

REPUBLIC OF SRPSKA

GOVERNMENT

**REPUBLIC OF SRPSKA DEBT MANAGEMENT STRATEGY
FOR THE PERIOD 2017-2020**

July, 2017

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1. Goals and assumptions

Republic of Srpska Medium-term debt management strategy (RS MTDS) specifies medium term goals and operations within the debt management, that Republic of Srpska Government (RS Government) intends to implement in the medium term in order to achieve desired debt portfolio structure, taking into account cost and risk preferences. Implementation of the RS MTDS is continuously being monitored and reported to the RS Government annually.

The scope of the RS MTDS covers all debt representing direct or indirect obligation of the RS Government - RS budget, with some exceptions.

External debt data includes:

- 1) RS Government debt (except for the part of the debt to the Paris Club of creditors-Germany, for which the repayment mechanism has not yet been determined);
- 2) Local governments debt;
- 3) Debt of SOEs and the RS Investment Development Bank (RS IDB).

Domestic debt data includes:

- 1) RS Government debt (verified domestic debt according to the RS Law on domestic debt, debt in the form of treasury bills, bonds, bank loans and activated guarantees) and
- 2) debt of the social security funds contracted indirectly.

Directly contracted domestic debt of local governments and social security funds is not covered by the MTDS, since it represents neither direct nor indirect obligation for RS (RS budget), therefore it cannot be managed by RS Ministry of Finance (RS MoF), on behalf of RS Government. Obligations related to frozen foreign currency savings, war damages and general liabilities are included in the MTDS only if they have been formally verified. Detailed table on the scope of the RS MTDS is presented in Annex I.

The RS debt management goal is to provide financial resources for financing the approved investment projects, for refinancing RS MTDS debt and RS Budget execution, at minimal costs and risks, while taking into account development of the economy and domestic securities market, as well as debt limits specified in the law.

The RS MTDS is based on the following assumptions:

- 1) In the medium term, the RS Government will continue with implementation of the fiscal consolidation and reform plans, as presented in the RS Economic Reform Programme 2017-2019 (RS ERP 2017-2019), in order to ensure long term fiscal sustainability and transparency (as stipulated by the Fiscal Discipline Law);
- 2) Macroeconomic projections and fiscal framework as presented in the Medium-term Budget Framework Document 2018-2020¹ (MTBFD 2018-2020), shown in Table 1 and 2;
- 3) Any new borrowing on behalf of the RS government will be contracted in accordance with the RS Law on borrowing, debt and guaranties, i.e. through the RS MoF;
- 4) There will not be taking over of debt from the other levels of Government;

¹ Medium-term Budget Framework Document 2018-2020 presents detailed assumptions for macroeconomic projections and fiscal framework, as well as associated risks for their realization.

- 5) Verification and reconciliation of war damage and frozen foreign currency savings obligations will proceed in accordance with the projections included in the MTBFD 2018-2020;
- 6) Central Bank of Bosnia and Herzegovina (CBBH) will continue to maintain monetary stability in accordance with the Currency Board Arrangement as constituted under the Law on Central Bank, and will not be issuing any securities in the domestic financial market;
- 7) Credit rating of Bosnia and Herzegovina will not be downgraded within the medium term²;
- 8) Institutional investor base in the RS domestic financial market will be maintained and broadened in the medium term;
- 9) There will not be significant increase of the European central bank reference rate³;
- 10) Creditors will provide funds at acceptable terms.

Table 1. Review of the macroeconomic indicators for the period 2013-2015, forecast for 2016 and 2017 and projections for the period 2018-2020

