

BOSNA I HERCEGOVINA
MINISTARSTVO FINANSIJA/
FINANSIJA I TREZORA



БОСНА И ХЕРЦЕГОВИНА
МИНИСТАРСТВО ФИНАНСИЈА
И ТРЕЗОРА

BOSNIA AND HERZEGOVINA
MINISTRY OF FINANCE
AND TREASURY

2022-2025 Bosnia and Herzegovina Medium-Term Debt Management Strategy

Sarajevo, December 2023

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I BOSNIA AND HERZEGOVINA MEDIUM TERM DEBT MANAGEMENT STRATEGY

Introduction

Debt management plays a significant role in the macroeconomic policy. The establishment and implementation of the debt management strategy, in the effort to obtain the required amount of funds at a low price in the medium- to long-term, requires consistency in the assessment of costs and risks in this context.

The Law on Borrowing, Debt and Guarantees of BiH defines the preparation of the BiH Medium-Term Debt Management Strategy (the BiH Strategy) which will include the debt of Entities and Brčko District of Bosnia and Herzegovina (BD BiH). In this regard, at its 101st session held on 12 May 2017 adopted the Calendar for the exchange of information required for the preparation of the BiH Strategy (the Calendar) as a procedural document defining the deadlines and activities of all who participate in the BiH Strategy preparation. In accordance with the Calendar, the BiH Strategy is prepared on the basis of medium-term debt management strategies of Republika Srpska (RS), the Federation of Bosnia and Herzegovina (FBiH) and Brčko District of Bosnia and Herzegovina (BD BiH), including the external debt of the Institutions of BiH. In fact, the preparation of the BiH Strategy purports that the governments of Entities and BD BiH prepare and adopt their debt management strategies on the basis of their gross financial needs, financing sources, and macroeconomic indicators, whereby they use the same shock scenario and the same initial projections in view of external debt interest rates and foreign exchange rate, while they use different projections for the development of Entity domestic debt interest rates.

The Strategy is revised annually and provides a wider picture of the BiH debt portfolio through the analysis of the current debt and variations of indebtedness in terms of shocks, and likewise defines the medium-term debt management goals and gives guidelines to the borrowing decision-makers.

In accordance with the above, the 2022-2025 Strategy represents the debt structures, estimates the state of indebtedness and defines the medium-term debt management goals and guidelines for the achievement of these goals.

1. Regulatory framework

The framework regulating debt in Bosnia and Herzegovina is determined in the Law on Borrowing, Debt, and Guarantees of BiH (*Official Gazette of BiH*, no. 52/05, 103/09 and 90/16) (BiH Borrowing Law), and the Law on Settlement of Obligations under the Old Foreign Currency Savings (*Official Gazette of BiH*, no. 28/06, 76/06, 72/07, 97/11 and 100/13) (BiH Old Foreign Currency Savings Law). The BiH Borrowing Law establishes the competence of the Ministry of Finance and Treasury of BiH (BiH MFT) in view of borrowing, i.e., the implementation of external borrowing procedures and state debt management, through managing, recording, monitoring, servicing and preparing plans related to state debt.

Debt of the Entities and BD BiH is regulated under the following framework:

- The Law on Borrowing, Debt and Guarantees of Republika Srpska (*Official Gazette of Republika Srpska*, no. 71/12 and 52/14, 114/17, 131/20, 28/21 and 90/21);
- The Law on Budget System of Republika Srpska (*Official Gazette of Republika Srpska*, no. 121/12, 52/14, 103/15 and 15/16);
- The Law on Fiscal Responsibility, (*Official Gazette of Republika Srpska*, no. 94/15 and 62/18);
- The Law on the Conditions and Method of Settling Obligations under the Old Foreign Savings through Emission of Bonds in Republika Srpska (*Official Gazette of Republika Srpska*, no. 1/08);
- The Law on Debt, Borrowing and Guarantees of the Federation of Bosnia and Herzegovina (*Official Gazette of the Federation of Bosnia and Herzegovina*, no. 86/07, 24/09, 44/10 and 30/16);
- The Law on the Conditions and Procedure of Verification of General Obligations of Republika Srpska (*Official Gazette of Republika Srpska*, no. 109/12);
- The Law on the Exercise of the Entitlement to a Compensation for Material and Non-material Damages during the War, from 20 May 1992 to 19 June 1996 (*Official Gazette of RS*, no. 103/05, 1/09, 49/09 and 118/09);
- The Law on Settlement of Obligations under the Old Foreign Savings in the Federation of Bosnia and Herzegovina (*Official Gazette of FBiH*, no. 62/09, 42/11, 91/13 and 101/16);
- The Law on Settlement of Obligations under the Old Foreign Savings through Emission of Bonds in Brčko District of Bosnia and Herzegovina (*Official Gazette of Brčko District*, no. 16/09, 19/10, 31/11, 20/13 and 06/18);
- The Law on the Treasury of Brčko District of Bosnia and Herzegovina (*Official Gazette of Brčko District*, no. 3/07, 19/07 and 2/08, 35/17, 52/18, 03/19 and 34/19);
- The Law on Domestic Debt of Brčko District of Bosnia and Herzegovina (*Official Gazette of BD BiH*, no. 27/04 and 19/07);
- The Law on Determining and the Method of Settlement of Domestic Obligations of FBiH (*Official Gazette of FBiH*, no. 66/04, 49/05, 35/06, 31/08, 32/09, 65/09, 42/11 and 35/14);
- The Law on Domestic Debt of Republika Srpska (*Official Gazette of Republika Srpska*, no. 1/12, 28/13, 59/13 and 44/14).

2. BiH Strategy Goals

The fundamental goal of the BiH Strategy is to secure financial funds for financing the needs of the State, Entities and BD BiH at an acceptable level of financing costs and risks. A further goal is to develop the domestic securities market.

3. BiH Strategy Scope

Bosnia and Herzegovina public indebtedness amounted to 12,857.1 million BAM in the end of 2021. The Strategy encompasses the debt¹ representing a direct or indirect liability of BiH Institutions, Entities and BD BiH, amounting to 11,840.5 million BAM, i.e., 92.1% of BiH public debt.

In accordance with the above stated, the BiH Strategy includes:

- The public state debt, i.e., in which the Ministry of Finance and Treasury of BiH acts as the borrower on behalf of Bosnia and Herzegovina, and which is allocated to BiH Institutions, Entities and BD BiH, and external debt of Entities and BD BiH,
- The BiH domestic debt, i.e., the domestic debt of Entities and BD BiH representing their direct or indirect liability.

The Strategy does not encompass:

- The issued external state guarantees,
- The issued domestic guarantees of Entities,
- The external debt of local self-government units and public companies created through the direct borrowing of the local self-government units and public companies, representing their direct liability,
- The domestic debt of Entities created through the borrowing of municipalities, cities, cantons, public companies and social security funds.

4. The overview of the structure, costs and existing debt risks

4.1. The existing debt structures

The total debt included in the BiH Strategy amounts to 11,840.7 million BAM in the end of 2021, representing 29.6% of GDP, shown in the table below.

Table 1: BiH total debts as of 31 December 2021

Description	Debt (in million BAM)				Total	Nominal debt as % of GDP ²
	FBiH	RS	BD BiH	BiH Institutions		
External debt	5,402.0	4,134.8	49.4	63.5	9,649.7	24.1%
Domestic debt	754.3	1,435.6	1.1	0.0	2,191.0	5.5%
Total debt	6,156.3	5,570.4	50.5	63.5	11,840.7	29.6%

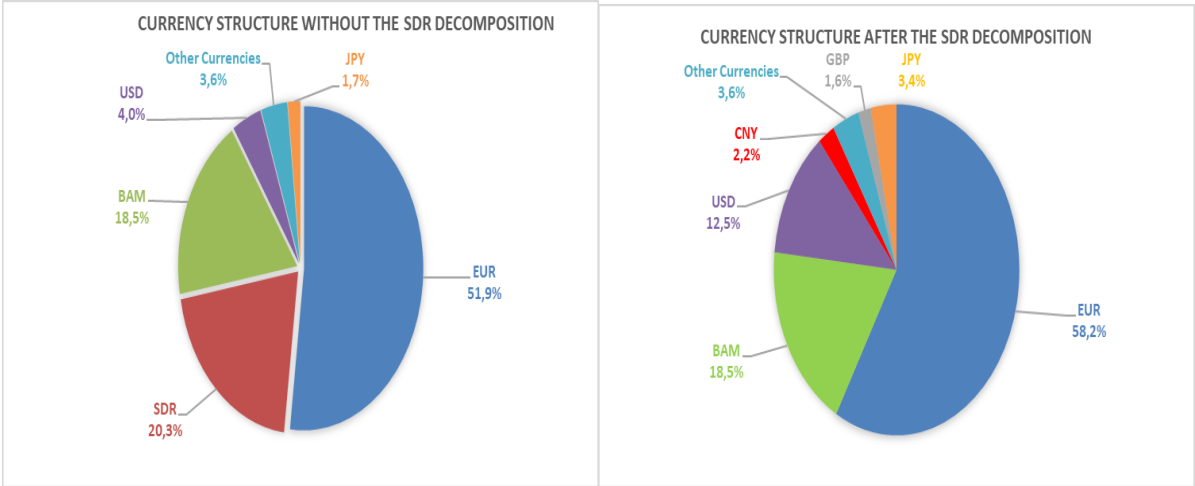
The share of external debt and domestic debt in the total debt is 81.5% and 18.5%, respectively. The share of the fixed interest rate debt and the share of the external non-EUR debt in the total debt is

¹ The remaining public debt is not serviced from the budgets of the BiH Institutions, Entities and BD BiH and the same is not included in the BiH Strategy.

² GDP for 2021 = 40,030.58 million BAM, the BiH Agency for Statistics, gross domestic product - expenditures method, press release of 29 September 2023;

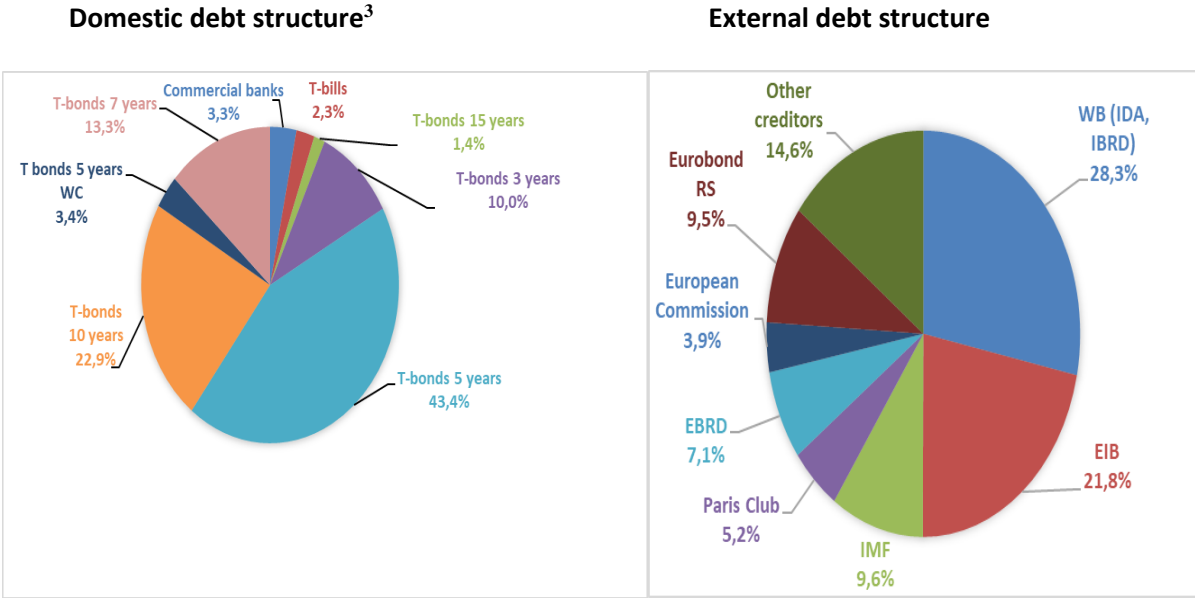
70.8% and 29.6%, respectively. The currency structure of BiH total debt included in the BiH Strategy is shown in Figure 1, and it includes the currency structure after the SDR decomposition.

Figure 1. BiH total debt currency structure as of 31 December 2021



The external debt is mostly composed of obligations toward multilateral creditors (75.8%), while the domestic debt is composed of: treasury bonds (T-bonds), treasury bills (T-bills), credits with domestic commercial banks, and bonds issued for the settlement of the obligations created under the old foreign savings and war claims. The maturity of T-bonds ranges from 3 to 15 years. The external and domestic debt structure in view of creditors and domestic debt is shown in Figure 2.

Figure 2 BiH debt structure as of 31 December 2021



³ T-bonds 5 years WC are amortised bonds under war claims issued by the FBiH

4.2. Existing debt costs and risks

The BiH total debt encompassed by the BiH Strategy is characterised by a relative low average weighted interest rate (Table 2). The weighted average interest rate of the total debt, external debt, and domestic debt is 1.8%, 1.6%, and 2.4%, respectively. For the most part, this is the result of external concessional borrowing and significant participation of external credits with a variable interest rate which was relatively low at the end of 2021.

Table 2 BiH: Indicators of costs and risks of the existing debt as of 31 December 2021

BOSNIA AND HERZEGOVINA				
Costs and risks indicators		External debt	Domestic debt	Total debt
Debt amount (million BAM)		9,649.7	2,191.0	11,840.7
Debt amount (million USD)		5,592.0	1,269.7	6,861.7
Nominal debt as % of GDP		24.1	5.5	29.6
Current debt value as % of GDP		19.7	5.5	25.2
Debt costs	Interest in comparison with GDP (%)	0.5	0.2	0.7
	Average weighted interest rate (%)	1.6	2.4	1.8
Refinancing risk	ATM (years)	6.7	3.6	6.1
	Debt maturity in the following year (% of the total)	6.9	22.3	9.8
	Debt maturity in the following year (% of GDP)	1.7	1.2	2.9
Interest risk	ATR (years)	4.6	3.6	4.4
	Debt re-fixed in the following year (% of the total)	39.6	23.0	36.5
	Fixed interest rate debt (% of the total)	64.5	99.0	70.8
Currency risk	External debt (% of the total debt)			81.5
	External debt, excluding the debt in EUR (% of the total)			29.6
	Short-term external debt (% of reserves)			4.1

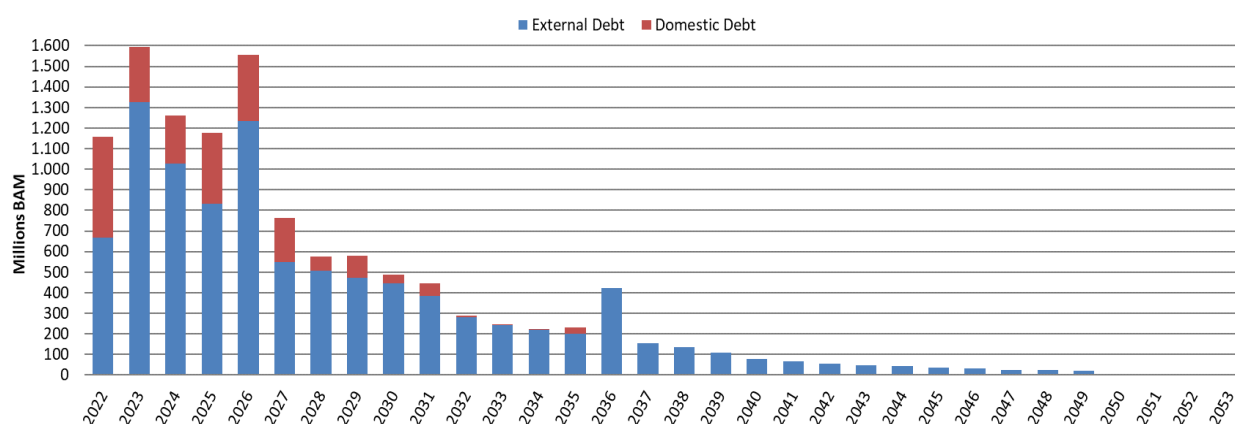
ATM=average time to maturity, ATR=average re-fixing time

The refinancing risk is moderate. The total debt repayment profile (Figure 3) indicates significant external debt servicing in 2023, when the credit of the European Commission for the macro financial assistance II in the amount of 50 million EUR will mature, as well as the RS Eurobond in the amount of 168 million EUR, and a part of the principal for the IMF RFI credit (Rapid Financial Instrument) for the mitigation of negative consequences of the slower economic activity caused by the Covid-19 pandemic in the amount of 87.44 million SDR. The ATM for the domestic debt and the external debt is 3.6 and 6.7 years, respectively.

The interest rate risk is moderate. The share of the fixed interest rate credits in the total debt structure is 70.8%. In total, 39.6% of external and 23.0% of domestic debt have the interest rate re-fixed within one year. The result of such a high percentage of external debt being re-fixed within one year is a significant participation of the variable interest rate in the external debt portfolio (35.5%).

The currency risk is moderate and significantly lower when compared to the share of foreign debt in the total debt structure due to the currency clause (linking the BAM and EUR), whereby 29.6% of the total debt is exposed to the exchange rate fluctuations, although the share of external debt in the total debt is 81.5%.

Figure 3 The existing total debt repayment profile



4.3. BiH Strategy implementation in 2021

The medium-term debt management strategy was first adopted on 26 April 2016 by the Council of Ministers of BiH, and the BiH Strategy implementation may be observed through a parallel overview of the indicators of costs and debt shown in the table below.

Table 3 BiH: The parallel overview of cost indicators and debt risk between 2015 and 2021

Costs and risks indicators		2015	2016	2017	2018	2019	2020	2021
		BiH	BiH	BiH	BiH	BiH	BiH	BiH
Nominal debt amount compared to GDP (%)		36.7	35.9	31.9	29.9	28.7	31.6	29.6
Debt current value compared to GDP (%)		32.5	31.6	28.5	26.5	24.3	27.1	25.2
Interest compared to GDP (%)		0.7	0.7	0.6	0.6	0.6	0.6	0.7
Average weighted interest rate (%)		1.9	1.9	1.9	1.9	1.9	1.8	1.8
Refinancing risk	Debt maturity in the following year (% of the total)	11.2	13.3	14.6	10.9	9.6	11.2	9.8
	Debt maturity in the following year (% of GDP)	4.1	4.8	4.7	3.3	2.7	3.6	2.9
	External debt ATM (years)	7.3	7.1	7.2	7.3	7.1	6.7	6.7
	ATM domestic debt (years)	3.1	3.1	3.1	3.0	3.5	3.5	3.6
	ATM total debt (years)	6.3	6.2	6.2	6.4	6.4	6.0	6.1
Interest risk	ATR (years)	4.1	4.2	4.2	4.4	4.7	4.2	4.4
	Debt re-fixed in the following year (% of the total debt)	46.1	44.5	43.2	38.6	33.6	38.3	36.5
	Fixed interest debt (% of the total debt)	60.9	62.7	65.4	68.3	73.1	70.0	70.8
Currency risk	External debt (% of the total debt)	77.5	76.7	75.6	80.1	78.9	76.9	81.5
	External debt, excluding the debt in EUR (% of the total debt)	37.8	37.1	33.7	32.8	31.4	32.1	29.6
	External debt, excluding the debt in EUR (% of external debt)	48.8	48.4	44.5	40.9	39.9	41.7	36.3
	Short-term external debt (% of reserves)	7.4	8.9	7.6	5.7	4.9	4.7	4.1

Although the amount of the total debt in 2021 is higher when compared to the previous year, the nominal debt indicators compared to the GDP and the debt current value compared to the GDP decreased in 2021, primarily, due to the increase of GDP. The average weighted interest rate of 1.8% remained unchanged in comparison with 2020.

The re-financing risk in 2021 is smaller when compared to the previous year, due to the significant decrease of the debt maturing in the following year. The average maturity period of external debt remained at the same level of 6,7 years, while it increased slightly for domestic and total debt.

Likewise, bearing in mind the improvement of all indicators related to this risk, the exposure of the interest rate to risk decreased in 2021 when compared to the previous year.

The share of external debt in the total debt in 2021 is at its highest level compared to the data in the observed period. However, the external debt exposure to the foreign exchange rates is at its lowest level. In fact, the share of the non-EUR external debt in the total and external debt decreased due to the higher borrowing in EUR in 2021. Likewise, the share of short-term external debt in foreign exchange reserves decreased due to the significant increase of the foreign exchange reserves in foreign currencies in 2021 in comparison with 2020.

