

Public Debt Management Strategy for the Period 2016 to 2018

According to the Public Debt Law, the legal basis for the borrowing of the Republic of Serbia, the public debt shall include all the direct liabilities of the Republic, based on borrowings, as well as on the guarantee issued by the Republic of Serbia for public enterprises' and local governments' borrowings.

The Republic may borrow in domestic or foreign currency, in order to finance budget deficit, current liquidity ratio deficit, to refinance an outstanding debt, to finance investment projects, and to assume liabilities based on the issued guarantees.

The provisions of the Public Debt Law indicate that the public debt shall be an unconditional and irrevocable obligation of the Republic of Serbia with regard to the repayment of the principal, the interest and the remaining costs.

The basic principle of public debt management is the provision of regular servicing of the budgetary needs at the lowest possible costs and an acceptable level of risk.

The development of the Public Debt Management Strategy used a quantitative approach by identifying possible restrictions through macroeconomic indicators, analysis of costs and risks and market conditions which affect the management of public debt. The analysis involved the use of financing instruments available in the domestic and international financial market.

The Public Debt Management Strategy is based on the principles that define the need for transparent and predictable process of borrowing with the permanent development of the government securities market and acceptable level of exposure to financial risks.

By analysing possible borrowing strategies, the World Bank model MTDS indicates that the borrowing structure that is based on dinar-denominated and euro-denominated securities issue represents the best option in terms of costs (risks). The model in which borrowing strategies were analysed indicates that, in situations when concessional financing sources may be ensured, these funds should be used, because in this way, financing costs are reduced with an acceptable risk, which achieves the primary objective of public debt management.

The fiscal strategy envisages that the public debt trend in the next period until 2018 shall stay below the level of 80% of GDP, with a clear tendency to decrease after 2016 to the level of 75.9% of GDP in the end of 2018, whereas, in accordance with the IMF-World Bank Guidelines for Public Debt Management, within the Public Debt Strategy was conducted the stress testing and scenario analysis of the effect of the foreign currency exchange rate of RSD against the currencies in which the public debt of the Republic of Serbia is denominated.

Significant progress has been made in the last four years in terms of increase in the average maturity of dinar-denominated securities and reduction of the costs of financing on the basis of this form of borrowing, which reduced the exposure to the refinancing risk. The Public Debt Management Strategy defines basic measures for further development of dinar-denominated securities market, because the development of this market shall create one of the necessary preconditions for raising the credit rating of the Republic of Serbia and reducing the exposure of the public debt to the foreign exchange risk.

1. Public Debt Balance and Structure from the End of 2012 to October 31, 2015

At the end of October 2015, the total public debt was RSD 2,988.9 billion, i.e. 75.4% of GDP. That includes RSD 2,643.7 billion of direct liabilities, and RSD 294.3 billion of indirect liabilities, RSD 49.3 billion of non-guaranteed local government units' debt and RSD 1.6 billion of non-guaranteed debt of the Development Fund of the Republic of Serbia (hereinafter referred to as the Development Fund) and of public enterprise "Putevi Srbije".

Graph 17. Public debt as a share of GDP in percentage

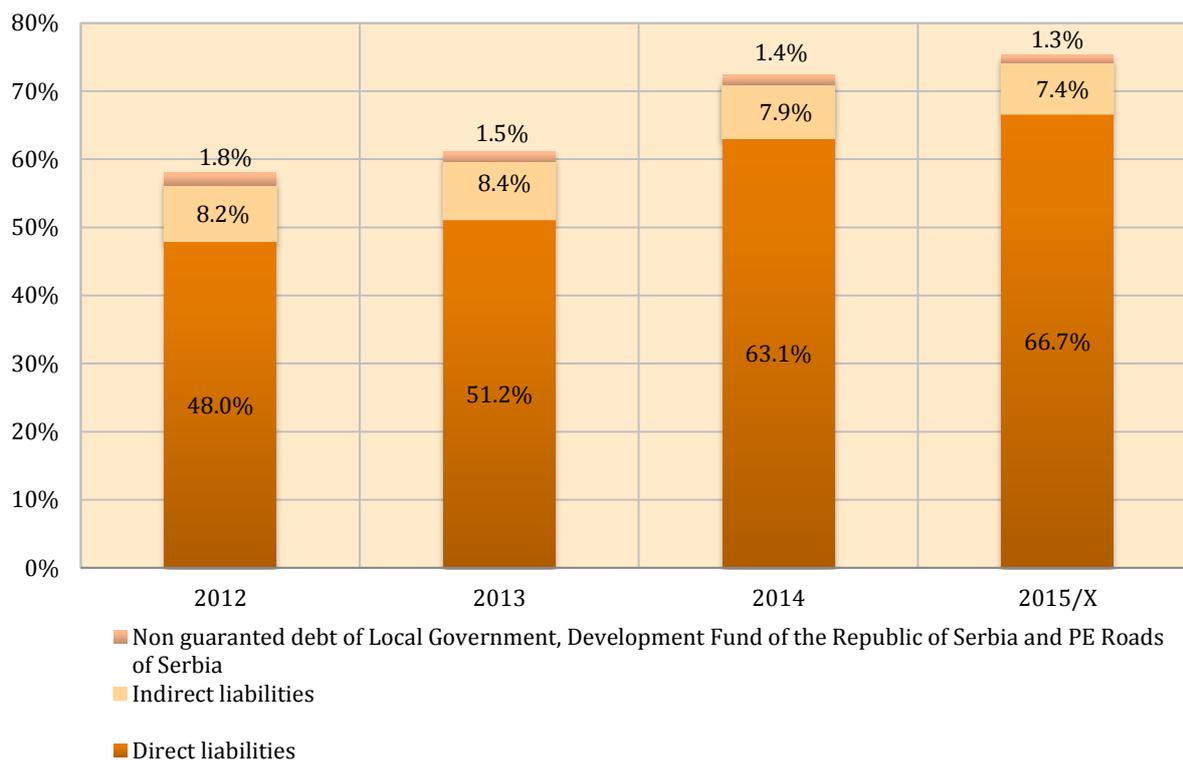


Table 12. Public debt of the Republic of Serbia in the period from the end of 2012 to October 31, 2015

	2012	2013	2014	2015/X
Public debt (in billion RSD)	2,073.9	2,369.0	2,808.2	2,988.9
Public debt (in billion EUR)	18,236.8	20,664.5	23,216.0	24,750.3
Public debt (in billion USD)	24,065.3	28,498.4	28,233.0	27,185.7

If growth of the public debt in the currencies in which it was initially denominated is observed in 2015, the largest growth may be noticed in the dinar-denominated part of the public debt, which was the main source of budget deficit financing. The dollar-denominated public debt increased by only USD 100 mill. in the first ten months of 2015, entirely on the basis of project loans, whereas the euro-denominated public debt increased in slightly more than EUR 170 mill.