	2013	2014	2015	2016	2017	2018	2019	2020
GDP								
GDP nominal, mil.BAM	8.792,9	8.887,3	9.205,0	9.528,5	9.926,3	10.363,2	10.833,6	11.342,5
Population, in mil.	1,2	1,2	1,2	1,2	1,2	1,2	1,1	1,1
GDP per capita, in BAM	7.507,7	7.615,0	7.920,6	8.231,8	8.597,8	8.999,6	9.432,7	9.901,7
GDP growth, nominal (%)	2,1	1,1	3,6	3,5	4,2	4,4	4,5	4,7
Inflation measured by the currency price index (CPI), average annual rate (%)	0,0	-1,2	-1,4	-1,2	1,2	1,3	1,4	1,3
Real growth rates %								
GDP growth, real	1,7	0,3	2,8	2,9	3,0	3,2	3,3	3,5
Import	2,9	11,7	-1,2	2,0	5,6	5,4	4,7	4,7
Export	6,1	5,8	-7,4	10,8	7,8	7,4	7,2	7,2
Private consumption	1,8	2,1	1,9	2,5	2,3	2,2	2,1	2,1
Public consumption	0,8	2,0	-1,8	1,2	0,8	0,8	0,8	0,7
Gross investments in fixed assets	-5,0	5,4	-0,2	3,4	3,0	3,7	3,1	4,0
Nominal growth rates %								
Average net salaries, in BAM	808,0	825,0	831,0	836,0	841,0	847,7	855,4	863,9
Import of goods, in mil. BAM	4.558,0	4.946,0	4.369,2	4.405,6	4.705,2	5.020,4	5.326,7	5.646,3
Import of goods, annual growth (%)	1,6	8,5	-11,7	0,8	6,8	6,7	6,1	6,0
Export of goods, in mil. BAM	2.604,2	2.692,0	2.613,9	2.865,3	3.122,4	3.394,6	3.687,2	3.999,2
Export of goods, annual growth (%)	9,7	3,4	-2,9	9,6	9,0	8,7	8,6	8,5
Export over Import (%)	57,1	54,4	59,8	65,0	66,4	67,6	69,2	70,8
Unemployment rate (%)	27,0	25,7	25,2	24,8	24,4	24,0	23,6	23,2

Source: MTBFD 2018-2020, RS MoF

² [Actual BH Credit rating](#) is „B/stable outlook“ (Standard and Poors) and „B3/stable outlook“ (Moody's).

³ European Central Bank; [Press Release as of June 8th, 2017](#)

Table 2: Fiscal framework for the period 2017-2020⁴

	Budget 2017	MTBFD 2018	MTBFD 2019	MTBFD 2020
A. BUDGET REVENUES (I+II+III+IV)	2.591,1	2.644,7	2.720,3	2.784,2
I Tax revenues	2.369,6	2.448,1	2.521,1	2.579,2
II Non tax revenues	221,4	196,6	199,2	204,9
III Grants	0,0	0,0	0,0	0,0
IV Transfers among the budgetary units	0,0	0,0	0,0	0,0
B. BUDGET EXPENDITURES (I+II+III)	2.449,5	2.470,3	2.459,4	2.499,3
I Current expenditures	2.307,5	2.323,6	2.308,4	2.309,0
II Transfers among the budgetary units	136,9	141,9	145,2	144,4
III Budget reserve	5,1	4,8	5,9	45,9
C. GROSS BUDGET SURPLUS/DEFICIT (A-B)	141,6	174,4	260,9	284,9
D. NET EXPENDITURES FOR NON FINANCIAL ASSETS	-74,4	-57,4	-63,7	-103,9
E. BUDGET SURPLUS/DEFICIT (C+D)	67,1	117,0	197,2	181,0
F. NET FINANCING (G+H)	-67,1	-117,0	-197,2	-181,0
G. NET PROCEEDS FROM FINANCIAL ASSETS	86,0	79,3	79,2	79,9
H. NET BORROWING	-128,1	-171,4	-257,8	-242,4
I. OTHER NET PROCEEDS	-25,0	-24,9	-18,6	-18,6

Source: MoF RS

2. Existing debt

2.1. Portfolio review

The composition of the RS debt analyzed under the MTDS (RS MTDS debt) is mostly the result of the basic debt management principle implemented in the past, which is maximization of external concessional borrowing. Therefore, the RS MTDS debt portfolio is characterized by a high share of external debt with relatively long maturities, as well as low implied interest rate of the external debt portfolio at the level of 1,2%.

RS MTDS debt amounts to 4,7 billion BAM (2,6 billion USD) i.e. 49,8% of GDP, as of December 31st, 2016. External MTDS debt accounted for 66,6% of the total (3,2 billion BAM or 1,7 billion USD, i.e. 33,1% of GDP), while domestic debt accounted for 33,4% of total (1,6 billion BAM or 0,9 billion USD, i.e. 16,6% of GDP).

The external MTDS debt is composed of:

- 1) Relevant external debt, i.e. loans contracted through the BH Ministry of Finance and treasury, as well as allocated „old“ external debt (debt originated before April 2nd, 1992); and

⁴ Presented fiscal framework represents RS budget in the terms of Fund 01 (revenues, expenditures and budget financing).

- 2) direct external debt (debt directly contracted with external creditors).

External borrowing is primarily contracted with multilaterals (80,9% of the total external debt outstanding). The largest multilateral creditors are The World Bank - IDA and IBRD (WB), European Investment Bank (EIB), International Monetary Fund (IMF), and European Bank for Reconstruction and Development (EBRD).

