PUBLIC DEBT MANAGEMENT STRATEGY FROM 2017 TO 2019

According to the Law on Public Debt, as the legal grounds for the borrowing of the Republic of Serbia, the public debt includes all direct liabilities of the Republic from borrowing, as well as guarantees issued by the Republic for debt settlement by state-owned enterprises and local self-governance. The Republic may borrow in local and foreign currency for the purpose of financing the budget deficit, current liquidity deficit, refinancing the unsettled debt, for financing investment projects as well as for repayment of liabilities for issued guarantees. The provisions of the Law on Public Debt state that the public debt is an unconditional and irrevocable liability of the Republic of Serbia for repayment of principal, interest and other relevant expenses.

The key principle of managing public debt is to secure regular servicing of budgetary needs at the lowest possible expense and at an acceptable level of risk.

In order to formulate the Public Debt Management Strategy, a quantitative approach was used which identifies possible limitations through macroeconomic indicators, analysis of expenses and risks and the market conditions that affect the management of public debt. For the purpose of analysis, financing instruments available at the local and international financial market were used. Public Debt Management Strategy is based on the principles that define the need for a transparent and predictable process of borrowing, with permanent development of the government securities market and an acceptable level of exposure to financial risks.

Having analyzed the possible borrowing strategies, the model proposed by the World Bank *Medium Term Debt Strategy Model* – MTDS points out that the borrowing structure that is based on securities issued in dinars and Euros is the best option from the aspect of expenses (risks). The model in which the borrowing strategies are analyzed show that in situations where it is not possible to secure concessional sources of funding, such funds should be used, as the cost of funding is therefore reduced at an acceptable risk which achieves the basic goal of public debt management.

Fiscal strategy anticipates a trend in public debt of the general government in the upcoming period until 2019 below 70% of GDP with a clear decreasing tendency after 2016, where, in accordance with the guidelines for managing public debt formulated by the World Bank and the International Monetary Fund, stress testing within the Public Debt Management Strategy is performed to analyze the effect of a change in exchange rate for the local currency against the currency in which the public debt of the Republic of Serbia is denominated.

Over the past four years, great progress has been made in increasing the average maturity of RSD government securities and reduction of the cost of funding from this lending source, which reduced the exposure to the refinancing risk. Public Debt Management Strategy defines the key measures for further continuation of development of the market for government securities in dinars, since the development of this market will create one of the necessary preconditions for increasing the credit rating of the Republic of Serbia and decreasing the exposure of public debt to FX risk.

Balance and Structure of Public Debt in the Period 2013 – 30th of September 2016

At the end of September 2016 the total balance of public debt of the general government was RSD 3,022.8bn or 72% of GDP. Of this amount, direct liabilities account for RSD 2,718.2 bn and indirect liabilities RSD 257.8 bn, while RSD 45.8bn is the unguaranteed debt of municipalities and RSD 1 bn is the unguaranteed debt of JP Putevi Srbije.

Public debt as a share of GDP in percentage

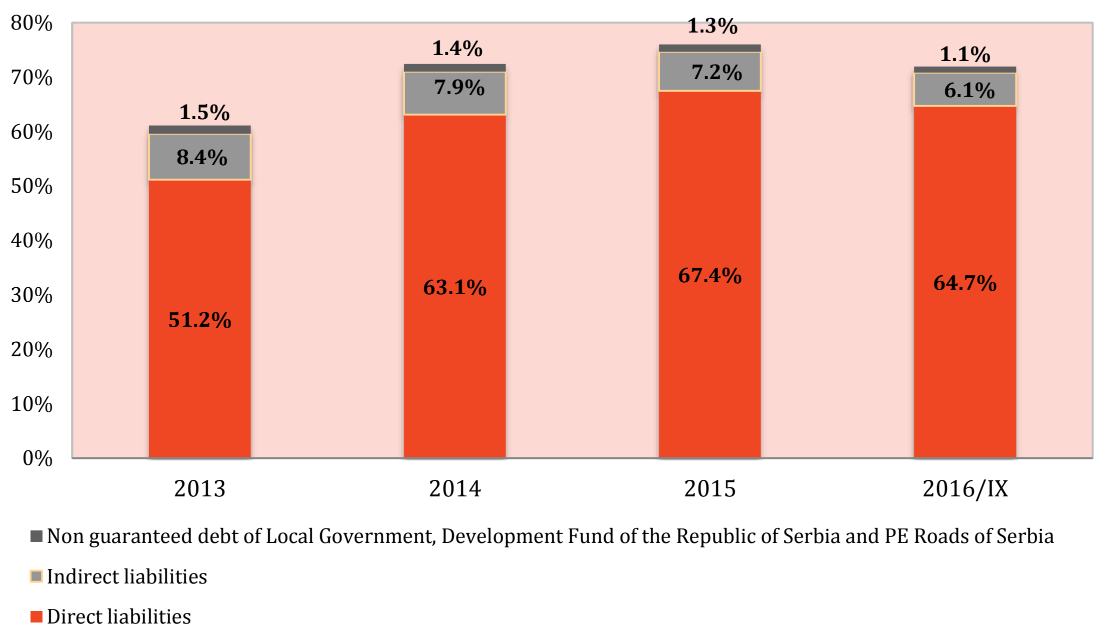


Table 1 - Public debt of the general government of the Republic of Serbia in the period end of 2013 – 30 September 2016

	2013	2014	2015	2016/IX
Public debt (in RSD bn)	2.369,0	2.808,2	3.072,3	3.022,8
Public debt (in EUR million)	20.664,5	23.216,0	25.260,1	24.517,6
Public Debt (in USD million)	28.498,4	28.233,0	27.616,9	27.506,3

Source: MFIN, Public Debt Administration

In the first nine months of 2016 there was a noticeable decrease in public debt of the central government for almost all currencies in which it had been originally denominated. The public debt denominated in US dollars went down in the first nine months of 2016 by 0.9 US dollars, whereas the public debt denominated in Euros went down by EUR 38.9 million and the public debt denominated in dinars went down by RSD 33.5 bn compared to the end of 2015.

