

REPUBLIC OF SRPSKA

GOVERNMENT

**REPUBLIC OF SRPSKA DEBT MANAGEMENT STRATEGY
FOR THE PERIOD 2016-2019**

December, 2016

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1. Goals and assumptions

Republic of Srpska Medium-term debt management strategy (RS MTDS) specifies the medium term goals and operations within 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 (IRB RS).

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 the 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 its' 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 enhance transparency (as stipulated by the Fiscal Discipline Law);
- 2) Macroeconomic projections and fiscal framework as presented in the RS ERP 2017-2019¹ (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 except the one which refers to the Public Fund for pension and disability insurance, which became part of the treasury system as of January 1st, 2016;

¹ RS Economic Reform Programme for the period 2017-2019 presents detailed assumptions for the given projections, as well as associated risks for their realization.

- 5) New issuance of war damage and frozen currency savings bonds will proceed in accordance with the projections included in the RS ERP 2017-2019;
- 6) Central Bank of Bosnia and Herzegovina will continue to adhere to 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 and Republic of Srpska 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 2012-2015, forecast for 2016 and projections for the period 2017-2019

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
| GDP | | | | | | | | |
| GDP nominal, mil.BAM | 8.585 | 8.761 | 8.847 | 9.153 | 9.501 | 9.890 | 10.325 | 10.790 |
| Population, in mil. | 1,4 | 1,4 | 1,4 | 1,4 | 1,4 | 1,4 | 1,4 | 1,4 |
| GDP per capita, in BAM | 6.006 | 6.146 | 6.225 | 6.465 | 6.725 | 7.015 | 7.340 | 7.686 |
| GDP growth, nominal (%) | -1,1 | 2,1 | 1,0 | 3,5 | 3,8 | 4,1 | 4,4 | 4,5 |
| GDP growth, real (%) | -1,1 | 1,9 | 0,2 | 2,6 | 2,9 | 3,0 | 3,2 | 3,3 |
| Inflation measured by the currency price index (CPI), average annual rate | 2,1 | 0,0 | -1,2 | -1,4 | -1,2 | 0,1 | 1,1 | 1,4 |
| Real growth rates % | | | | | | | | |
| GDP growth, real | -1,1 | 1,9 | 0,2 | 2,6 | 2,9 | 3 | 3,2 | 3,3 |
| Private consumption* | 2,9 | 1,8 | 2,1 | 1,9 | 1,9 | 2,1 | 2,2 | 2,2 |
| Public consumption | 2,6 | 0,8 | 2 | -1,8 | 1,1 | 0,8 | 0,9 | 0,7 |
| Gross investments in fixed assets | 11 | -5 | 5,4 | -0,2 | 3,1 | 3,2 | 3,4 | 3,8 |
| Nominal growth rates % | | | | | | | | |
| Average net salaries, in BAM | 818 | 808 | 825 | 831 | 836 | 843 | 850 | 859 |
| Import of goods, in mil. BAM | 4.488 | 4.558 | 4.946 | 4.369 | 4.346 | 4.503 | 4.719 | 4.955 |
| Import of goods, annual growth (%) | -2,0 | 1,6 | 8,5 | -11,7 | -0,5 | 3,6 | 4,8 | 5,0 |
| Export of goods, in mil. BAM | 2.375 | 2.604 | 2.692 | 2.614 | 2.792 | 2.956 | 3.169 | 3.404 |
| Export of goods, annual growth (%) | -7,3 | 9,7 | 3,4 | -2,9 | 6,8 | 5,9 | 7,2 | 7,4 |
| Export over Import (%) | 52,9 | 57,1 | 54,4 | 59,8 | 64,2 | 65,7 | 67,2 | 68,7 |
| Unemployment rate (%) | 25,6 | 27,0 | 25,7 | 25,2 | 24,8 | 24,4 | 24,0 | 23,6 |

Source: RS ERP 2017-2019, RS MoF

² [Actual BH credit rating](#) is „B/stable outlook“ (Standard and Poors) and „B3/stable outlook“ (Moody's). According to the latest review, Republic of Srpska credit rating is „B3/stable outlook“ (Moody's).