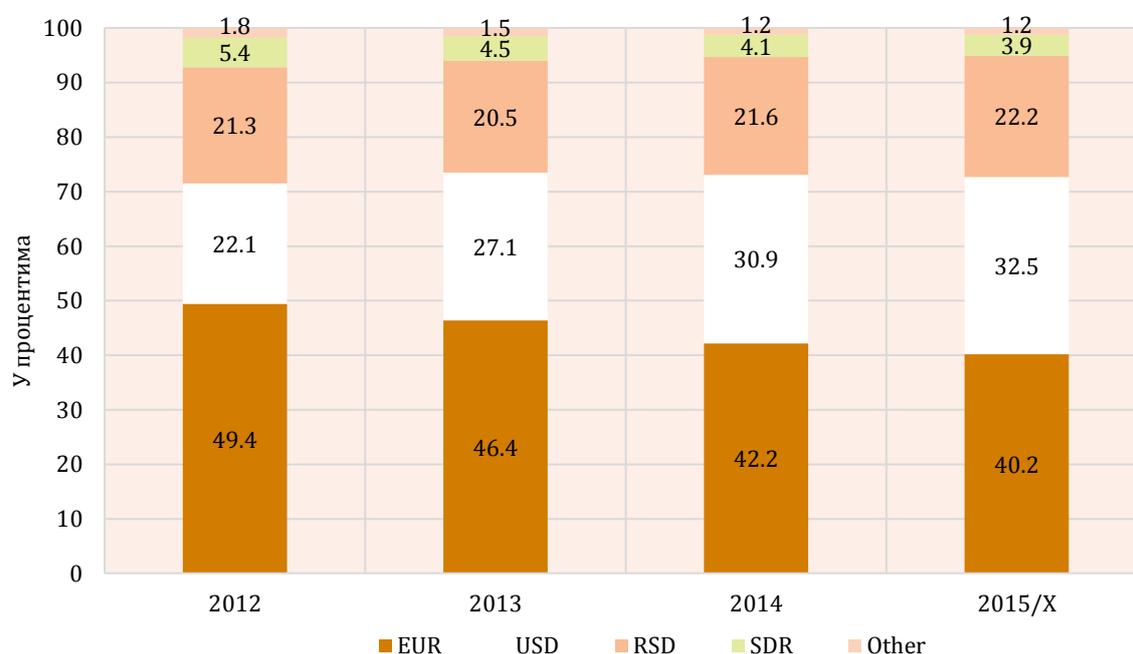
Table 13. Central government debt balance per initial currencies in the period 2012 - October 31, 2015

	2012	2013	2014	2015/X
<i>In million</i>				
Special drawing rights	849.2	832.9	801.2	763.3
EUR	8,992.1	9,226.2	9,493.4	9,666.6
USD	5,307.8	7,675.6	8,717.8	8,824.0
CHF	253.5	225.7	199.1	173.2
RSD	380,519.9	466,366.6	588,570.0	648,832.5
Other currencies (in RSD)	12,686.1	13,142.8	13,776.4	15,427.8

The main source of financing in the period 2012–2015 are dinar-denominated securities issue, which increased the share of dinar-denominated public debt from 19.5% at the end of 2012 to 21.6% of the public debt of the Republic of Serbia at the end of 2014. The tendency to drop the currency risk effects, to expand maturity and develop new borrowing instruments in the domestic financial market, and the trend of national currency share increase in the public debt portfolio continues in 2015, and on October 31, 2015, that share was 22.2% of the total public debt portfolio.

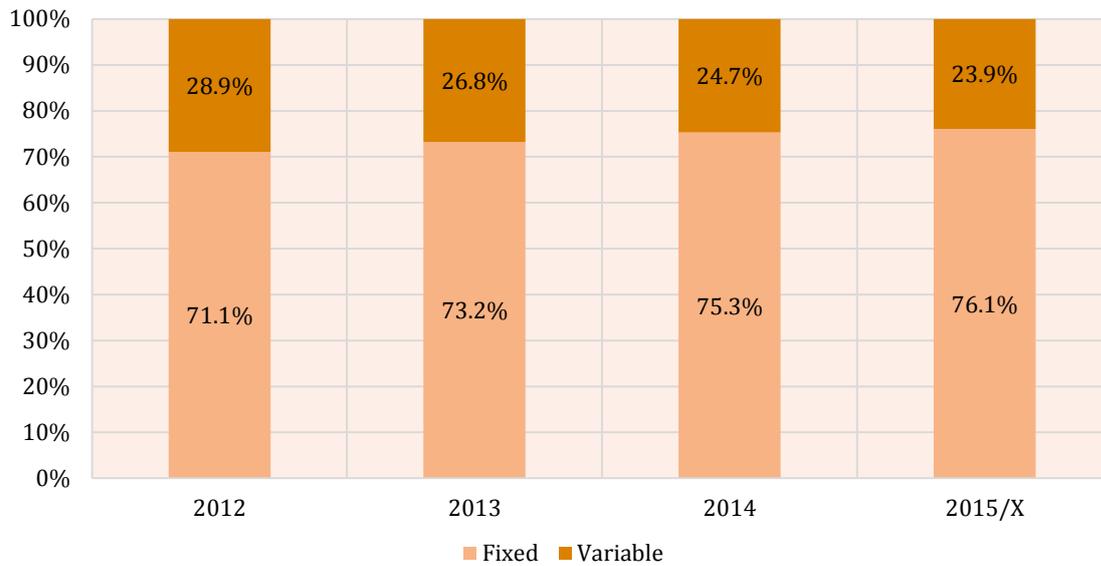
According to data from October 31, 2015, the largest part of the public debt of the Republic of Serbia is still euro-denominated debt and it amounts to 40.2%. It is followed by dollar-denominated debt whose part is 32.5% and dinar-denominated debt in the amount of 22.2%. The remaining debt is denominated in special drawing rights (3.9%) and other currencies (1.2%).

Graph 18 Currency structure of the government public debt state in the period 2012 - October 31, 2015



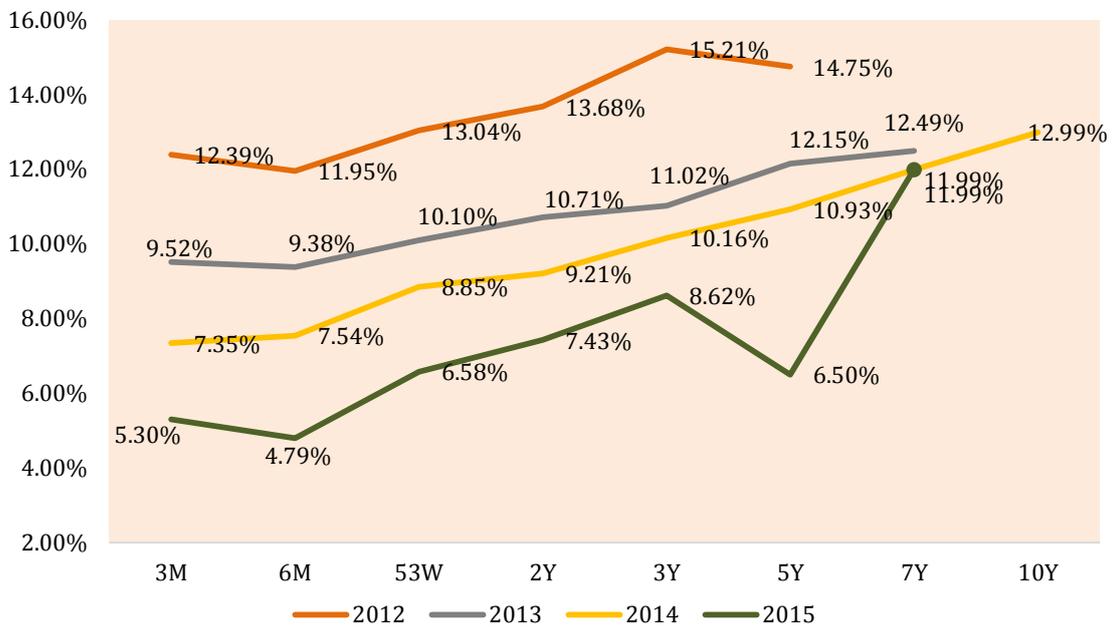
As of October 31, 2015, the majority of Serbia's public debt 76.1% is with the fixed interest rate, whereas the public debt with the floating interest rate makes 23.9% of the public debt. Among the floating interest rates, the highest share hold Euribor and Libor interest rates in EUR, which in total make 63.7% of the total public debt tied to floating interest rates, whereas 12.1% refers to the liabilities tied to the reference interest rate of the NBS, 11.5% to the Libor interest rates in USD, and the rest of the liabilities tied to other types of floating interest rates have the share of 12.6% (mainly the floating interest rate for special drawings rights).