Domestic MTDS debt is composed of:

- 1) T-bills and medium-term T-bonds;

T-bills outstanding amounted to 88,0 million BAM at the end of 2016 (47,4 million USD), with original maturities of 6 and 12 months. Debt outstanding under medium-term T-bonds (4 and 5 year amortization bonds and 3, 5, 7, 10 years bullet bonds) amounted to 728,0 million BAM (392,4 million USD), at the end of 2016.

- 2) bonds issued for repayment of debt stipulated by the RS Law on domestic debt:

- i) amortizing war claim bonds with 13-15 year maturity and 3-5 year grace period, and interest rate of 1,5% ;
- ii) amortizing frozen foreign currency savings bonds, with 5 year maturity, no grace period and interest rate of 2,5%;
- iii) amortizing bonds for the settlement of liabilities to suppliers and liabilities under executive court decisions, with a 15 year maturity, 5 year grace period and interest rate of 1,5%.

These bonds are registered at the RS Central Registry of Securities and listed on Banja Luka Stock Exchange. As of end-2016, debt outstanding under these instruments totaled 360,7 million BAM (194,4 million USD).

- 3) domestic commercial bank loans;

Debt outstanding under these loans as of end-2016 amounted to 256,3 million BAM (138,1 million USD). These are fixed or variable rate amortizing loans with a maturity of 3-12 year and 0-2 year grace period.

- 4) cash payments (action plans) for reconciliation of obligations under the executive court decisions related to war damage claims and general liabilities, as stipulated by the RS Law on Domestic Debt.

Debt outstanding under this category totaled 117,2 million BAM (63,2 million USD).

Obligations for war damage claims, frozen foreign currency savings and general liabilities, which have not yet been verified, thus not representing direct government debt, are excluded from the RS MTDS debt portfolio. However, projected repayments of these obligations, based on projected bonds issuances (according to projected dynamics of verification), are included in the expenditures, which influences gross financing needs. Nevertheless, RS is required to recognize these liabilities as debt, in accordance with the existing legal framework. Debt outstanding under these liabilities amounted to 351,6 million BAM (189,5 million USD) at the end of 2016.

2.2. Strategy implementation in 2016 and evaluation of identified debt indicators

Debt management in 2016 was conducted in accordance with the guidelines defined by the Debt Management Strategy for the period 2015-2018, which has been adopted by the Republic of Srpska Government in December 2015.

For the purpose of achieving the main goal of the Strategy, i.e. providing necessary financial resources, in 2016 investment projects were financed from external concessional resources, while budget consumption was mainly financed in the domestic market.

Government faced unavailability of the financial sources for financing the budget consumption, as it was planned by the Debt Management Strategy and Budget for 2016, therefore 21,3% of the financing planned through the external floating instruments was realized, 26,4% was replaced with domestic fixed instruments and 52,3% of the financing planned through that instrument was not realized. Out of the total budget financing realized in 2016, 87,8% was provided through the domestic fixed instruments, while 12,2% was provided through external floating instruments. Share of short-term domestic instruments in budget financing in 2016 was 20,9%, while the share in total financing was 12,1%.

Out of the total financing in 2016 for investment projects, 70,7% was provided through the external fixed instruments and 82,5% was denominated in EUR. In 2016, the possibility of choosing loan conditions at the withdrawal of tranches existed for 8 tranches, withdrawn on the basis of 7 previously approved loans (66,8% of the total external loan funds withdrawn in the same year), where for 6 tranches withdrawn on the basis of 5 loans (representing 93,2% of the withdrawn funds with the mentioned possibility) the fixed rate was chosen and amounted to 1,2% in average.

Out of the five new external loans adopted by the Republic of Srpska National Assembly in 2016, four loans are denominated in EUR, one loan is contracted with fixed interest rate, two loans with floating interest rate and two loans have the possibility of choosing the interest rate at the withdrawal. These borrowings will influence the debt structure in the future period at the time of withdrawal.

Following table shows debt indicators identified by the Strategy, their target values and evaluation at the end of 2015 and 2016.

Table 3. Strategy defined indicators of debt structure and their values at the end of 2015 and 2016

Objective	Indicator	Strategy defined	Values	
			end-2015	end-2016
Foreign exchange risk				
	External debt, excluding debt in EUR (% of total)	≤ 35,0%	32,6%	30,6%
Domestic market development				
	Domestic debt (% of total)	≥ 25,0%	32,0%	33,4%
Refinancing risk				
	Average time to maturity, in years (ATM) ⁵	≥ 4	6,2	6,3
	Short term debt - original maturity (% of last year revenues)	≤ 8%	5,4%	5,5%
Interest rate risk				
	Fixed rate debt (% of total)	≥ 60%	62,5%	66,0%
Cost of debt				
	Weighted average interest rate, in % (WAIR) ⁶	≤ 3,5	2,3	2,3

Source: MoF RS

Overall, existing portfolio is associated with low costs. The weighted average interest rate across the total portfolio is 2,3%, while 1,2% for the external debt and 4,6% for the domestic debt. This is mainly the reflection of external concessional loans and low interest rates on bonds issued for reconciliation of domestic debt obligations.

