face in the future in meeting its obligations. Some countries of South America and Southeast Asia entered financial crises with a relatively small share of foreign debt in GDP, while other countries (involved in globalization processes) had high rates of economic growth despite a high share of foreign debt in GDP (Jošić, 2008). On the basis defined in the following table, we present the values of the observed indicator of selected countries, where the highlighted threshold values show the potential risk of insolvency.

Table 8 The ratio of external debt to realized exports in the period 2008-2015

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bosnia and Herzegovina	77,70	88,30	88,40	84,40	78,60	61,20	57,70	57,00	73,20	59,00
Croatia	<u>247,90</u>	<u>245,70</u>	<u>234,00</u>	207,60	202,70	178,40	164,20	144,00	197,00	162,20
Czech Republic	78,70	68,30	68,00	83,50	91,40	108,90	98,20	102,00	105,50	97,70
Hungary	144,30	113,90	108,30	119,50	109,90	94,80	88,30	88,00	99,60	97,20
Poland	212,10	129,60	129,00	147,70	149,60	128,80	112,40	109,90	106,40	90,20
Slovak Republic	82,60	72,50	81,30	91,00	98,10	110,80	111,30	120,00	135,40	133,90

Source: World Bank, 2022.

The analysis of the chosen indicator showed that Bosnia and Herzegovina is still well under the defined unsustainable levels of the ratio of foreign debt to exports of >220% coverage, while for certain countries in the sample the values were cumulatively reached throughout the period. The need to reduce this ratio conditioned the continuous increase in privileges for exporters in order to stimulate their growth and reduce the foreign trade deficit as a generator of borrowing growth. Increased borrowing is not necessarily the cause of potential danger if countries generate high revenues from the export of goods and services, but the problem of covering obligations arising from significantly higher imports leads to new and unsustainable debt creation.

The consequences of the financial crisis will certainly continue to manifest themselves in the oscillations of the deficit and public debt, which is the result of the failure to implement medium-term fiscal consolidation, which leads to increased volatility on the money market and the securities market, and threatens economic growth. The reduction of the required reserve ratio was the main measure of support for the financial sector, which is not the case in the countries of the euro area that tried to provide large capital support to their financial system. The countries of the region have relied on the parent banks to provide enough fresh capital for the countries in the region, which has so far resulted in success as no bank has failed. Forecasts of public debt trends in the coming period are still uncertain, but with somewhat better expectations for its stabilization. The unsustainable path of public debt in certain countries requires certain major fiscal consolidations, which, if not implemented, will lead to breaking through the debt ceiling of 60 percent of GDP. In addition to the growing debt trend, the direction of fiscal consolidation should not endanger the repayment of the

public debt because it manages to organize the timely repayment of loans. In the next year, Bosnia and Herzegovina will face significant difficulties in public financing because it is necessary to return significant funds based on borrowing, and without the help of the IMF, it is likely that it will find itself in a hopeless situation.

Despite the crisis and strong pressures, the public debt of Bosnia and Herzegovina is still mostly below the level of 60% of GDP, which is defined by the European Pact for Stability and Growth, and this is largely the result of large privatizations before the crisis, which increased FDI inflows and reduced the need for external borrowing. Using the MBS (model-based sustainability) test of fiscal sustainability, the essence of which is to observe the correlation between the ratio of public debt to GDP, and the ratio of the primary balance of the budget to GDP (a positive correlation is interpreted as an indicator of fiscal sustainability because such a case means that the government responds to the increase in the debt burden by correcting the fiscal policy in the direction of the surplus) Mendoza and Ostry (2007) proved that the correlation is very weak, that is, that fiscal sustainability is questionable in developing countries where the ratio of public debt to GDP is greater than 50 %. However, the fundamental problem of the increased indebtedness of these countries is the inadequate use of these funds, which are mainly directed to personal and public consumption as opposed to investment, which is the main generator of GDP growth and the creation of a balance of payments surplus that will be used to reduce the public debt.

3. CONCLUSION

Borrowing policy analysis is one of the most important components when looking at a country's debt, because the size and structure of the existing debt, as mentioned, significantly determines the direction of investments, and therefore economic trends, which is why it is necessary to create a long-term public debt management strategy that will help achieve the basic economic goals. The continuous borrowing policy of Bosnia and Herzegovina, although with a decreasing trend, carries with it the obligation to implement a long-term public debt management strategy, which entails making decisions on refinancing or repayment of public debt, its conversion and reprogramming, issuance of new debt, and the choice of maturity structure, all in order to avoid over-indebtedness which threatens economic goals.

In conditions of external and internal shocks that threaten macroeconomic stability, it is important to analyse the interactive effects of specific characteristics of public debt, i.e. the effects on growth, the monetary and fiscal system, and on the final movement of public debt. The main task is to reduce the cost of borrowing and positively influence sustainable, non-inflationary growth. With the recent crisis and the accumulation of public debt, the question of not only the fiscal management of public debt but also the role of monetary policy in achieving its sustainability has opened up. And while developed countries can realize fiscal reserves and achieve fiscal consolidation relatively quickly and, thanks to monetary independence, finance the fiscal sphere almost indefinitely, in less developed and especially small open economies such as Bosnia and Herzegovina, this is not possible.

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