Graph 19. Interest rate structure of the government public debt in the period 2012 – October 31, 2015

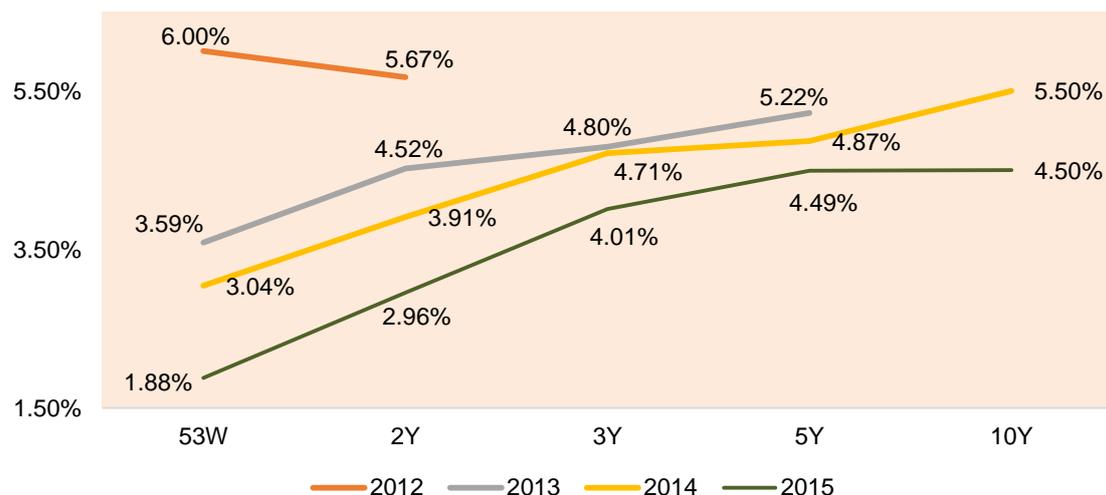


Further drop of borrowing costs of the Republic of Serbia in terms of dinar- and euro-denominated securities occurred in 2015 due to the reduced credit risk in the country i.e. reduced risk premium, inflation rate and reference NBS interest rate, which continued the trend that began in 2012.

Graph 20. Overview of the trend of average effective interest rates in dinar-denominated securities in the period 2012–2015



Graph 21. Overview of average effective interest rates for euro-denominated securities in the period 2012–2015



Graph 22. Overview of yield rate trend for Serbian Eurobond 2021



Servicing the public debt of the Republic of Serbia (central government¹) in the period 2015 - 2018

Table 14. Interests and principals repayment projections by 2018

	2015p	2016p	2017p	2018p
	In RSD billion			
Principal	525.7	567.6	702.7	668.6
Interest	128.0	139.6	151.6	157.0
Total	653.7	707.2	854.3	825.6
Share in the public debt as of 31 October 2015	22.3%	24.1%	29.1%	28.1%

Table 15. Interests and principals repayment projections by 2018 (as a % of GDP)

	2015p	2016p	2017p	2018p
	In RSD billion			
GDP	3,964.4	4,137.7	4,377.2	4,711.6
Principal	13.3%	13.7%	16.1%	14.2%
Interest	3.2%	3.4%	3.5%	3.3%
Total	16.5%	17.1%	19.5%	17.5%

¹ Central government includes the budget of the Republic of Serbia, mandatory social security funds and PE "Putevi Srbije".

2. Projection of general government public debt balance in the period 2015-2018

Considering the projected primary budget deficit of the Republic of Serbia for the period 2015-2018, and including the withdrawal of loan instruments for project financing of budget beneficiaries, effects of foreign currency exchange rate of RSD against EUR and USD in the basic macroeconomic scenario, the central government debt balance at the end of 2018 should amount to 74.5% of GDP.

Table 16. Basic projection of general government public debt balance by 2018

	2015p	2016p	2017p	2018p
	In RSD billion			
GDP	3,964.4	4,137.7	4,377.2	4,711.6
Primary deficit (central government)	33.0	23.0	-35.9	-77.4
Interests (central government)	128.0	139.6	151.6	157.0
Public debt (central government)	2,980.1	3,239.0	3,396.1	3,510.5
Central government debt, as % of GDP	75.2%	78.3%	77.6%	74.5%
Non-guaranteed local government - GDP	1.4%	1.4%	1.4%	1.4%
General government debt, as % of GDP	76.6%	79.7%	79.0%	75.9%

The ratio indicating the share of the general government public debt in GDP in 2016 is expected to rise to 76.6% from 79.7% in comparison to 2015, whereas in 2017, it is expected to stabilise and slightly drop to 79.%, and the full effect of fiscal consolidation and measures taken will give a result in 2018 when the ratio is expected to drop to 75.9%. The local government public debt is predicted at the relatively same level at about 2.1% of GDP in the following period.

The public debt stock according to the Maastricht criteria

It is important to mention that, according to the national methodology, public debt stock includes direct liabilities of central government as well as all indirect liabilities, i.e. guaranteed debt for public enterprises, local governments and other legal entities founded by the Republic of Serbia. This stock encompasses all the guarantees regardless of whether payment they will be activated in the following period or not.

Considering the fact that one of the major economic and political objectives of the Republic of Serbia is EU accession, compliance of domestic methodology and European standards arises as a prerequisite. For that reason, the public debt stock is regularly analysed based on the criteria of the Maastricht Treaty, which are the systematic guidelines with the goal to maintain the public debt and the fiscal system, i.e. macroeconomic stability. According to these criteria, apart from the direct liabilities of central government, the public debt stock should also include non-guaranteed debt of local government, and exclude the debt based on direct and indirect liabilities that the Republic of Serbia (central government) does not pay for.

This debt is measured at the nominal value equal to the agreed amount of debt the Government must repay the creditors at maturity. That means that public debt is not influenced by the market yield changes and it excludes the unpaid accrued interest.

