



**MINISTRY OF PUBLIC FINANCE**

**GOVERNMENT PUBLIC DEBT  
MANAGEMENT STRATEGY**

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**2013 – 2015**

**General Directorate for Treasury and Public Debt**

Bucharest, March 2013

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## Acronyms

ATM	Average time to maturity (years)
ATR	Average time to re-fixing (years)
CEDB	Council of Europe Development Bank
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EMBIG	Emerging Markets Bond Index Global of JP Morgan
EU	European Union
GCAST	General Current Account of the State Treasury
GDP	Gross Domestic Product
GMTN	Global Medium Term Note Program for the eurobonds issuances on the foreign markets
IBRD	International Bank for Reconstruction and Development
IFIs	International Financial Institutions
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
MoPF	Ministry of Public Finance
NBR	National Bank of Romania
NCP	National Commission of Prognosis
PDs	Primary dealers
RON	Romanian national currency
WB	World Bank

## Summary

The present Public Government Debt Management Strategy for 2013-2015 is a continuation of Public Government Debt Management Strategy for 2013-2015 and was prepared following the international sound practice as defined in the WB-IMF Guidelines for debt strategy design<sup>1</sup>.

The Ministry of Public Finance's objectives of debt management are:

- Cover the government's financing needs and payment obligations, while minimizing medium and long-term costs;
- Limit the financial risks of the government public debt portfolio especially by extending the average remaining maturity; and
- Develop a domestic market for government securities.

The strategic guidelines set for the period 2013-2015 for risk, expressed as indicative targets for key risk indicators, includes the following actions:

- *to manage foreign currency risk:*

1. The government, through the MoPF, will pursue a balanced funding mix keeping a minimum share of 40% for local currency denominated debt in total government public debt.
2. Foreign currency should be predominantly contracted in EUR and the minimum share of debt denominated in EUR as a proportion of foreign currency debt is set at 70%. Foreign currency debt will comprise market instruments placed in the domestic and international markets as well as loan contracted with official creditors and other creditors.
3. Romania will access the international capital markets in USD or other foreign currencies when financial conditions result attractive relative to EUR denominated instruments.

- *to manage refinancing risk*

1. The government will pursue a smooth redemption profile, avoiding to the extent possible the concentration of repayments in the short-term. The share of debt maturing in the next 12 months shall remain below 45% for the local currency debt and 25% for the total debt.
2. The government will endeavor to extend the tenors, especially of RON denominated securities. The ATM should not fall below 2.0 years for local currency denominated debt and 4 years for total debt.
3. The MoPF will continue to maintain a foreign currency buffer of four months of financing needs and if market conditions allow front-load the financing in order to maintain a comfortable liquidity position.
4. Refinancing risk will also be mitigated with contingent credit lines.

- *to manage interest rate risk*

1. The government will ensure that the share of debt re-fixing its interest rate in the next 12 months remains at levels that do not expose the budget to undue interest rate risk. This ratio should not exceed 45% for the local currency debt and 35% for the total debt.
2. To maintain control on interest rate risk beyond the first year the ATR should not fall below 2.0 years for local currency debt and 3.5 years for total debt.

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<sup>1</sup> See "Developing a Medium-Term Debt Management Strategy (MTDS)—Guidance Note for Country Authorities, Prepared by the Staff of the World Bank and the International Monetary Fund February 24, 2009

## 1. Introduction

In August 2008 the Ministry of Public Finance (MoPF) in consultations with the National Bank of Romania elaborated the first Public Government Debt Management Strategy for 2008-2010 which was approved by Government in August 2008; subsequently, it was elaborated the strategy for 2011-2013 which was revised in July 2012 in compliance with the legal framework<sup>2</sup>. The present Public Government Debt Management Strategy for 2013-2015 (hereinafter the Strategy) is a continuation of this work and was prepared following the international sound practice as defined in the WB-IMF Guidelines for debt strategy design.

As it has been the case with previous documents, the Strategy for 2013-2015 is consistent with the medium-term Fiscal-Budgetary Strategy for 2013-2015 and with the agreements concluded with the international financial institutions (IMF/WB/EU). However, in line with the international sound practice this time the Strategy focuses exclusively on the composition of the public government debt, in particular on those aspects for which the debt manager can be made accountable<sup>3</sup>. Accordingly the Strategy provides the direction in which the authorities intend to steer the funding and the structure of the debt portfolio and such direction is expressed in terms of target bands for the main risk indicators: refinancing, interest rate and foreign currency risks. As the experience of other countries show the use of bands provides debt managers with the flexibility required to respond to the changing conditions of the financial markets.