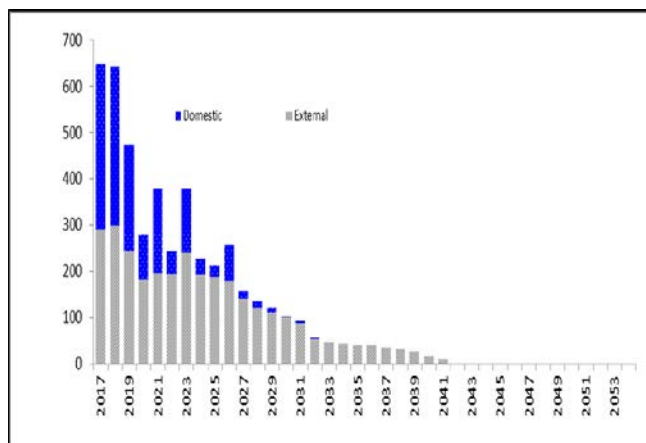
Exchange rate risk is moderate. Out of the total portfolio, 33,4% is denominated in BAM, while 35,9% is denominated in EUR. Under the current currency board arrangement, with BAM pegged to EUR, only 30,6% of the portfolio is exposed to exchange rate risk (or 26,4% after SDR decomposition and excluding the debt in EUR). In USD is denominated 3,1% of the portfolio (or 12,1% after SDR decomposition), which impose some risk, having in mind historical volatility of the USD against the EUR, as well as projections for the future.

⁵ Average time to maturity, ATM

⁶ Weighted average interest rate, WAIR

Refinancing risk is moderate. Fixed rate instruments stand for 66,0% of the total portfolio. Average time to maturity of the portfolio is 6,3 years. Average time to maturity for external debt is 7,8 years, as the result of long-term concessional loans, while average time to maturity for domestic debt is 3,4 years. Out of the total portfolio, 22,6% of domestic debt is expected to mature within 1 year, resulting from the changes in the dynamics of reconciliation of the projected domestic debt (due to decision of the European court for human rights), taking over the debt of the Public Fund for pension and disability insurance⁷, as well as using T-bills for the liquidity management. Redemption profile, presented by the Graph 1, shows an increase in the repayment of domestic and external debt over coming years, especially in 2018, when large amounts of domestic debt are coming due (T-bonds and commercial loans), while on the external side in 2018 there is a large spike due to the IMF SBA repayments.

Graph 1. Redemption profile of the existing portfolio



Source: MoF RS

The most important cost and risk indicators of the existing portfolio are shown in the following table.

Table 4: Cost and risk indicators of the existing portfolio

	External debt	Domestic debt	Total debt
Amount (in million BAM)	3.157,8	1.585,8	4.743,6
Amount (in million USD)	1.701,9	854,7	2.556,6
Nominal value of debt to GDP (%)	33,1	16,6	49,8
Present value of debt to GDP (%)	25,8	16,6	42,4
Cost of debt			
Interest to GDP (%)	0,4	0,8	1,2
Weighted average interest rate, in % (WAIR)	1,2	4,6	2,3
Refinancing risk			
Average time to maturity, in years (ATM)	7,8	3,4	6,3
Debt maturing in 1 year (% of total)	9,2	22,6	13,7
Debt maturing in 1 year (% of GDP)	3,1	3,8	6,8
Interest rate risk			
Average time to refixing, in years (ATR) ⁸	5,3	3,1	4,6
Debt refixing in 1 year (% of total)	46,4	33,3	42,0
Fixed rate debt (% of total)	56,0	86,1	66,0
Currency risk			
External debt (% of total)			66,6
Short term external debt (% of reserves)			9,2

Source: MoF RS

⁷ Portfolio of the debt taken over from the Public Fund for pension and disability insurance, as of December 31st, 2016, is characterized by 29,0% of debt maturing in 1 year, average time to refixing of 0,1 year and entire debt is with floating interest rates and high spreads (average spread is 6,0%).

⁸ Average time to refixing, ATR

Maintaining cost risk and indicators at a relatively low level is the challenge for RS, considering the change in the structure of financing sources. The current debt portfolio is characterized by relatively favorable cost and risk indicators, as a result of significant use of the concessional financing sources, as well as bonds issued for reconciliation of domestic debt obligations with a relatively low costs and long maturities. As concessional financing sources become scarce in the future, there will be needed more reliance on commercial funds from external and domestic sources, taking into account the acceptable level of increase in costs and risks.