Table 17. Public debt structure and projection until 2018 according to the Maastricht criterion

	2014	Oct 31, 2015	2015p	2016p	2017p	2018p
	In RSD billion					
Total direct liabilities	2,368.6	2,562.1	2,628.6	2,914.0	3,054.7	3,171.5
Guaranteed debt	199.7	189.2	186.5	169.6	153.7	132.8

Remaining debt of the government sector	2.2	1.6	1.3	0.7	0.4	0.4
Local government debt	82.2	79.0	85.1	88.3	90.8	93.7
Social insurance institutions debt	0	0	0	0	0	0
Public debt of the Republic of Serbia	2,652.8	2,831.9	2,901.6	3,172.6	3,299.7	3,398.4
Public debt of the Republic of Serbia/GDP	68.4%	71.4%	73.2%	76.7%	75.4%	72.1%

Public debt management principles

According to the Public Debt Law, the primary goal of Serbia's borrowing and public debt management is to ensure the funds necessary to finance budget expenditures, with medium-term and long-term minimal financial costs and acceptable risk level. Reduction of long-term public debt servicing costs to a minimum is restricted by the debt structure and costs reduction will be influenced by a number of factors and risks. With this in mind, the Public Debt Management Strategy of the Republic of Serbia defines the following general objectives and principles:

- 1) It is necessary to ensure the financing of the fiscal deficit and regular financing of liabilities based on the public debt of the Republic of Serbia;
- 2) It is necessary to define an acceptable risk level that should be defined in terms of a targeted debt portfolio structure, including debt currency structure, interest rate structure, maturity structure and debt structure by types of instruments;
- 3) It is necessary to uphold the development of a market of government securities issued in the domestic and international market, so as to have a developed market which would reduce the medium-term and long-term borrowing costs;
- 4) The borrowing process should be transparent and predictable.

The Public Debt Strategy should be supported by, and consistent with, the government's general medium-term macroeconomic and fiscal framework.

The Public Debt Management Strategy shall in the following medium-term period be based on the financing of the budget costs of the Republic of Serbia, mainly through the issue of government securities in the international and domestic capital market. The government securities market is still developing and one of the principles of public debt management is the necessary flexibility in order to secure the financing of Serbia's budget expenditures. Flexibility shall be reflected in the choice of the market for borrowings, borrowing currency and financing instruments. The choice of the financing structure will be made considering the domestic and international financial market current balance and development (interest rate level, risk premiums, yield curve, reference foreign currency exchange rates) and an acceptable level of financial risks exposure.

The objective is financing through the issue of mainly dinar-denominated securities in the domestic market in the following long-term period although the current situation indicates that, despite the firm decision to develop domestic securities market, in the following medium-term period, the financing must be carried out in the international financial market. Guidelines for financing in the international market in foreign currency will be to secure access to a greater number of investors in different parts of the international financial market, if possible, to define the borrowings in foreign currency according to the repayment of the foreign currency-denominated debt.

Borrowing in a foreign currency, such as, e.g. in US dollars, includes the foreign currency risk, due to the changes of the exchange rate RSD-EUR and EUR-USD, indicating that the public debt management is faced with the task of actively considering and using the possibility of hedging, if borrowing is not in RSD.

The public debt management policy must take into account the long-term perspective, and still make a decision about financing budget expenditures once a year. Decision on annual borrowing is made within the Budget Law for a certain fiscal year and depending on the basic fiscal aggregate changes correction of the borrowing plan is possible during a fiscal year.

Financial risks and financial risk management measures

Financial and fiscal risks can cause a greater public debt growth than predicted by the basic scenario. The risks that are present and may cause the debt and public debt servicing costs increase are: refinancing risks, foreign currency exchange risks, market risk (interest rates risk, inflation risk), liquidity risk, credit and operative risks, and risks tied to the servicing costs distribution (debt structure, liabilities concentration).

In order to reduce the exposure to financial risks, the following measures should be taken:

1. Refinancing risks

- Greater share of medium-term and long-term dinar-denominated financial instruments on the domestic financial market;
- Equal liabilities distribution based on public debt on an annual level and during the fiscal year in the following long-term period;
- Extension of average debt maturity issued in securities;

2. Foreign currency risk

- Tendency to reduce the foreign currency-denominated debt share regarding the new debt costs (cost of debt dinarisation);
- Utilisation of financial derivatives to limit the effects of the reference currencies exchange rates changes;
- Tendency to have external debt in EUR mainly and to use the US dollar-denominated debt only if financing in dollars in the international market is less expensive, with the additional use of limiting the financial derivatives risk;

3. Market risk (interest rate risk, inflation risk)

- Tendency to extend the duration of the internal dinar-denominated debt;
- Issue of indexed bonds (interest rates indexation);
- Risk based on external debt interest rate does not jeopardise the long-term objective of minimising public debt costs;

4. Liquidity risk

- Permanent sustainability of cash on Serbia's accounts at a level that enables smooth liabilities financing for at least four months and that enables amortization of possible minor inflows based on borrowing according to the plan;
- Adequate management of free cash assets available on the accounts of the Republic of Serbia, according to the asset-liability management principles;
- Consolidation of foreign currency assets, apart from dinar assets, in the consolidated Treasury system at the NBS, and the use of foreign currency assets to actively manage liquidity of the dinar account of the budget execution;

5. Credit and operative risks

- Financial derivatives transactions can only be carried out with the financial institution of high credit rating;
- The use of financial instruments that limit the credit risk;
- Granting guarantees and new loans to local government only if there has been an adequate analysis of a relatively low possibility of realizing the guaranty in the medium-term period;
- Introduction of adequate control in all the business activities in the Public Debt Administration and expanding the employees' knowledge, which requires expanding limit of the number of employees and approving adequate budget funds;

- Upgrade and improve the existing information system that monitors the public debt and the operations related to it;

6. Risks tied to the servicing costs distribution

- Adequately planned annual borrowing and equal distribution for the following years and during the fiscal year to avoid the risk of high concentration of refinancing obligations;
- Avoiding the obligations concentration based on the public debt on a monthly level, which could not be amortized by free cash assets on the accounts of the Republic of Serbia.

Analyses used to create the Public Debt Management Strategy

Public Debt Administration used the quantitative approach to formulate the Public Debt Management Strategy, identifying the possible restrictions through the macroeconomic indicators, and the analysis of costs, risks and market conditions which affect the public debt management. During the analysis of costs and risks, all the feasible financing alternatives are considered. Share of each instrument in the overall financing needs in the given year is decided according to the objectives of the Strategy.

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

Financing sources denominated in foreign currency

- Foreign governments and international financial institutions loans are shown as instruments denominated in EUR and USD, with fixed and floating interest rate;
- Internal, euro-denominated debt is presented through two instruments – government bills and government bonds issued in the domestic financial market;
- Eurobond denominated in EUR and USD issued in the international financial market.

Financing sources denominated in domestic currency

All of the dinar-denominated government securities are categorized into several groups: short-term government bills (with maturity dates 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

In the process of creating the medium-term public debt management strategy for the period 2016-2018, quantitative costs and risks analyses based on various scenarios and projections were used.

The first step is the basic scenario based on the most likely market conditions. Then three groups of market variables are identified: foreign currency exchange rates, interest rates in the international market and RSD reference interest rates. Future market rates can be deducted through the analysis of the available predictions of the purchasing power parities or through the prediction of the interest rate parities. The trend of RSD depreciation against EUR and USD is assumed, according to the macroeconomic framework in the period observed, and the constant relation between EUR and USD remains in order to provide a clear picture of the effect of the shock applied. The shocks test the effects of the market interest rates changes. Approach to dinar-denominated interest rates is based on current yield rates realised in 2015.

Having defined the basic scenario, three more scenarios – shocks were chosen to conduct the stress test.