Total engaged funds from external sources in 2021 amount to 1,560.6 million BAM, of which 98.6% is in EUR, and 74.4% with a fixed interest rate.

In 2021, 10 new credit arrangements have been agreed in the amount of 1,576.0 million BAM, of which 81.9% is with a fixed interest rate and 100.0% in EUR.

5. Macroeconomic framework

Macroeconomic assumptions⁴ used in the BiH Strategy preparation analysis are shown in Table 4.

Table 4: Macroeconomic assumptions

	2021	2022	2023	2024	2025
Nominal GDP (in million BAM)	40,031.0	45,518.0	48,462.0	51,170.0	53,956.0
Nominal growth (in %)	12.5	13.70	6.5	5.6	5.4
GDP deflator (previous year=100)	104.9	109.5	104.4	102.6	102.4
Real growth (in %)	7.2	3.8	2.0	2.9	3.0
Inflation measured by retail prices index in %	2.0	14.0	6.2	3.1	2.2
Budget revenues ⁵ (in million BAM)	8,640	9,477	10,733	11,135	11,378
Budget expenditures ⁶ (in million BAM)	8,941	9,901	10,771	10,986	11,170

⁴ GDP, nominal growth, real growth, GDP deflator, and inflation, measured through the consumer prices index for the period between 2021 and 2025, represent the data and projections of the BiH Economic Planning Directorate from September 2023.

⁵ Aggregate revenues of Entities, BD BiH and BiH Institutions used in the preparation of strategies.

⁶ Aggregate expenditures of Entities, BD BiH and BiH Institutions used in the preparation of strategies.

6. Sources of financing

6.1. External financing sources

Potential external sources of financing envisaged in the BiH Strategy are stated in Table 5.

Table 5: External financing sources

Creditor's name	Interest rate	Grace period	Repayment deadline	Currency	Risks
IBRD	Fixed or variable	5-10	15-32	EUR	Refixing risk for the variable
EIB	Fixed or variable	4-8	25-30	EUR	Refixing risk for the variable
CEB	Fixed or variable	5	10-20	EUR	Refixing risk for the variable
IFAD	Fixed or variable	3-10	18-30	SDR/ EUR	Refixing risk for the variable, refinancing and currency risk for SDR
EBRD	Variable	3-5	12-15	EUR	Refixing risk for the variable
OPEC FOND	Fixed	10	20	USD	Currency risk
KfW	Fixed	0.5-10	9-20	EUR	Refinancing risk
Saudi Fund	Fixed	5	25	SAR	Currency risk
Kuwait Fund	Fixed	5	25	KWD	Currency risk
EUROBOND	Fixed	4	5	EUR	Refinancing risk
Other creditors	Fixed or variable	0-5	10-18	EUR	Refinancing risk and refixing risk for the variable

Bosnia and Herzegovina is rated in category B+/positive perspectives, awarded by the International sovereign rating agency Standard and Poor's, and B3/stable prospects awarded by the rating agency Moody's.

6.2. Domestic financing sources

Republika Srpska plans to issue treasury bills and bonds with the maturity period of 5, 7 and 10 years with "bullet" repayment and fixed interest rate. Federation of BiH plans to issue treasury bills and bonds with the maturity period of 3, 5 and 10 years with "bullet" repayment. BD BiH is not planning to borrow on the domestic market.

7. BiH Strategy analysis

Shock scenarios are used with the aim of determining the preferred strategies of Entities and BD BiH in order to analyse the influence of the growth of interest rates to the domestic and external debt and depreciation of currency exchange rates⁷. The costs are calculated on the basis of flows generated in accordance with the baseline scenario, while the risk is measured as increase of costs due to disturbances affecting exchange rates and increase of interest rates and increase of debt when compared to the GDP.

A short description of strategies adopted by Entities and BD BiH for the following medium-term period are given below.

7.1. Description of medium-term debt management strategies of Entities and BD BiH

The Federation of BiH chose a strategy⁸ based on the actual state of FBiH's borrowing in accordance with the 2023 FBiH Budget, the 2023-2025 FBiH Budget Framework Document and 2023-2025 PIP. Financing of development projects until the end of 2025 was estimated at 799.38 million BAM. In the context of the assessment of costs and risks for external credits intended for the realization of the FBiH PIP, credit conditions were applied in accordance with the general conditions of the creditor's business with the preferred currency EUR. For more details on the stated Strategy, see Chapter II in Part B. Federation of Bosnia and Herzegovina Debt Management Strategy.

The Government of Republika Srpska adopted the Strategy to Diversify Financing Sources, Instruments and Investors' Base⁹. This strategy is based on the financing of budgetary spending through the issuance of medium-term securities, with "bullet" and amortization repayment, mostly on the international financial market and to a lesser extent on the domestic financial market. External financing sources will be used to finance investment projects as the result of maximum usage of the access to concessional sources (WB, EIB, EBRD, KfW, etc.), which contributes to the reduction of the refinancing risks and minimum possible costs. The average share of domestic financing is reduced in favour of external sources. For more details on the stated Strategy, see Chapter II in Part A. Republika Srpska Debt Management Strategy.

Brčko District BiH chose the Strategy of Preference of Multilateral Creditors¹⁰ (new borrowing in EUR with the possibility of a fixed interest rate) for their investment projects of crucial importance for a faster economic growth and development of BD BiH, since such a strategy will ensure an acceptable level of costs and financing risks; likewise, the conditions for borrowing from domestic commercial banks are still unfavourable, and there is no regulatory framework at the moment enabling the issuance of long-term treasury bonds. As per this Strategy, by the end of 2025, the percentage of nominal debt in the BD BiH GDP in BD BiH would amount to 5.5% when compared to the current 5.2%, to which it amounted in the end of 2021. The amount of interest compared to GDP for 2021 shows an increase of 0.1%. The refinancing risk in Strategy C2 is at its lowest since the ATM has been extended from 3.7 to 7.2 years. Approximately 69.3% of the debt to be refixed within one

⁷ Depreciation of BAM when compared to USD

⁸ Identified as S1 Strategy in the FBiH Debt Management Strategy.

⁹ <https://www.vladars.net/sr-SP-Cyrl/Vlada/Ministarstva/mf/PPP/ud/Pages/default.aspx#collapsible0>

¹⁰ Identified as S2 Strategy in the BD BiH Debt Management Strategy.

year is the result of a large share of variable interest rate in the total debt portfolio (77.0%) when compared to 23.0% of debt with a fixed interest rate, while the average time to refix increased from 1.5 to 3.4 years. Likewise, this would mean an increase of the share of external debt in the total debt from 97.8% to 100.0%. For more details on the stated Strategy, see Chapter II in Part C. Brčko District of Bosnia and Herzegovina Medium-term Debt Management Strategy.

The structure of the debt of BiH Institutions in the end of 2021 implies that the total debt of the BiH Institutions is in fact an external debt with a fixed interest rate and an average weighted interest rate of 1.3%, the ATM is 6.2 years, while 6.6% of the debt is to mature in the following year. Only 21.1% of the total debt is exposed to the risk of exchange rate fluctuation, given that 78.9% of the total debt is denominated in EUR. In the observed period, BiH Institutions do not plan to borrow anew, except to withdraw funds under the existing contracted credits, and in case of a need for new external financing, the guidelines defined in the BiH Strategy will be applied.

7.1. Analysis of the BiH Strategy costs and risks

Table 6 shows the indicators of costs and risks for the BiH Strategy in the end of 2025, as well as the indicators of costs and risks for the BiH debt in the end of 2021.

Table 6: The existing debt (2021) and the BiH Strategy (2025) costs and risk indicators

Costs and risks indicators		2021	2025
Nominal debt amount compared to GDP (%)		29.6	26.2
Debt current value compared to GDP (%)		25.2	24.0
Interest compared to GDP (%)		0.7	0.9
Average weighted interest rate (%)		1.8	3.8
Refinancing risk	Debt maturity in the following year (% of the total debt)	9.8	14.3
	Debt maturity in the following year (% of GDP)	2.9	3.7
	ATM External debt (years)	6.7	6.7
	ATM domestic debt (years)	3.6	3.2
	ATM total debt (years)	6.1	5.8
Interest risk	ATR (years)	4.4	4.5
	Debt refixed in the following year (% of the total debt)	36.5	33.9
	Fixed interest debt (% of the total debt)	70.8	78.4
Currency risk	External debt (% of the total debt)	81.5	76.1
	External debt, excluding the debt in EUR (% of the total debt)	29.6	15.5
	External debt, excluding the debt in EUR (% of external debt)	36.3	20.4
	Short-term external debt (% of reserves)	4.1	7.5

The nominal amount of debt in the end of 2025 (14,124.1 million BAM) is increased by 19.3% when compared to the state of debt in the end of 2021 (11,840.4 million BAM). The stated increase occurs to a greater extent as a result of the financing of investment development projects that the Entities and BD plan to implement through borrowing, and as a result of borrowing to finance the budget deficit. Due to higher projected GDP growth, the debt-to-GDP ratio and the debt current value-to-GDP ratio will decrease.

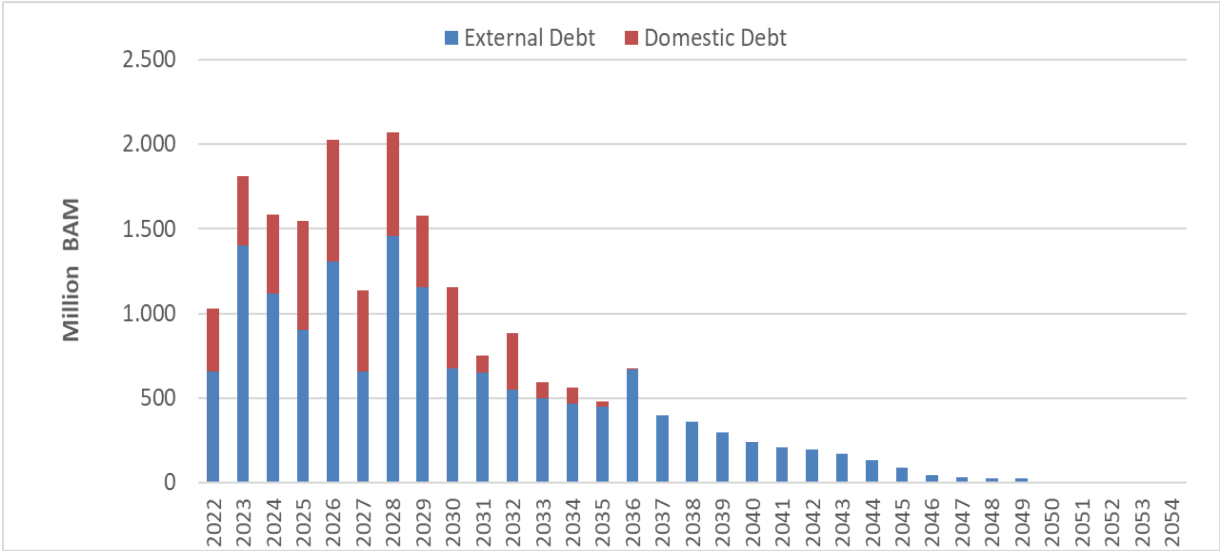
The average weighted interest rate is increasing significantly, i.e. from 1.8% at the end of 2021 to 3.8% at the end of 2025, which was mostly influenced by the increase in the variable interest rate, as well as the fixed interest rate on new credits.

Exposure to the risk of refinancing at the end of 2025 has increased compared to the end of 2021, given that the debt maturing in the following year as a percentage of the total debt and the debt maturing in the following year as a percentage of GDP have increased, primarily due to repayment of RS Eurobond in the amount of EUR 300 million, which are due for collection in 2026. The ATM of external, domestic and total debt is at approximately the same level.

In the end of 2025, the interest rate risk indicators improve when compared to 2021 due to the higher external and domestic borrowing under fixed interest rate. In fact, in the BiH Strategy, the share of the debt with the fixed interest rate increases to 78.4% when compared to the current level (70.8%), while the refixing debt decreases due to the reduced external borrowing under variable interest rate.

Exposure to exchange rate fluctuations is significantly reduced due to the preference for external borrowing in the EUR currency, as well as an increase in borrowing from domestic financing sources, and the share of debt in currencies other than EUR in the total debt is significantly lower (from 29.6% to 15.5%), i.e. 15.5% of the total debt is exposed to exchange rate fluctuations. The share of short-term foreign debt in foreign exchange reserves is increasing compared to the current situation due to the increase in the repayment of foreign debt in 2026 compared to 2022 (Figure 4), which is primarily the result of the maturity of liabilities based on the RS Eurobond.

Figure 4 Repayment of the total debt profile according to the BiH Strategy



8. Guidelines

According to the chosen strategy, the financing costs will be higher due to inflation and world events, in addition to the lower currency and interest risk and an acceptable level of the re-financing risk when compared to the current situations. With the aim to achieve the above-mentioned, it would be desirable to contract new external credits with a longer maturity and grace periods, fixed interest rates and in EUR where the creditor's conditions allow, and in consideration of the financing costs. In this regard, and in view of the external state debt, the operating guidelines up to 2025 are as follows:

- In view of new external borrowing, to choose, where possible, the type of the interest rate, to prefer fixed interest rates (unless the analysis provides strong arguments to choose a variable interest rate).
- In view of new external borrowing, to choose, where possible, the maturity and grace periods, to prefer external borrowing with longer grace and repayment periods.
- When planning borrowing, ensure to maintain the even repayment structure by years, with the aim of minimising the refinancing risk.
- In order to reduce the currency risk in new external borrowing, where it is possible to choose a currency, the EUR currency should be preferred.

The guidelines for the Entities' and BD BiH domestic and external debt are defined within their respective strategies given in Chapter II herein (pages 31, 52 and 59).

II DEBT MANAGEMENT MEDIUM-TERM STRATEGIES OF ENTITIES AND BRČKO DISTRICT

A REPUBLIKA SRPSKA DEBT MANAGEMENT STRATEGY

1. Legislative and legal framework

Borrowing in Republika Srpska is regulated by the Law on Borrowing, Debt and Guarantees of Republika Srpska and the Law on Borrowing, Debt and Guarantees of Bosnia and Herzegovina. In accordance with the provisions of the Law on Borrowing, Debt and Guarantees of Republika Srpska, borrowing means the realization of contracted credits and loans, the issuance of securities and the issuance of guarantees during the fiscal year. Also, this Law regulates the manner and procedure of borrowing, issuance of guarantees and issuance of securities of Republika Srpska, local self-government units and social security funds, provision of funds for debt repayment, keeping records of debt, guarantees and securities, as well as other issues referring to debt, guarantees and securities of Republika Srpska, local self-government units and social security funds.

The law also provides for the purposes for which Republika Srpska can borrow in the short and long term in the country and abroad, that is, on the domestic and foreign markets, and accordingly, in domestic and foreign currency.

The Law on Borrowing, Debt and Guarantees of Republika Srpska established limits on the amount of debt, where it was established that the total debt of Republika Srpska at the end of the fiscal year cannot be higher than 60% of the realized GDP in that year, that the public debt of Republika Srpska at the end of the fiscal year cannot be higher than 55% of the realized GDP in that year, and that the short-term debt cannot be higher than 8% of the amount of regular revenues realized in the previous fiscal year.

In addition to the Law on Borrowing, Debt and Guarantees of Republika Srpska, the public debt, i.e. its limit, is also determined by the general fiscal rules defined by the Law on Fiscal Responsibility in Republika Srpska. In accordance with the aforementioned Law, the general fiscal rules include the debt rule and the consolidated budget deficit rule. The first rule limits the public debt of RS in such a way that at the end of the fiscal year it cannot be higher than 55% of the realized GDP in that year, and the second rule determines that the consolidated budget deficit at the end of the fiscal year cannot be higher than 3% of the realized GDP in that year.

The legislative and legal framework that regulates the debt and guarantees of Republika Srpska is as follows:

- The Law on Borrowing, Debt and Guarantees of Republika Srpska (*Official Gazette of Republika Srpska*, no. 71/12 and 52/14, 114/17, 131/20, 28/21 and 90/21);
- The Law on Budget System of Republika Srpska (*Official Gazette of Republika Srpska*, no. 121/12, 52/14, 103/15 and 15/16);
- The Law on Domestic Debt of Republika Srpska (*Official Gazette of Republika Srpska*, no. 1/12, 28/13, 59/13 and 44/14);
- The Law on the Conditions and Procedure of Verification of General Obligations of Republika Srpska (*Official Gazette of Republika Srpska*, no. 109/12);
- The Law on the Exercise of the Entitlement to a Compensation for Material and Non-material Damages during the War, from 20 May 1992 to 19 June 1996 (*Official Gazette of RS*, no. 103/05, 1/09, 49/09 and 118/09);

- The Law on Settlement of Obligations under the Old Foreign Savings (*Official Gazette of Bosnia and Herzegovina*, no. 28/06, 76/06, 72/07, 97/11 and 100/13);
- The Law on the Conditions and Method of Settling Obligations under the Old Foreign Savings through Emission of Bonds in Republika Srpska (*Official Gazette of Republika Srpska*, no. 1/08);
- The Law on Fiscal Responsibility, (*Official Gazette of Republika Srpska*, no. 94/15 and 62/18).

2. Goal, scope and premises

The 2022-2025 RS Medium-term Debt Management Strategy (hereinafter: The Strategy) is based on the basic goals and proven methods of improving debt sustainability and mitigating related risks defined in the recently adopted 2021-2024 Debt Management Strategy. At the same time, the Strategy establishes a medium-term goal and a plan of activities in the field of debt management that the Government of Republika Srpska intends to implement during the observed medium-term period. The implementation of the measures and activities included in the RS Strategy will ensure the desired debt portfolio structure in consideration of the cost and risk preferences of the RS Government.

Regular adoption and publication of the implementation of the Debt Management Strategy, with goals based on cost and risk analysis, taking into account the three-year macroeconomic and market developments and limitations, is one of the necessary levers for active debt management. Accordingly, **the Medium-term Debt Management Strategy is regularly adopted annually, its implementation is monitored, and its execution is reported annually to the Government of Republika Srpska.** At the same time, for the purpose of transparency of debt management, the Strategy is regularly published on the website of the Ministry of Finance upon its adoption, so that all other interested members of the public can become familiar with this document.

The RS Strategy encompasses debt representing direct or indirect liabilities of Republika Srpska¹¹, including certain exceptions.

The data on the external debt include:

- 1) The RS debt (except the part of debt toward the Paris Club - Germany, for which the repayment conditions have not been determined);
- 2) The debt of local self-government units created under the RS indirect borrowing;
- 3) The debt of public companies and the RS Investment-Development Bank created under the RS indirect borrowing.

The data on the domestic debt include:

- 1) The RS debt (verified domestic debt regulated by the RS Law on Domestic Debt, treasury bills¹², medium-term bonds, credits and activated guarantees);
- 2) The debt of social security funds created under the RS indirect borrowing.

The debt (external and domestic) created under the direct borrowing of local self-government units, social security funds, public companies and the RS Investment-Development Bank is not included in the RS Strategy as it does not represent neither the direct nor indirect liability of Republika Srpska

¹¹ In accordance with the Law on Borrowing, Debt and Guarantees of Republika Srpska (*Official Gazette of Republika Srpska*, 71/12, 52/14, 114/17, 131/20, 28/21 and 90/21), the RS indirect debt was created on behalf and for the account of debtors (local self-government units, social security funds, the RS Investment-Development Bank and the funds it manages, public companies and public sector institutions), and repaid by RS from funds that debtors pay for their respective debt.

¹² From 31 December 2021, there were no obligations based on treasury bills, because all issued treasury bills were settled as of 31 December 2021.

and as it cannot be managed by the RS Ministry of Finance on behalf of the RS Government. The detailed overview of the RS Strategy scope is given in Schedule 1.

The goal of borrowing and debt management is to secure the financial resources needed to execute the budget of Republika Srpska, finance approved investment projects, and refinance the observed debt with the lowest financing costs and an acceptable level of risk.