## 2. Objectives and scope

The Ministry of Public Finance's objectives of debt management are:

- Cover the government's financing needs and payment obligations, while minimizing medium and long-term costs;
- Limit the financial risks of the government public debt portfolio, especially by extending the average remaining maturity; and
- Develop a domestic market for government securities.

The first two objectives are stated in the EGO no 64/2007 and are complemented by the domestic market development objective which was formulated in the Strategy for the period 2012-2014.

The scope of the Strategy for 2013-2015 is limited to debt contracted or guaranteed by the Government, through the Ministry of Public Finance, but excluding the loans from the State Treasury Account ("temporary financing"). "Temporary financing" is more a cash management instrument and cannot be viewed as a financing vehicle in the medium-term<sup>4</sup>.

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<sup>2</sup> The legal framework for the management of public debt is stated in the Government Emergency Ordinance 64/2007 and the Government Decision 1470/2007

<sup>3</sup> In consequence, the document avoids committing to fiscal policy targets such as debt/GDP or to cost/GDP since the first is a decision of the fiscal authority and the second results from fiscal decisions and market developments both of which are out of the control of the debt manager

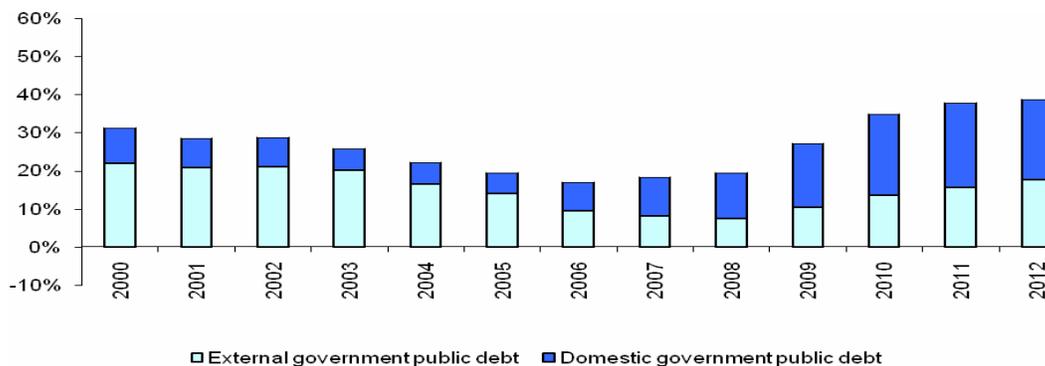
<sup>4</sup> It should be noted however that drastic changes in the level of temporary financing may have an impact in the issuance of government securities and can affect the plans for developing the domestic debt market. In GDMS for 2012-2014 the policy was to reduce temporary financing in equal installments of 3.2 billion lei over 10 years.

### 3. Description of the public government debt portfolio

#### 3.1. Evolution of government public debt: volume and structure

At the end-December 2012 the outstanding government public debt was RON 227.2 billion, 38.7% to GDP. Since 2000 this ratio decreased continuously until 2006 when it reached a low 17.1% to GDP reflecting sustained economic growth, low budget deficits and relatively low interest payments together with the use of privatization revenues. The downward trend however reversed in 2008 driven by the impact of the global financial crises in late 2008 and the eurozone sovereign debt crises more recently. In contrast to the direct debt, the ratio of guaranteed debt to GDP decreased from 6.3% of GDP in 2000 to 2.2% of GDP in 2012, due to the slowdown in the issuance of guarantees especially after 2007.