Table 2 - The balance of public debt of the central government by original currency in the period 2013 – 30 September 2016, in million

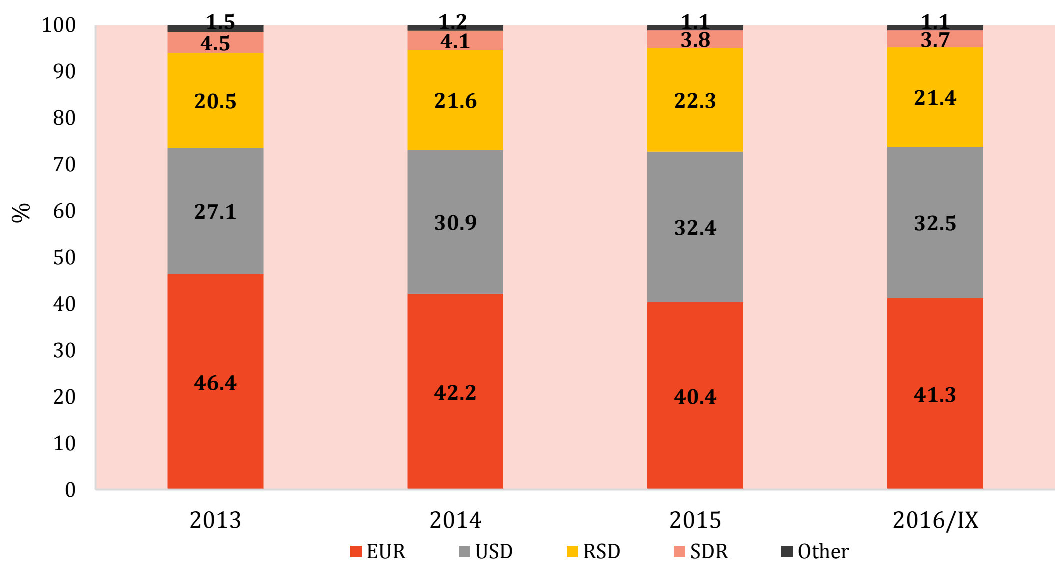
	2013	2014	2015	2016/IX
SDR	832,9	801,2	760,2	721,2
EUR	9.226,2	9.493,4	9.885,4	9.846,5
USD	7.675,6	8.717,8	8.934,6	8.933,7
CHF	225,7	199,1	173,2	146,4
RSD	466.366,6	588.570,0	668.939,4	635.473,8
Other currencies (in RSD)	13.142,8	13.776,4	16.613,5	17.335,1

Source: MFIN, Public Debt Administration

In line with the orientation toward decreasing the exposure to currency risk, extending the maturity and continuing with the development of new borrowing instruments in the local financial market, the key source of funding in the period 2013 – 2016 was the issuing of dinar securities, which resulted in an increase in the share of public debt in dinars from 20.5% at the end of 2013 to 21.4% of the public debt of the Republic of Serbia at the end of September 2016 i.e. from 469.1 bn dinars, which was the amount of the public debt in dinars from the end of 2013 to RSD 635.5 bn at the end of September 2016.

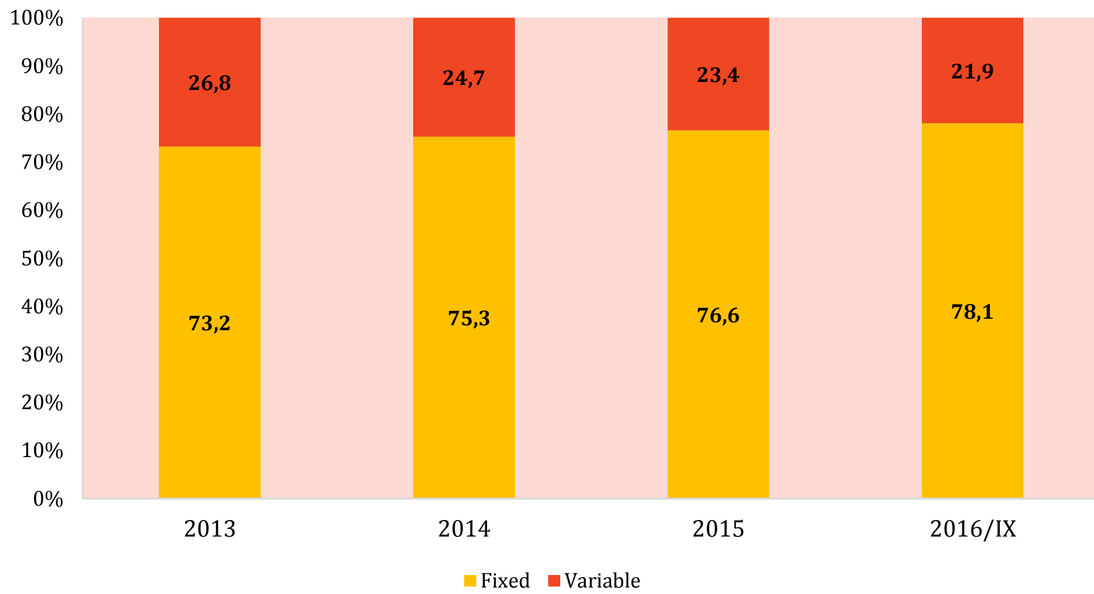
According to the data as of 30 September 2016, the largest portion of public debt of the general government of the Republic of Serbia is still denominated in Euros and amounts to 41.3%. US dollars follow with 32.5% and dinars with 21.4%. The rest of the debt is denominated in special drawdown rights 3.7% and other currencies 1.1%.

Currency structure of the government public debt state in the period 2013 – September 30, 2016

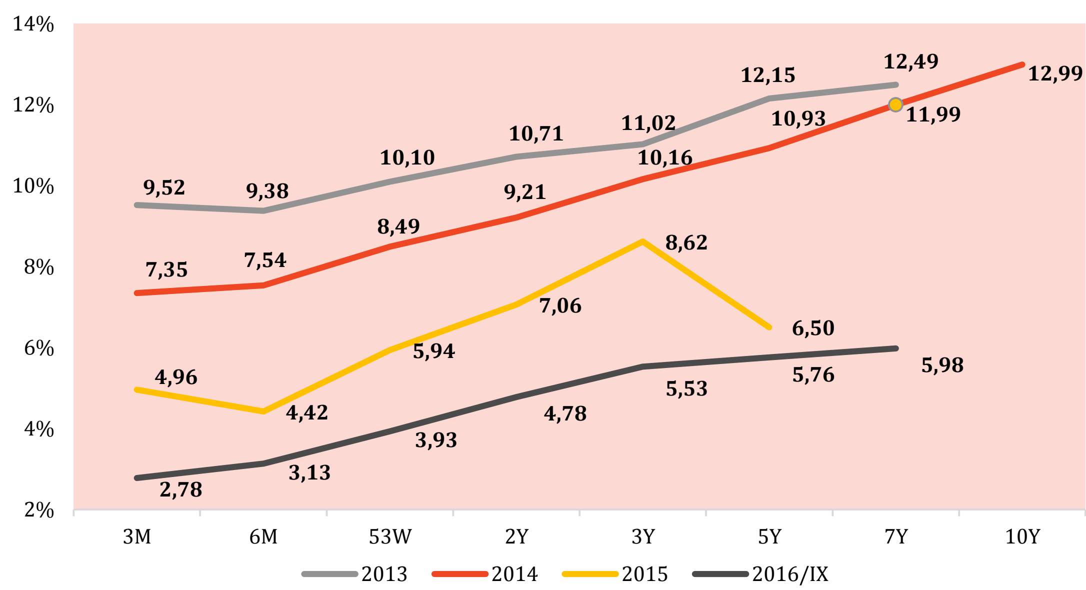


As of 30 September 2016 the greatest portion of public debt of the general government of the Republic of Serbia had a fixed interest rate – 78.1%, while the public debt with variable interest accounted for 21.9% of total public debt. Of the variable interest rates, the most common ones are EURIBOR and LIBOR for euro, which account for 68.4%, then LIBOR for US dollar which accounts for 10.8%, while liabilities linked to the NBS key-policy rate account for 7.2% and other liabilities 13.6%, mostly variable interest rate for special drawdown rights).