³ European Central Bank; [Press release as of 8 December, 2016](#)

Table 2: Fiscal framework for the period 2016-2019⁴

| | Execution forecast 2016 | Budget 2017 | RS ERP 2018 | RS ERP 2019 |
|--|----------------------------|----------------|----------------|----------------|
| A. BUDGET REVENUES (I+II+III+IV) | 2.469,1 | 2.571,7 | 2.638,1 | 2.693,6 |
| I Tax revenues | 2.288,9 | 2.369,6 | 2.434,3 | 2.485,1 |
| II Non tax revenues | 180,2 | 202,1 | 203,8 | 208,5 |
| 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) | 2.336,8 | 2.424,4 | 2.407,7 | 2.411,1 |
| I Current expenditures | 2.228,9 | 2.286,8 | 2.275,3 | 2.275,3 |
| II Transfers among the budgetary units | 103,5 | 131,1 | 127,3 | 130,7 |
| III Budget reserve | 4,4 | 6,5 | 5,0 | 5,0 |
| C. GROSS BUDGET SURPLUS/DEFICIT (A-B) | 132,3 | 147,3 | 230,4 | 282,5 |
| D. NET EXPENDITURES FOR NON FINANCIAL ASSETS | -32,2 | -78,7 | -54,9 | -63,6 |
| E. BUDGET SURPLUS/DEFICIT (C+D) | 100,2 | 68,6 | 175,5 | 218,9 |
| F. NET FINANCING (G+H) | -100,2 | -68,6 | -175,5 | -218,9 |
| G. NET PROCEEDS FROM FINANCIAL ASSETS | 1,0 | 0,1 | 0,0 | 0,2 |
| H. NET BORROWING | -101,2 | -68,8 | -175,5 | -219,1 |

Source: RS MoF

2. Existing debt

2.1. Portfolio review

The composition of the RS debt for the MTDS analysis (RS MTDS debt) is consistent with the implicit debt management strategy implemented in the past, which involved maximizing external concessional borrowing. In particular, 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 5,3 billion BAM (2,9 billion USD) i.e. 48,3% GDP-a, as of 31.12.2015. External MTDS debt accounted for 68,0% of the total (3,0 billion BAM or 1,7 billion USD, i.e. 32,8% of GDP), while domestic debt accounted for 32,0% of total (2,3 billion BAM or 1,3 billion USD, i.e. 15,5% of GDP).

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

The external MTDS debt is composed of:

- 1) Loans contracted through the BH Ministry of Finance and treasury;
- 2) Direct external debt (debt directly contracted to external creditors); and
- 3) "old" external debt (debt incurred before April 2nd 1992).

External borrowing is primarily from multilaterals (79,1% of the total external debt outstanding). The largest multilateral creditors are The World Bank (IDA or IBRD), The European Bank for Reconstruction and Development (EBRD), The European Investment Bank (EIB), and International Monetary Fund (IMF).

Domestic MTDS debt is composed of:

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

The amount of T-bills outstanding was 86,7 million BAM at the end of 2015 (48,5 million USD), with maturities of 6 months. Debt outstanding under medium term T-bonds (4 and 5 year amortization bonds and 7 year bullet bonds) amounted to 534,5 million BAM (298,6 million USD).

- 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, at an interest rate of 1,5%;
 - ii) amortizing frozen foreign currency savings bonds, with 5 year maturity, no grace period and 2,5% interest rate; and
 - 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 1,5% interest rate;

These bonds are registered at the RS Central Registry of Securities and listed on Banja Luka Stock Exchange. As of end-2015, debt outstanding under these instruments totaled 366,8 million BAM (204,9 million USD).

- 3) Domestic commercial bank loans;

Debt outstanding under these loans as of end-2015 amounted to 256,8 million BAM (143,5 million USD). These are generally fixed or variable rate amortizing loans with a maturity of 4-12 years and 1-2 year grace period.