The Strategy is based on the following premises:

- 1) In the medium-term, the RS Government will carry out fiscal consolidation and reform plan presented in the 2023-2025 RS Economic Reforms Programme (2023-2025 RS ERP) to secure long-term fiscal stability (in accordance with the Law on Fiscal Responsibility);
- 2) The projections of macroeconomic indicators and fiscal framework (Tables 1 and 2) given in the 2023-2025 RS ERP¹³ and the 2023-2025 Framework Budget Revised Document (hereinafter: 2023-2025 Revised RS FBD);
- 3) All new borrowing in which Republika Srpska, i.e. Bosnia and Herzegovina, acts as the borrower, will be contracted in accordance with the procedures prescribed by the Law on Borrowing, Debt and Guarantees of Republika Srpska, i.e. the Law on Borrowing, Debt and Guarantees of Bosnia and Herzegovina¹⁴, and with active participation of the Ministry of Finance of Republika Srpska;
- 4) All new borrowing in which BiH acts as the borrower, and Republika Srpska as a subsidiary borrower, will be contracted in accordance with the procedures prescribed by the Law on Borrowing, Debt and Guarantees of BiH, that is, through the Ministry of Finance and Treasury of BiH;
- 5) There will be no changes to the legal legislation that would enable the recognition (assumption) of debt from other levels of government;
- 6) Settlement of the verified obligations regulated by the RS Law on Domestic Debt (hereinafter: RS LDD) will be carried out in accordance with the projections included in the 2023-2025 Revised RS FBD;
- 7) The Central Bank of BiH (hereinafter: CB BiH) will continue to maintain monetary stability in accordance with the currency board arrangement and the provisions of the Law on Central Bank of BiH, and will not issue securities on the domestic market;
- 8) The credit rating of Republika Srpska and Bosnia and Herzegovina will not be lowered in the medium-term¹⁵;
- 9) The basis of the institutional investors in domestic and foreign finance market of Republika Srpska will be maintained and widened in the medium-term;
- 10) The possibility of new increases in the reference interest rate of the European Central Bank¹⁶ and the Federal Reserve of the United States of America (FED), taking into account several successive increases in the past year, as well as current development in the international market;
- 11) The creditors will offer funds under acceptable conditions;
- 12) Other analytic premises presented in Schedule 2 and used for the purpose of producing the quantitative RS Strategy.

¹³ 2023-2025 RS ERP includes the detailed premises of macroeconomic projections and fiscal framework, as well as risks to their achievement.

¹⁴ *Official Gazette of BiH*, no. 52/05, 103/09 и 90/16

¹⁵ [The current BiH credit rating](#) is B with positive outlooks, as assessed by Standard and Poor's, and B3 with stable outlooks, as assessed by Moody's. The current BiH credit rating is B with stable outlooks, as assessed by Standard and Poor's, and B3 with stable outlooks, as assessed by Moody's.

¹⁶ European Central Bank; [Press release of 16 March 2023](#).

Table 1: Overview of macroeconomic indicators for 2018-2022 period and projections for 2023-2025 period

	2018	2019	2020	2021	2022	2023	2024	2025
GDP								
Nominal GDP, in million BAM	1,701.0	11,251.3	11,131.8	12,501.7	14,238.7	15,319.8	16,376.8	17,244.8
Population, in millions	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
GDP per capita, in BAM	9,322.0	9,848.0	9,795.0	11,080.1	12,664.4	13,692.7	14,711.0	15,490.7
% of GDP growth, nominally	6.0	5.1	-1.1	12.3	13.9	7.6	6.9	5.3
Inflation-average annual rate	1.2	0.5	-1.2	1.7	12.7	6.0	3.5	2.0
real growth rate %								
Real GDP growth	3.9	2.5	-2.5	6.9	3.5	3.1	3.4	3.2
Export	7.4	1.5	-13.9	23.7	17.5	7.0	7.5	8.0
Import	7.4	-2.4	-3.8	6.2	18.3	5.5	5.9	6.9
Private spending	2.5	2.8	0.2	5.5	3.5	2.0	2.6	2.4
State spending	1.8	1.5	3.9	3.9	3.0	1.5	1.8	1.1
Gross investments in fixed assets	11.1	-2.2	10.1	-5.0	10.5	-1.0	9.0	3.9
Premises								
Average net salaries in BAM	857.0	906.0	956.3	1,004.0	1,144.0	1,208.4	1,261.6	1,312.0
Unemployment rate % ¹⁷	-	-	-	14.3	11.2	10.7	9.9	9.2

Source: 2023-2025 RS ERP, RS MF, RS IS

Table 2: 2022-2025 Fiscal framework¹⁸

	2022	2023 Budget	2024 Rev. FBD	2025 Rev. FBD
A. BUDGET REVENUES (I+II+III+IV)	3,683.8	4,142.7	4,383.6	4,591.2
I Tax revenues	3,408.4	3,822.0	4,033.3	4,200.6
II Non-tax revenues	269.0	314.3	344.0	384.3
III Grants	0.0	0.0	0.0	0.0
IV Transfers between or within governance units	6.4	6.4	6.3	6.3
B. BUDGET EXPENDITURES (I+II+III+IV)	3,824.7	4,247.8	4,392.1	4,480.2
I Current expenditures	3,390.5	3,824.6	3,974.3	4,058.4
II Transfers between or within governance units	434.2	415.4	408.0	412.2
III Budget reserves	0.0	7.8	9.8	9.6
C. GROSS BUDGET SURPLUS/DEFICIT (A-B)	-140.9	-105.1	-8.5	111.0
D. NET EXPENDITURES FOR NON-FINANCIAL ASSETS	-146.7	-156.1	-138.1	-138.1
E. BUDGET SURPLUS/DEFICIT (C+D)	-287.6	-261.2	-146.5	-27.1
F. NET FINANCING (G+H+I)	211.0	261.2	146.5	27.1
G. NET PROCEEDS FROM FINANCIAL ASSETS	78.1	100.2	109.4	111.8
H. NET BORROWING	154.0	187.4	59.6	-63.6
I. OTHER NET PROCEEDS	-21.1	-26.4	-22.4	-21.2

Source: RS MF

¹⁷ In accordance with the Regulation of the European Parliament and Council, which entered into force on 1 January 2021, the RS IS carried out the methodological alignment of the ARS Questionnaire by way of which information for 2021 are collected, whereby the indicators for Q2 2021 are not fully comparable to the indicators published for previous years. For this reason, the Table does not show data for the previous years.

¹⁸ RS Budget in the narrower sense, i.e., the general fund 01.

3. The existing debt portfolio

3.1. Portfolio overview

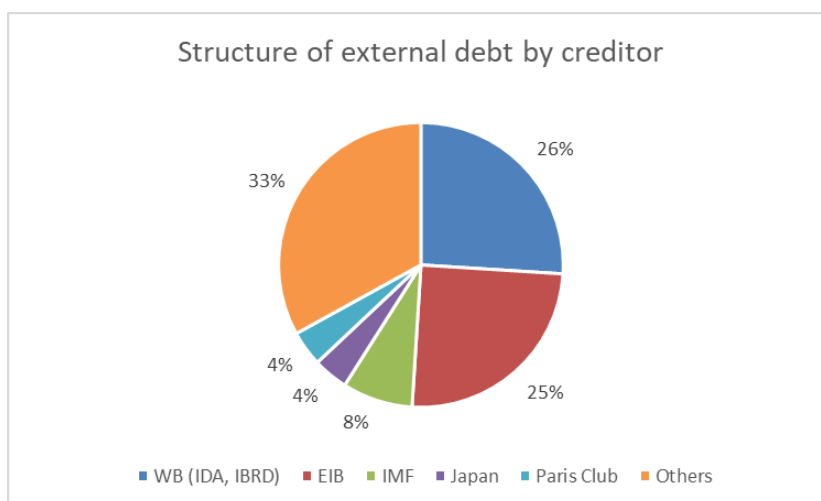
The debt included in the RS Strategy amounts to 5,570.4¹⁹ million BAM (3,228.0 million USD, i.e., 44.6% of GDP), as of 31 December 2021.

The share of external debt is 74.2% of the total observed debt (4,134.8 million BAM or 2,396.1 million USD, representing 33.1% of GDP), while the share of domestic debt is 25.8% of the total observed debt (1,435.6 million BAM or 831.9 million USD, representing 11,5% of GDP).

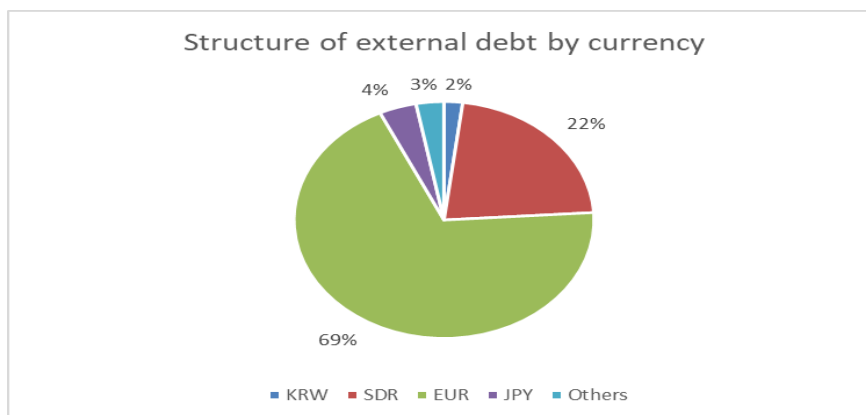
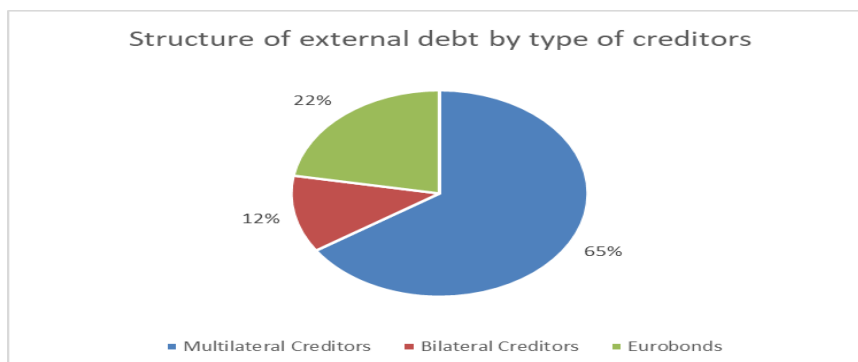
The external debt included in the RS Strategy comprises:

- 1) The relevant external debt, i.e., credits contracted through the BiH MFT and the allocated old external debt (created up to 2 April 1992);
As of 31 December 2021, the relevant external debt amounts to 3,187.9 million BAM (1,847,4 million USD, representing 57.2% of the total observed debt, and 25.5% of GDP).
- 2) The direct external debt (debt directly contracted by RS with external creditors);
As of 31 December 2021, the relevant external debt amounts to 946.8 million BAM (548.7 million USD, representing 17.0% of the total observed debt, and 7.6% of GDP).

The following graphs show the structure of external debt by creditor, type of creditor, and by currency.



¹⁹ Debt balance as of 31 December 2021 included in the RS Debt Management Strategy for the period 2022-2025 is higher by 149,055.36 BAM than the amount of the debt balance which was the subject of a cost and risk analysis when preparing the Debt Information with the balance as of 31 December 2021. The difference occurs due to the fact that in the Debt Information the data is shown in accordance with the situation recorded in the Treasury's General Ledger on 31 December 2021, where there are several loans that have been repaid and the repaid amount is greater or less than the amount of debt accepted by Republika Srpska, i.e. from the withdrawn amount, and for the given loans, the debt balance is recorded in a certain amount, positive or negative (correction of the debt balance will be made after coordination with the MFT BiH). On the other hand, for the purpose of drafting the Debt Management Strategy of the Republic of Srpska for the period 2022-2025, for the mentioned loans it was assumed that the debt balance is equal to zero, considering that there are no more repayments for the same. As a result, the values of certain cost and risk indicators as of 31 December 2021 shown in the Strategy differ from the values of the same indicators shown in the Debt Information with the balance as of 31 December 2021.



In the total observed external debt, the largest share is represented by the debt toward multilateral creditors (65.5%), followed by the debt in the form of bonds issued on the international market (22.1%), and the debt toward bilateral creditors (12.4%). Observed by individual creditors, the largest share in the total observed external debt is represented by the obligations toward the World Bank - IDA and IBRD (hereinafter: WB; 25.9%), European Investment Bank (hereinafter: EIB; 25.0%), International Monetary Fund (hereinafter: IMF; 8.1%), Government of Japan (4.1%), and Paris Club (4.0%). In terms of the currency structure of the external debt, the largest share is represented by EUR and SDR at the rate of 68.8% and 22.1%, respectively, JPY at the rate of 4.1%, KRW at the rate of 2.1%, and other currencies at the rate of 2.9% (USD, CPU, CHF).

The domestic debt included in the RS Strategy comprises:

- 1) medium-term bonds;
As of 31 December 2021, the debt under medium-term bonds amounts to 999.5 million BAM (579.2 million USD, representing 17.9% of the total observed debt, and 8.0% of GDP). The maturity period of the bonds issued with the amortisation payment is 5 years, with the grace period of one year, while the maturity period of the bonds issued with a one-time repayment is 5, 7 and 10 years.
- 2) commercial credits with domestic banks;
As of 31 December 2021, the debt under these credits amounts to 187.3 million BAM (108.5 million USD, representing 3.4% of the total observed debt, and 1.5% of GDP). These credits are repaid at fixed or variable interest rate and their maturity period is 6 to 12 years, while the grace period is 1 to 3 years, with the amortisation repayment.
- 3) bonds issued for the settlement of obligations defined in the RS Law on Domestic Debt, as follows:

- i) bonds for the settlement of obligations under war damages, with the maturity period of 13 to 15 years and grace period from 3 to 5 years, interest rate of 1.5% and amortisation repayment;
- ii) bonds for the settlement of obligations under old foreign currency savings, with the maturity period of 5 years, no grace period, interest rate of 2.5% and amortisation repayment;
- iii) bonds for the settlement of obligations toward suppliers and under final court decisions, with the maturity period 15 years and grace period of 5 years, interest rate of 1.5% and amortisation repayment;

As of 31 December 2021, the debt under these bonds amounts to 194.1 million BAM (112.5 million USD, representing 3.5% of the total observed debt, and 1.6% of GDP).

- 4) verified debt due to outstanding out-of-court settlements concluded on the basis of war damage, which is settled by issuing bonds, with a maturity of 13 years and a grace period of 3 years, with an interest rate of 1.5% and amortization repayment;

As of 31 December 2021, the debt under these bonds amounts to 15.2 million BAM (8.8 million USD, representing 0.3% of the total observed debt, and 0.1% of GDP).

- 5) cash payments (in accordance with the action plan) for the settlement of obligations in the name of final court decisions under war damages and general obligation, in accordance RS Law on Domestic Debts, cash payments under old foreign currency savings, and obligations under the refund of taxes to municipalities and funds on the basis of tax payments through bonds;

As of 31 December 2021, this debt amounts to 39.5 million BAM (22.9 million USD, representing 0.7% of the total observed debt, and 0.3% of GDP).

Expenditures for the period from 2023 to 2025 planned in 2023-2025 Revised RS FBD are increased for the estimated amount of the maturity of obligations under the planned issuances and cash payments (under the assessed war damages, old foreign currency savings and general obligations verification dynamics in the observed period), which is reflected onto the financing needs.

The most important current portfolio cost and risk indicators are given in Table 3, while Table 4 shows the values of cost and risk indicators in the period from 2017 to 2021.

Table 3: Current portfolio cost and risk indicators²⁰

	External debt	Domestic debt	Total debt
Amount (in million BAM)	4,134.8	1,435.6	5,570.4
Amount (in million USD)	2,396.1	831.9	3,228.0
Nominal debt amount compared to GDP (%)	33.1	11.5	44.6
Debt current value compared to GDP (%)	27.9	11.5	39.8
Borrowing cost			
Interest amount compared to GDP (%)	0.7	0.3	1.0
Weighted average interest rate ²¹ , in % (WAIR)	2.1	3.0	2.3
Refinancing risk			
Average time to maturity, in years (ATM)	6.8	3.5	6.0
Debt maturing within one year (% of the total)	5.1	16.3	8.0
Debt maturing within one year (% of GDP)	1.7	1.9	3.5
Interest rate risk			
Average time to refixing, in years (ATR)	5.1	3.5	4.7
Debt refixed within one year (% of the total)	29.3	17.2	26.1
Fixed interest rate debt (% of the total)	74.1	98.5	80.4
Currency risk			
External debt (% of the total)			74.2
Short-term external debt ²² (in % of foreign currency reserves)			3.9

Source: RS MF

Table 4: Cost and risk indicator values at the end of the year in the period 2017-2021

	2017	2018	2019	2020	2021
Nominal debt amount compared to GDP (%)	45.4	43.7	43.0	46.9	44.6
Debt current value compared to GDP (%)	39.1	37.0	36.7	40.5	39.8
Borrowing cost					
Interest amount compared to GDP (%)	1.0	1.0	1.0	1.0	1.0
Weighted average interest rate, in % (WAIR)	2.2	2.3	2.3	2.1	2.3
Refinancing risk					
Debt maturing within one year (% of the total)	16.0	10.4	7.9	10.7	8.0
Debt maturing within one year (% of GDP)	7.3	4.6	3.4	5.0	3.5
External debt average time to maturity, in years (ATM)	8.0	8.0	8.0	7.4	6.8
Domestic debt average time to maturity, in years (ATM)	3.4	3.5	3.9	3.6	3.5
Interest rate risk					
Total debt average time to maturity, in years (ATM)	6.4	6.7	6.8	6.2	6.0
Average time to refixing, in years (ATR)	4.8	5.4	5.5	4.8	4.7
Debt refixed within one year (% of the total)	38.2	28.4	24.5	29.5	26.1
Fixed interest rate debt (% of the total)	71.9	78.6	81.3	79.1	80.4
Currency risk					
External debt (% of the total)	64.1	71.2	69.9	67.0	74.2
Short-term external debt ²³ (in % of foreign currency reserves)	8.1	5.8	4.6	4.4	3.9

Source: RS MF

²⁰ See footnote no. 19.

²¹ The weighted average interest rate is calculated by co-relating the aggregate of sums of interest rates (calculated by co-relating the 2022 interest and debt in the end of 2021) and the debt under individual instruments in the end of 2021, with the total debt under all instruments at the end of 2021.

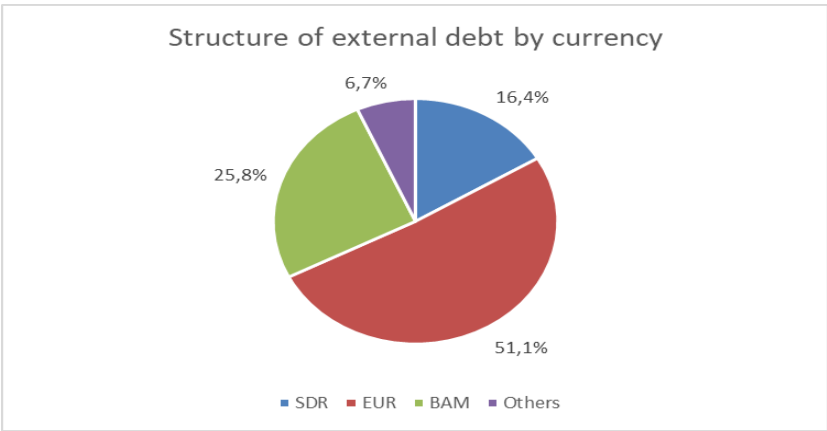
²² Under the term "Short-term external debt" for the purposes of drafting the MTDS, external debt that is to mature in the following year is considered, although it is de facto and de iure not a short-term debt.

²³ Under the term "Short-term external debt" for the purposes of drafting the MTDS, external debt that is to mature in the following year is considered, although it is de facto and de iure not a short-term debt.

The RS debt structure analysed within the RS Strategy is mostly the result of the basic principle of borrowing in the past, which is to maximise external financing under concessional conditions. Therefore, the debt portfolio is characterised by a large number of credits of external debt with a relatively long maturity period and low average interest rate.

Generally speaking, the existing portfolio is characterised by a low-cost level. The weighted average interest rate of the total debt, external debt, and domestic debt is 2,3%, 2,1% and 3,0% respectively. This is mostly the result of external concessional credits and low interest rates borne by bonds for the settlement of domestic debt obligations defined in the RS Law on Domestic Debt.