Interest rate structure of the government public debt in the period 2012 – September 30, 2016

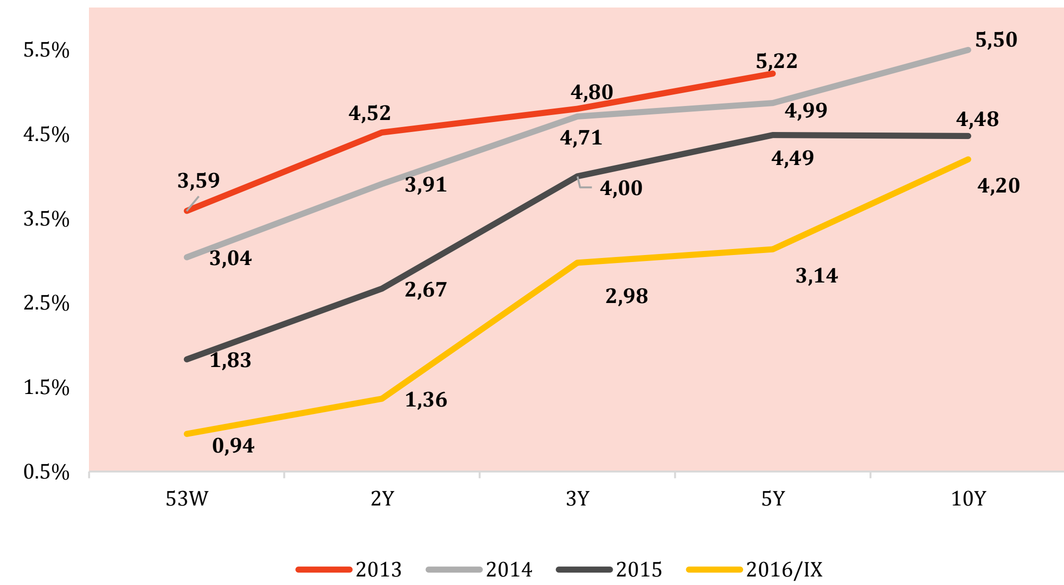


Average weighted interest rate for dinar-denominated securities in the period from the end of 2013 to September 30, 2016

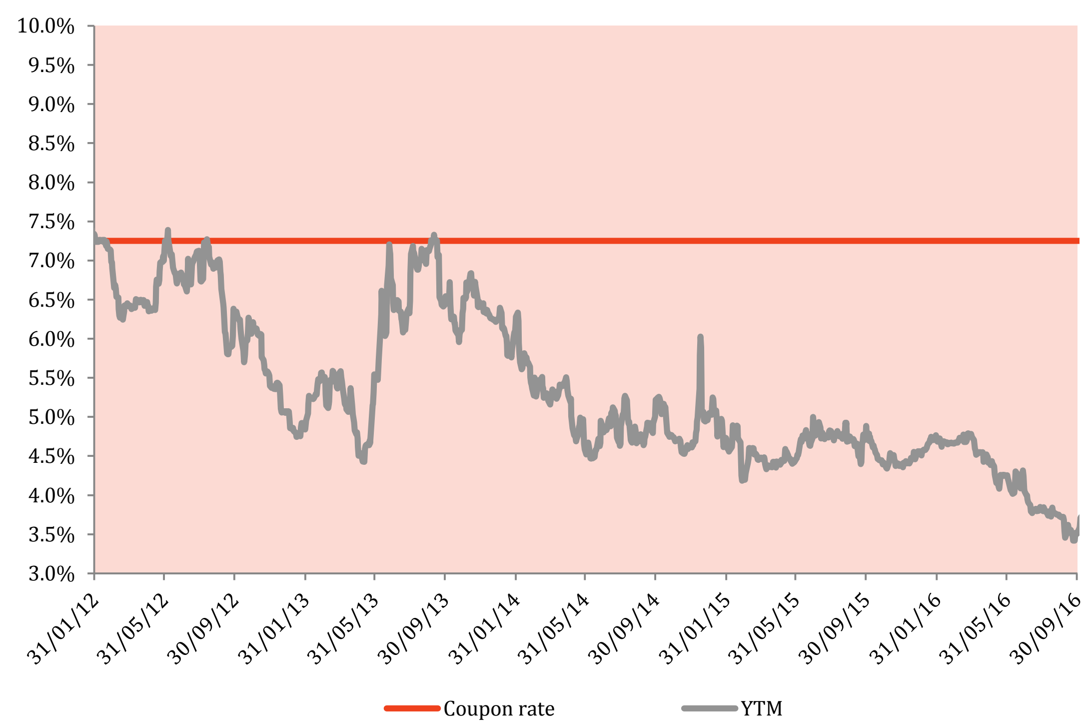


During 2016 there was further decline in the cost of borrowing for the Republic of Serbia from dinar and euro denominated securities, thanks to a decrease in the country's credit risk i.e. the decreased risk premium, low inflation and a decrease in the NBS key-policy rate that is currently 4%, which continued the trend started in the final quarter of 2012.

Average weighted interest rate for euro-denominated securities in the period from the end of 2013 to September 30, 2016



Price/YTM Graph - Serbia Eurobond 2021



Servicing public debt of the Republic of Serbia (central government level) in the period 2016 – 2019

Table 3 - Projections for repayment of interest and principal by 2019, in RSD bn

	2016p	2017p	2018p	2019p
Principal	537,5	686,4	608,0	580,4
Interest	129,0	134,0	132,5	127,7
Total	666,5	820,3	740,4	708,1
Compared to the public debt as of 30.09.2016, %	22,4	27,6	24,9	23,8

Source: MFIN, Public Debt Administration

Table 4 - Projected repayment of interest and principals by 2019

	2016p	2017p	2018p	2019p
GDP, bn dinars	4.203,5	4.396,7	4.678,1	4.987,5
Principal, % of GDP	12,8	15,6	13,0	11,6
Interest, % of GDP	3,1	3,0	2,8	2,6
Total, % of GDP	15,9	18,7	15,8	14,2

Source: MFIN, Public Debt Administration

Projected balance of general government debt for the period 2016 – 2019

Bearing in mind the projected primary deficit of the budget of the Republic of Serbia for the period 2016 – 2019, including also the volume of loans drawn down for project financing from budget beneficiaries, the effects of change in the exchange rate of dinar to the euro and US dollar, in the baseline macroeconomic scenario, the balance of debt of the central government should be at approx. 65.9% of GDP at the end of 2019.