- 4) cash payments (action plans) for 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 131,3 million BAM (73,3 million USD).

War damage claims, frozen foreign currency savings and general liabilities, which are not yet being verified, hence not representing direct government debt, are excluded from the RS MTDS debt portfolio. However, projected repayments of these liabilities, on the basis of projected bonds issuances (based on the 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 403,5 million BAM (225,4 million USD) at the end of 2015.

2.2. Strategy implementation in 2015

Guidelines for debt management, defined for the first time in the Debt management Strategy for the period 2015-2018, couldn't be implemented in 2015, since the document is adopted at the end of 2015 and all the events throughout the year were given at that point. Following table shows strategy defined indicators and their evaluation.

Table 3. Strategy defined indicators of debt structure and its' values at the end-2015

| Objective | Indicator | Values | |
|------------------------------------|---|------------------|----------------|
| | | strategy defined | as of end 2015 |
| Foreign exchange risk | | | |
| | External debt, excluding debt in EUR (% of total) | ≤ 35 | 34,8 |
| Domestic market development | | | |
| | Domestic debt (% of total) | ≥ 25 | 32,1 |
| Refinancing risk | | | |
| | Average time to maturity, in years (ATM) ⁵ | ≥ 4 | 6,1 |
| | Short term debt - original maturity (% of last year revenues) | ≤ 8 | 5,4 |
| Interest rate risk | | | |
| | Fixed rate debt (% of total) | ≥ 60 | 62,5 |
| Cost of debt | | | |
| | Weighted average interest rate, in % (WAIR) ⁶ | ≤ 3,5 | 2,2 |

Source: RS MoF

Overall, portfolio is associated with low costs. The weighted average interest rate across the portfolio is 2,2%, comprising 1,2% for external debt and 4,5% for domestic debt. This is the reflection of external concessional loans and low interest rates on bonds issued for reconciliation of domestic debt obligations.

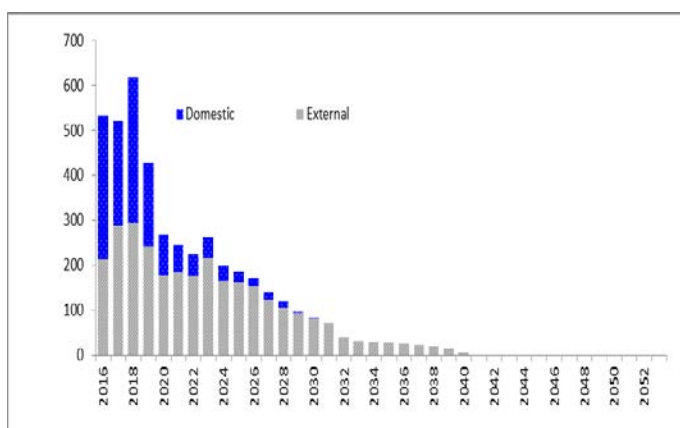
Exchange rate risk is moderate. 32,0% of the total portfolio is denominated in BAM, while 35,4% is denominated in EUR. Under current currency board arrangement, with BAM pegged to EUR, only 32,6% of the portfolio is exposed to exchange rate risk (or 23,6% after SDR decomposition and excluding the debt in EUR). The fact that 4,6% of the portfolio is denominated in USD (or 14,6% after SDR decomposition) impose some risk, having in mind historical volatility of the USD against the Euro, 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 account for 62,5% of the total portfolio. The average time to maturity is 6,1 years. The average time to maturity for external debt is 7,6 years, reflecting long-term concessional financing, while the average time to maturity for domestic debt is 3,2 years. Nearly 23% 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) as well as using the 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, reflecting bunching of domestic debt repayments related to 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: RS MoF