3. Medium term debt management strategy

The main RS debt management goal is to provide financial resources for financing the approved investment projects, for refinancing RS government debt and RS government budget execution at minimal costs and risks, while taking into account development of the economy and domestic securities market, as well as debt limits specified in the law.

In order to achieve the main goal, the following goals of borrowing are defined:

- 1) to ensure continuous borrowing opportunities at the domestic financial market and explore borrowing opportunities at the international financial market, under acceptable terms;
- 2) to minimize costs subject to acceptable level of risk, taking into account development of the domestic securities market.

In the following medium term period (2017-2020), the above mentioned goals will be achieved through the *Strategy of Diversifying Financing Sources and Instruments*, which has been chosen as preferred strategy among four analyzed medium term debt strategies⁹. This strategy achieves low costs with acceptable level of risk, reflecting continued utilization of the available support from multilateral creditors, while at the same time improving the RS position in the context of future financing sources, through domestic financial market development, analyzing opportunities and preparations for initial participation in the international capital market, given the favourable conditions. At the end of observed period, comparing to end-2016, solvency indicators (nominal and present value of debt as share of GDP), as well as liquidity indicators (debt maturing in 1 year as a share of total and share of GDP, service of interest as a share of GDP and share of revenues) are improved, refinancing risk of domestic debt (measured by average time to maturity) is decreased, as well as interest rate risk (measured by average time to refixing, debt refixing in 1 year as a share of total, fixed rate debt as a share of total) and exchange rate risk (measured by nominal amount of external debt excluding part in EUR, as well as short term external debt as % of reserves).

During the strategy implementation, all borrowing activities will be performed in accordance with the following best practice principles:

- 1) activities at the domestic and international financial markets will be performed professionally, transparently, expediently and in a timely manner, while contracted obligations will be fulfilled in the due time and amount;

⁹ More details can be found in Annex 2.

- 2) selection of the borrowing conditions will be (in priority order) focused at government debt refinancing, providing funds for financing the budget execution, compliance with debt covenants set in the Fiscal discipline law and achievement of the identified debt indicators;
- 3) when planning borrowing activities, attention will not be focused on the comparative short term advantages of each specific borrowing transaction, but rather on the development and enhancement of long term borrowing opportunities in financial market;
- 4) in general, the most favorable borrowing terms and conditions will be ensured, while taking into account principle under the 3).

In order to implement the preferred strategy, following basic tasks of the RS MoF have been set out:

- 1) developing and maintaining relations with partners and investors at the domestic and international market;
- 2) developing and, if necessary, revising medium term Borrowing Plan;
- 3) publishing auction calendar on the quarterly basis and, whenever possible, providing information on planned issuances for a longer time period;
- 4) continuously maintaining the offer of medium and long term financial instruments at the domestic financial market, with a tendency to expand the range of instruments in order to facilitate the development of domestic securities market;
- 5) identifying the specific debt indicators - maturity profile, interest rate structure, cost of borrowing, domestic debt outstanding, currency risk exposure (excluding the debt in EUR, considering currency board arrangement) and specifying targets for cost and risk indicators;
- 6) monitoring of the debt portfolio in relation to identified debt indicators and reporting on their values on an annual basis.

In the medium term, the RS MoF task will be to analyze opportunities and harmonize practices and procedures related to domestic securities market with those of EU, if it's feasible in the given time.

In accordance with the defined objectives and basic principles of debt management, considering RS MTDS debt composition and situation at the financial markets, previously defined parameters of the RS MTDS debt portfolio structure will be kept, as shown in the table 3.