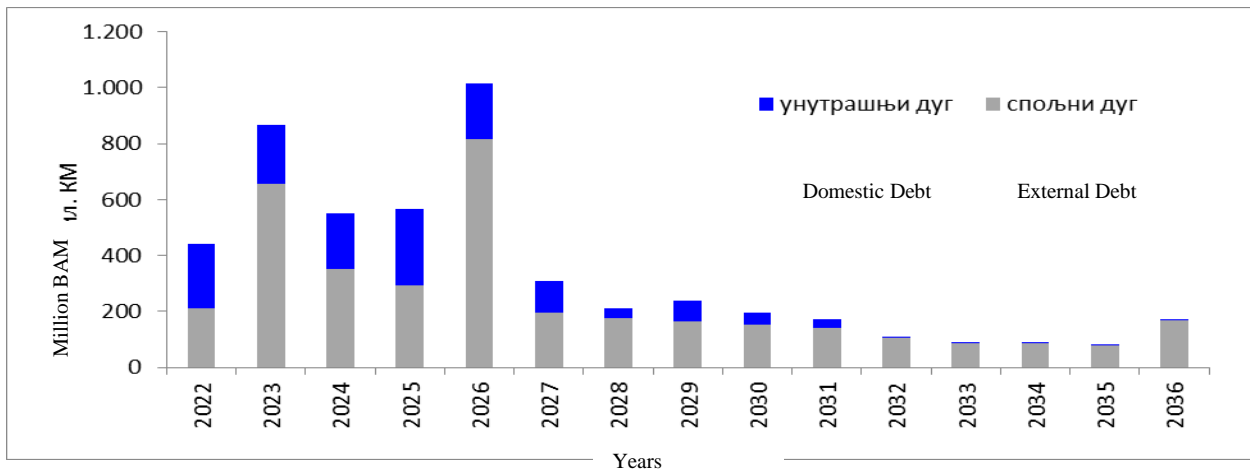
The currency risk is moderate. Of the total portfolio, 51.1% is denominated in EUR, while 25.8% is denominated in BAM. In view of the applicable currency board arrangement tying the domestic currency to EUR, only 23.2% of the total portfolio is exposed to the currency risk (i.e., 18.1% if SDR is decomposed and if EUR-based part is excluded). The share of the portfolio denominated in USD is 1.2% (i.e., 8.1% if SDR is decomposed), and this carries a certain level of risk bearing in mind the fluctuations of the USD in the previous, as well estimates for the following period.



The refinancing and refixing risk is moderate. Of the total portfolio, 80.4% is contracted under fixed terms. The average time to maturity of the observed portfolio is 6.0 years. The average time to maturity of the external debt is 6.8 years as the result of long-term concessional credits, while the average time to maturity of the domestic debt is 3.5 years Figure 1 represents the existing debt repayment profile over the next 15 years, where there is an evident increase in the debt repayment in 2023, and in 2026, as the result of the maturity of obligations under external debt (15.9% of the total observed external debt is to mature in 2026) mostly under bonds issued in 2018 and 2021, as well as due to the commencement of the repayment of the RFI²⁴ IMF credit in 2023, several EIB credit tranches and one-time repayment of the European Commission credit Macro-Financial Assistance II from 2013.

²⁴ Rapid Financing Instrument, RFI.

Figure 1 Debt repayment profile under the existing debt



Source: RS MF

Maintaining the cost and risk indicators at a relatively low level represents a challenge for Republika Srpska when the financing sources structure changes is taken into account. The existing debt portfolio is characterised by relatively favourable cost and risk indicators due to the significant share of concessional financing sources and bonds for the settlement of obligations under the domestic debt with low costs and long maturity. As concessional sources of finance will be less available in the future, it will be necessary to rely more heavily on commercial external and domestic sources and ensure that the increase of the level of costs and risks is acceptable. Also, the current situation on the international financial market should be taken into account. Namely, the conflict in Ukraine further aggravated the problems in the global supply chains, which have been disrupted since the outbreak of the corona virus pandemic, which led to an increase in the prices of goods on the world markets, above all the prices of food and energy, causing the growth of inflation, as well as disruptions in the international financial market in the form of the growth of interest rates and exchange rates.

3.2. Implementation of the RS Strategy in 2021 and the values of the identified indicators of the debt structure

In 2021, debt management was carried out in accordance with the guidelines defined by the 2020-2023 Debt Management Strategy (hereinafter: Strategy 2020-2023), which was adopted by the Government Republika Srpska in February 2021.

In order to achieve the basic goal of managing the debt defined in the 2020-2023 Strategy, i.e., in order to secure the necessary financial funds through borrowing, in 2021. investment projects were financed from external concessional sources, while the financing of budget spending was predominantly secured through the issuance of securities on the international market (80.2%), as well as through external credits (13.7%), while a smaller part of financing of budget spending (6.1%) was provided from domestic sources, i.e. through securities issued on the domestic market.

Of the total financing in 2021, (for the needs of budget spending and investment projects) 94.7% was realized through external instruments (of which 89.7% were fixed, and 99.1% in EUR), and the share of fixed instruments in total financing was 90.3%. Regarding the currency structure of the total financing in 2021, 93.8% was realized in EUR, 5.3% in BAM, and 0.9% was realized in other foreign currencies besides EUR.

When it comes to the sources of financing the budget spending in 2021, 92.7% was realized through external fixed instruments (representing 79.9% of the total financing), 6.1% was realized through domestic fixed instruments (representing 5.3% of the total financing), while the remaining 1.2% (representing 1.0% of the total financing) was realized through external variable instruments. In view of the currency structure of budget spending financing structure in 2021, 6.1% was realized in BAM, while 93.9% was realized in EUR.

The following table represents the budget spending financing structure in 2021 planned in the 2020-2023 RS Strategy, and achieved financing in 2021, by instruments.

Table 5: The budget spending financing structure planned in the Strategy and the achieved financing in 2021, by instruments

Instruments	Planned	Achieved
External variable, EUR	11.1%	1.2%
External fixed, EUR	0.0%	12.5%
Eurobond	80.9%	80.2%
Treasury bills	1.5%	0.0%
Domestic bonds 3 years fixed	1.2%	0.0%
Domestic bonds 7 years fixed	2.4%	2.7%
Domestic bonds 10 years fixed	3.0%	3.4%
	100.0%	100.0%

Source: RS MF

Of the planned budget spending financing in 2021, 86.5% was realized, whereby the realization of external commercial fixed instruments amounts to 85.7%, the realization of internal fixed instruments amounts to 66.2%, and the realization of external concession variable instruments amounts to 9.2%²⁵ (all denominated in EUR), because they were replaced by external concessional fixed instruments.

Of the total financing realized in 2021 for the needs of investment projects, 36.6% was obtained through external fixed instruments (representing 5.0% of the total financing), and 93.5% in EUR (representing 12.9% of the total financing).

The following table represents the structure of financing the investment projects in 2021 planned in the 2020-2023 RS Strategy, and the achieved financing in 2021, by instruments.

²⁵ According to the 2020-2023 Strategy, the planned financing of budget spending amounted to 845.9 million BAM, and 731.9 million BAM was realized, i.e., 86.5% of the planned (due to a faster than expected recovery of economic activity and therefore a higher execution of budget revenues than planned, as well as due to the payment of funds based on the SDR allocation from the IMF). The planned amount of external concession variable instruments was 93.7 million BAM (i.e. 11.1% of the total financing of budget spending), and 8.6 million BAM was realized (i.e. 1.2% of the total financing of budget spending), representing 9.2%, while 91.7 million BAM was realized through external concessional fixed instruments.

Table 6: The structure of the investment projects financing planned in the Strategy and achieved financing in 2021, by instruments

Instruments	Planned	Achieved
External variable, EUR	64.3%	63.4%
External fixed, USD	18.5%	6.5%
External fixed, EUR	17.1%	30.1%
	100.0%	100.0%

Source: RS MF

In relation to the financing of investment projects planned by the Strategy, 60.0% was realized in 2021, whereby the realization of external instruments with a variable interest rate (denominated in EUR) is 59.1%, and of external instruments with a fixed interest rate 61.5% (105.3% denominated in EUR and 21.0% in non-EUR currencies).

In 2021, the possibility to choose conditions for the withdrawal of tranches existed for four tranches achieved under three previously approved credits (representing 2.8% of external financing, i.e., 2.7% of the total financing), and for all of the four withdrawn tranches with the mentioned possibility, a fixed rate was chosen, while the average weighted interest rate amounted to 1.1%.

In 2021, five new external borrowings were accepted, all denominated in EUR, three²⁶ with variable interest rate (of which two borrowings have the possibility of fixing the interest rate). The impact of the mentioned borrowings on the debt structure will be achieved in the following period, on the occasion of the withdrawal of funds.

The following table shows the target values of debt structure indicators and their values in the 2015-2021 period (at the end of the period).

Table 7: The identified indicators of the debt structure and their values in the 2015-2021 period

Goal	Indicator	target values	Values				
			2017	2018	2019	2020	2021
Currency risk management							
	The external debt, including debt in EUR (% of the observed debt)	≤ 35	26.5	25.9	24.5	25.5	23.2
Growth of the domestic debt share							
	Domestic debt (% of the total observed debt)	≥ 20	35.9	28.8	30.1	33.0	25.8
Refinancing risk management							
	ATM (years)	≥ 4	6.4	6.7	6.8	6.2	6.0
	Short-term debt - original maturity (% of revenues achieved in the previous year)	≤ 8	3.3	0.0	0.0	3.8	0.0
Interest rate risk management							
	Fixed interest debt (% of the total observed debt)	≥ 60	71.9	78.6	81.3	79.1	80.4

²⁶ Credit from the World Bank (WB IBRD) for the Project "Sava and Drina Rivers Corridors Integrated Development Program using the Multiphase Programmatic Approach", Credit from the World Bank (WB IBRD) for the Project "MSME Emergency Response", and credit from the International Fund for Agricultural Development (IFAD) for "Rural Enterprises and Agricultural Development Project".

Table 7: The identified indicators of the debt structure and their values in the 2015-2021 period

Goal	Indicator	target values	Values				
			2017	2018	2019	2020	2021
Debt cost management							
	Average weighted interest rate ²⁷ (%)	≤ 3,5	2.2	2.3	2.3	2.1	2.3

Source: RS MF

From the debt structure indicators in the previous period, it results that the share of external debt, excluding the EUR debt, has a decreasing trend up to 2020, when it increased due to the credit borrowing from the International Monetary Fund, and then in 2021, this indicator decreases again.

The domestic debt share in the total debt had an increasing trend until 2017, while it decreased in 2018 (due to the replacement of domestic financing instruments with external instruments, mostly in the form of bonds issued on the international financial market), and then in 2019 and 2020 it started growing again, but is still below the level recorded in 2017. In 2021, there was another decline in the share of domestic debt in the total debt, as a consequence of the issuance of bonds on the international financial market.

The average time to maturity was increasing up to 2019, but decreased in 2020 (mostly due to the credit borrowing from the International Monetary Fund - RFI, because it is a shorter-maturity instrument, with a repayment period of 5 years, including a grace period of 3 years). The decline of the average time to maturity indicator continued in 2021 and reached the lowest value in the entire observed period. The share of short-term debt in the revenues generated in the previous year had a decreasing trend since 2017, while in 2020 this indicator increased again, and its value was approximately equal to that of 2017. At the end of 2021, this indicator recorded a decline, i.e. the short-term debt was fully settled. The share of fixed-term debt in the total debt had a growing trend throughout the observed period, except in 2020, when the value of this indicator decreased, which is mostly a consequence of the credit borrowing from the International Monetary Fund - RFI. The weighted average interest rate during the observed period had a volatile trend, although the changes were not significant.

4. Sources of financing

In the observed medium-term period, the RS Strategy is mostly based on financing through the issuance of securities on the domestic and international financial market. In accordance with the achieved RS development level, the sources of financing will be available to a lesser extent in the observed period. In addition, it is important to note that approval of concessional sources to finance budget spending is most often conditioned by the fulfilment of goals set at the level of BiH, which can be limiting.

The following table shows the external sources of financing envisaged in the RS Strategy.

²⁷ As under item no. 20.

Table 8: External sources of financing

Creditor's name	Interest rate	Repayment	Grace period	Currency	Risks
IBRD	variable/fixed	15-32	5-7	EUR	refixing risk for the variable interest
EIB	variable/fixed	25-30	5-8	EUR	refixing risk for the variable interest
EBRD	variable	15	3	EUR	refixing risk for the variable interest
KfW	fixed	9-16	0.5-7	EUR	refinancing risk
Eurobond	fixed	5	4	EUR	refinancing risk
Other creditors ²⁸	variable/fixed	10-18	0-3	EUR	refixing risk for the variable interest

Source: RS MF

The domestic sources of financing are mostly used to finance budget spending. The investors in the domestic securities, i.e., bonds and treasury bills are predominantly investors based in Bosnia and Herzegovina. Investors are primarily domestic banks, then insurance companies, funds and others. It should be borne in mind that the banks' limits in terms of their exposure to the public sector may represent a potential financing limitation, taking into account the projected budget deficit in the period 2023-2025 and total borrowing needs in the period 2022-2025. Trade in bonds and treasury bills on the secondary market is enabled, but it is practised to a limited extent. The most frequent type of secondary trade is related to the trade in war damages bonds, old foreign currency savings and general liabilities. The development of the secondary securities market represents one of the preconditions to attract investors. In addition to securities, Republika Srpska has the possibility to use domestic banks' credits as financing instrument, if it is estimated at a certain moment that credits are a more favourable instrument than bonds.

In choosing the market to borrow, the currency and the financing instrument, the state and trend of the domestic and international financial market development (interest rate level, risk premium, yield curve, and alike) will be taken into account in the future period, as well as the acceptable level of risk exposure.

The policy of debt management will be carried out through the achievement, primarily of medium-term goals, where it is noted that the decision on short- and long-term borrowing will be adopted annually in accordance with the RS Law on Borrowing, Debt and Guarantees. Depending on the changes in the basic fiscal aggregates and unforeseen circumstances²⁹, it is possible that the borrowing plan will be corrected during a fiscal year.

²⁸ IFAD, Hungarian Export-Import Bank

²⁹ Unforeseen circumstances such as COVID-19 pandemic, the Russia-Ukraine conflict, the energy crisis, inflation, etc.

5. RS Medium-term Debt Management Strategy

The main goal of borrowing and managing the debt of Republika Srpska is to secure the financial resources needed to execute the budget of Republika Srpska, finance approved investment projects, and refinance the observed debt, with the lowest financing costs and an acceptable level of risk.

With the aim to achieve the debt management basic goal, the following operative goals and principles have been defined:

- 1) continuous promotion and presence in the domestic and international financial markets through issuance of securities and other instruments, which would, under the conditions of unpredictable global shocks, contribute to the decrease in the costs of borrowing in the medium- and long-term;
- 2) to ensure debt portfolio in accordance with previously identified debt structure indicators - maturity profile, interest rate structure, borrowing costs, domestic debt state, exposure to the currency risk (not taking into account the debt expressed in EUR due to the existence of the currency board arrangement) and their targeted levels;
- 3) to continue with the implementation of the transparent and predictable borrowing process.

In the following medium-term period (2022-2025), the previously stated goals will be achieved through the strategy to diversify the financing sources and instruments, and the investors' basis.

This strategy is based on the financing of budget spending mostly through the issuance of medium-term securities on both the international and domestic financial markets, including the "bullet" and amortization repayment, mostly on the international financial market and to a lesser extent on the domestic financial market. External financing sources are used to finance investment projects as the result of maximum usage of the access to concessional sources (WB, EIB, EBRD, KfW, etc.), which contributes to the reduction of the re-financing risks and the minimum possible costs. The average share of domestic financing is reduced in favour of external sources.

This strategy enables for the RS position to be improved in terms of future sources of financing through the presence in the international financial market, domestic financial market development, short-term³⁰ and medium-term instruments, with the acceptable growth of costs and risk level mitigated by the continued use of the available support by multilateral creditors.

The following table shows the stylised instruments of financing the debt portfolio, the share in gross financing for the period from 2022 to 2025, and their estimated share in the debt portfolio at the end of 2025.

³⁰ Short-term instruments will mostly be used for temporary financing of the deficit resulting from the cash flow.

Table 9: Instruments of financing the debt portfolio, their share in gross financing for the period from 2022 to 2025, and their estimated share in the debt portfolio at the end of 2025

Instrument name	Repayment period	Grace period	% of portfolio at the end of 2021	average over the period	% gross financing needs				% of portfolio at the end of 2025
					2022	2023	2024	2025	
External variable USD (concessional)	18	4	1.1	0.0	0.0	0.0	0.0	0.0	0.2
External variable EUR (concessional)	15	3	12.1	11.3	18.1	11.6	7.9	5.4	13.7
External fixed USD (concessional)	20	5	16.1	0.0	0.0	0.0	0.0	0.0	8.3
External fixed EUR (concessional)	20	5	22.5	17.7	34.0	11.1	3.5	27.4	24.3
IMF variable USD (concessional)	5	3	6.0	0.0	0.0	0.0	0.0	0.0	0.5
Eurobond 5-year fixed EUR (market)	5	4	16.4	34.1	0.0	54.4	63.4	0.0	27.4
Domestic credit variable (market)	6	1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Domestic credit fixed (market)	10	1	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Treasury bills fixed (market)	1	0	0.0	4.1	10.7	2.1	3.7	0.0	0.0
Domestic bonds 3-year fixed (market)	3	2	2.7	0.0	0.0	0.0	0.0	0.0	0.4
Domestic bonds 5-year fixed (market)	5	4	8.6	16.1	24.1	9.8	13.7	22.5	9.2
Domestic bonds 7-year fixed (market)	7	6	5.2	13.6	10.8	6.3	5.4	44.7	9.9
Domestic bonds 10-year fixed (market)	10	9	7.9	2.9	2.3	4.9	2.4	0.0	6.1
External sources			74.2	63.2	52.1	77.0	74.9	32.7	74.4
Domestic sources			25.8	36.8	47.9	23.0	25.1	67.3	25.6

Source: RS MF

The standard cost and risk indicators, estimated values for the period 2022-2025 are shown in the table below.

Table 10: The RS Strategy cost and risk indicators from 2022 - 2025

	Initial	Strategy			
	2021	2022	2023	2024	2025
Nominal debt amount compared to GDP (%)	44.6	42.9	43.2	41.3	39.2
Debt current value compared to GDP (%)	39.8	38.7	39.7	38.4	36.8
Borrowing cost					
Interest amount compared to GDP (%)	1.0	0.9	1.1	1.6	1.8
Weighted average interest rate, in % (WAIR) ³¹	2.3	2.3	2.9	4.0	4.6
Refinancing risk					
Debt maturing within one year (% of the total debt)	8.0	16.1	9.3	9.2	15.4
Debt maturing within one year (% of GDP)	3.5	6.9	4.0	3.8	6.1
External debt average time to maturity, in years (ATM)	6.8	7.1	6.9	6.3	5.7
Domestic debt average time to maturity, in years (ATM)	3.5	5.0	4.6	4.1	3.7
Total debt average time to maturity, in years (ATM)	6.0	6.5	6.2	5.7	5.2

³¹ Values of the average weighted interest rate for the period 2022- 2025. are calculated by bringing into relation of the amount of interest for the given year and the state of debt for the previous year. See the method of calculation of this indicator for 2021 in footnote no. 21.

Table 10: The RS Strategy cost and risk indicators from 2022 - 2025

	Initial	Strategy			
	2021	2022	2023	2024	2025
Interest rate risk					
Average time to refixing, in years (ATR)	4.7	5.4	5.1	4.7	4.2
Debt refixed within one year (% of the total)	26.1	25.7	21.6	21.6	28.6
Fixed interest rate debt (% of the total)	80.4	83.5	83.4	84.9	85.6
Currency risk					
External debt (% of the total)	74.2	71.4	71.7	72.5	74.4
External debt, excluding the debt in EUR (% of the total)	23.2	20.8	16.7	12.2	9.0
Short-term external debt ³² (in % of foreign currency reserves)	3.9	12.4	7.0	5.8	15.4

Source: MF RS

At the end of the observed four-year period, and when compared to the end of 2020, the borrowing cost indicators will worsen (interest in comparison with GDP and the average weighted interest rate), refinancing risk indicators (share of debt maturing within one year in GDP and in total debt, average time to maturity of external and total debt), interest rate risk (the average time to refix and the share of the debt that is refixed within a year in the total debt) and currency risk (the share of external debt in the total debt and the share of short-term external debt in foreign currency reserves), which is the result of the changed financing sources structure and the projected budget deficit, as well as the needs to borrow in the period from 2022 to 2025. Also, the current situation should be taken into account, i.e., disruptions on the international financial market in the form of rising interest rates and exchange rates. On the other hand, at the end of the observed four-year period, the nominal debt amount will decrease when compared to GDP, and the refinancing risk indicator in the form of the average time to maturity of the domestic debt and the interest rate risk indicator in the form of the share of debt with a fixed interest rate in the total debt will be improved, and as a result of the use of predominantly fixed instruments for financing needs, and the currency risk indicator in the form of the share of external debt excluding the debt in EUR in the total debt.