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) | 3.002,9 | 1.415,8 | 4.418,8 |
| Amount (in million USD) | 1.677,5 | 790,9 | 2.468,5 |
| Nominal value of debt to GDP (%) | 32,8 | 15,5 | 48,3 |
| Present value of debt to GDP (%) | 25,6 | 15,5 | 41,1 |
| Cost of debt | | | |
| Interest to GDP (%) | 0,4 | 0,7 | 1,1 |
| Weighted average interest rate, in % (WAIR) | 1,2 | 4,5 | 2,2 |
| Refinancing risk | | | |
| Average time to maturity, in years (ATM) | 7,6 | 3,2 | 6,1 |
| Debt maturing in 1 year (% of total) | 7,1 | 22,5 | 12,1 |
| Debt maturing in 1 year (% of GDP) | 2,3 | 3,5 | 5,8 |
| Interest rate risk | | | |
| Average time to refixing, in years (ATR) ⁷ | 4,7 | 2,8 | 4,1 |
| Debt refixing in 1 year (% of total) | 50,7 | 34,2 | 45,4 |
| Fixed rate debt (% of total) | 51,5 | 85,8 | 62,5 |
| Currency risk | | | |
| External debt (% of total) | | | 68,0 |
| Short term external debt (% of reserves) | | | 7,4 |

Source: RS MoF

⁷ Average time to refixing, ATR

RS is facing the challenge of maintaining relatively benign risk and cost indicators in the context of change in the structure of financing.

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

3. Medium term debt management strategy

The main RS debt management goal is to provide financial resources for financing investment projects, refinancing RS government debt and RS government budget execution at minimal costs and risks, while taking into account the 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 borrowing objectives are defined:

- a) to ensure continuous borrowing opportunities in the domestic financial market and explore borrowing opportunities in the international financial markets, under optimal terms and conditions, and
- b) to minimize costs subject to acceptable level of risk, while facilitating development of domestic securities market.

In the following medium term period (2017-2019), the above mentioned goals will be achieved through the *Diversifying Financing Sources and Instruments Strategy*, which has been chosen as preferred strategy among four analyzed medium term debt strategies⁸.

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 supporting domestic financial market development, analyzing opportunities and preparing for initial participation in the international capital market, given the favourable conditions. At the end of observed period, comparing to end-2015, 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).

When implementing the strategy, all borrowing activities will comply with the following best practice principles:

⁸ More details can be found in Annex 2

- 1) activities in domestic and international financial markets shall be performed professionally, transparently, expediently and in a timely manner, while contracted obligations shall be fulfilled in the due time and amount;
- 2) selection of the borrowing strategy and its' conditions shall 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 government debt structure parameters;
- 3) when planning borrowing activities, attention shall 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 markets;
- 4) in general, the most favorable terms and conditions for each borrowing transaction shall 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 on domestic and international market;
- 2) developing and, if necessary, revising the medium term Borrowing Plan;
- 3) publishing domestic securities borrowing plan on a quarterly basis and, whenever possible, providing information about planned issuances for a possibly longer time period;
- 4) continuously maintaining offer of medium to long term financial instruments in the domestic financial market, with a tendency to expand the range of instruments facilitating the development of domestic securities market;
- 5) identifying the specific debt structure indicators - maturity profile, interest rate cost and structure, domestic debt outstanding, non EUR foreign exchange exposure (having in mind 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 the annual basis.