Annex 1. Scope of the RS MTDS

		Included (✓) / Excluded (X)	Reasoning behing including into MTDS	Amounts as of 12/31/2016	
				mil. BAM	mil. USD
1	Total debt by the Law (1.1.+1.2.+2.a.)		100,0%	5.440,0	2.931,9
1.1.	External debt		58,2%	3.168,0	1.707,4
1.1.1.	Republika Srpska			1.988,2	1.071,6
1.1.1.1.	“Relevant” external debt	✓	Direct liability with with clear repayment obligation	1.973,6	1.063,7
1.1.1.2.	“Relevant external debt” - Paris Club Germany	X	Direct liability with repayment method not defined yet	9,1	4,9
1.1.1.3.	Direct external debt	✓	Direct liability with with clear repayment obligation	5,6	3,0
1.1.2.	Municipalities			86,6	46,7
1.1.2.1.	“Relevant” external debt	✓	Indirect liability with clear repayment obligation	86,6	46,7
1.1.3.	SOEs and Investment Development Bank			1.093,1	589,1
1.1.3.1.	“Relevant” external debt	✓	Indirect liability with clear repayment obligation	1.042,1	561,6
1.1.3.3.	Direct external debt	✓	Indirect liability with clear repayment obligation	51,1	27,5
1.2.	Domestic debt		41,7%	2.267,8	1.222,3
1.2.1.	Republika Srpska			1.800,2	970,2
1.2.1.1.	Projected domestic debt			861,5	464,3
1.2.1.1.1.	Issued bonds (frozen foreign currency savings, war claims, suppliers, executive court decisions)	✓	Direct liability with with clear repayment obligation	360,7	194,4
1.2.1.1.2.	Planned bond issuances (war claim bonds)	✓	Direct liability with with clear repayment obligation	31,9	17,2
1.2.1.1.3.	Planned bond issuances (frozen foreign currency savings, war claims, general liabilities)	X	Direct liability depending on the verification process	317,7	171,2
1.2.1.1.4.	Cash payments (general liabilities, war claims, frozen foreign currency savings)	✓	Direct liability with with clear repayment obligation	117,2	63,2
1.2.1.1.5.	Planned cash payments (general liabilities, war claims, frozen foreign currency savings)	X	Direct liability depending on the verification process	33,9	18,3
1.2.1.2.	T-bonds	✓	Direct liability with with clear repayment obligation	728,0	392,4
1.2.1.3.	T-bills	✓	Direct liability with with clear repayment obligation	88,0	47,4
1.2.1.4.	Commercial bank loans	✓	Direct liability with with clear repayment obligation	122,7	66,2
1.2.2.	Municipalities	X	Neither direct nor indirect liability	285,7	154,0
1.2.3.	Social security funds			182,0	98,1
1.2.3.1.	Direct debt	X	Neither direct nor indirect liability	48,5	26,1
1.2.3.2.	Indirect debt	✓	Indirect liability with clear repayment obligation	133,5	72,0
2	Guaranties (a+b+u)			350,5	188,9
a	Activated RS guaranties	✓	Called guaranties included in debt	4,2	2,3
b	Non activated RS guaranties	X	Guaranties yet to be called	346,3	186,6
u	Implicit RS guaranties	X	Debt of SOEs and municipalities and other forms of implicit guaranties	0,0	0,0
3	Total debt included in MTDS		87,2%	4.745,2	2.557,4
4	Total debt excluded from MTDS		12,8%	694,8	374,4

Source: MoF RS

Annex 2. Analytical underpinnings

This section presents scenario analysis, description of alternative borrowing strategies for the RS and consideration of their costs and risks. Debt service projections are generated for each strategy under the baseline and alternative scenarios, applying interest rate and exchange rate shocks. Costs are calculated based on the debt service profile generated under the baseline scenario, while risk is measured as debt service increase due to the interest rate and exchange rate shocks applied.

I. Scenario analysis

For the purpose of sensitivity analysis of the strategies, following shocks are applied:

- **Exchange rate shock:** 30% depreciation against USD in the second year of the period, comparing to the initial exchange rate projection for the same year;
- **Interest rate shock:** comparing to the baseline scenario it's applied 4% increase in interest rate for domestic short term and external long term instruments and 2% increase in interest rate for domestic medium term instruments, which contributes to the flattening of the yield curve;
- **Combined shock:** comparing to initial projection, it's applied 20% depreciation against USD, combined with 2% interest rate shock for short term domestic and long term external instruments and 1% interest rate shock for medium term domestic instruments.

II. Description of analyzed strategies

The analyses reflect rigidities of the financing options. Structure of financing budget expenditures in the current year (defined by the RS budget), as well as structure of financing the approved investment projects (based on the latest data provided by the project implementation units for the period 2017-2020), is the same in all the observed strategies. The instruments for financing those needs are predetermined. Besides that, all the strategies include the same dynamics of verification and reconciliation of domestic debt obligations (defined by the Law on domestic debt). Variations in strategies relates primarily to the sources of financing budget expenditures (including refinancing needs) in the next 3 years (2018-2020) - 45,7% of the total financing needs over the projection period (2017-2020).

Available options for RS are limited. After a long period of using the concessional multilateral and bilateral financing, that sources are now becoming scarce due to the level of development, hence they are used mostly for financing investment projects. Therefore, there is a need for diversification of the financing sources, having in mind limitations of the domestic market (shallow and undeveloped) and international market (country credit rating, relatively modest financing needs which may increase costs and constrain possibilities for bond issuances).