Table 5 - Baseline projection of the balance of the general government public debt by 2019

	2016p	2017p	2018p	2019p
GDP, bn dinars	4.203,5	4.396,7	4.678,1	4.987,5
Primary surplus (central government), bn dinars	54,6	64,9	83,1	91,9
Interests (central government), bn dinars	129,0	134,0	132,5	127,7
Public debt (central government), bn dinars	3.089,2	3.201,8	3.256,4	3.287,2
Central government's debt, % of GDP	73,5	72,8	69,6	65,9
Unguaranteed debt of local self-governments, % of GDP	1,1	1,1	1,1	1,1
General government debt, % of GDP	74,6	73,9	70,7	67,0

Source: MFIN, Public Debt Administration

It is expected that in 2016 the ratio showing the share of central government's public debt in GDP will fall to 74.6% while in 2017 a fall to 73.9% is expected. Full effects of the fiscal consolidation and the undertaken measures will be felt in 2019 when a decrease in ratio is expected to reach 67%. It is estimated that in the upcoming period the unguaranteed debt of the local government level will be at approx. 1.1% of GDP in relative terms.

Balance of debt according to the Maastricht criteria

It is important to note that, according to the national methodology, the balance of public debt includes central government's direct liabilities, as well as all indirect liabilities i.e. guaranteed debt in favor of state-owned enterprises, local self-governments and other legal entities whose founder is the Republic of Serbia. This balance includes also all guarantees, regardless of whether they will be paid in the upcoming period.

Given that one of the key economic and political goals of the Republic of Serbia is accession to the EU, a precondition that is being imposed is the compliance of local methodology with EU standards. Therefore, the balance of public debt is regularly analyzed also on the basis of the criteria set in the Maastricht agreement which contains systematic guidelines aimed at making the public debt and the fiscal system sustainable and preserving macroeconomic stability. According to these criteria, the balance of public debt should include, apart from direct liabilities of the central government, also the unguaranteed debt of local self-governments, but exclude the debt from direct and indirect liabilities that the Republic (the central government) is not paying for.

This debt is measured at nominal value equal to the agreed amounts of debt that the Government should repay to the creditors within maturity, which means that the public debt is not under the influence of changes in market yields and excludes the unpaid accrued interest.

Table 6 - Structure and projection of the balance of public debt according to Maastricht criteria by 2019,

	2015	IX 2016.	2016p	2017p	2018p	2019p
Total direct liabilities	2.626,5	2.615,0	2.707,5	2.828,4	2.869,0	2.898,9
Guaranteed debt	187,1	161,4	149,0	116,2	91,2	73,0
Other debt of the state sector	1,4	1,0	0,7	0,4	0,4	0,4
Debt of local self-governance	81,9	75,9	77,1	78,5	80,0	81,7
Debt of the social security institutions	0,0	0,0	0,0	0,0	0,0	0,0
Public debt of the Republic of Serbia	2.896,9	2.853,2	2.934,3	3.023,5	3.040,7	3.054,0
Public debt of the Republic of Serbia as % of GDP	71,6	67,9	69,8	68,8	65,0	61,2

Principles of public debt management

According to the Law on Public Debt, the primary aim of borrowing by the Republic of Serbia and public debt management is to secure the funds needed for financing budget outlays, at minimum cost of financing in the medium and long run and at an acceptable risk level. Minimizing the long-term expenses of servicing a public debt is limited by the debt structure while achieving the goal of reducing the expenses will be conditioned on a range of factors and risks. On the basis of that, the Public Debt Strategy of the Republic of Serbia defines the following general targets and principles:

1. It is necessary to secure the financing for the fiscal deficit and regular servicing of liabilities from the public debt of the Republic of Serbia;
2. It is necessary to define an acceptable level of risks that should be determined in the environment of targeted debt portfolio structure in terms of currency clause of the debt, the structure of interest rates, maturity structure and the debt structure by instruments;
3. It is necessary to develop the market for securities that are issued in the local and international market, so that the developed market could help bring down the cost of borrowing in the medium and long run;
4. It is necessary to allow for transparency and predictability of the borrowing process;

Public debt management strategy should be supported by and consistent with the overall Government's mid-term macroeconomic and fiscal framework.

Public debt management strategy will be based in the upcoming mid-term period on financing the outlays from the budget of the Republic of Serbia mostly through the issue of government securities in the local and international capital market. The market for the government securities is still developing and one of the principles of managing public debt is the necessity for flexibility in order for the financing of outlays from the budget of the Republic of Serbia to be secured. Flexibility will apply to the choice of markets where borrowing will be made, the borrowing currency and financing instruments. The choice of financing structure will take into consideration the current condition and the trend in development of local and international financial market (interest rates, risk premiums, yield curve, exchange rates of the reference currencies) and an acceptable level of exposure to financial risks.

The aim is for financing to be done in the upcoming long-term period primarily through issuing of dinar securities in the local market. The current situation shows that, despite firm determination towards developing the local securities market, a portion of financing must be secured in the international financial market in the medium run. The guidelines for financing in the international market in a foreign currency, securing access to a large number of investors in various parts of the international financial market and borrowing in foreign currency (to the extent possible) are defined in accordance with the repayments of debt denominated in a foreign currency.

Borrowing in a foreign currency, e.g. in the US dollars carries also FX risk due to changes in the exchange rates for the dinar – euro and euro - US dollar. Therefore, it is necessary to consider the use of hedging if borrowing is not in dinars.

Public debt management policy must take into consideration the long-term perspective, but the decision on financing budget outlays must be made per year. The decision on the annual borrowing is made in compliance with the Law on Budget for a particular fiscal year. Depending on the change in the key fiscal aggregates, it is possible to correct the plan of borrowing during a fiscal year.

Financial risks and measures for managing financial risks

Financial and fiscal risks may lead to higher growth in public debt than predicted in the baseline scenario. The risks that are present and which might result in the increase in indebtedness and in the cost of servicing the public debt are: refinancing risk, FX risk, market risk (interest rate risk, inflation risk), liquidity risk, credit and operational risks and risks related to the distribution of servicing costs (debt structure, concentration of liabilities).

In the aim of reducing the exposure to financial risks, it is necessary to undertake the following measures:

1. Refinancing risk

   - increase the share of medium term and long-term financial instruments denominated in dinars in the local financial market;
   - balanced distribution of liabilities from public debt on a yearly level and during a fiscal year in the future long-term period;
   - extending the average maturity of the debt that is issued as securities;

2. FX risk

   - striving towards reducing the debt denominated in foreign currency, while taking into consideration the cost of a new debt (cost of debt dinarization);
   - use of financial derivatives with the aim of limiting the effects of change in the exchange rates of reference currencies;
   - effort to have the foreign debt mostly in euros and that the US debt be used only if financing in the international market in US dollars is cheaper with the use of financial derivatives for limiting the risk;

3. Market risk (risk of interest rates, risk of inflation)

   - effort to extend the average maturity of the domestic debt in dinars;
   - issuing indexed bonds (indexation of interest rates);
   - effort to prevent the risk from interest rates on foreign debt from threatening the long-term goal of minimizing the cost of public debt;

4. Liquidity risk

   - permanently maintaining the level of cash in accounts of the Republic of Serbia at the level that enables unhindered financing of liabilities for at least four months and at the level that enables an absorption of possible lower than planned inflows from borrowing;
   - adequate management of free cash in the accounts of the Republic of Serbia, in accordance with the principles of asset-liability management, in line with the capacity;
   - consolidation of FX assets, apart from dinar ones, within consolidated treasury system that is kept at the NBS and the use of FX funds to actively manage liquidity also on the FX budget

execution account;