Dinar depreciation against US dollar by 25%. In this type of shock the EUR-RSD ratio in projection remains unchanged. This scenario has large influence on the Serbian debt due to the US-denominated debt share (which was 33% of central government public debt at the end of October 2015).

Depreciation of dinar against all the currencies by 25%. In this scenario, the EUR-USD ratio would remain stable, whereas dinar would be depreciated against both currencies. Macroeconomic conditions for such scenario would refer to the increased current deficit of balance of payments and to the low direct and portfolio foreign investments inflow.

International market interest rates increase. The current interest rates in the world are historically low. If the world economy recovers, the interest rates will probably increase for about 2-3 percentage points in the medium-term period.

Domestic market interest rates increase by up to 4 percentage points. This scenario would be possible if the inflation were to rise again (over 10%) as in the period until 2012, and high volatility of RSD-EUR exchange rate due to the country's risk premium increase.

Each of the above mentioned stress tests or risk scenarios were used to outline the effects of the costs of the strategies examined.

Alternative borrowing strategies for the period 2016-2018

The optimal choice between costs and risks, on the basis of the World Bank model Medium Term Debt Strategy Model (MTDS), defined the basic borrowing strategy choice for the next medium-term period. The alternative borrowing strategies are the following:

Basic Strategy (S1): it is the strategy that covers the need to finance government securities issue in domestic and foreign currency in the domestic financial market, and the euro-denominated five-year and ten-year Eurobonds issue.

Secured Concessionary Loan Strategy (S2): as opposed to S1 strategy, euro-denominated five-year and ten-year Eurobond is issued, more favourable long-term loan and fixed interest rate of 2% in US dollars is ensured, whereas the additional domestic market financing is primarily based on dinar-denominated securities in a structure similar to S1. This strategy, compared to S1 strategy, has a greater share of external sources of financing.

Eurobonds Issue-Based Strategy (S3): S3 strategy, as compared to S1 strategy predicts the issue of US dollar-denominated Eurobonds with five and ten-year maturity, whereas the structure and amount of dinar-denominated securities remain as in S1 strategy.

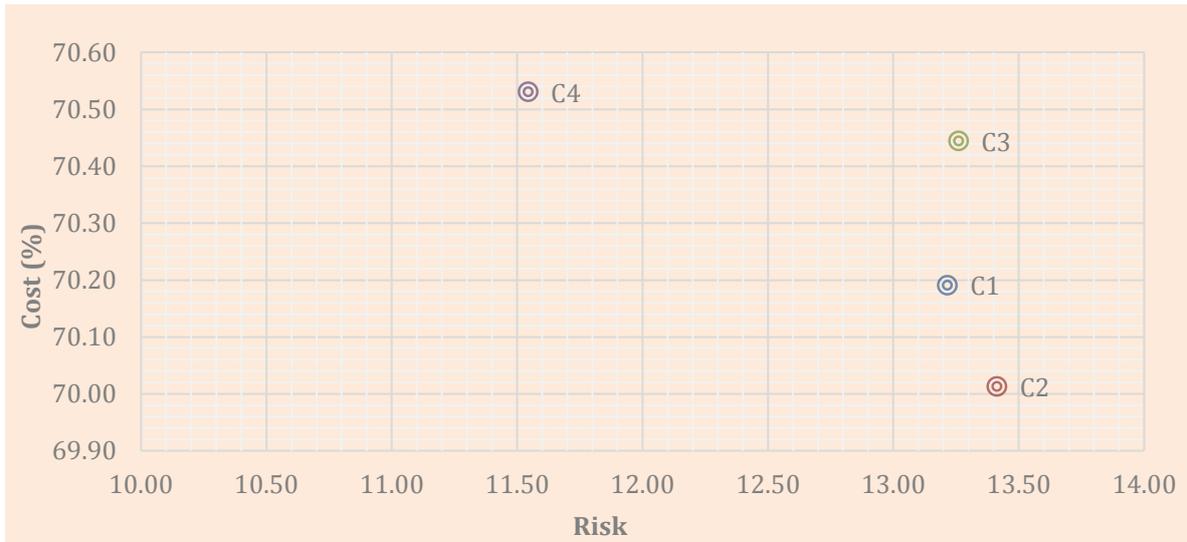
Additional Dinarisation Strategy (S4): this is a strategy in which the total financing is based on dinar-denominated securities issues.

Financing Serbia's budget expenditures following these strategies will be executed mainly through the issue of government securities in the international and domestic capital market, except in the strategy S2, when a greater share of concessionary loans is predicted.

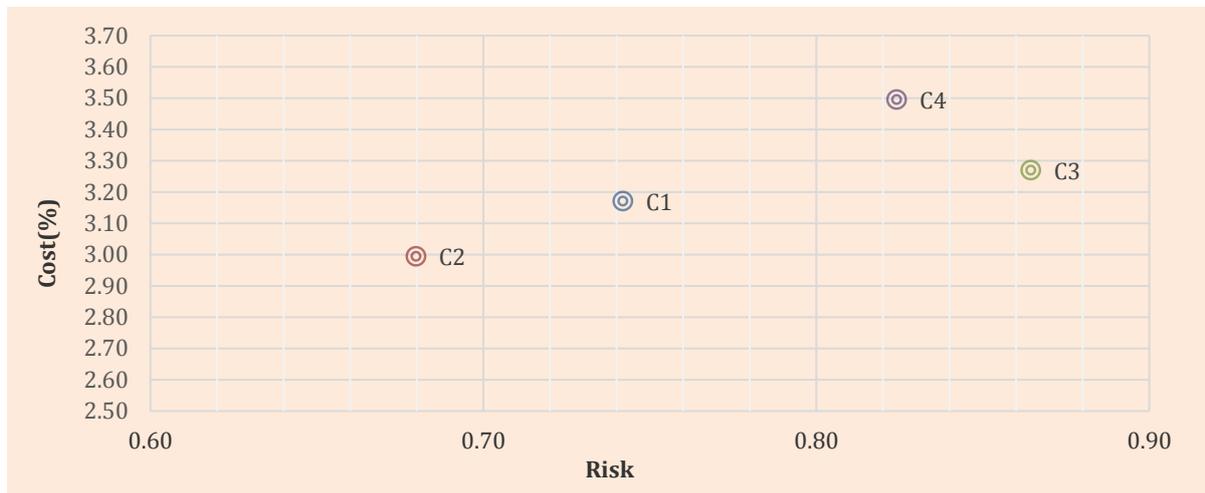
Comparing the alternative strategies

Quantitative analysis represents the performance of each of the four alternative borrowing strategies. The vertical axis represents the debt share in GDP and interest in GDP costs in the basic macroeconomic framework whereas the horizontal axis represents the potential cost of a certain borrowing strategy (stress test result). Two cost ratios are implemented: public debt to GDP and nominal interest to GDP. The former is the balance indicator, and the latter the course indicator. For the sake of comparison, the attention is focused on the results of the strategies examined, at the end of 2018.