With the aim of analysing the susceptibility of debt to the developments of key variables, the table below shows the values of certain indicators in accordance with the baseline scenario of the development of the foreign exchange rate and interest rates, and alternative scenarios, including the application of shocks and interest rate shocks.

Table 11: Cost and risk indicators achieved from 2017 to 2021, and the estimated indicators for the period from 2022 to 2025 in accordance with different foreign exchange rate and interest rate development scenarios

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Nominal debt amount compared to GDP (%)									
The baseline scenario	45.4	43.7	43.0	46.9	44.6	42.9	43.2	41.3	39.2
Scenario 1 ³³	-	-	-	-	-	42.9	45.7	43.7	41.7
Scenario 2 ³⁴	-	-	-	-	-	42.9	43.2	41.9	40.2

³² See footnote no. 23.

³³ BAM/USD exchange rate depreciation by 30 p.p. in 2023.

³⁴ Interest rates in 2023 are by 4 p.p. on the medium-term domestic and long-term external instruments, and by 2 p.p. on the short-term domestic instruments.

Table 11: Cost and risk indicators achieved from 2017 to 2021, and the estimated indicators for the period from 2022 to 2025 in accordance with different foreign exchange rate and interest rate development scenarios

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Scenario 3 ³⁵	-	-	-	-	-	42.9	44.9	43.2	41.3
Interest amount compared to GDP (%)									
The baseline scenario	1.0	1.0	1.0	1.0	1.0	0.9	1.1	1.6	1.8
Scenario 1	-	-	-	-	-	0.9	1.2	1.7	1.9
Scenario 2	-	-	-	-	-	0.9	1.1	2.2	2.2
Scenario 3	-	-	-	-	-	0.9	1.2	2.0	2.1
Interest amount compared with revenues (%)									
The baseline scenario	3.9	3.8	3.8	3.9	3.8	3.5	4.2	6.1	6.8
Scenario 1	-	-	-	-	-	3.5	4.4	6.4	7.2
Scenario 2	-	-	-	-	-	3.5	4.2	8.4	8.1
Scenario 3	-	-	-	-	-	3.5	4.4	7.5	7.7

Source: RS MF

It results from the Table above that the most serious deterioration of the debt state indicators in comparison with GDP is the result of the extreme shock of the depreciation of the domestic currency in comparison with foreign currencies (Scenario 1 - the BAM/USD exchange rate depreciation at the rate of 30 p.p. in 2023), while the most serious deterioration of the interest rate amount in comparison with GDP and revenues is the result of the extreme shock of interest rate values (Scenario 2 - interest rates in 2023 are higher by 4 p.p. on medium-term domestic and long-term external instruments and by 2 p.p. on short-term domestic instruments).

In implementing the RS Strategy, the borrowing activities will be implemented in accordance with the best practices, as follows:

- 1) activities in the domestic and international financial market will be carried out professionally, transparently, purposefully and timely, while the contracted obligations will be executed regularly;
- 2) the selection of the borrowing conditions will be directed (in accordance with the priorities' list) to refinancing the debt, securing the funds to finance the budget execution, alignment with the provisions of the RS Law on Fiscal Responsibility and the achievement of the identified debt indicators;
- 3) when planning the borrowing, the accent will be placed on the development and extending the long-term possibilities of borrowing on the financial market;
- 4) the most favourable borrowing conditions will be ensured, taking into account the preparation and, if necessary, the revision of the medium-term borrowing plan and the auction calendar based on cash flow in order to ensure a stable pattern of total cash inflows into the budget on a monthly basis.

³⁵ The BAM/USD exchange rate depreciation in 2023 combined with the 2023 interest rates shock at the rate of 2 p.p. on the medium-term domestic and long-term external instruments and 1 p.p. on short-term domestic instruments.

In order to implement the strategy, the activities of the Ministry of Finance of Republika Srpska will be as follows:

- 1) to develop and maintain cooperation with partners and investors on the domestic and foreign market;
- 2) to prepare and possibly revise, of the medium-term borrowing plan and auction calendar based on the cash flow in order to ensure a stable pattern of total monthly budget cash inflow;
- 3) to publish a calendar of auctions on a quarterly basis, in line with the possibilities, to ensure information on the planned auctions over a longer period and in the medium-term borrowing plan;
- 4) to continuously maintain the supply of short- and medium-term financial instruments on the domestic financial market, with insurance that the instruments and procedures are efficient and favourable for primary and secondary trade in order to enable further development of the domestic securities market;
- 5) to monitor the development of the debt portfolio in comparison with the identified debt indicators and annual reporting on their values, in order to actively manage the portfolio structure and achieve optimal values of debt indicators;
- 6) to explore the possibilities and harmonise practices and procedures on the domestic securities market with those on the EU market, if realistically possible over the medium-term period,
- 7) to manage the credit rating assessment process, including active participation of the representatives of the competent institutions.

With the aim of reducing the exposure to financial risks, the following measures need to be implemented:

- 1) to extend the average maturity of the debt issued in the form of securities, if possible, and taking into consideration the situation on the domestic and international markets,
- 2) to extend the domestic debt average maturity,
- 3) to reduce the share of external debt denominated in non-EUR currencies,
- 4) to equally distribute the debt repayment obligations by years in the following long-term period.

In accordance with the determined goals and debt management principles, and having in mind the debt structure, the changes in the financing structure and financial markets situation, the previously identified debt structure indicators will be retained, as well as their values represented in Table 7, except for the average weighted interest rate, the value of which changes to ≤ 5 , taking into account the current trends in the international financial market regarding the continuous growth of interest rates and forecasts for further growth in the following period.

Schedule 1 Total debt and debt management strategy scope

	Included/ Excluded	% of the total debt	Amounts as of 31 December 2021		% of GDP
			in million BAM	in million USD ³⁶	
1		100.0%	6,162.5	3,571.2 \$	49.3%
1.1.		67.6%	4,167.7	2,415.2 \$	33.3%
1.1.1.		48.2%	2,968.8	1,720.4 \$	23.7%
1.1.1.1.	Republika Srpska				
1.1.1.1.1.	Relevant external debt	✓ ³⁷	2,044.4	1,184.7 \$	16.4%
1.1.1.1.2.	Relevant external debt - PC Germany	X ³⁸	9.1	5.3 \$	0.1%
1.1.1.1.3.	Direct external debt	✓	915.3	530.4 \$	7.3%
1.1.1.2.	Local self-government units		124.5	72.2 \$	1.0%
1.1.1.2.1.	Relevant external debt	✓✓ ³⁹	100.7	58.4 \$	0.8%
1.1.1.2.2.	Direct external debt	XX ⁴⁰	23.8	13.8 \$	0.2%
1.1.1.3.	Public enterprises and IRB		1,074.4	622.6 \$	8.6%
1.1.1.3.1.	Relevant external debt	✓✓	1,042.9	604.3 \$	8.3%
1.1.1.3.3.	Direct external debt	✓✓	31.5	18.3 \$	0.3%
1.2.		32.3%	1,993.4	1,155.2 \$	15.9%
1.2.1.		23.3%	1,432.8	830.3 \$	11.5%
1.2.1.1.		4.0%	248.8	144.2 \$	2.0%
1.2.1.1.1.	The issued bonds for the settlement of the obligations defined under the RS Borrowing Law (RŠ)	✓	194.1	112.5 \$	1.6%
1.2.1.1.2.	The planned issuances of bonds to settle the verified obligations defined under the RS Borrowing Law (RŠ)	✓	15.2	8.8 \$	0.1%
1.2.1.1.3.	Cash payments (OO, RŠ, SDŠ, tax refunds)	✓	39.5	22.9 \$	0.3%
1.2.1.2.	Medium-term bonds	✓	999.5	579.2 \$	8.0%
1.2.1.3.	Treasury bills	✓	0.0	0.0 \$	0.0%
1.2.1.4.	Long-term loans with commercial banks	✓	184.5	106.9 \$	1.5%
1.2.2.	Local self-government units	XX	365.8	212.0 \$	2.9%
1.2.3.	Social security funds		194.8	112.9 \$	1.6%
1.2.3.1.	Direct borrowing	XX	193.5	112.1 \$	1.5%
1.2.3.2.	Indirect borrowing	✓	1.3	0.7 \$	0.0%
2			784.6	454.7 \$	6.3%
a	RS activated guarantees	✓✓✓ ⁴¹	1.4	0.8 \$	0.0%
b	Not activated RS guarantees covered by the total debt ⁴²	XX	185.0	107.2 \$	1.5%
c	Not activated RS guarantees	XXX ⁴³	598.2	346.6 \$	4.8%
3	Total debt included in the Strategy		5,570.3	3,228.0 \$	44.6%
4	Total debt excluded from the Strategy⁴⁴		592.2	343.2 \$	4.7%

Source: RS MF

³⁶ The values expressed in USD are based on the exchange rate USD/BAM = 1.725631, as per the exchange rate list of the BiH CB no. 259 of 31 December 2021.

³⁷ A direct obligation with a clearly determined repayment obligation.

³⁸ A direct obligation, but without a clearly determined repayment method.

³⁹ An indirect obligation with a clearly determined repayment obligation.

⁴⁰ Neither a direct nor an indirect obligation.

⁴¹ Issued guarantees that have been activated and converted into RS debt.

⁴² RS guarantees issued for direct borrowing of the local self-government units and social security funds that have not been activated.

⁴³ RS guarantees issued for direct borrowing of public companies and public sector that have not been activated.

⁴⁴ The debt incurred by the direct borrowing of local self-government units, social security funds, public companies and the Investment and Development Bank of RS is not included in the Strategy, because it does not represent either a direct or indirect obligation of Republika Srpska, and part of the debt to the Paris Club - Germany, for which the terms of repayment have not been determined.

Schedule 2 Analytic premises

In this part, the other analytic premises used for the quantitative analysis of the RS Strategy are presented. The debt repayment plans are generated on the basis of the baseline and alternative scenarios, with the application of currency and interest rate shocks. The costs are calculated on the basis of the baseline debt repayment profile, while the risks are measured by the increase in the debt repayment as the result of the foreign exchange and interest rate shocks.

The baseline scenario is based on the most probable market conditions. The following table represents the instrument interest rate and foreign exchange rate projections from 2022 to 2025, used in the baseline scenario.

Table: Projections of interest rates of financing instruments and exchange rate between 2022 and 2025

	2022	2023	2024	2025
Stylised instruments				
External variable USD (concessional)	4.39%	6.68%	6.75%	6.82%
External variable EUR (concessional)	1.98%	3.83%	4.04%	4.24%
External fixed USD (concessional)	3.03%	5.32%	5.39%	5.46%
External fixed EUR (concessional)	2.84%	4.69%	4.90%	5.10%
IMF variable USD (concessional)	3.67%	3.74%	3.81%	3.88%
Eurobond 5-year fixed EUR (market)	8.93%	9.49%	10.06%	10.62%
Treasury bills fixed (market)	2.65%	2.03%	1.90%	1.99%
Domestic bonds 5-year fixed (market)	6.50%	6.41%	6.47%	6.56%
Domestic bonds 7-year fixed (market)	7.00%	6.96%	7.01%	7.09%
Domestic bonds 10-year fixed (market)	7.50%	7.48%	7.52%	7.58%
Exchange rate BAM/USD	1.86	1.94	1.94	1.94

Source: RS MF and BiH MFT

The following shocks were applied to analyse the vulnerability of the Strategy:

- **Foreign exchange shock:** BAM/USD exchange rate depreciation in the amount of 30 percentage points in 2023 when compared to the initial premise on the value of the foreign exchange rate for that year;
- **Interest rate shock:** when compared to the baseline scenario of the interest rate development, interest rates in 2023 are higher by 4 percentage points on medium-term domestic and long-term external instruments and by 2 percentage points on short-term domestic instruments;
- **Combined shock:** the depreciation of the BAM/USD exchange rate of 20 percentage points in 2023, in comparison with the initial assumption, and combined with the 2023 interest rates shocks, in comparison with the initial assumptions on their development, in the amount of 2 percentage points on short-term domestic and long-term external instruments, and 1 percentage point on short-term domestic instruments.

B. FEDERATION OF BIH DEBT MANAGEMENT STRATEGY

1. STRATEGY GOAL AND SCOPE

1.1. Debt management goals

The FBiH Government debt management goals are as follows:

1. to secure financial funds to finance the Government's needs with acceptable costs and risks and in the medium and long-term;
2. to develop the domestic securities market.

1.2. The FBiH Strategy scope

The FBiH Strategy encompasses the debt portfolio as of 31 December 2022, managed by the FBiH Government, and shown in the Table below.

Table 1 The debt portfolio as of 31 December 2022, included in the FBiH Strategy

Type of debt	Included (✓)/ Excluded (x)	Amount (in million BAM)
FBiH external debt, of which:		5,410.49
– relevant FBiH external debt	✓	5,352.96
– direct FBiH external debt	✓	57.53
FBiH domestic debt, of which:		682.63
– FBiH treasury bills	✓	50.00
– FBiH treasury bonds	✓	590.00
– old foreign currency saving bonds	✓	0.00
– war claims bonds	✓	38.69
- verified debt	x	3.94
TOTAL debt included in the FBiH Strategy		6,089.18

2. FBiH Government debt portfolio

As of 31 December 2022, the debt portfolio included in the Strategy and under the responsibility and management of FBiH Government amounts to 6,089.18 million BAM⁴⁵ (3,320.70 million USD or 20.74% of the FBiH GDP⁴⁶), and comprises the external debt in the amount of 5,410.49 million BAM (2,950.58 million USD or 88.85% of the total debt) and domestic debt in the amount of 678.69 million BAM (370.12 million USD or 11.15% of the total debt).

⁴⁵ The BiH CB foreign exchange rate list No. 259 as of 31 December 2022

⁴⁶ The amount of GDP of the FBiH in 2022 is 29,354 million BAM, Monthly Statistical Review of the FBiH no. 7/23.

Table 2 The FBiH total debt as of 31 December 2022, included in the FBiH Strategy

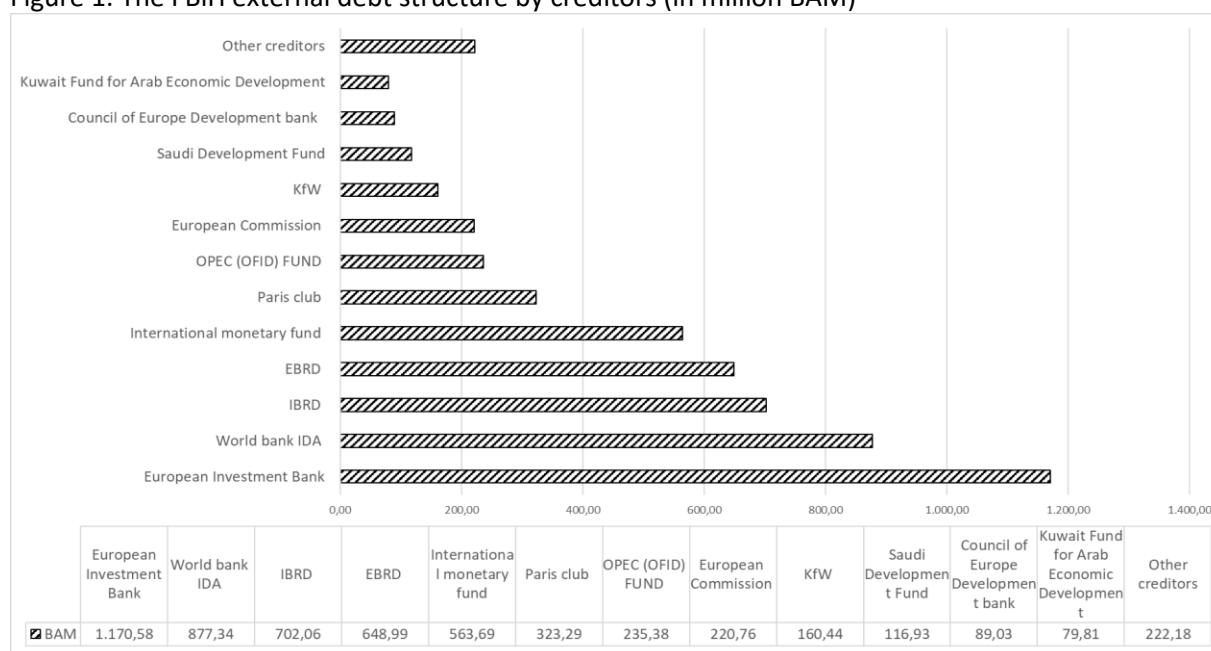
Description	External debt	Domestic debt	Total debt
Amount (in million BAM)	5,410.49	678.69	6,089.18
Amount (in million USD)	2,950.58	370.12	3,320.70
Nominal debt as % of the FBiH GDP	18.43%	2.31%	20.74%

2.1. The FBiH external debt structure as of 31 December 2022

2.1.1. The FBiH external debt structure by creditors

Due to the favourable credit conditions and concessional interest rates, the FBiH external debt is mostly contracted with international financial institutions and bilateral creditors.

Figure 1. The FBiH external debt structure by creditors (in million BAM)



2.1.2. The FBiH external debt currency structure

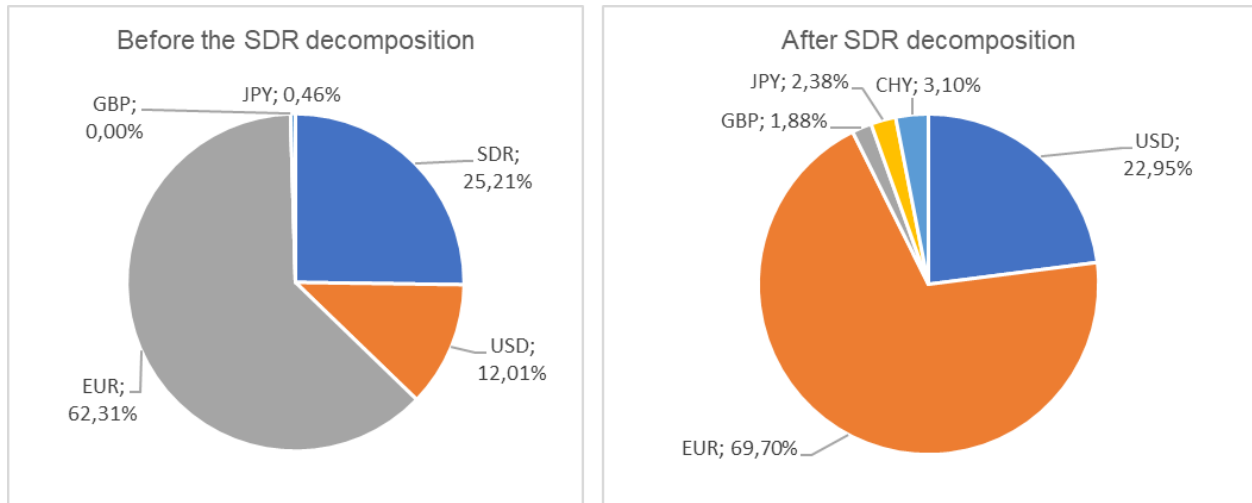
The FBiH external debt currency structure is defined by the available financing sources. The most common currency in the FBiH debt portfolio is EUR, followed by SDR⁴⁷ and USD.

⁴⁷ SDR – the international reserve asset comprising the following currencies: Chinese Yuan (CNY) 1.0993, Euro (EUR) 0,37379, US dollar (USD) 0.57813, British pound (GBP) 0.08087 and Japanese Yen (JPY) 13.452.