5. Credit and operational risks

- implementation of transactions with financial derivatives only with financial institutions that have high credit rating;
- use of financial instruments that limit credit risk;
- issuing guarantees and approving new debt to local self-governments and to state-owned enterprises only if there is adequate analysis of a relatively low degree of probability that the guarantee will be activated in the medium term;
- introducing adequate control in all business activities in the Public Debt Administration and improvement of the knowledge of employees, for which the limit to the number or employees will have to be increased and adequate budget funds will have to be granted;
- creating new information system for monitoring public debt and its operations;

6. Risks related to the distribution of the servicing costs

- adequate planning of indebtedness on an annual level and equal distribution in the upcoming years and during the fiscal year in order to avoid the risk of high concentration of liabilities to be refinanced;
- avoiding concentration of liabilities for one public debt on a monthly level, which could not be cushioned by the cash available in the accounts of the Republic of Serbia;

Analyses used when preparing the Public Debt Management Strategy

Public Debt Administration used quantitative approach to formulate the Public Debt Management Strategy, having identified possible limitations through macroeconomic indicators, analysis of costs and risks and market conditions that affect public debt management. When analyzing the cost and risk, all feasible financing alternatives are considered. The share of each instrument in the total financing needs in a given year is determined in accordance with the Strategy goals.

For the purpose of analysis, the instruments described below, available in the local and international financial market, were used.

Funding sources denominated in a foreign currency

- Loans from foreign governments and international financial institutions – shown as instruments denominated in euros or US dollars, with fixed or variable interest;
- Domestic debt denominated in euros is expressed through two instruments – government T-bills and government bonds issued in the local financial market;
- Eurobonds – issued in euros or US dollars in the international financial market.

Funding sources in local currency

All government securities denominated in dinars are grouped in several groups, into short-term government bills (with maturity of up to 53 weeks), two-year, three-year and long-term (five-year, seven-year and ten-year) government bonds.

Future market interest rates and analysis scenario

When preparing the long-term public debt strategy for the period 2017 – 2019 quantitative cost and risk analyses were used that were based on different scenarios and projections.

The starting point is the baseline scenario that is based on the most likely market conditions. Three groups of market variables were identified: exchange rate, interest rates in the international market and interest rates on dinars. Future market rates can be obtained from analyzing the available prediction of the purchasing power parity or by predicting the interest rate parity. It is assumed that the trends in the exchange rate for the dinar against the euro or against the US dollar, in accordance with the macroeconomic framework in the observed period, and a relatively stable exchange rate of the euro to the dollar was retained in order to obtain a clear picture of the effect of applied shock. The effect of changes in market interest rates was tested in shocks. The approach for dinar interest rates is based on the current rates of return realized during 2016.

After defining the baseline scenario, with the aim of stress testing, another three types of scenarios – shocks were selected.

Dinar depreciation against the US dollar of 15%. At this type of shock, the exchange rate of the euro to the dinar is not changed in this projection. This scenario has a great effect on the public debt of the republic of Serbia due to the share of the debt denominated in US dollar, which, at the end of September 2016, accounted for 33% of the central government debt of the Republic of Serbia

Dinar depreciation of 15% against all currencies. In this scenario the exchange rate of the euro against US dollar is stable, while only dinar would depreciate against both currencies. macroeconomic circumstance for such a scenario would include large current balance of payments deficit and low level of FDI and portfolio investments.

Rise in interest rates in the international market. Currently, interest rates in the world are at a historic low. If the world economy recovers, interest rates will probably increase by approx. 2pp in the medium term.

Increase in interest rates in the local market up to 4pp. Such a scenario would be possible if inflation is above the allowed departure compared to the targeted inflation, as was the case until 2012 and if there is high volatility of the exchange rate of the dinar against the euro due to an increase in the country's risk premium.

Each of the stress tests listed above or the risk scenario has been used for the overview of the cost effects of the strategies that have been considered.

Alternative borrowing strategies for the period 2017-2019

Optimum choice between the cost and risk, on the basis of the World bank's model MTDS has defined the choice of the basic borrowing strategy for the future medium term period. The alternative borrowing strategies that were analyzed include:

Basic strategy (S1): is a strategy that covers the needs to finance the issues of government securities in the local and foreign currency in the local financial market and the issues of Eurobonds in euros with a maturity of five and ten years.

Strategy with secured concessional loan (S2): compared to strategy S 1, a Eurobond in euros in issued to ten years, favorable long-term loan is secured with a fixed interest rate of approx. 2% in US dollars, while additional financing in the local market is based mostly on dinar securities in the structure, similar to S1. Compared to the S1 strategy, this strategy has higher share of external funding sources.

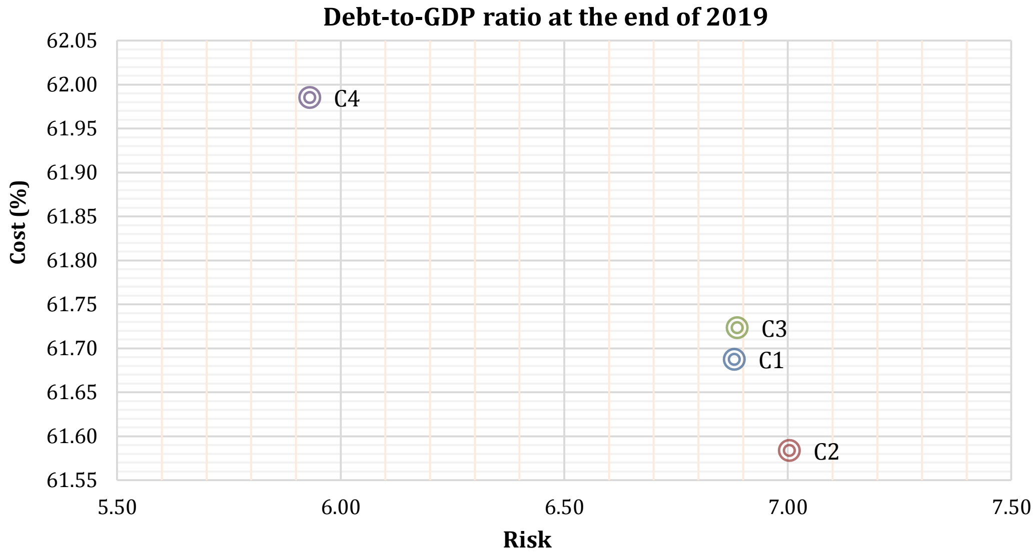
Strategy based on Eurobond issues (S3): strategy S3, compared to strategy S1, anticipates that the Eurobonds with a maturity of five and ten years be issued in US dollars, while the structure and volume of issues of dinar securities should remain as in strategy C1.