Graph 23. Debt-to-GDP ratio at the end of 2018



Graph 24. Interest-to-GDP ratio at the end of 2018



The Graphs clearly show the costs brought by each of the considered strategies – strategies S2 and S3 have relatively higher foreign currency exchange rate risk exposure. As it combines securities denominated in RSD and EUR, strategy S1 is currently highly exposed to the possible dinar-denominated interest rates for government securities volatility, and the risk is higher in the strategy S4, where the complete additional financing plan is based on the issue of dinar-denominated securities. On the other hand, strategy S4 in the basic macroeconomic framework has relatively higher share of dinar, and therefore has more stable ratio of debt share in GDP. Strategy S2, which is partially based on a long-term concession loan in US dollars, has the lowest risk in terms of interest rates, out of the four strategies examined, due to low fixed costs of the concessionary loan. Strategy S3 appears to be of relatively high risk regarding the debt-to-GDP ratio, since additional financing is based on the issue of US dollar-denominated bonds, whereas strategy S4 appears to be relatively expensive, considering the high share of dinar-denominated securities in this strategy.

The analysis of public debt-to-GDP ratio graded strategy S2 as the one of the highest risk. The basic strategy S1 has relatively higher expenditures of interest, compared to S2 strategy, due to the significant share of dinar-denominated securities. In the basic macroeconomic framework strategy S2 has lower interest costs, since a part is financed out of the concessionary loan. Based on the analyses, it is evident that in the following medium-term period, basic borrowing operations will be based on strategies S1 and S2, and with clearly indicated preference to, if there is a possibility of borrowing in greater amount according to the concessionary conditions, base the borrowing

operations on strategy S2, considering that further reduction of interest rates for dinar-denominated securities would lead to the preference of S1 strategy. Application of discount prices that maintain limit borrowing costs of the Republic of Serbia in the financial market would result in the most optimal S1 and S2 borrowing strategies and from the aspect of net present value.

Table 18. Public debt-to-GRP ratio at the end of 2018

Scenarios	S1	S2	S3	S4
Basic scenario	70.2	70.0	70.4	70.5
Foreign currency exchange rate shock (25% of all the currencies)	83.4	83.4	83.7	82.1
Interest shock (scenario 1)	70.6	70.4	71.0	71.0
Interest shock (scenario 2)	70.8	70.6	71.1	71.2
Combined shock (25% of USD and interest shock 1)	77.0	77.2	78.2	77.4
Maximum risk	13.2	13.4	13.3	11.5

Table 19. Payment ratio based on interest and GDP at the end of 2018

Scenarios	S1	S2	S3	S4
Basic scenario	3.2	3.0	3.3	3.5
Foreign currency exchange rate shock (25% of all the currencies)	3.7	3.5	3.8	3.9
Interest shock (scenario 1)	3.6	3.4	3.8	4.0
Interest shock (scenario 2)	3.8	3.5	4.0	4.2
Combined shock (25% of USD and interest shock 1)	3.9	3.7	4.1	4.3
Maximum risk	0.7	0.7	0.9	0.8

The following table shows the basic public debt parameters trends in each of the four strategies considered, which outlines the above mentioned characteristics of each strategy:

Table 20. Alternative strategies risk indicators

Risk indicators	At the end of 2018				
	S1	S2	S3	S4	
Nominal debt (% of GDP)	70.2	70.0	70.4	70.5	
Net present value (% of GDP)*	62.8	60.1	67.7	67.8	
Applied interest rate (%)	4.7	4.4	4.8	5.1	
Refinancing risk	ATM ² external portfolio (in years)	6.5	7.6	6.5	6.8
	ATM domestic portfolio (in years)	3.2	3.2	3.2	3.8
	ATM total portfolio (in years)	5.2	6.1	5.2	4.7
Interest rate risk	ATR ³ (in years)	4.7	5.6	4.7	4.2
	Refixing (% of total debt)	23.4	22.3	23.4	25.5
	Fixed rates debt (% of total debt)	84.4	85.1	84.4	83.5
Foreign currency exchange rate risk	Foreign currency debt (% of total debt)	68.3	71.4	68.3	43.8

* Application of discount prices reflects the limit borrowing cost of the Republic of Serbia in the financial market.

Stress test analysis

² ATM - Average Time to Maturity

³ ATR - Average Time to Refixing

Fiscal rule, defined by the Law on Budget System, imposes that the General Government public debt must not exceed 45% of GDP. Should the debt exceed that level, the Government's duty is to implement a program to reduce the debt share in GDP, i.e. to have the debt within the legal framework again.

At the end of 2014 central government debt reached 71.0% of GDP, and general government debt reached 72.4% of GDP. The public debt-GDP ratio of Central Government was 74.1% of GDP at the end of October 2015. Rising trend is expected to continue until the end of 2015, and to reach a share of about 75.2% of GDP at central government level, and 76.6% of GDP at general government level

Due to high share of foreign currency-denominated debt (about 78%), it is clear that the foreign currency risk will determine the behaviour of public debt-GDP ratio in the following period, and it will significantly influence the success of the fiscal policy measures designed to consolidate public finances and reduce the debt share in GDP

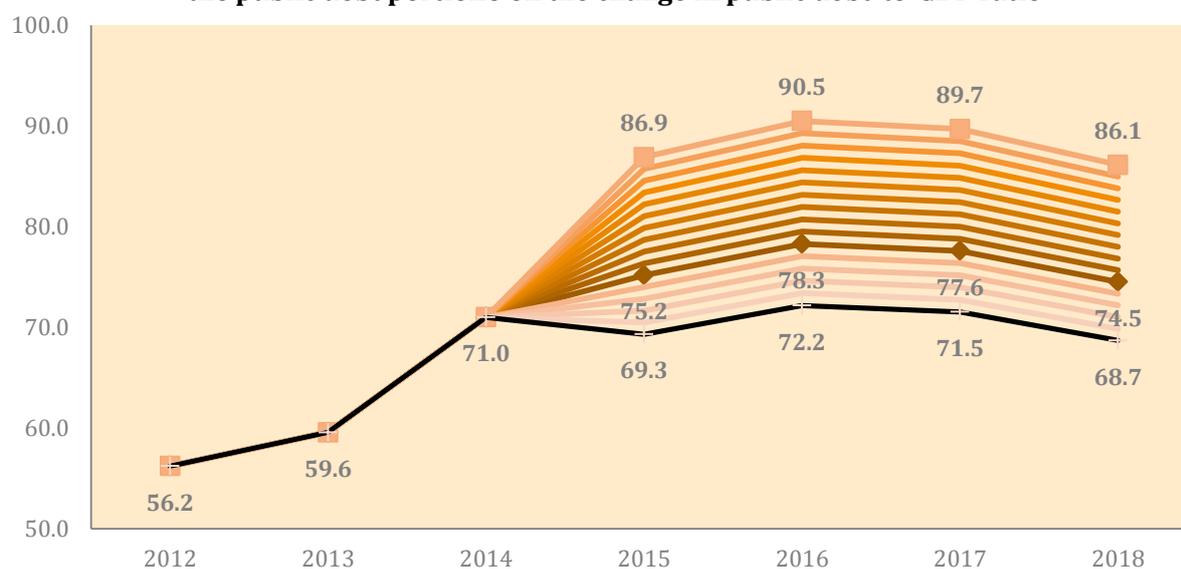
Based on the planned macroeconomic framework, providing that there is no possible risk influence (foreign currency risk primarily), public debt, excluding the non-guaranteed debt of local government, would be at the level of 74.5% of GDP, until 2018.

The key factors that influence the stabilization of public debt-GDP ratio include GDP growth, primary deficit, dinar exchange rate against foreign currency rates, and interest level. The planned measures of fiscal policy define the reduction of primary deficit, which reduces the key factor of debt growth.