In the medium term, a further task of the RS MoF will be to analyze opportunities and harmonize practices and procedures relating 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, while taking into consideration RS MTDS debt composition and situation in 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 behind including into MTDS | Amounts as of 31.12.2015. | |
|-------------|--|--------------------------------|--|---------------------------|----------------|
| | | | | mil. BAM | mil. USD |
| 1 | Total debt by the Law (1.1. + 1.2. + 2.a.) | | 100,0% | 5.277,1 | 2.948,0 |
| 1.1. | External debt | | 57,1% | 3.012,1 | 1.682,7 |
| 1.1.1. | Republika Srpska | | | 1.951,4 | 1.090,1 |
| 1.1.1.1. | “Relevant” external debt | ✓ | Direct liability with with clear repayment obligation | 1.935,0 | 1.081,0 |
| 1.1.1.2. | “Relevant external debt”-Paris Club Germany | X | Direct liability with repayment method not defined yet | 9,1 | 5,1 |
| 1.1.1.3. | Direct external debt | ✓ | Direct liability with with clear repayment obligation | 7,4 | 4,1 |
| 1.1.2. | Municipalities | | | 79,1 | 44,2 |
| 1.1.2.1. | “Relevant” external debt | ✓ | Indirect liability with clear repayment obligation | 79,1 | 44,2 |
| 1.1.3. | SOEs and Investment Development Bank | | | 981,6 | 548,4 |
| 1.1.3.1. | “Relevant” external debt | ✓ | Indirect liability with clear repayment obligation | 927,4 | 518,1 |
| 1.1.3.3. | Direct external debt | ✓ | Indirect liability with clear repayment obligation | 54,2 | 30,3 |
| 1.2. | Domestic debt | | 42,8% | 2.260,4 | 1.262,7 |
| 1.2.1. | Republika Srpska | | | 1.614,6 | 902,0 |
| 1.2.1.1. | Projected domestic debt | | | 937,2 | 523,5 |
| 1.2.1.1.1. | Issued bonds (frozen foreign currency savings, war claims, suppliers, executive court decisions) | ✓ | Direct liability with clear repayment obligation | 366,8 | 204,9 |
| 1.2.1.1.2. | Planned bond issuances (war claim bonds) | ✓ | Direct liability with clear repayment obligation | 35,6 | 19,9 |
| 1.2.1.1.3. | Planned bond issuances (frozen foreign currency savings, war claims, general liabilities) | X | Direct liability depending on the verification process | 366,0 | 204,5 |
| 1.2.1.1.4. | Cash payments (general liabilities, war claims, frozen foreign currency savings) | ✓ | Direct liability with clear repayment obligation | 131,3 | 73,3 |
| 1.2.1.1.5. | Planned cash payments (general liabilities, war claims, frozen foreign currency savings) | X | Direct liability depending on the verification process | 37,4 | 20,9 |
| 1.2.1.2. | T-bonds | ✓ | Direct liability with clear repayment obligation | 534,5 | 298,6 |
| 1.2.1.3. | T-bills | ✓ | Direct liability with clear repayment obligation | 86,8 | 48,5 |
| 1.2.1.4. | Commercial bank loans | ✓ | Direct liability with clear repayment obligation | 56,2 | 31,4 |
| 1.2.2. | Municipalities | X | Neither direct nor indirect liability | 306,9 | 171,4 |
| 1.2.3. | Social security funds | | | 338,9 | 189,3 |
| 1.2.3.1. | Direct debt | X | Neither direct nor indirect liability | 138,3 | 77,2 |
| 1.2.3.2. | Indirect debt | ✓ | Indirect liability with clear repayment obligation | 200,6 | 112,1 |
| 2 | Guaranties (a+b+c) | | | 309,9 | 173,1 |
| a | Activated RS guaranties | ✓ | Called guaranties included in debt | 4,7 | 2,6 |
| b | Non activated RS guaranties | X | Guaranties yet to be called | 305,3 | 170,5 |
| c | 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 | | 83,8% | 4.419,4 | 2.468,9 |
| 4 | Total debt excluded from MTDS | | 16,2% | 857,7 | 479,1 |

Source: RS MoF

Annex 2. Analytical underpinnings

This section presents scenario analysis and alternative borrowing strategies for the RS in terms of costs and risks. Debt servicing flows are generated for each strategy under a baseline and alternative scenarios, applying interest rate and exchange rate shocks. Costs are calculated based on the flows generated under the baseline scenario, while risk is measured as the 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:** 20% depreciation against USD comparing to initial projection, 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 (based on the RS budget execution forecast), as well as structure of financing the approved investment projects (based on the last data provided by the project implementation units for the period 2016-2019), 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) and taking over debt of the Public fund for pension and disability insurance in 2016. Variations in strategies relates primarily to the sources of financing budget expenditures (including refinancing needs) in the next 3 years - approximately 49% of the total financing needs over the projection period.