**Graph 1: Evolution of public government debt (in % of GDP)**



Source: MoPF

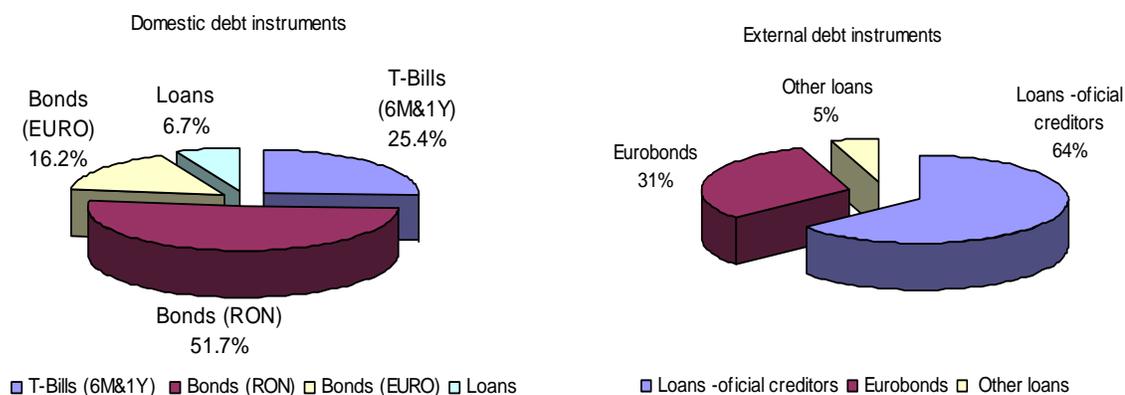
During this period the structure of the public government debt continuously improved from a portfolio comprising mainly external loans to one with more marketable debt instruments issued both in local and foreign currencies.

#### 3.2. The outstanding debt structure at end 2012 and associated cost

The outstanding public government debt at the end 2012 was RON210 billion<sup>5</sup>, 51.0% contracted on domestic market and 49.0% external. As presented in graph 2, the bulk of the domestic debt is represented by securities, T-Bills and T-bonds denominated in RON and EUR, whereas the external debt contains a mix of bonds issued in the international capital markets and loans contracted with bilateral and multilateral organizations, as well as with commercial banks.

<sup>5</sup> Exclude temporary financing of RON 17 billion.

## Graph 2: Composition of the debt portfolio by debt



Source : MoPF

Government securities issued in the domestic and external markets represent 62.8% compared to 37.2% of loans; and 62.7% of these securities are denominated in RON and 37.3% in foreign currencies.

In terms of cost, measured as average interest rates<sup>6</sup>, the debt in local currency at end-2012 is significantly more expensive than the debt in foreign currencies as presented in table 1, which shows also the average interest rates for main stylized instruments.

**Table 1: Cost of debt by type of instruments at the end of 2012**

Average interest rate of public government debt (%)	
	4.8
<i>1. in local currency</i>	
a. T-Bills with 1 year maturity	5.6
b. T-Bonds with 3 years maturity	5.6
b. T-Bonds with 5 year maturity	7.4
c. T-Bonds with 10 year maturity	6.2
<i>2. in foreign currencies</i>	
	3.9
a. EUR private creditors <sup>7</sup> (including bond holders) with 10 years maturity	3.5
b. EUR private creditors (including bond holders) with 5 years maturity	4.7
c. EUR with 3 years maturity – securities on domestic market	4.8
d. EUR multilateral, fixed interest rate with 10 years maturity	3.2
e. EUR multilateral, floating interest rate with 10 years maturity	2.5
f. USD private creditors (including bond holders) with 10 years maturity	6.1
g. USD multilateral, floating interest rate with 10 years maturity	5.0

Source : MoPF

External debt is generally cheaper because it includes a significant portion of multilateral loans contracted at relatively concessional rates. Marketable debt

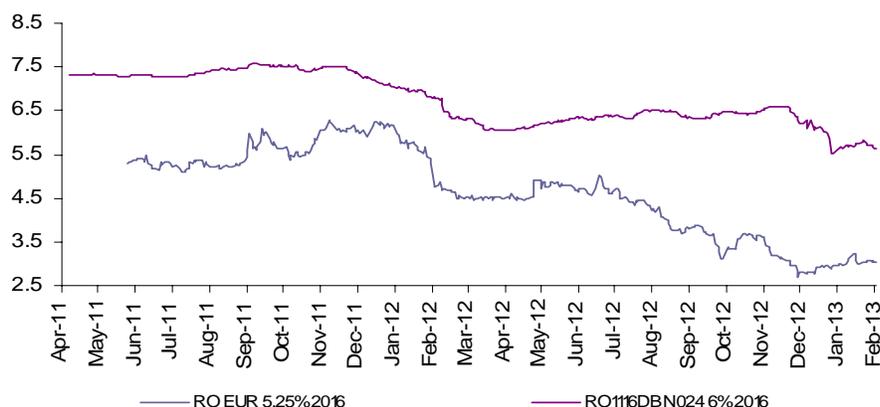
<sup>6</sup> Calculated as interest payments projected for 2013 divided by outstanding debt at end-2012.