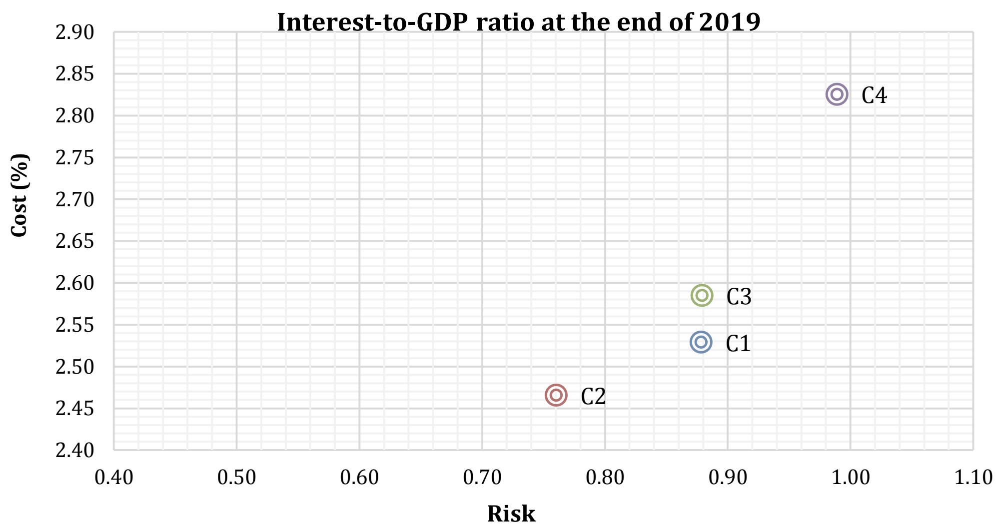
Additional dinarization strategy (S4): is a strategy that bases the whole financing on the issues of dinar securities.

In all these strategies, the financing of budget outlays will be performed mostly through issue of government securities in the international and local capital market, except for strategy S2 where a more considerable share of concessional loans is anticipated.

Comparison of alternative strategies

Quantitative analysis presents the effects of each of the four alternative borrowing strategies where the share of debt in GDP i.e. the cost of interest in GDP in the basic macroeconomic framework is placed on the vertical axis, while the horizontal axis contains the potential cost of a certain borrowing strategy (result of stress testing). Two cost measures were applied: the ratio of public debt to GDP and the nominal interest as percentage of GDP. The first ratio is the indicator of balance and the second is the flow indicator. For the sake of comparison, the focus is on the results of considered strategies at the end of 2019.





On the basis of the graphs one can clearly see the costs that each of the considered strategies implies - strategies S2 and S3 have a relatively higher exposure to the exchange rate risk. Strategy S1, due to combining dinar and euro denominated securities, has high exposure to possible oscillations in dinar interest on government bonds, in the current proportions, while this level of exposure in Strategy S4 increases considerably, as the total additional financing is secured by issuing dinar securities. On the other hand, S4 strategy, given the basic macroeconomic framework, has a more stable ratio of debt share in GDP, due to a relatively higher share of dinars. In strategy S2, which is partially based on the long-term concessional loan in US dollars, the interest rate is the lowest compared to all four observed strategies due to low fixed cost of concessional loan. Strategy S3 is shown as quite risky when it comes to the debt/GDP ratio, because additional financing is based on an issue of bonds denominated in US dollars, while strategy S4 turns out to be relatively expensive, given the high share of dinar securities in this strategy.

When analyzing the ratio of public debt to GDP, it was estimated that the strategy S2 is the one that carries the highest risk. Basic S1 strategy has somewhat higher interest expenses compared to S2 strategy, due to higher share of dinar securities. At the basic macroeconomic framework, strategy S2 has low interest expenses, as one part of the funding needs is secured from concessional loan. On the basis of these analyses, it is evident that in the future, medium-term period the key borrowing operations will be based around strategies S1 and S2, but with a clear preference that, in case an opportunity arises for borrowing on concessional terms and in a greater volume, borrowing operations will be based on strategy S2, but further decrease in interest rates on long-term dinar securities will lead towards preference for strategy S1. By applying discounted rates that reflect the borderline (marginal) cost of borrowing for the Republic of Serbia in the financial market, we can see that, from the aspect of net present value as well, the most optimum borrowing strategies are S1 and S2.

Table 7 - Ratio of public debt to GDP at the end of 2019

Scenarios	C1	C2	C3	C4
Baseline scenario	61,7	61,6	61,7	62,0
Exchange rate shock(15% all currencies)	68,6	68,6	68,6	67,9
Interest shock (scenario 1)	62,4	62,2	62,4	62,8
Interest shock (scenario 2)	63,1	62,8	63,1	63,5
Combined shock (15% USD and interest shock 1)	65,4	65,5	65,9	65,8
Maximum risk	6,9	7,0	6,9	5,9

Source: MFIN, Public Debt Administration

Table 8 - Ratio of payments for interest to GDP at the end of 2019

Scenarios	C1	C2	C3	C4
Baseline scenario	2,5	2,5	2,6	2,8
Exchange rate shock(15% all currencies)	2,8	2,7	2,8	3,0
Interest shock (scenario 1)	3,0	2,8	3,0	3,3
Interest shock (scenario 2)	3,4	3,2	3,5	3,8
Combined shock (15% USD and interest shock 1)	3,1	3,0	3,2	3,5
Maximum risk	0,9	0,8	0,9	1,0

Source: MFIN, Public Debt Administration

The table below shows the trends in key public debt parameters for all four considered strategies, which depicts the above-mentioned features of each strategy:

Table 9 - Risk indicators for alternative strategies

Risk indicator		At the end of 2019			
		C1	C2	C3	C4
Nominal debt (% of GDP)		61,7	61,6	61,7	62,0
Net present value (% of GDP)*		55,2	53,8	59,2	59,4
Applied interest (%)		4,2	4,1	4,3	4,7
Refinancing risk	ATM[1] external portfolio (in years)	6,3	7,4	6,3	6,5
	ATM domestic portfolio (in years)	3,3	3,3	3,3	3,8
	ATM total portfolio (in years)	5,1	6,0	5,1	4,6

[1] ATM (*Average Time to Maturity)*

Interest rate risk	ATR[2] (in years)	4,6	5,4	4,6	4,1
	Refixing (% of total debt)	29,3	28,2	29,3	31,3
	Debt at fixed rates (% of total debt)	84,6	85,2	84,6	83,7
Exchange rate risk	Foreign currency debt (% of total debt)	68,6	71,6	68,5	45,2

Stress-test analysis

Fiscal rule, specified in the Law on Budget System, prescribes an obligation that the general government public debt may not exceed 45% of GDP. In case the debt exceeds that level, the Government is obliged to adopt a program for reducing the ratio of public debt to GDP i.e. for bringing the debt back within the lawful range.

At the end of 2015 the balance of the central government's debt reached 74.7% of GDP and the general government's debt reached 76% of GDP. Ratio of public debt to GDP for the central government level was 70.8% of GDP at the end of September 2016 and for the general government this ratio stood at 72%. A slight increase is expected until the end of 2016 and the share will reach approx. 73.5% of GDP on the central level and 74.6% of GDP on the general government level.

Due to high share of the debt denominated in a foreign currency (78.4%), it is evident that FX risk will determine the behavior of the public debt/GDP ratio in the upcoming period and will significantly condition the success of the fiscal policy measures aimed at consolidating public finances and reducing the share of public debt in GDP.