2.1.3. The FBiH external debt interest structure

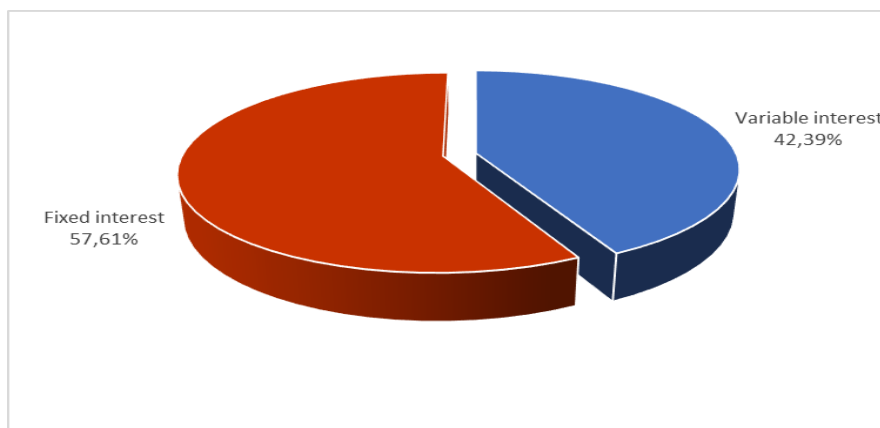
In total, 3,116.79 million BAM or 57.61%, and 2,293.70 million BAM or 42.39% of external debt was contracted with a fixed and variable interest rate, respectively.

Figure 2 The FBiH external debt currency structure



If SDR is decomposed, the EUR share grows to 69.70%, and the USD share to 22.95% of the total external debt.

Figure 3 The FBiH external debt structure by the interest rate type



2.2. The FBiH domestic debt structure as of 31 December 2022

The domestic debt included in the FBiH Strategy comprises the debt created in accordance with the law⁴⁸, in the form of securities, and domestic debt created through the issuance of market securities. The domestic debt is contracted in the domestic currency (BAM) and with fixed interest rates.

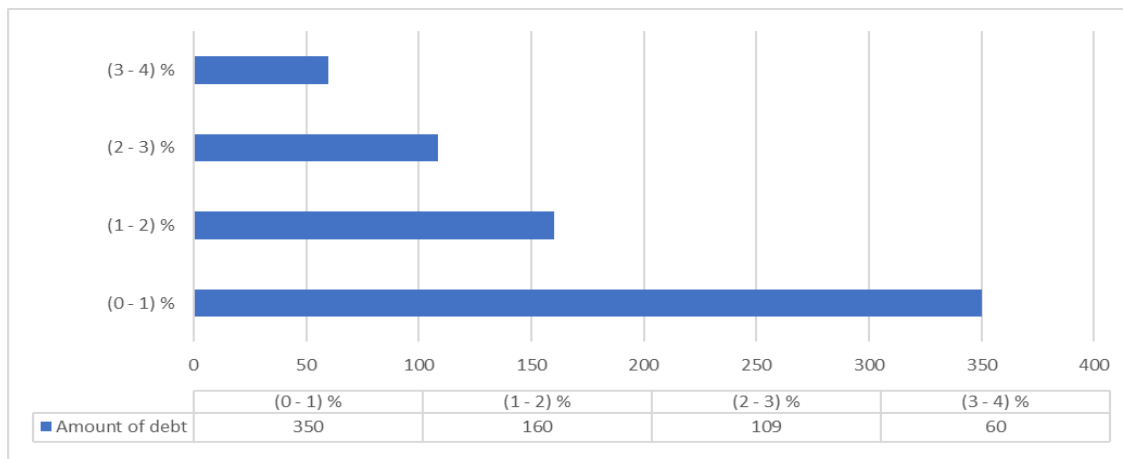
⁴⁸ The Law on Determining and the Method of Settlement of Domestic Obligations of FBiH (*Official Gazette of FBiH*, no. 66/04, 49/05, 35/06, 31/08, 32/09, 65/09, 42/11 and 35/14); The Law on Settlement of Obligations under the Old Foreign Savings in the Federation of Bosnia and Herzegovina (*Official Gazette of FBiH*, no. 62/09, 42/11, 91/13 and 101/16)

Table 3 The FBiH domestic debt included in the Strategy

Type of debt	Included (√)/ Excluded (x)	Amount (in million BAM)
The FBiH domestic debt, of which:		678.69
- FBiH treasury bills	√	50.00
- FBiH treasury bonds	√	590.00
- War claim bonds	√	38.69

2.2.1. The FBiH domestic debt interest structure

Figure 4 The FBiH domestic debt structure by the level of interest rate (in million BAM)



3. THE FBiH DEBT PORTFOLIO RISKS

3.1. The FBiH debt portfolio cost and risk characteristics

The average weighted interest rate of the total FBiH debt portfolio is relatively low and amounts to 1.8%, and is the result of the proportion of the bonds issued to settle the war claims having the legally defined interest rate of 2.5% (38.69 million BAM) and market short-term and long-term securities in the form of bonds (590.0 million BAM). The external debt average weighted implicit interest rate also amounts to 1.8%.

Table 5 The parallel view of the FBiH debt portfolio risk indicators as of 31 December 2022 compared with the indicators at the end of 2021

Risk indicators		External debt		Domestic debt		Total debt	
		2021	2022	2021	2022	2021	2022
Debt amount (million BAM)		5,406.6	5,410.5	754.3	678.7	6,160.9	6,089.2
Debt amount (million USD)		3,133.1	2,950.6	437.1	370.1	3,570.2	3,320.7
Nominal debt in % of GDP		23.6	13.7	3.3	1.7	26.8	15.4
Current debt value as % of GDP		19.1	11.4	3.3	1.7	22.7	13.2
Debt costs	Interest as % of GDP	0.3	0.3	0.04	0	0.4	0.3
	Average weighted interest rate (%)	1.2	1.8	1.2	1.3	1.2	1.8
Refinancing risk	Average maturity (years)	6.6	6.4	3.6	4.2	6.2	6.2
	Debt maturity in the following year (% of the total)	8.2	12.4	33.9	15.6	11.5	12.8
	Debt maturity in the following year (% of GDP)	1.9	1.8	1.1	0.3	3.3	2.0
Interest risk	Average refixing period (years)	4.2	4.2	3.6	4.2	4.1	4.2
	Debt refixed in the following year (% of the total)	47.5	48.8	33.9	15.6	45.8	45.2
	Fixed interest rate debt (% of the total)	57.1	57.6	100	100	62.5	62.2
Currency risk	Foreign currency debt (% of the total debt)					87.8	88.9
	Short-term foreign currency debt (% of reserves)					3.0	4.1

3.2. Refinancing risk

The refinancing risk is significant for both the domestic and external debt, and is concentrated on the short- and medium-term. The average maturity (ATM) of domestic debt is 4.2 years in comparison with 6.4 years for external debt. The average time to maturity of the total debt is 6.2 years. The average maturity of domestic debt is slowly being extended due to the successful issuance of marketable bonds to ten and fifteen years to compensate for the maturity of bonds issued to settle war claims.

Figure 5 The profile of the FBiH debt repayment as of 31 December 2022 (in million BAM)

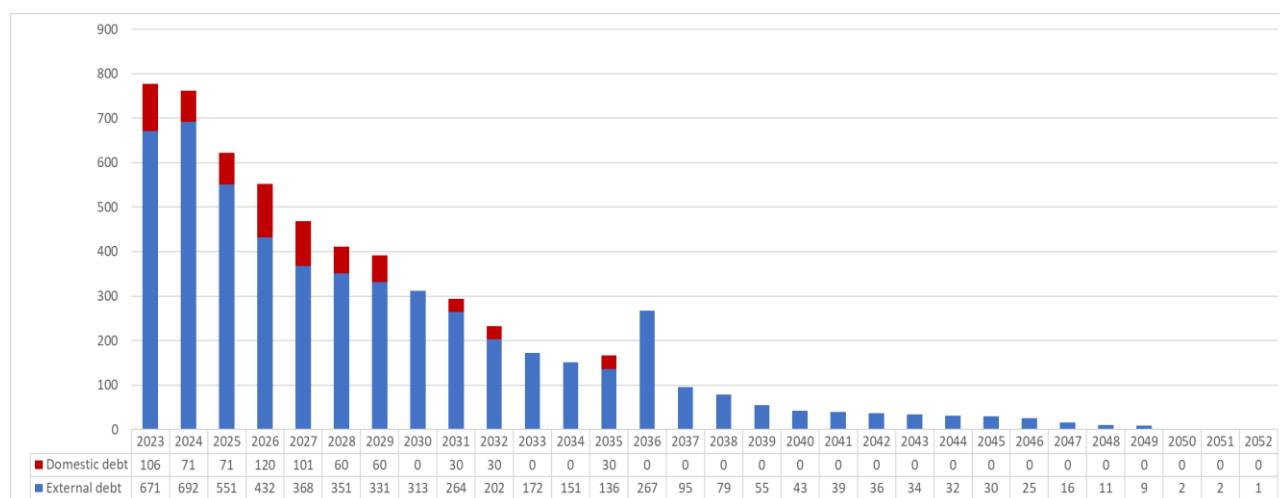
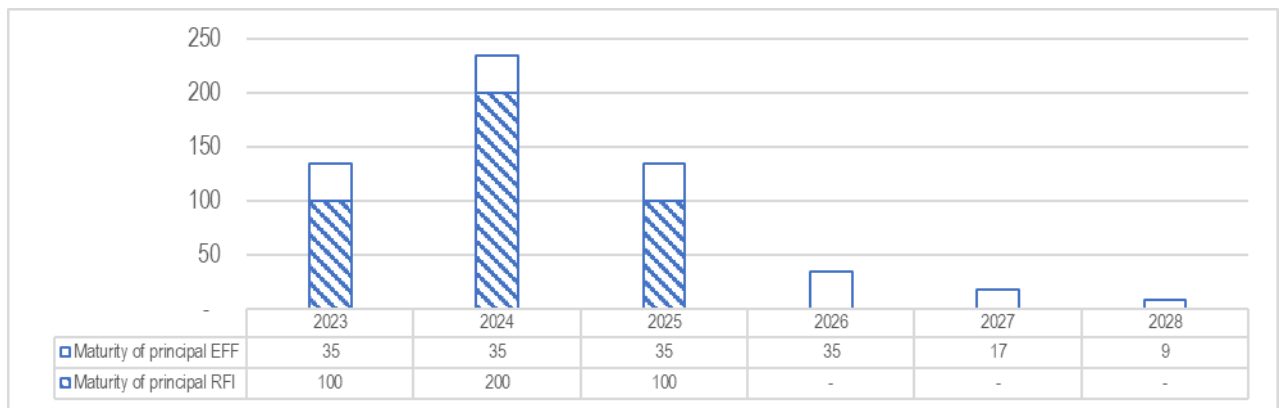


Figure 6 The profile of the FBiH debt repayment to the IMF as of 31 December 2022 (in million BAM)



3.3. Interest risk

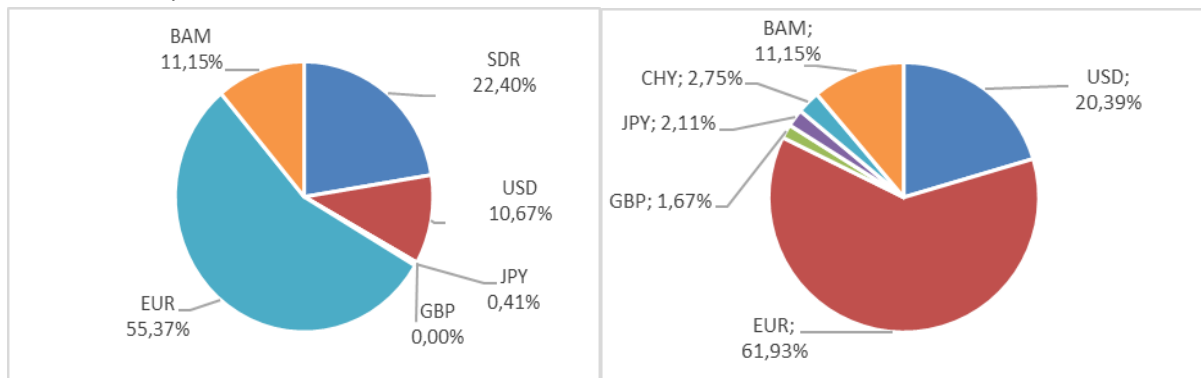
The share of debt portfolio refixed within one year amounts to 45.2% and is the result of the fact that about 38% of the external debt was contracted with a variable interest rate, as well as the shorter maturities of the market securities issued on the domestic market.

The average time of refixing the debt portfolio of the FBiH is 4.2 years, and in this case the refixing time for external and domestic debt is equal.

3.4. The FBiH debt portfolio currency risk

The most represented currencies in the FBiH debt portfolio are EUR (55.37%), SDR (22.40%), USD (10.67%) and BAM (11.15%). If SDR is decomposed, the EUR share grows to 61.93% of the total debt, and the USD share to 20.39% (Figure 7).

Figure 7 The total FBiH debt currency structure as of 31 December 2022, before and after SDR decomposition.



The FBiH debt portfolio currency structure is relatively high. Slightly more than 35% of the external debt is susceptible to the fluctuations in the foreign exchange rate, bearing in mind its structure (EUR – 62.31%, SDR – 25.21% and USD – 12.01%), in which, after the SDR decomposition, the share of EUR in the total external debt grows to 69.70%.

4. MACROECONOMIC FRAMEWORK

In 2022, there was a global slowdown in growth, with the expectation that economic activity on a global level will only recover towards the end of 2023. Despite the unfavourable global developments, the economies of the Western Balkan countries proved to be resilient. The achieved growth was driven by demand, domestic spending and, in some countries, investments.

Overview of the GDP growth in the Western Balkan countries

Projections	2022	2023	2024	2025
Albania	4.8	2.8	3.3	3.3
BiH	4.0	2.5	3.0	3.5
Kosovo	3.5	3.7	4.4	4.2
Montenegro	6.1	3.4	3.1	2.9
North Macedonia	2.1	2.4	2.7	2.9
Serbia	2.3	2.3	3.0	3.8
Western Balkan	3.2	2.6	3.1	3.5

Source: World Bank, Regular Economic Report no. 23, spring 2023

According to the consumer price index, inflation at the regional level amounted to 11.8% in 2022, which is the highest level in the past 20 years. The peak of inflation in most countries was reached towards the end of 2022, and in the current year there are visible indicators of its reduction, although the estimated value for 2023 is 7%, which is still relatively high. The medium-term prospects for the economies of the Western Balkans are positive, subject to the implementation of structural reforms and the acceleration of the green transition process and investments in the field of energy efficiency in accordance with the Green Agenda for the Western Balkans.

Despite the above, growth in Bosnia and Herzegovina turned out to be higher than expected, so according to the first estimates of the Agency for Statistics⁴⁹, Bosnia and Herzegovina achieved a real GDP in 2022 according to the expenditure approach in the amount of 37.5 billion BAM, that is, real growth of 4%. The analysis of GDP components indicates a significant growth of domestic consumption at the annual level of 4.9%, while the growth of gross investments shows a tendency to decelerate compared to last year's growth.

According to World Bank projections⁵⁰, lower private spending growth and a significant slowdown in growth compared to the multi-year average with a rate of 2.5% are expected in Bosnia and Herzegovina in the current year. This assessment is, among other things, the result of the expected modest growth of exports due to the low growth of Bosnia and Herzegovina's main export markets in the EU. Projections for the next medium-term period are also very modest, and the World Bank projected growth in BiH in 2024 at 3%, and in 2025 at 3.5%.

GDP growth projections made by the Federal Ministry of Finance are based on the projections of the Directorate for Economic Planning at the Council of Ministers of BiH from March 2023 and the

⁴⁹ BHAS: Gross domestic product-expenditure method-three-month data (chain values in the prices, 2015), from 30 March 2023

⁵⁰ World Bank Group; Western Balkans Regular Economic Report, Testing Resilience No. 23, Spring 2023.

projections of international institutions (the IMF and the World Bank from April, the European Commission from February 2023).

Table 6 Nominal and real GDP of FBiH and growth rate for the period from 2022 to 2026

Indicator	Estimate			Projections	
	2022	2023	2024	2025	2026
Nominal GDP in million BAM	29,681	31,689	33,400	35,365	37,408
Nominal growth in %	17.6%	6.8%	5.4%	5.9%	5.8%
Real GDP in million BAM	26,201	30,353	32,650	34,502	36,602
Real growth in %	3.9%	2.3%	3.0%	3.3%	3.5%

Despite the unfavorable situation of the main foreign trade partners, the Federation of Bosnia and Herzegovina achieved a real GDP growth of 3.9% in 2022, which is more than projected. Private spending as the main feature of the economy growth of the Federation of Bosnia and Herzegovina could have a slightly lower importance compared to previous years. The contribution of private spending is influenced by the burden of inflation, and a smaller impact on real GDP growth is estimated. However, the goal during the upcoming period is to limit the growth of public spending and redirect funds to investment spending, and therefore the structure of future GDP growth could also change. In that case, the investments, along with the improvement of the business environment, could achieve significant growth and make a greater contribution to the expected GDP growth. In the medium term, it is expected that public investments will play a more significant role in stimulating economic growth. The construction of road infrastructure and energy projects in the medium term should significantly increase the share of public investments in the GDP structure.

The financing conditions on the foreign market are significantly influenced by the global credit rating of the country shown in the table, which places Bosnia and Herzegovina in the group of countries with high credit risk, even though the latest assessment by the agency Standard & Poor's increased the credit rating (previously it was B/positive outlook).

Table 5 BiH credit rating

	Moody's Investors Service	Standard & Poor's
Rating	B3/stable outlook	B+/ stable outlook
Date	22 July 2022	4 August 2023
Activity	Rating confirmed	Rating confirmed

Source: BiH CB

Table 7 Macroeconomic risks and implications on the FBiH Strategy

<i>Real sector</i>		
- Growth	Medium to high	Weak foreign demand or higher financial instability may decrease the growth potential, which would result in difficulties in the fiscal policy and in higher borrowing.
<i>Fiscal sector</i>		
- Debt sustainability	Medium	Pressure on the rising expenditures and capital investments would increase financial needs. Potential liabilities, whether from the banking sector or state enterprises, might lead to the increase in gross financial needs and financing costs and deterioration of the fiscal balance, which might result in greater domestic and external borrowing.
<i>Payment balance</i>		
- Foreign demand / exchange rate currency	Medium to high	Slow global growth, especially in the EU, may result in the decline of the export and foreign direct investments, and thus pressurise foreign currency reserves, which could, having in mind the currency board arrangement, result in higher external borrowing.
<i>Inflation</i>		
- Prices of goods / exchange rate	Medium to low	The growth in the prices of energy, food, beverages and utilities will have the biggest influence on the growth of prices. Higher inflation may lead to higher debt servicing costs.
<i>Financial system</i>		
- Overall state	Medium	The banking system capital adequacy rate is significantly higher than the legal minimum and shows a satisfactory capitalisation of the total system for the existing level of risk exposure, and represents a strong basis for the preservation of its security and stability.

5. SOURCES OF FINANCING

5.1. External sources of financing

External financial funds available to the FBiH, which the FBiH plans to engage between 2023 and 2025 are estimated in the amount of 1,748.62 million BAM⁵¹ (953.60 million USD⁵²). Having in mind the goals defined in the FBiH Strategy, and the costs and risks of contracting loans, the FBiH will continue its policy of maximising borrowing from multilateral financial institutions, and it is estimated that the majority of the planned needs might be met from financing from these sources.