RS is facing relatively limited options. 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. RS must now diversify sources of financing, having in mind limitations of domestic market (shallow and undeveloped) and international market (country credit rating, relatively modest financing needs which may increase costs and constrain possibilities of 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 markets.** 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, European Commission, WB) and domestic sources. Diversification of instruments at the international market is carried out through analyzing the conditions and procedures for Eurobonds issuance, while at the domestic market it's carried out by introducing instruments with maturities of 3, 5, 7 and 10 years and bullet repayment, while maintaining the volume of 7 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.
- **Strategy 4 - Intensifying domestic market development.** This strategy implies absence of multilateral creditors' support, which requires reliance on domestic market exclusively. The volume of domestic issuances is increased, with a reorientation of the domestic portfolio 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

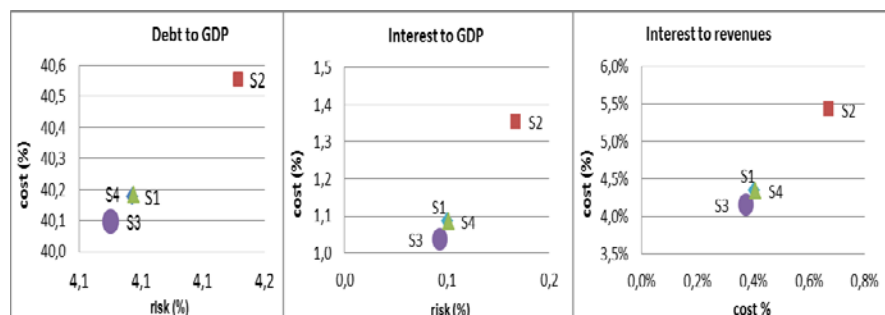
| Instruments for new financing | S1 | S2 | S3 | S4 |
|-----------------------------------|------------|------------|------------|------------|
| External Var USD | 0,3% | 0,3% | 0,3% | 0,3% |
| External Var EUR | 0,9% | 1,0% | 3,4% | 0,9% |
| External Fix USD | 12,6% | 12,7% | 12,6% | 12,2% |
| External Fix EUR | 16,2% | 16,5% | 18,0% | 15,5% |
| IMF Var USD | 8,5% | 1,5% | 14,1% | 1,4% |
| Eurobonds | 0,0% | 49,5% | 0,0% | 0,0% |
| T-bills Fix DX | 14,5% | 10,0% | 14,6% | 22,5% |
| T-bonds 3y Fix DX | 5,5% | 0,9% | 2,5% | 18,4% |
| T-bonds 5y Fix DX | 17,3% | 3,0% | 10,0% | 15,5% |
| T-bonds 7y Fix DX | 14,0% | 2,4% | 14,7% | 8,5% |
| Domestic commercial bank 10 y Fix | 0,5% | 0,5% | 0,5% | 0,5% |
| T-bonds 10y Fix DX | 9,7% | 1,7% | 9,3% | 4,4% |
| External | 39% | 81% | 48% | 30% |
| Domestic | 61% | 19% | 52% | 70% |

Source: RS MoF

III. Costs and risks of 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 the change in the outstanding debt resulting

Graph 2. Cost and risk indicators of the observed strategies



Source: MFRS

from exchange rate movements, as it includes valuation effects. Interest payments to GDP and to revenues show potential impact of each strategy on the government budget. For a given financing strategy, the risk represents the difference between costs under a baseline scenario comparing to risk 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. 2019. Standard cost and risk indicators for the four strategies are shown in the Chart 2 and Table 6.