On the basis of the planned macroeconomic framework, in case the possible risks (primarily FX risk) do not materialize, the public debt, excluding the unguaranteed debt of the local self-governance, should be at 65.9% of GDP by 2019.

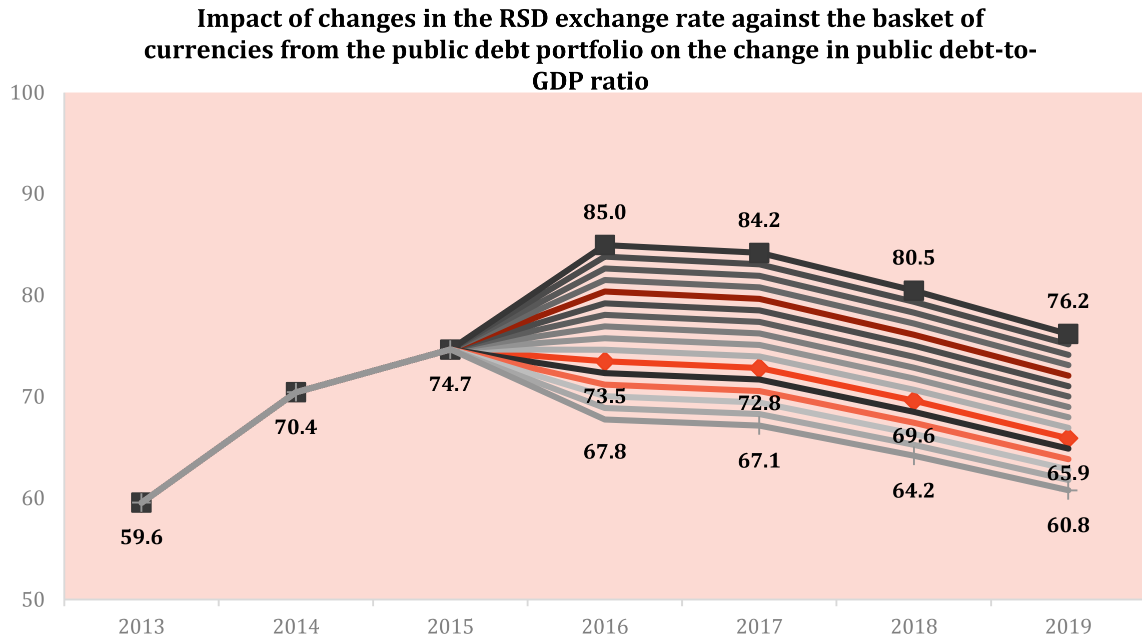
The key factor that affects the stabilization of the public debt/GDP ratio are the GDP growth, primary deficit, dinar exchange rate against foreign currencies and the level of interest. The planned fiscal policy measures also call for a reduction in the primary deficit which reduces the key factor of debt growth.

Table 10 - Contributions from the key macroeconomic variables to the change in the public debt (central government)/GDP ratio, in %

	2014	2015	2016p	2017p	2018p	2019p
Central government debt as % of GDP	70,4	74,7	73,5	72,8	69,6	65,9
Change compared to the previous year	10,8	4,3	-1,2	-0,7	-3,2	-3,7
Effect of primary deficit	3,6	-0,3	-1,3	-1,5	-1,8	-1,8
Interest	2,8	3,1	3,1	3,0	2,8	2,6
Nominal GDP growth	-0,5	-2,3	-2,8	-3,2	-4,4	-4,3
Other factors that affect the ratio	4,9	3,8	-0,1	1,0	0,1	-0,1

Source: MFIN, Public Debt Administration

[2] ATR (*Average Time to Refixing)*



The graph shows the trend in the ratio of public debt of the central government /GDP, depending on the change in the dinar exchange rate against a certain currency bucket. Basic projection is shown with alternative scenarios, depending on appreciation or depreciation of the dinar exchange rate in the range between 10% of appreciation to 20% of depreciation of dinar against the currency bucket. Implementation of these scenarios will show that the ratio for 2019 would range between 60.8% and 76.2%, while for the baseline scenario this ratio would be 65.9%.

Key risks for realization of Strategy, apart from the above listed factors that have been quantified, are also the stability of the macroeconomic situation in the Republic of Serbia, the need for additional borrowing in order to settle the debts in other levels of government, public sector and the financial sector of the republic of Serbia and issued guarantees.

It is important to mention that the reduction of public debt against the GDP is contributed also by the adequate control of issuing guarantees and improvement of the process of prioritizing investment projects that are financed from credit lines of multilateral and bilateral creditors. As of 2015 the guarantees are issued only for project (investment) loans i.e. issuing of guarantees for loans for current liquidity of state-owned enterprises has been halted, which in 2015 and 2016 noticeably reduced the balance of the guaranteed public debt.

Long-term strategic framework for public debt management

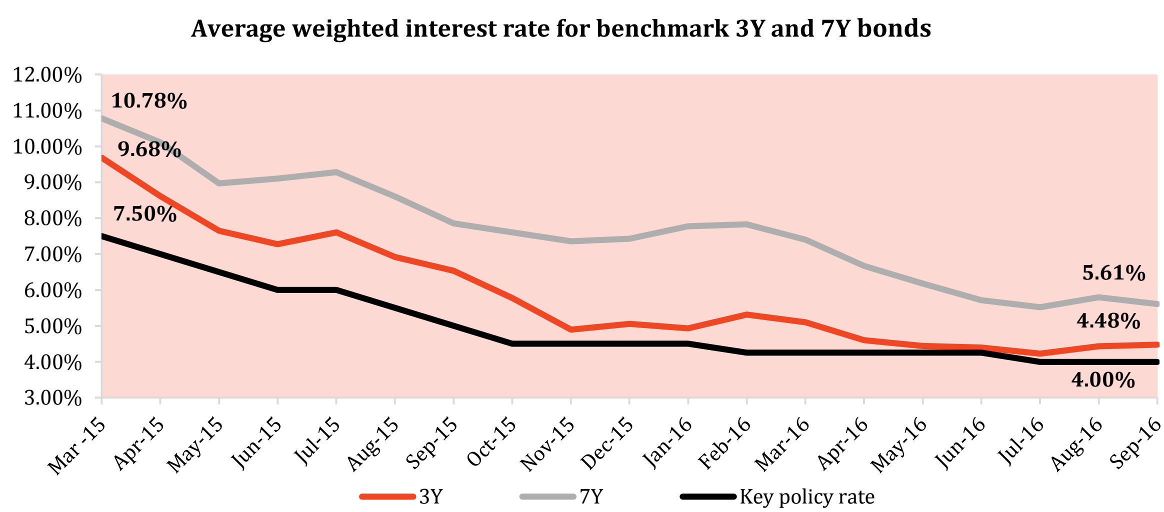
The key strategic goals that we should strive for in the upcoming long-term period, in order to minimize the risk of increasing the indebtedness and the cost of servicing public debt are:

- that the share of debt denominated in dinars amounts to approx. 20-25% of the total public debt in the medium run;
- that the share of debt denominated in euros in the public debt amount to no less than 60% of the debt in foreign currency, including future borrowings and transactions;