The following strategies were considered:

- **Strategy 1 - Status quo.** Under this strategy, the existing structure of financing budget expenditures in the current year is maintained across the period.
- **Strategy 2 - Accessing global capital market.** Financing needs are met through issuing Eurobonds or similar external commercial instruments. Reliance on multilateral creditors is substantially reduced and except T-bills no other domestic financing instruments are used.
- **Strategy 3 - Diversifying financing sources and instruments.** Share of external financing is decreasing during the period, in favor of domestic financing. Investment projects are financed from the external sources, as a result of maximizing utilization of access to concessional sources of financing (WB, EIB, EBRD, CEB, etc.), contributing to the reduction of refinancing risk and cost. Budget expenditures are financed both from external (IMF, WB), and domestic sources.

Diversification of instruments at the international market is carried out through analyzing the conditions and procedures for issuing Eurobonds and taking loans, while at the domestic market it's carried out by continuous issuance of instruments with maturities of 3, 5, 7 and 10 years and bullet repayment, while maintaining the volume of 7 year and 10 year instruments across the period, at the level which contributes to the decrease in refinancing risk and interest rate risk (having in mind those are fixed instruments), with the acceptable level of costs, as well as exploring the possibilities of issuing bonds with longer maturities.

- **Strategy 4 - Intensifying domestic market development.** This strategy implies absence of support from multilateral creditors and external financing sources, which requires reliance on domestic market exclusively. The volume of domestic instruments is increased, with domestic portfolio shifting towards short term instruments, due to constraints in domestic banking sector (exposure to the public sector, internal policies of limiting the maturities for placements in public sector securities, etc.).

Table 5: Structure of financing instruments in the observed strategies

Instruments for new financing	S1	S2	S3	S4
External Var USD	0,3%	0,3%	0,3%	0,3%
External Var EUR	11,9%	8,3%	10,7%	7,9%
External Fix USD	13,1%	12,9%	12,9%	12,7%
External Fix EUR	12,7%	13,0%	12,9%	13,3%
IMF Var USD	21,4%	7,6%	16,9%	7,2%
Eurobonds	0,0%	37,1%	0,0%	0,0%
T-bills Fix DX	10,8%	9,6%	13,4%	17,7%
T-bonds 3y Fix DX	3,3%	1,2%	2,6%	13,4%
T-bonds 5y Fix DX	13,2%	4,7%	9,4%	14,6%
T-bonds 7y Fix DX	5,9%	2,1%	11,8%	7,5%
Domestic commercial bank 10 y Fix	0,8%	0,7%	0,7%	0,7%
T-bonds 10y Fix DX	6,6%	2,4%	8,2%	4,8%
External	59%	79%	54%	41%
Domestic	41%	21%	46%	59%

Source: MoF RS

I. Costs and risks of the observed strategies

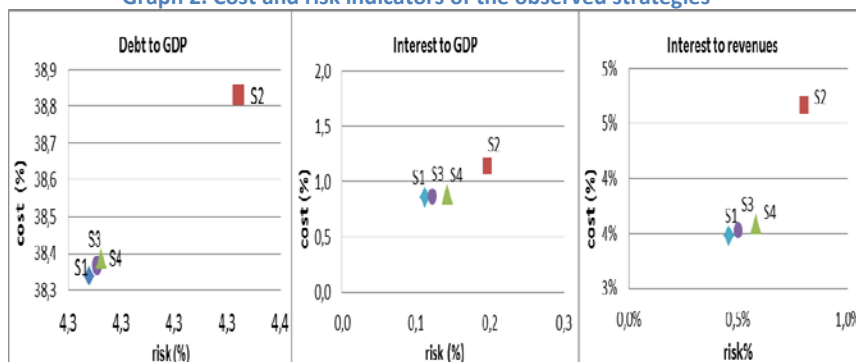
The performance of the selected four strategies was assessed under the baseline and alternative scenarios, with applied shocks. Key cost indicators were calculated to determine how the strategies respond to a set of shocks. The debt/GDP ratio is important when analyzing those changes in the debt outstanding resulting from

exchange rate movements, as it includes valuation effects. Interest payments to GDP and to revenues show the potential impact of each strategy on the RS budget. For a given financing strategy, the risk represents the difference between costs under the baseline scenario

(i.e., after applying certain

shocks to the baseline). The maximal risk deriving from three stress scenarios is used to compare the risk associated with each of the borrowing strategies. For the purpose of comparison, the focus is on the outcome at the end of the time horizon, i.e. 2020. Standard cost and risk indicators for the four strategies are shown in the Chart 2 and Table 6.