<sup>7</sup> Includes also guarantees issued under special laws (guarantees only for principal).

comprising Eurobonds issued in international capital markets in EUR and bonds issued in the domestic market in foreign currency with tenors of 3 and 4 years are more costly than borrowings from IFIs . The average interest rates are those for the bonds denominated in RON issued in domestic market at medium and long maturities.

As presented in graph 3 the spread between 5-year bonds in RON and EUR has fluctuated between 100 and 200 basis points during the last years. It is likely that the spread will narrow down following the announcement of the inclusion of the local currency bonds in the benchmark indexes of Barclays and JPMorgan.

**Graph 3: Domestic benchmark bond yield vs 5 yrs eurobond**



Source:

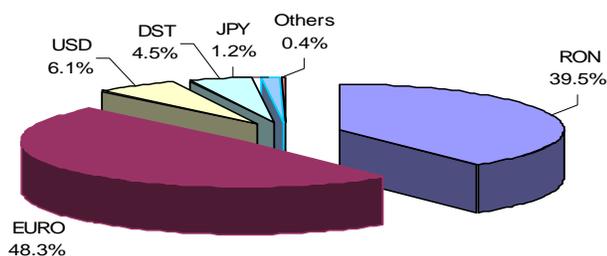
MoFP

### 3.3. Risks of the public government debt portfolio at end-2012

#### Currency risk

At end of 2012, 60.5% of the debt portfolio was debt denominated in foreign currencies (see graph 4), mainly in EUR.

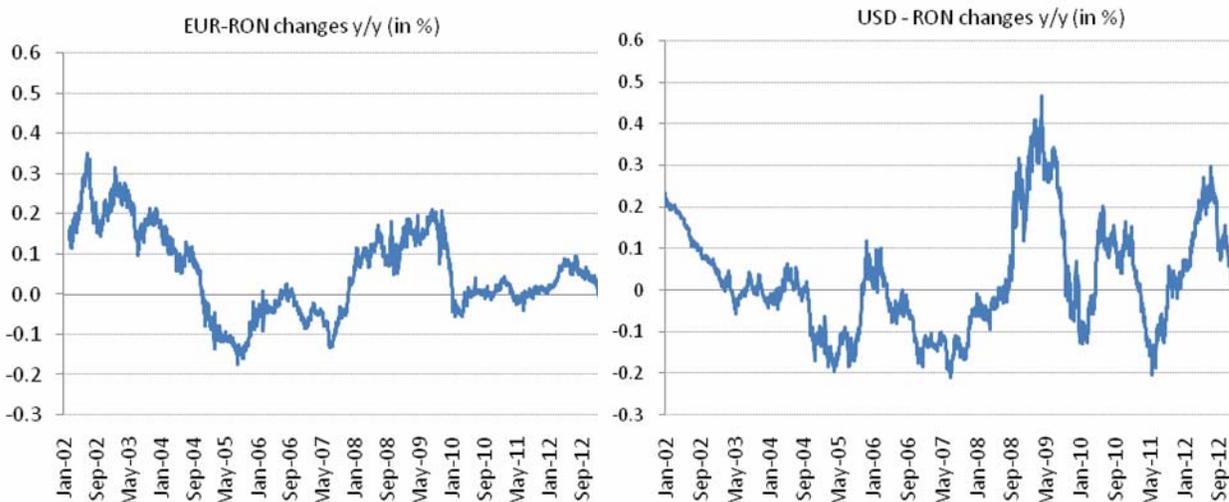
**Graph 4: Public government debt by currency**



Source: MoFP

Given the strong correlation of the RON with the EUR, the current composition with 87.8% denominated in RON or EUR mitigates the exposure to foreign currency risk. Indeed, over the last 3 years the volatility of the RON/USD has been four times higher compared to the RON/EUR exchange rate.