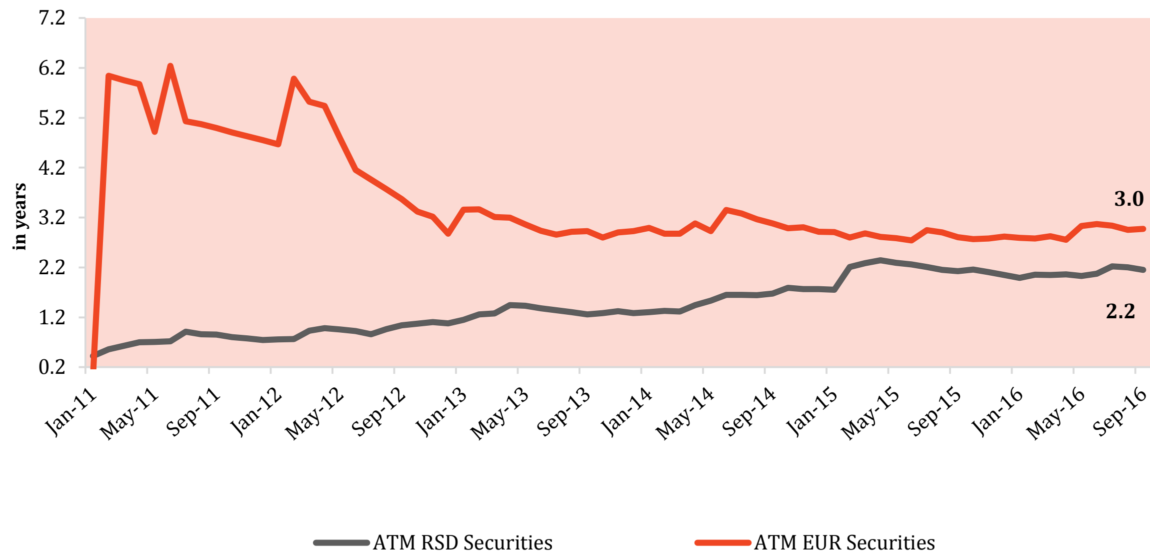
that the share of debt with variable interest rate decreases to below 20% in the medium term;

- that the average time to refixing (ATR) is maintained at the level of at least 4.5 years, in accordance with the above-stated measure for gradual decrease in the share of debt with variable interest rates;
- that the weighted average interest rate (WAIR) for the internal public debt does not exceed 10% for mid-term and medium-term borrowing;
- that the share of short-term debt (whose maturity is up to one year) amounts up to 155 of the total public debt;
- that the average time to maturity (ATM) of the internal debt is at the level of at least 4 years for medium term;

that the average time to maturity (ATM) of the external debt is maintained at the level of 6±0.5 years in the same time horizon.



Average time to maturity (ATM) of securities issued in the domestic financial market in the period from the beginning of 2011 to September 30, 2016



Measures for improving the market for dinar securities in the period 2016–2019

The market for government securities in the period from 2012 to September 2016 is characterized by fulfilling the set strategic targets, primarily regarding the financing instruments, and by developing and maintaining the stability of diversified investor base. Thanks to pursuing a development policy for the local market of government securities, continuity has been enabled in financing the budget of the Republic of Serbia, as well as improvement of the volume of financing by issuing long-term dinar government securities in the local financial market. Transfer from short-term funding sources, which are related to the period until 2010, to mid-term and long-term instruments of finance, with constant decrease in the cost of borrowing, reduces the refinancing risk, as one of the primary risks in the public debt management process. At the end of 2013 the share of long-term dinar instruments at original maturity of three and more years amounted to 37% in the balance of dinar securities and 67% at the end of September.

Transparency in operation and in reporting, as well as presence in the international capital market influences how well informed and, by extension, interested the non-residents are in investing their capital into debenture instruments, primarily into government long-term dinar securities, which generates the growth of stable investor base. In 2014, ten-year bonds were issued for the first time, which completed the development of maturity in the yield curve for both dinar and euro denominated government securities. In February 2015 a benchmark issue was issued for the first time in the local financial market with seven-year maturity in the amount of RSD 50 million. During 2015 two three-year bonds were also issued in the amount of RSD 50bn each. Due to successful realization of benchmark issues during 2015, the same practice was continued during 2016. In February 2016 three-year and seven-year bonds were issued at the volume of issue of RSD 110 bn. With these issues the volume of secondary trade in these instruments increased considerably, which contributed also to the decrease in applicable rates of return for reopening of these issues.

For the purpose of developing the secondary market for government securities, as of 12 November 2015 it has been allowed to trade in long-term government securities on Belgrade Stock Exchange.

In the period this Strategy applies to we expect to see improvement in the efficiency of primary market through the concept of primary dealers, as a mechanism for selling government securities that directly, over a long period, contribute to a reduction in the cost of borrowing, and the reduction of refinancing risk. Introduction of the system for selling government securities in the local financial market via primary dealers provides good basis for improvement of market efficiency of the secondary market for government securities. With the development of secondary market, over time, the concept of market efficiency will be established in the process of valuing government securities. Introduction of benchmark bond issues would have a positive effect on the volume and continuity of secondary trading, as well as improvement of market efficiency in the process of selling government securities in the primary markets.

The leading factor that affect the yield curve of the government securities and that should be singled out is the fiscal result, the expected inflation rate and exchange rate. Macroeconomic trends and expectations should be singled out as a special group of factors, as well as changes in the international financial market that affect the country's risk premium.

At the end of 2011 the average maturity of dinar securities amounted to 272 days (0.75 years), at the end of 2012 amounted to 394 days (1.1 years), at the end of 2013 amounted to 469 days (1.3 years), at the end of 2014 amounted to 645 days (1.8 years), at the end of 2015 amounted to 749 days (2.1 years), while on 30 September 2016 it amounted to 789 days (2.2 years). In the period until 2018 it is estimated that the average maturity will range between 2 to 3 years. The development of the local market for government securities will be supported by the Republic of Serbia through the following measures:

- Including the government securities denominated in local currency into one of the global indices of government bonds of countries in the emerging markets (Local Currency Government Bond Emerging Market Index). Including the bonds of the Republic of Serbia into one of the global indices will considerably increase the investor base and promote secondary trade, which will contribute to further decrease in the cost of borrowing from issue of government securities;
- With the aim of creating the biggest possible investor database and with the aim of developing the secondary market for securities issued in the local market, an equal tax treatment was created for both local and foreign investors at the end of 2011 and in the upcoming period the tendency will be to eliminate all possible obstacles for free flow of capital. An option of using the international clearing system to clear and net the transactions with domestic securities will be considered in the upcoming period;
- Activities will be undertaken in the upcoming period on the introduction of the primary dealer systems;
- With the aim of increasing investments by local private individuals, additional efforts will be made in the domain of educating the population of the Republic of Serbia and the issue of the so called retail bonds will be considered.

The Finance Ministry will modify the auction platform in the upcoming period on the basis of proposals from investors in order to satisfy the interests of both sides in the best possible manner and in the manner acceptable for both sides.