Graph 2. Cost and risk indicators of the observed strategies



Source: MoF RS

Table 6: Cost and risk indicators at the end of 2015 and 2016, as well as indicators of the observed strategies at the end of 2020

	2015	2016	C1	C2	C3	C4
Debt/GDP (%)	48,3	49,8	38,3	38,8	38,4	38,4
Debt PV/GDP (%)	41,1	42,4	32,9	33,8	33,0	33,3
Cost of borrowing						
Interest/GDP (%)	1,1	1,2	0,9	1,1	0,9	0,9
Weighted average interest rate, in % (WAIR)	2,2	2,3	2,1	2,8	2,1	2,2
Refinancing risk						
Debt maturing in 1 year (% of total)	12,1	13,7	9,6	9,2	10,1	12,5
Debt maturing in 1 year (% of GDP)	5,8	6,8	3,7	3,6	3,9	4,8
Average time to maturity for external debt, in years (ATM)	7,6	7,8	7,2	6,5	7,3	7,4
Average time to maturity for domestic debt, in years (ATM)	3,2	3,4	3,3	2,8	3,6	2,9
Average time to maturity for total debt, in years (ATM)	6,1	6,3	6,2	5,8	6,3	5,9
Interest rate risk						
Average time to refixing, in years (ATR)	4,1	4,6	4,5	4,5	4,6	4,6
Debt refixing in 1 year (% of total)	45,4	42,0	39,3	31,2	37,6	34,8
Fixed rate debt (% of total)	62,5	66,0	67,5	75,4	69,9	75,1
Currency risk						
External debt (% of total)	68,0	66,6	74,6	82,6	72,5	67,8
External debt, excluding debt in EUR (% of total)	32,6	30,6	34,7	28,4	32,9	28,9
Short term external debt (as % of reserves)	7,4	9,2	5,9	5,9	5,9	5,9

Source: MoF RS

In terms of interest rate costs and stock of debt, Strategies 1 and 3 bear the lowest cost, Strategy 4 is similar with the higher level of cost, while the highest cost is shown under the Strategy 2. Costs are increased under Strategy 2, i.e. Strategy 4, based on the greater reliance on more expensive external, i.e. domestic financing sources, respectively. The higher share of multilateral financing under Strategy 1 and 3 reduces overall costs and therefore also risks (refinancing and refixing risk). The present value of debt is the lowest under Strategy 1 and 3, due to reduced utilization of commercial instruments, both from external (comparing to Strategy 2) and domestic sources (comparing to Strategy 4). On the other hand, Strategy 3 bears slightly higher currency risk than other strategies due to the greater share of external concessional instruments that are exposed to exchange rate fluctuations.

Refinancing and refixing risk vary across all strategies. Strategy 3 achieves the longest average time to maturity for the domestic and total debt, with slightly lower average time to maturity for external debt, comparing to Strategy 4 which shows the best result in that terms, due to the higher share of external financing with shorter maturity, comparing to existing portfolio. For domestic debt, longer maturities result from the domestic debt portfolio shifting towards long term bonds. Average time to maturity (for domestic, external and total debt) decreases significantly under Strategies 2 and 4, comparing to Strategies 1 and 3, due to the reliance on relatively short term Eurobonds (in Strategy 2) and issuing domestic T-bills (in Strategies 2 and 4). Average time to refixing is similar over strategies, with a slight decrease under Strategies 1 and 2, which reflects higher share of short term instruments at the domestic and international market, comparing to Strategies 3 and 4.

Certain strategies imply significant increase in currency risk. Comparing to portfolio in 2016, at the end of 2020 share of debt denominated in foreign currencies is increasing significantly under all the observed strategies. This reflects the strategy objectives in terms of moving towards increased use of external concessional, i.e. commercial sources of financing (in strategies 1 and 2), as well as lower nominal amount of total debt outstanding at the end of 2020. It is important to note, however, that actual currency risk is softened by the currency board arrangement, which implies fixed exchange rate of the local currency against the Euro, as well as the fact that nominal amount of external debt at the end of 2020 is lower under strategies 3 and 4, comparing to the portfolio in 2016.

Based on all the considerations given, Strategy 3 is the chosen strategy for RS for the following period. Comparing to other strategies, this Strategy achieves relatively low costs and acceptable risks, due to the available support from multilateral creditors. At the same time, the strategy provides good position for RS in terms of potential future funding sources, through supporting domestic market development and analyzing possibilities for the initial participation in the international capital market. Under this strategy, average time to maturity for domestic and total debt is the longest, as well as the longest average time to refixing, while financing costs, foreign currency risk and refixing risk are at the acceptable levels. Redemption profile is similar to other strategies, with the slightly increase in period 2023-2026, driven by the IMF tranches coming due, as well as significant obligations coming due on the basis of issuance of medium term domestic instruments planned in the following medium term period.