Table 21. Basic macroeconomic variables' contributions to the changes in the central government debt-to-GDP ratio

	2013	2014	2015p	2016p	2017p	2018p
					In percentage	
Central government debt/GDP	59.6	71.0	75.2	78.3	77.6	74.5
Changes compared to the last year	3.4	11.4	4.2	3.1	-0.7	-3.1
Primary deficit influence	2.9	3.6	0.8	0.6	-0.8	-1.6
Interest	2.3	2.8	3.2	3.4	3.5	3.3
Nominal GDP growth	-4.2	0.0	-1.5	-3.1	-4.3	-5.5
Other factors affecting the ratio	2.4	5.0	1.7	2.3	0.9	0.7

Graph 25. Impact of changes in the RSD exchange rate against the basket of currencies from the public debt portfolio on the change in public debt-to-GDP ratio



Graph 25 represents the public debt-to-GDP ratio trends depending on the dinar exchange rate against a certain currency basket. It shows the basic projection with alternative scenarios depending on the appreciation or depreciation of dinar exchange rate, in the range of 10% appreciation to 20% depreciation of dinar against a currency basket. Implementation of the scenarios in question shows that in 2018 the ratio would range from 68.7% to 86.1%, whereas in the basic scenario it would be at 74.5%

Major risks to the Strategy implementation, apart from the above mentioned quantified factors, include the following: stability of macroeconomic situation in the Republic of Serbia, the need for additional borrowing in order to regulate debts and other government levels, the public sector and the financial sector of the Republic of Serbia and activation of provided guarantees.

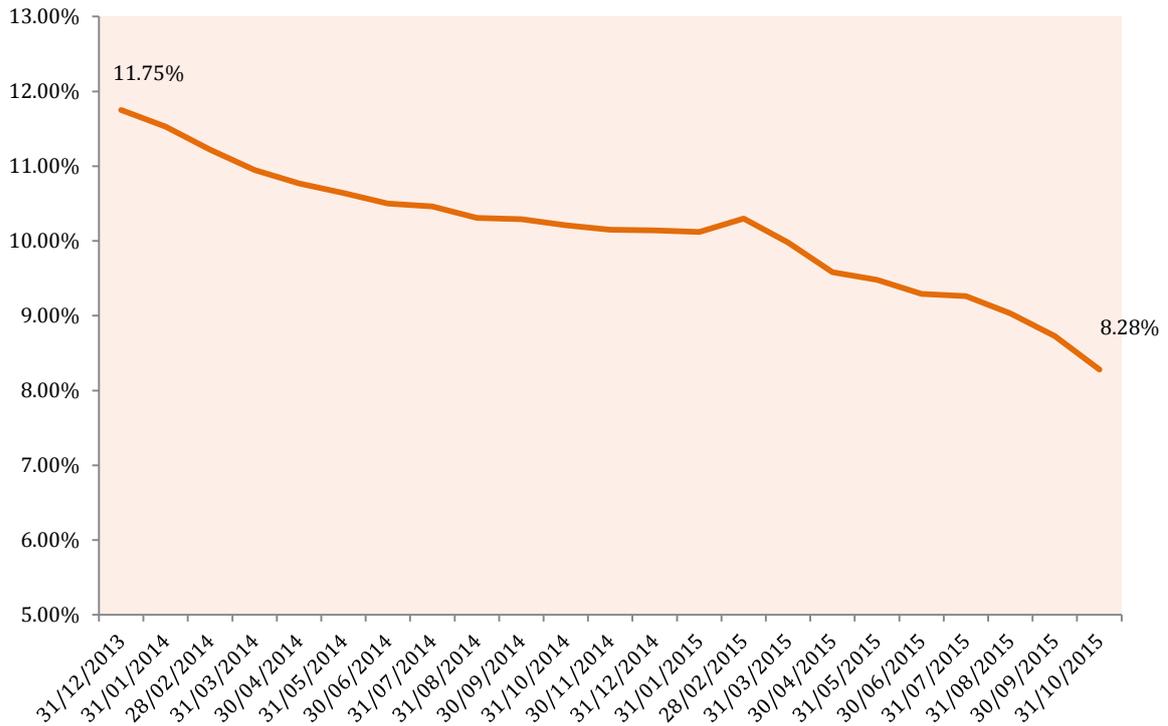
It is important to mention that the reduction of the public debt in relation to GDP will be enhanced by the more adequate control of guarantees issuance and the improvement of the process of investments projects prioritization, financed from the loan lines of multilateral and bilateral creditors. Starting from 2015, the guarantees will be issued only for the project (investment) loans, i.e. no more guarantees for current liquidity loans to public enterprises which already in 2015 resulted in the reduction of the guaranteed public debt balance.

Long-term strategic framework of public debt management

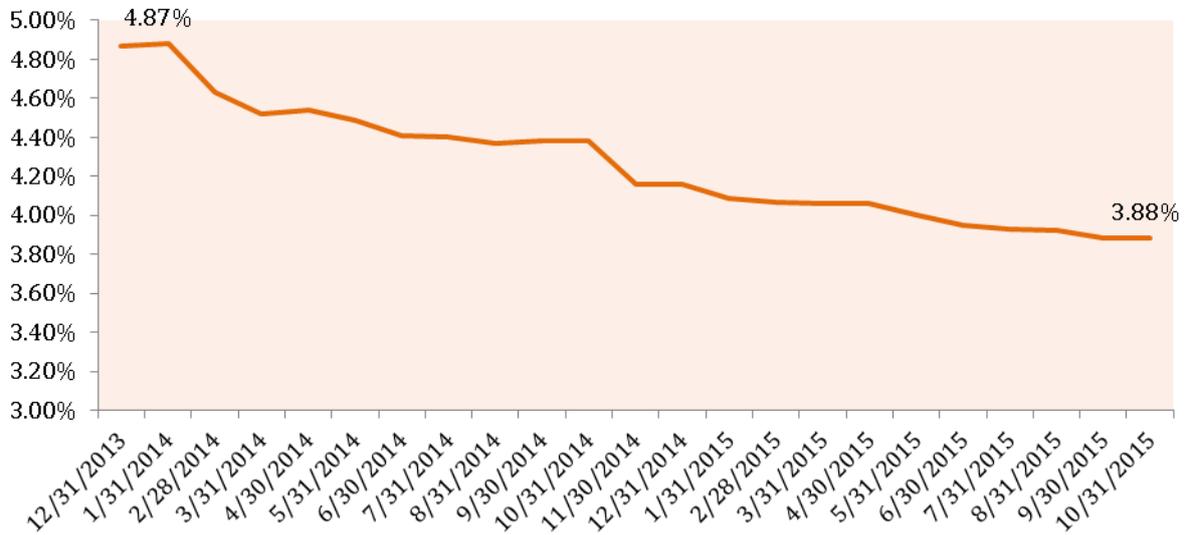
The basic strategic objectives which are to be acquired in the following long-term period, in order to minimize the risk of increased debt and public debt servicing costs are the following:

- The share of dinar-denominated debt should be about 20-25% of the overall public debt in the medium-term period;
- The share of euro-denominated debt in the public debt should be at least 60% of the foreign currency debt, including future borrowings and transactions;
- The share of floating interest rate should drop to below 20% in the mid-term period;
- Average time to refixing (ATR) should remain at a level of at least 4.5 years, in accordance with the above mentioned measure of gradual decrease of floating interest rate debt share;
- Weighted average interest rate (WAIR) for internal public debt shall not exceed 10% in short-term and mid-term debts;
- The share of the short-term debt (whose maturity is up to a year) shall be up to 15% of the overall public debt;
- The average maturity time (ATM) of internal debt shall be at a level of at least 4 years in mid-term;
- The average maturity time (ATM) of external debt shall remain at a level of from 6 ± 0.5 years in the same time framework.