⁵¹ According to the data of the PIUs from the FBiH PIP 2023-2025

⁵² Calculation made according to the USD : BAM exchange rate as of 31 December 2022 (1USD=1.833705 BAM)

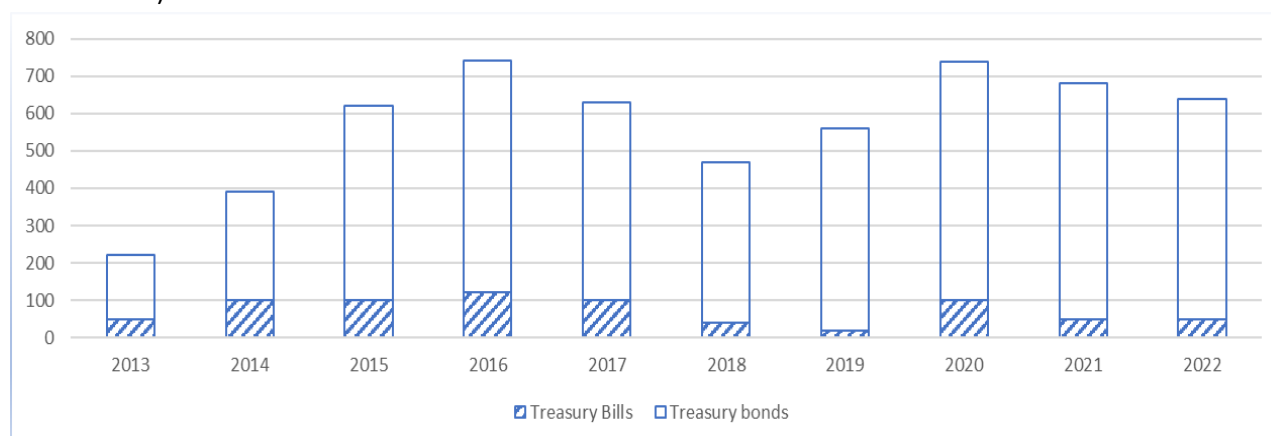
Table 8: Overview of contracted and planned external sources of financing in the 2023 - 2025 period

Creditor	Interest rate	Grace period	Repayment period	Currency	Financing in million USD	%	Risks
IBRD	Fixed or variable	5-10	18-30	EUR	67.89	7.12%	Refixing risk for the variable
EIB	Fixed or variable	4-5	25	EUR	500.72	52.51%	Refixing risk for the variable
EBRD	Fixed or variable	3-5	12-15	EUR	298.12	31.26%	Refixing risk for the variable
Kuwait Fund	Fixed	5	25	KWD	26.98	2.83%	Currency risk
Saudi Fund	Fixed	5	25	SAR	3.12	0.33%	Currency risk
OPEC Fund	Fixed	10	20	USD	15.85	1.66%	Currency risk
CEB	Fixed or variable	5	10	EUR	18.96	1.99%	Refixing risk for the variable
IFAD	Fixed	10	30	SDR	4.2	0.44%	Refinancing risk and currency risk
KfW	Fixed or variable	2.5 - 10	12-20	EUR	15.99	1.68%	Refinancing risk
Other funds	Fixed or variable	3-5	10-15	EUR	1.77	0.19%	Refinancing and refixing risk for the variable
TOTAL					935.60	100.00%	

5.2. Domestic sources of financing

The domestic securities market is relatively small and underdeveloped, but certain growth is recorded as the result of the adaptation to the FBiH Government needs. Domestic commercial banks are the most important investors when it comes to treasury bills and FBiH market bonds, and mostly hold them until their maturity.

Figure 8 The FBiH domestic debt development under market securities in the 2013 – 2022 period (in million BAM)



With the aim of securing further development of the domestic securities market and transparency of borrowing, having in mind its financial needs and costs as well, the FBiH Government will continue to hold auctions of bonds to the extent necessary to maintain the amount of funds on the FBiH single treasury account at a satisfactory level, as well as auctions of treasury bills in case of a deficit on the FBiH single treasury account as the result of misalignment of cash flows.

The number of issues and the extent of the offer of treasury bills (maturities of three, six, nine, and twelve months) will vary depending on the needs of the Treasury in the process of managing the liquidity. For future issuances of bonds, the FBiH will take into account the interests of investor, but also try to extend the average maturity of securities through issuing bonds with maturity longer than five years.

The FBiH market securities auctions are carried out in accordance with the annual indicative auction calendar published by the FBiH MF on their web page, except in cases when the FBiH MF cancels auctions because of satisfactory liquidity of the FBiH single treasury account.

Table 9 Structure, costs and risks of domestic sources of financing

DESCRIPTION	Treasury bills	FBiH bonds
Structure	Discount, one-time payment	Fixed or variable interest, one-time payment
Characteristics	Simple, satisfactory demand	The demand meets the current needs, market development will affect the demand
Costs	Low, except in case of the liquidity crisis or larger issues	Larger issue volume and extended maturity may result in increased costs
Risks	Refixing and refinancing risks	The risks depend on the achieved maturity, and include refinancing risk, and in case of variable rates, refixing risk

6. PRICES PREMISES AND SHOCK SCENARIO DESCRIPTIONS

In this part, four possible strategies for financing the needs of the FBiH Government are presented, so that each of the strategies is tested for sudden changes in terms of interest rates and exchange rates in order to assess the costs and risks of these changes. Premises of the interest rates and the estimated foreign currency exchange rates developments for the external debt between 2023 and 2025 are taken from the BiH MFT.

6.1. Unforeseen events scenario (Shock scenario)

The scenarios were tested for the impact of shocks, separate interest and currency shocks and combined interest and currency shocks based on the existing debt balance.

The currency (foreign) exchange rate shock implies the following:

- smaller shock: depreciation of the BAM value by 20% in comparison with USD in the second year,

- bigger shock: depreciation of the BAM value by 30% in comparison with USD in the second year.

The interest rate shock implies the following:

- smaller shock: increase in interest rates in the second year by 2% on all domestic and foreign instruments and by 1% on short-term domestic instruments. The instruments comprising the old foreign currency savings and war claims remain unchanged;
- bigger shock: increase in the estimated interest rates at the level of 4% to long-term foreign and domestic instruments and 2% to short-term domestic instruments in the second year. The instruments comprising the old foreign currency savings and war claims remain unchanged.

Shock scenarios:

- Currency (foreign) exchange rate: 30% depreciation of the BAM/USD exchange rate in the second year;
- Interest rate shock: 4% increase in the interest rate on foreign and domestic long-term instruments and 2% on short-term domestic instruments in the second year, contributing to the levelling of the yield curve;
- Combined shock: 20% depreciation of the BAM/USD exchange rate combined with a 1% shock on short-term domestic instruments and 2% on all long-term domestic and foreign instruments in the second year.

Premises about the future movements of variable interest rates on external debt are based on the existing yield curves for the Eurozone and the USA from the middle of November 2022, taking into account the average values in 2022. For the projections of variable interest rates, six-month LIBOR⁵³ and EURIBOR⁵⁴, current data on these interest rates were used with the assumption that the difference between the value of the six-month EURIBOR (LIBOR) and the yield on German one-year bonds (US one-year bonds) will be equal during the 2023-2025 period.

These interest rates represent reference interest rates for debt instruments with variable interest rates, while the existing borrowing was taken into account for debt instruments with fixed interest rate in estimating the level of interest. The developments of interest rates on the domestic debt is calculated on the basis of simple expectations, on the basis of interest rates of the existing FBiH domestic debt portfolio.

Table 10 The estimated interest rates on external debt instruments between 2023 and 2025 used in the MTDS AT

Instrument name	Interest		
	2023	2024	2025
Concessional USD Fixed	5.23%	5.39%	5.46%
Concessional EUR Fixed	4.69%	4.90%	5.10%
Concessional USD Variable	5.18%	5.25%	5.32%
Concessional EUR Variable	2.58%	2.79%	2.99%
IMF RFI USD Variable	2.74%	2.81%	2.88%

⁵³ London Interbank Offered Rate

⁵⁴ Euro Interbank Offered Rate

IMF EFF USD Variable	2.74%	2.81%	2.88%
5-year Eurobond	9.49%	10.06%	10.62%
10-year Eurobond	5.45%	5.65%	5.85%
15-year Eurobond	5.94%	6.14%	6.34%

Table 11 The estimated spread (margin) on debt instruments with variable interest rate between 2023 – 2025 used in MTDS AT

	2023	2024	2025
Concessional USD Variable	1.50%	1.50%	1.50%
Concessional EUR Variable	1.25%	1.25%	1.25%
IMF RFI USD Variable	1.00%	1.00%	1.00%
IMF EFF USD Variable	1.00%	1.00%	1.00%

Projections of the European Central Bank from November 2022 point to a strengthening of the USD compared to the end of 2021 by 7.9% in 2022, 4.0% in 2023 compared to 2022 and remaining at the same level in 2024.

Similar estimates were published by the IMF (World Economic Outlook from October 2022), according to which the value of the USD for EUR in 2022 compared to 31.12.2021 was higher by 7.2% in 2023, and by 3.1% in 2023.

Taking into account all of the above during the making of the Strategy, an increase in the value of the USD in relation to the EUR is predicted for the year 2023 in the amount of 4%, and for the years 2024 and 2025 0%.

For the purposes of creating different scenarios of the Debt Management Strategy, adapted instruments were used in order to reduce the different loan conditions in the portfolio to a similar instrument (the difference exists in the currency, maturity years, interest rate and grace period).

Table 13 FBIH debt portfolio stylised instruments

Instrument sign	Name or type of the instrument	Fixed or variable	Concessional or market	Maturity (year)	Grace (year)	Currency type	Currency
USD_2	Concessional USD	Fixed	Concessional	20	5	Foreign	USD
USD_3	Concessional EUR	Fixed	Concessional	20	5	Foreign	EUR
USD_4	Concessional USD	Variable	Concessional	18	4	Foreign	USD
USD_5	Concessional EUR	Variable	Concessional	15	3	Foreign	EUR
USD_6	IMF EFF USD	Variable	Concessional	10	4	Foreign	USD
USD_7	IMF RFI USD	Variable	Concessional	5	3	Foreign	USD
BAM_9	T-bill	Fixed	Market	1	0	Domestic	BAM
BAM_11	2-3y T-bond	Fixed	Market	3	2	Domestic	BAM
BAM_12	5-7y T-bond	Fixed	Market	6	5	Domestic	BAM
BAM_16	10y T-bond	Fixed	Market	10	9	Domestic	BAM

BAM_17	15y T-bond	Fixed	Market	15	14	Domestic	BAM
USD_8	5y Eurobond	Fixed	Market	5	4	Foreign	EUR
USD_18	10y Eurobond	Fixed	Market	10	9	Foreign	EUR
USD_19	15y Eurobond	Fixed	Market	15	14	Foreign	EUR

Table 14 Comparison of current debt portfolio risk indicators and strategy risks

Risk indicators		Debt portfolio		
		2021	2022	Chosen strategy
				the end of 2025
Nominal debt (% of GDP)		26.8	15.4	15.9
Current value (% of GDP)		22.4	13.2	14.3
Weighted average rate (%)		1.3	1.8	3.0
Refinancing risk	AMT foreign debt (years)	6.6	6.4	7.5
	ATM domestic debt (years)	3.6	4.2	2.7
	ATM total debt (years)	6.2	6.2	6.4
Interest risk	ATR (years)	4.2	4.2	4.8
	Debt being refixed in the following year (% of the total debt)	45.8	45.2	38.8
	Fixed interest debt (% of the total debt)	62.5	62.2	72.0
Currency risk	External debt (% of the total debt)	87.8	88.9	77.3
	Short-term external debt (% of the reserves)	3.0	4.1	2.5

6.2. Description of alternative debt management strategies

Strategy (S1): based on the actual state of the current borrowing of the Federation of Bosnia and Herzegovina in accordance with the 2023 FBiH Budget, 2023-2025 Budget Framework Document and the 2023-2025 Public Investments Programme (PIP). Financing of development projects up to 2025 is estimated in the amount of 799.38 million BAM. In the context of the estimation of costs and risks related to foreign credits intended to implement the FBiH PIP, the credit conditions were applied in accordance with the general operations of the creditor with EUR as the preferred currency.

Strategy 2 (S2): based on the current borrowing of the Federation of Bosnia and Herzegovina in accordance with the 2023 FBiH Budget, 2023-2025 Budget Framework Document and the 2023-2025 Public Investments Programme (PIP) with the assumption of credit conditions that include credits with a majority-agreed variable interest rate with EUR as the preferred currency.

Strategy 3 (S3): based on the current borrowing of the Federation of Bosnia and Herzegovina in accordance with the 2023 FBiH Budget, 2023-2025 Budget Framework Document and the 2023-2025 Public Investments Programme (PIP) with the assumption of credit conditions that include credits with a majority-agreed fixed interest rate with EUR as the preferred currency.

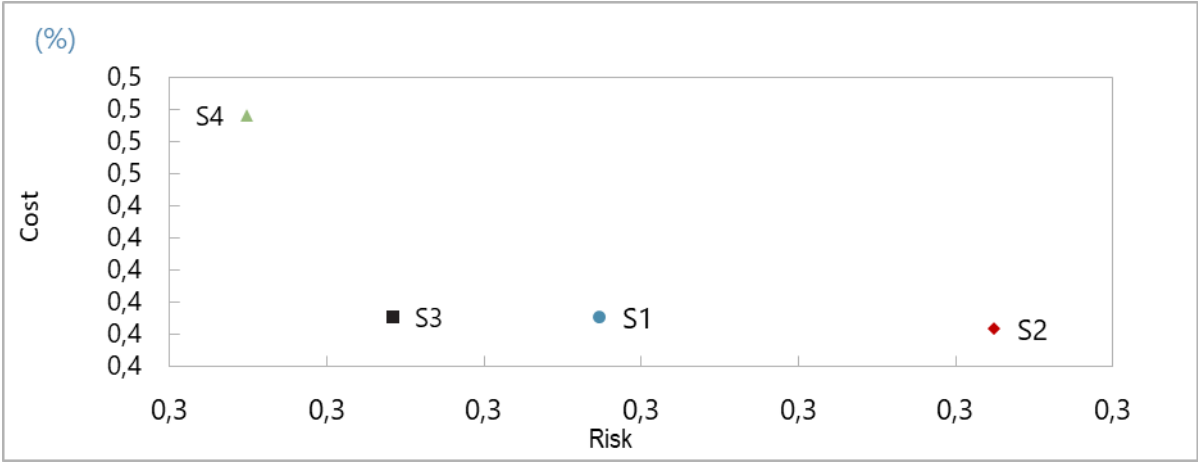
Strategy 4 (S4): based on the current borrowing of the Federation of Bosnia and Herzegovina in accordance with the 2023 FBiH Budget, 2023-2025 Budget Framework Document and the 2023-2025 Public Investments Programme (PIP) with the assumption of replacement of all domestic instruments with the issuance of 10-year and 15-year Eurobonds at a level adequate to the sources that have been replaced.

6.3. Cost and risk analysis of base and alternative borrowing strategies

The impact of the proposed strategies is assessed in the baseline and shock scenarios. The two key cost indicators (debt/GDP and interest rate/GDP) were calculated in order to determine the ratio between costs and risks of different borrowing scenarios. Changes in the level of unpaid debt caused by the changes in the foreign currency exchange rate are reflected in the debt/GDP ratio. The share of the interest paid so far in the GDP provides for the assessment of the potential budget impact of each strategy. The given strategy risk is the difference between its costs in the shock scenario compared to the base scenario.

The debt servicing cost is directly related to the interest rate fluctuation. The high-interest rate debt generates higher debt costs over time, i.e., increases the need for refinancing. Strategy S4 bears the smallest risk, but also has the highest costs (Figure 12) due to the debt structure dominated by external borrowing in EUR with a combination of 10-year and 15-year Eurobonds under the market interest conditions. Strategies S1, S2 and S3 have approximately the same costs, with the fact that strategy S2 is the riskiest, given that strategy S2 considered credit conditions in which variable interest rates prevail to a greater extent. The biggest risk for all baseline strategies in view of the interest/GDP ratio is the extreme interest shock in the second year of the strategy.

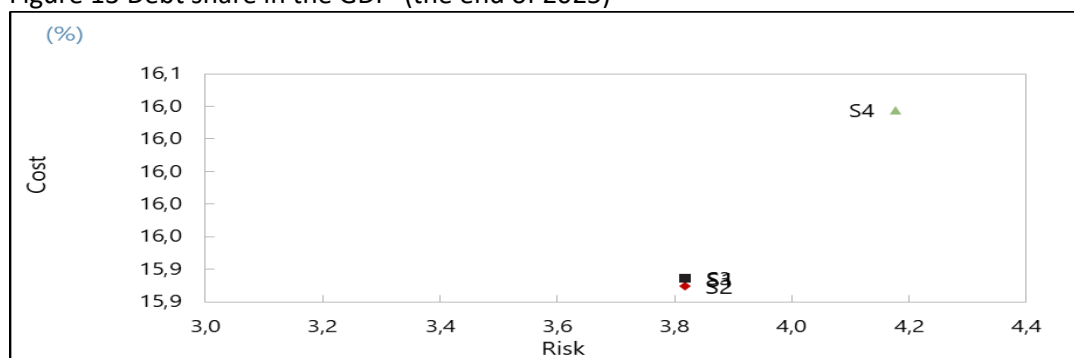
Figure 12 Share of interest costs in GDP (end of 2025)



The biggest debt portfolio risk for all four tested strategies, in view of the debt/GDP ratio is the currency risk in case of a sudden change in the foreign currency exchange rate, i.e., appreciation of USD in comparison with BAM and EUR (30% shock in the second year). Portfolio with a larger share of non-EUR currencies in the unpaid external debt is exposed to a bigger risk in terms of appreciation of foreign currencies in comparison with the domestic currency. The S4 Strategy is the most vulnerable to the changes in foreign exchange rates due to a small share of domestic borrowing and a more significant external borrowing. As in the case of the previous indicator, strategies S1, S2 and

S3 have the least costs and are less risky compared to strategies S4, which is the riskiest and the most expensive. Strategy S4 is the most susceptible to the exchange rate changes and has a greater deviation from the base scenario compared to other strategies because this strategy involves issuing a Eurobond on the foreign market, as well as borrowing in non-euro currencies (USD and SDR). In case of the extreme foreign exchange rate risk (appreciation of USD in comparison with BAM at the level of 30%), the divergence of the shock scenario from the baseline scenario is at the level of 3.8170%–4.1772%, of the estimated GDP in 2025, with this deviation being the smallest in Strategy S2.

Figure 13 Debt share in the GDP (the end of 2025)



6.4. Alternative strategies of the risk indicators

As the *debt/GDP* and *interest/GDP* ratios are not sufficient to assess the risk, other indicators were analysed as well: the refinancing risk, interest risk and currency risk.

Table 15 Risk indicators by strategies at the end of 2025

Risk indicators		Initial portfolio	S1	S2	S3	S4
		Nominal debt in % of GDP	15.38	15.93	15.93	15.93
Current debt value as % of GDP		13.16	14.31	14.04	14.31	14.39
Interest rate costs in % of GDP		0.27	0.41	0.40	0.41	0.47
Implicit interest rate (%)		1.78	3.02	2.99	3.02	3.56
Refinancing risk	Debt maturing in the following year (% of the total)	12.75	13.34	13.33	13.37	7.81
	Debt maturing in the following year (% of GDP)	2.03	2.12	2.12	2.13	1.25
	Average debt portfolio maturity (years)	6.18	6.44	6.28	6.52	7.94
	Domestic debt average maturity (years)	4.19	2.70	2.70	2.70	2.82
	External debt average maturity (years)	6.42	7.54	7.33	7.65	8.26
Interest risk	Average refixing time (years)	4.24	4.75	3.99	4.90	6.32
	Debt refixing in the following year (years)	45.23	38.79	45.49	37.43	31.81
	Fixed interest rate debt (% of the total debt)	62.17	72.00	65.29	73.39	73.47
	Treasury bills (% of the total debt)	0.79	4.33	4.32	4.36	0.00
Currency risk	External debt in % of the total debt	88.85	77.29	77.31	77.21	94.09
	Short-term external debt in % of the reserves	4.09	2.47	2.47	2.47	2.47

By comparing the proposed strategies risk indicators with the current debt portfolio risks, we can conclude the following:

Debt costs – The average weighted interest rate in all analysed strategies increases and ranges from 1.78% to 3.56%, amounting to 3.02% in the preferred S1 Strategy at the end of 2025.

Refinancing risk – The amount of debt maturing in 2025 is approximately the same in all strategies, but is higher in relative amount compared to the initial debt portfolio from 2022 when it was 12.75% and below the amount listed in the borrowing guidelines as the upper limit (15% of the total debt portfolio).

Average time to maturity (ATM) would increase in all analysed strategies and be in line with the defined strategic goals. The longest time to maturity would be in the S4 Strategy considering the debt instruments used in the aforementioned strategy. In case the S1 Strategy is implemented, the debt portfolio ATM at the end of 2025 would be 6.4 years.

Interest rate risk – The average refixing time increases in the preferred strategy and is 4.75 years in comparison with the current refixing time which is 4.24 years. The share of debt with fixed interest rates would increase in the preferred strategy when compared to the initial debt portfolio and amount to 72%, as well as the share of treasury bills which would increase to 4.33%. The S4 Strategy, considering borrowing through issuing Eurobonds under fixed interest rates has a significantly more favourable ATR of 6.32 years.

The FBiH Government chose the **S1 Strategy** to be implemented from 2023 to 2025, since the risk indicators of the chosen S1 Strategy at the end of 2025 are for the most part in line with the debt management guidelines.