Table 6: Cost and risk indicators of the observed strategies at the end-2019

| | 2015 | S1 | S2 | S3 | S4 |
|--|-------------|-------------|-------------|-------------|-------------|
| Debt/GDP (%) | 48,3 | 40,2 | 37,5 | 40,1 | 40,2 |
| Debt PV/GDP (%) | 41,1 | 35,5 | 36,2 | 35,1 | 35,8 |
| Cost of borrowing | | | | | |
| Interest/GDP (%) | 1,1 | 1,1 | 1,4 | 1,0 | 1,1 |
| Wighted average interest rate, in % (WAIR) | 2,2 | 2,6 | 3,2 | 2,5 | 2,6 |
| Refinancing risk | | | | | |
| Debt maturing in 1 year (% of total) | 12,1 | 8,6 | 8,0 | 9,1 | 12,3 |
| Debt maturing in 1 year (% of GDP) | 5,8 | 3,5 | 3,0 | 3,6 | 4,9 |
| Average time to maturity for external debt, in years (ATM) | 7,6 | 6,7 | 5,7 | 6,7 | 6,7 |
| Average time to maturity for domestic debt, in years (ATM) | 3,2 | 4,1 | 3,0 | 4,2 | 3,0 |
| Average time to maturity for total debt, in years (ATM) | 6,1 | 5,8 | 5,4 | 6,0 | 5,3 |
| Interest rate risk | | | | | |
| Average time to refixing, in years (ATR) | 4,1 | 4,5 | 4,3 | 4,5 | 4,2 |
| Debt refixing in 1 year (% of total) | 45,4 | 29,7 | 24,0 | 34,3 | 29,6 |
| Fixed rate debt (% of total) | 62,5 | 76,5 | 81,5 | 72,4 | 80,3 |
| Currency risk | | | | | |
| External debt (% of total) | 68,0 | 65,2 | 89,1 | 70,2 | 61,6 |
| External debt, excluding debt in EUR (% of total) | 32,6 | 29,9 | 25,8 | 32,7 | 26,3 |
| Short term external debt (as % of reserves) | 7,4 | 5,6 | 5,6 | 5,6 | 5,6 |

Source: RS MoF

In terms of interest rate costs and stock of debt, Strategy 3 bears the lowest cost, Strategy 1 and Strategy 4 are similar with the higher level of cost, while the highest cost are shown under the Strategy 2. Costs are increased under Strategy 2, i.e. Strategy 1 and 4, based on the greater reliance on more expensive external, i.e. domestic financing sources, respectively. The higher share of multilateral financing under Strategy 3 reduces overall costs and therefore also risks (refinancing and refixing risk). The present value of debt is the lowest under Strategy 3, due to reduced utilization of commercial instruments, both from external (comparing to strategies 1, 2 and 4) and domestic sources (comparing to Strategies 1 and 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 risks vary across all strategies. Strategy 3 achieves the longest average time to maturity for the domestic and total portfolio, 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. For domestic debt, longer maturities result from the orientation of domestic debt portfolio 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 issuance of domestic T-bills (in Strategies 2 and 4). Average time to refixing is similar over strategies, while slightly decreasing under Strategies 2 and 4, which reflects higher share of short term instruments on the domestic and international market, comparing to Strategies 1 and 3.

Certain strategies imply significant increase in currency risk. Comparing to portfolio in 2015, at the end of 2019 share of debt denominated in foreign currency is increasing significantly under Strategies 2 and 3, while decreasing under Strategies 1 and 4. This reflects the strategy objectives in terms of moving towards increased external commercial financing and domestic financing respectively, as well as lower nominal amount of debt outstanding as of end-2019. It is important to note, however, that actual currency risk is mitigated by the currency board arrangement, which implies fixed exchange rate of the local currency against the Euro.

Based on all the given considerations, Strategy 3 is the chosen strategy for RS for the following period. Comparing to other strategies, this Strategy achieves relatively low cost and risk, 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, financing costs are the lowest among all the strategies, while foreign currency risk and refixing risk are at the acceptable levels. Redemption profile is comparable to other strategies, with the slightly increase in period 2023-2025, driven by the IMF tranches coming due, as well as bunching of repayments on the basis of planned issuances of medium term domestic instruments in the following medium term period.