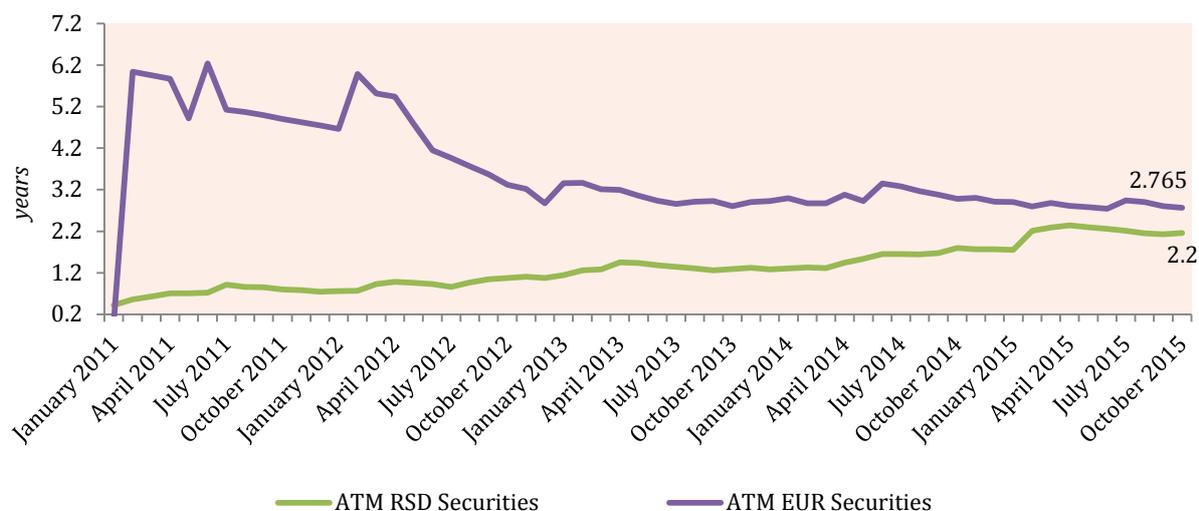
Graph 26. Average weighted interest rate for dinar-denominated securities in the period from the end of 2013 to October 31, 2015



Graph 27. Average weighted interest rate for euro-denominated securities in the period from the end of 2013 to October 31, 2015



Graph 28. Average time to maturity (ATM) of securities issued in the domestic financial market in the period from the beginning of 2011 to October 31, 2015



Improvement measures for dinar-denominated securities market in the period 2015-2018

In the period of 2012–October 2015, the securities market has achieved the set strategic objectives, primarily regarding the financing instruments, but also when it comes to maintaining stability of diversified investor base. The development policy of the domestic market of securities has enabled the continuity of Serbia's budget financing, as well as broadening the amount that will be financed from the issue of long-term dinar-denominated securities in the domestic financial market. Transferring from short term financing resources, which were used in the period up to 2010, to the mid-term and long-term financing instruments, and the constant drop in borrowing costs, have influenced the reduction of 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-denominated instruments in initial maturity of three or more years amounted to 37% in dinar-denominated securities balance, whereas at the end of October 2015, the amount was 57%.

Transparent work and reports, as well as presence on the international capital market, helps the non-residents to be informed and therefore interested to invest their capital into borrowing instruments, primarily into long-term government securities, which enhances the development of a stable investor base. In 2014 were for the first time issued ten-year bonds which concluded the maturity development on the yield curve, of both dinar and euro denominated government securities. In February 2015 was for the first time established benchmark issue in the domestic financial market with the 7-year maturity in the amount of RSD 50 billion. In 2015, there was an issue of two three-year bonds in the amount of RSD 50 billion each. This issue considerably extended the scope of secondary trade in these instruments which considerably contributed to the drop in effective yield rates in the re-opening of the stated issues.

Trade in long-term government securities was enabled at Belgrade stock exchange to ensure further development of the secondary market of government securities from November 12, 2015.

The period to which this strategy applies is expected to improve the efficiency of the primary market through the concept of primary dealers, as a mechanism of selling government securities which can, in the long run, directly contribute to the reduction of borrowing costs and refinancing risk. Introduction of the selling system for the government securities in the domestic financial market through primary dealers is a solid base for the improvement of the market efficiency of the secondary market of government securities. In time, the development of the secondary market will establish the concept of market efficiency in the process of government securities evaluation. Introduction of the benchmark issue of bonds will have a positive effect on the amount and continuity of secondary trade, as well as on the improvement of market efficiency in the process of selling government securities in the primary market.

We should highlight the fiscal result, expected inflation rate and foreign currency exchange rate as the key factors that influence the yield curve of government securities. A special group of factors are the macroeconomic trends and expectations, as well as changes in the international financial market, which reflects the premium risk of the country.

The plan to extend the average maturity of the dinar-denominated securities depends on a series of factors, primarily on the success of Government and the NBS in the process of dinarization and maintenance of the set inflation framework, along with the growth of confidence in the monetary and economic policy of the Government and the NBS, as well as the stability of the dinar exchange rate.

At the end of 2011 the average maturity of dinar-denominated securities was 272 days (0.75 years), at the end of 2012 it was 394 days (1.1 year), at the end of 2013 it was 469 days (1.3 years), at the end of 2014 it was 645 days (1.8 years) and as of October 31, 2015, it was 788 days (2.2 years). The maturity has grown over the years and during 2015 there was the most significant improvement, due to successful issue of bonds of three, five, seven and ten years. Bearing in mind that during 2018 the planned average maturity should be ranging from 2 to 3 years. Development of the domestic securities market will be supported by the Republic of Serbia with the following measures:

- Considering to increase the amount of benchmark issue in the following period;
- Including domestic currency-denominated securities in one of a Global Currency Government Bond Emerging Market Indexes. Including Serbia's bonds in a global index would considerably increase the database of investors and support secondary trade, which would contribute to further reduction of costs by borrowing issues of securities;
- In order to create a base of investors as large as possible and to develop the secondary market for securities issued in domestic market, the Government created an equal tax treatment for the domestic and foreign investors at the end of 2011, and in the following period, efforts will be made to remove all the obstacles to a free capital flow. During the last three years there has been a noticeable trend of increased share of foreign investors, and a change in the base of investor and the current investors structure is expected to remain in the following three-year period, which could contribute to the development of secondary market;
- The possibility of clearing and settling the domestic securities transactions through the international clearing system is to be considered in the following period;
- The possibility of introducing the primary dealers will be considered in the following period;
- In order to increase the investments of domestic natural persons, there will be additional efforts in the domain of educating the citizens of the Republic of Serbia and consider the issue of retail bonds.

In the following period, the Ministry of Finance will modify the auction platform, based on the suggestions from the investors, in order to satisfy the interests of both parties in the best and the most acceptable manner.