7. DEBT MANAGEMENT GUIDELINES

Intending to secure funds for the budget liquidity, meet the demand and increase the liquidity of government securities, the FBiH Government will continue to issue treasury bills and bonds, whereby the extend and the dynamic of these issuances will be consistent with this medium-term Strategy.

7.1. The total debt portfolio structure

The guidelines for the desired debt portfolio structure are as follows:

- To maintain the share of BAM and EUR debt above 60% of the total debt portfolio;
- To maintain the share of the fixed interest rate debt above 50% of the total debt portfolio;
- The average time to maturity of the total debt portfolio should be extended to 6.5 years.

7.2. Borrowing guidelines

The main guidelines for the FBiH borrowing are as follows:

- When planning borrowing take care of equal repayment structure by years in order to minimise the refinancing risk;
- In order to reduce the currency risk, use borrowing in EUR and BAM as much as possible;
- In order to reduce the risk of debt refinancing, the share of the debt portfolio that matures within 12 months/one year will amount to a maximum of 15% of the total unpaid debt;
- In order to extend the average debt portfolio maturity over 6.5 years, future borrowing will be contracted with a longer grace and repayment periods. The average weighted debt portfolio should be extended to at least 6.5 years.

7.3. Quantitative goals

On the basis of the current macroeconomic framework, by following the preferred borrowing strategy, at the end of 2025 the expected risk indicators of the debt portfolio would be as follows:

- the average credit maturity (ATM) should not be less than 6.44 years;
- the average credit refixing time (ATR) will be 4.75 years;
- the share of debt interest servicing in revenues will amount to less than 4%.

The goals defined in this Strategy are susceptible to changes of the premises on growth, fiscal deficit and the availability of the envisaged sources of financing, primarily concessional ones.

C BRČKO DISTRICT MEDIUM-TERM DEBT MANAGEMENT STRATEGY

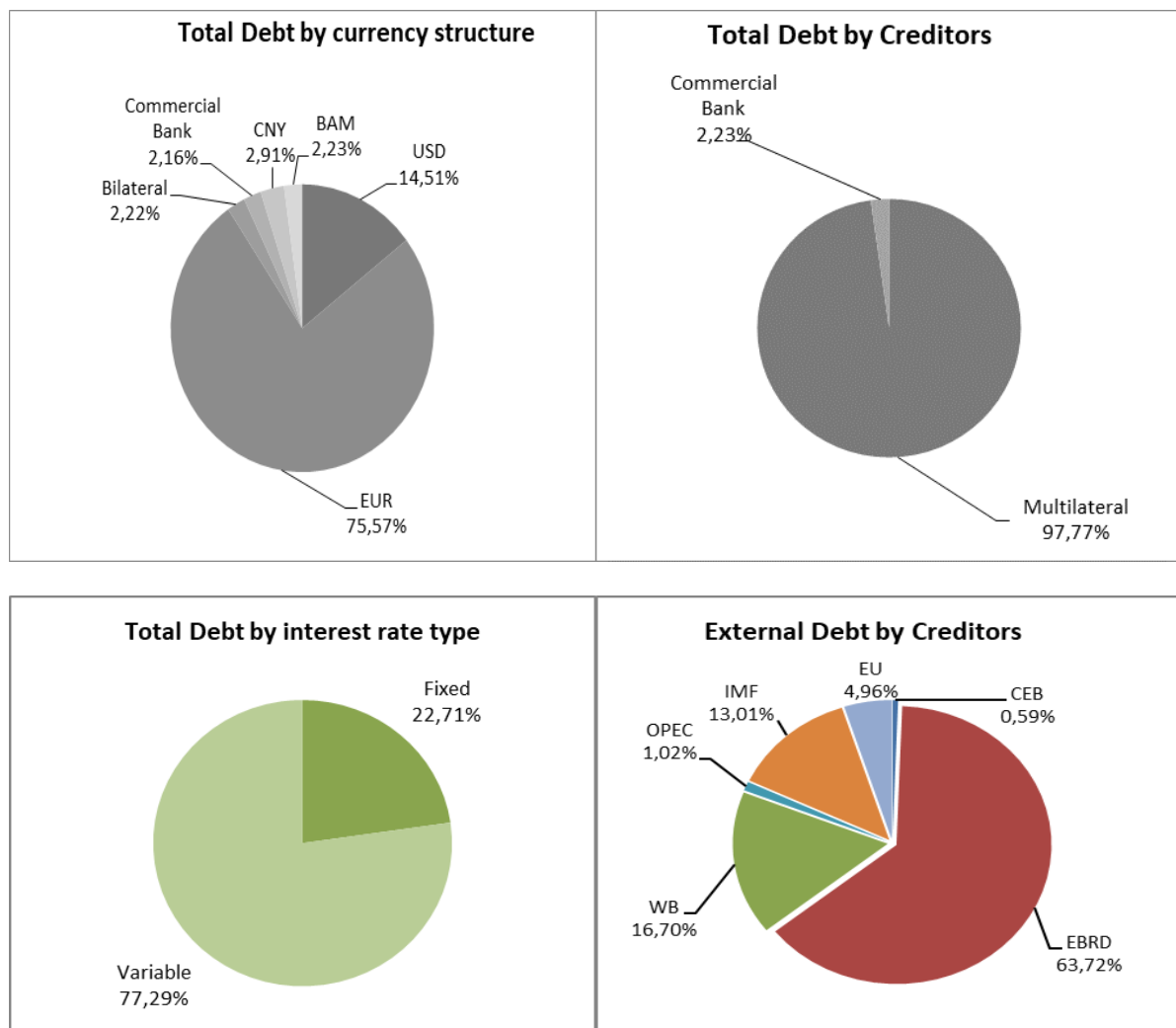
The public debt of Brčko District BiH (District) as of 31 December 2021, expressed in USD, amounted to 29.25 million USD or 5.16% of the District GDP (in 2021 the GDP was 979 million BAM), of which external debt amounted to 28.6 million USD (5.04% of the District GDP), and domestic debt to 0.7 million USD (0.12% of the District GDP). The share of external debt in the total debt is 98%, and domestic 2%.

Up to and including 31 December 2021, there are no records of guarantees issued in the BD BiH Finance Directorate (Finance Directorate).

In the District public debt currency structure, the highest percentage pertains to EUR, 76%, followed by USD, CNY, GBP, JPY and BAM.

Approximately 98% of total debt relates to multilateral creditors (EBRD, WB, CEB, OPEC) and one domestic creditor, which accounts for 2% of the total debt of the BD BiH.

Figure 1 BD BiH: The structure of the existing debt at the end of 2021



The total District debt structure is characterised by a low weighted average interest rate (Table 1), which amounts to 1.5% for the total debt, i.e., 1.5% for the external debt, and 4% for the domestic debt. This is the result of the high share of external borrowing and low reference interest rates. The ATM is relatively short, being 0.9 years for the domestic debt, and 3.7 years for the external debt. The repayment profile (Figure 1) is inclined toward the shorter domestic debt repayment term and the high of the external debt repayment in 2024. In order to reduce the refinancing risk, it is necessary to extend the total debt maturity on the occasion of new borrowing.

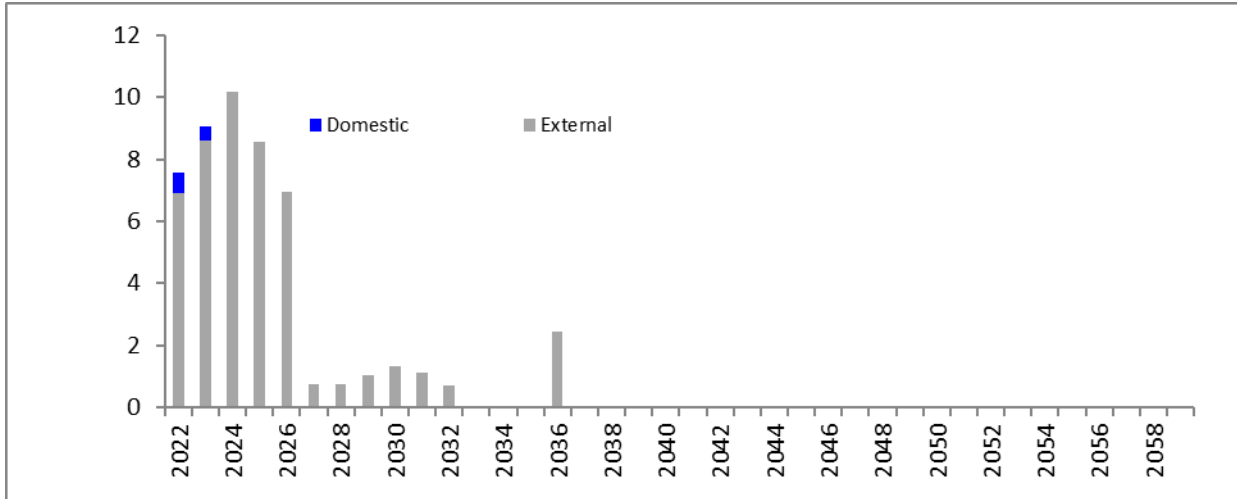
The interest risk for the total debt is high, since 100% of domestic and 78% of external debt is reflected in the following year as the consequence of the fact that 77% of total portfolio is represented by the debt with a variable interest rate.

The existing debt portfolio currency risk is low, although the share of the external debt in the total debt is 98%, and this is the result of the fact that EUR is highly represented in the external debt currency structure, thus resulting in only 24% of external debt being exposed to the currency risk.

Table 1 BD BiH: Cost and risk indicators at the end of 2021

Cost and risk indicators		External debt	Domestic debt	Total debt
Debt amount (million BAM)		49.4	1.1	50.5
Debt amount (million USD)		28.6	0.7	29.2
Nominal debt in % of GDP		5.0	0.1	5.2
Current debt value as % of GDP		4.6	0.1	4.7
Debt costs	Interest rate in relation to % of GDP	0.1	0.0	0.1
	Average weighted interest rate (%)	1.5	4.0	1.5
Refinancing risk	ATM (years)	3.7	0.9	3.7
	Debt maturity in the following year (of the total debt)	14.0	59.3	15.0
	Debt maturity in the following year (% of GDP)	0.7	0.1	0.8
Interest risk	ATR (years)	2.2	0.5	2.1
	Debt being refixed in the following year (%)	78.1	100.0	78.6
	Fixed interest rate debt (% of the total)	23.2	0.0	22.7
Currency risk	External debt (% of the total debt)			97.8

Figure 2 BD BiH: Public debt repayment profile at the end of 2021



Source: BD BiH Finance Directorate

MACROECONOMIC FRAMEWORK

District current budget is balanced, and the aim of all the borrowing is to finance capital expenditures. The local authorities estimated the total needs for investment borrowing for each year on the basis of the ongoing projects (the Port of Brčko reconstruction project) and the planned capital project "Construction of Main Transmission Pipeline Plazulje - Potočari". On this basis, the total needs for borrowing were included in the MTDS as a share of gross financial needs.

Table 2: BD BiH: Key economic indicators, 2022-2025

	2022	2023	2024	2025
In million BAM				
Public revenues (including grants)	248	272	279	288
Primary public sector expenditures	245	286	283	278
Interest	1	1	1	1
Total expenditures (Total expenditures-amortisation+new credit withdrawals)	246	287	284	279
GDP-2021 (979)	1032	1077	1128	1183
Borrowing needed for investments	5.23	24.08	16.08	0.00

SOURCES OF FINANCING

The main external multilateral creditors are the EBRD, WB, IMF, CEB, OPEC. In the MTDS period (2022-2025), the BD BiH is to start implementation of the project which is financed by a credit from the European Bank for Reconstruction and Development - "Construction of Main Transmission Pipeline Plazulje - Potočari".

Table 3 BD BiH: Current and potential sources of financing

Current sources of financing	Potential sources of financing
External: - Multilateral: EBRD, WB, IMF,OPEC,CEB, European Commission - Bilateral: UniCredit Bank Austria	External: - Multilateral: European Bank for Reconstruction and Development
Domestic: - Commercial banks	Domestic: -

Source: BD BiH Finance Directorate

SCENARIO ANALYSIS

Alternative borrowing strategies

The strategic goal of the BD BiH Government's debt management in the period from 2022 to 2025 is to secure such sources of financing (borrowing) the purpose of which is solely to finance investment projects of importance to encourage economic growth and BD BiH development, and which ensure the acceptable level of costs and financing risks.

In accordance with the existing BD BiH debt management goal, four alternative strategies were prepared for the purpose of the MTDS analysis:

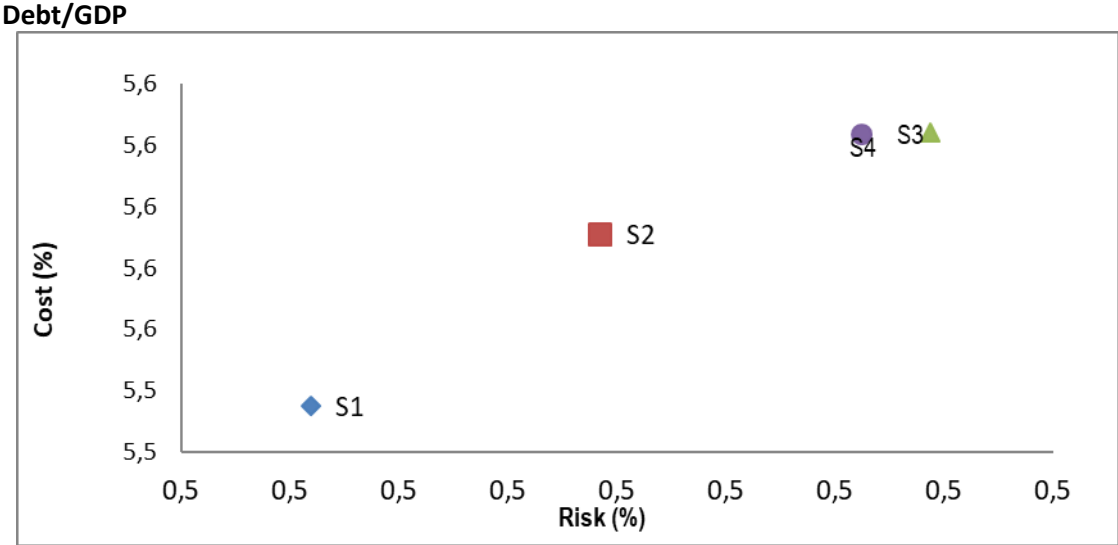
- **S1:** Development of the domestic market (new borrowing through the issuance of long-term bonds, credits with commercial banks);
- **S2:** The strategy of preferring multilateral creditors (new borrowing in EUR, preferably with a fixed interest rate);
- **S3:** The strategy of reducing the interest rate risk (new borrowing with fixed interest rate);
- **S4:** The strategy of reducing the currency risk (new borrowing in EUR and BAM);

The analysis of risks and costs of the alternative borrowing strategies

On the basis of the analysis of cost and risk indicators at the end of 2025 of all alternative strategies used in the MTDS, we conclude that the **S2 is: The Strategy of preferring multilateral creditors (new borrowing in EUR, preferably with a fixed interest rate) is desirable and the preferred BD BiH borrowing strategy in the following medium-term period.**

Under this strategy, the percentage of nominal debt in the projected BD BiH GDP would amount to 5.5% at the end of 2025, in comparison with the current 5.2% to which amounted at the end of 2021 (Table 4). The ratio between interest and GDP for 2021 shows an increase of 0.1%. The refinancing risk in the S2 Strategy is at its lowest, since the ATM is extended from 3.7 to 7.2 years. Approximately 69.3% of debt to be refixed within one year is the result of the high share of the variable interest rate in the total debt portfolio (77%) in comparison with 23% of debt with a fixed interest rate, while the ATR is increased from 2.1 to 3.4 years. Under the S2 Strategy, new borrowing in EUR, preferably with a fixed interest rate, would result in the increase share of external debt in the total debt from 97.8 to 100%.

Figure 3 BD BiH: Cost and risk balance of the alternative strategies at the end of 2025



Interest/GDP

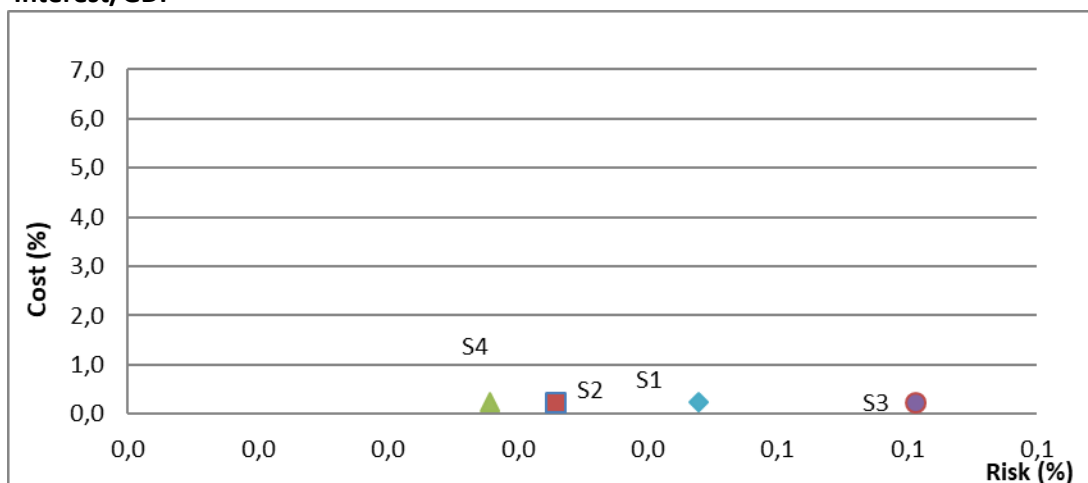


Table 4 BD BiH: Risk and cost indicators of different strategies at the end of 2025

Cost and risk indicators		2021	the end of 2025			
		Currently	S1	S2	S3	S4
Nominal debt in % of GDP		5.2	5.5	5.554	5.566	.566
Current debt value of GDP (%)		4.7	5.4	4.8	5.1	5.1
Interest amount in comparison with the GDP		0.1	0.2	0.2	0.2	0.2
The average weighted rate (%)		1.5	3.8	3.9	4.0	4.0
Refinancing risk	Maturity of debt in the following year (% of the total)	15.0	11.9	11.3	14.1	11.4
	Maturity of debt in the following year (%)	0.8	0.7	0.6	0.8	0.6
	ATM external debt (years)	3.7	4.1	7.2	7.7	7.4
	ATM domestic debt (years)	0.9	2.9	-	2.7	4.8
	ATM total debt (years)	3.7	3.3	7.2	7.1	7.1
Interest risk	ATR (years)	2.1	2.8	3.4	5.3	4.7
	Debt being refixed in the following year (% of the total debt)	78.6	23.9	69.3	43.8	52.1
	Debt under fixed interest rate (% of the total debt)	22.7	77.4	31.9	60.3	49.10
Currency risk	External debt (% of the total debt)	97.8	32.6	100.0	88.0	88.1

Source: BD BiH

Table 5 BD BiH: The state of debt under the instruments of the alternative strategies at the end of 2025

In million USD	2021	2025			
Debt state under the instruments		S1	S2	S3	S4
Concessional fixed EUR	2	2	7	13	10
Concessional variable EUR	18	6	23	13	16
Concessional fixed USD	5	4	4	4	4
Concessional variable USD	0	0	0	0	0
IMF RFI variable USD	4	0	0	0	0
Commercial variable BAM	1	2	0	0	1
T-bills	0	0	0	0	0
T-bonds 2-3y fixed	0	2	0	1	0
T-bonds 5-7y fixed	0	19	0	3	2
T-bonds 10y fixed	0	0	0	0	1
External debt	29	11	34	30	30
Domestic debt	1	23	0	4	4
Total debt	29	34	34	34	34

RECOMMENDATIONS

It is recommended by the BD BiH public debt management to accept as the preferred strategy the strategy of preferring multilateral creditors (borrowing in EUR, preferably with a fixed interest rate) for investment project of importance for a faster economic growth and BD BiH development, as well as because the conditions of borrowing from domestic commercial banks are still unfavourable and as there is no legal framework enabling the issuance of long-term treasury bonds.

With the aim of improving the public debt management system in the following medium-term period, the need arises to reform the regulatory and institutional framework for managing and strengthening the capacities in terms of human and material public debt management resources.