**Graph 5: Annual change in the RON/EUR and RON/USD exchange rates**



Source: MoFP; NBR

A possible depreciation of RON against EURO by 20% and against USD by 30% in 2013 would increase the debt stock by RON 27.5 billion or 4.7% of GDP and the debt service payments in 2013 by RON 4.7 billion or 4.4 % of central government revenues<sup>8</sup>. Accordingly, the exposure to exchange rate risk could be considered moderate but not negligible given the uncertainty regarding the timing of adoption of the EUR.

Foreign currency risk is also limited by NBR significant holdings of foreign currency reserves that amount to EUR 35.4 billion at end of 2012 and cover 32 times the short-term external public government debt<sup>9</sup> and about four fifths of the foreign currency debt.

### *Refinancing risk*

The structure of repayments presented in graph 6 shows some accumulation of amortizations in the first few years: RON 55.1 billion, 26.2% of the total debt stock, will be repaid in 2013, while RON 117.0 billion, 55.6 % of the total, will be repaid in the next three years (2013-2015). The concentration of repayments over the short term is particularly noticeable in the domestic debt<sup>10</sup> and reflects the importance of T-bills in the government funding since 2009. From a total domestic debt of RON 107.3 billion, RON 47.1 billion will be repaid in 2013 and RON 84 billion will be repaid within the next three years (2013 – 2015). The refinancing of these obligations may pose a significant

<sup>8</sup> Revenues according to cash methodology.

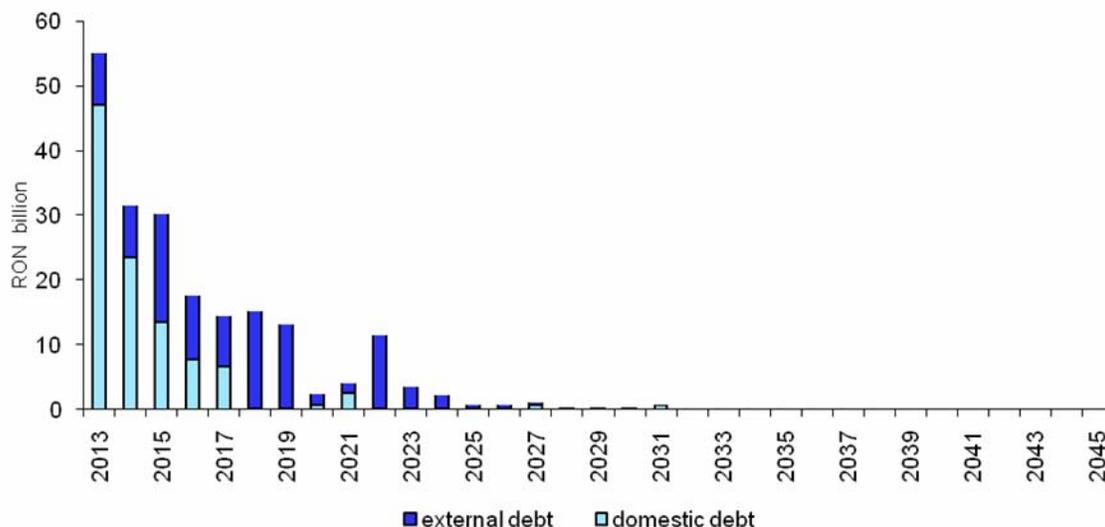
<sup>9</sup> Includes T-bills issued on domestic markets and held by non-residents.

<sup>10</sup> By market of issuance.

challenge for the government if the banks were to find alternative and more profitable placements with the revival of demand for credit from the private sector.

On external side, the refinancing risk is low as a result of the repayment structure of the external financial package concluded in 2009 with the IMF (5 years maturity), EU (7 years average maturity) and WB (bullet 12 years maturity), as well as the Eurobonds are issued at medium and long tenors.

**Graph 6: Principal repayment schedule on public government debt at the end of 2012**



Source: MoPF

The portfolio redemption profile described results in an average time to maturity<sup>11</sup> (ATM) of 4.4 years for total public debt portfolio at the end of 2012: 2.4 years for the local currency denominated debt and 5.8 years for the foreign currency denominated debt.

**Table 2: Refinancing risk indicators**

	2011 <sup>12</sup>			2012		
	Domestic currency denominated debt	Foreign currency denominated debt	Total	Domestic currency denominated debt	Foreign currency denominated debt	Total
Debt maturing in 1 year (% of total)	55.0	10.0	29.0	46.9	12.6	26,2
ATM (years)	1.8	5.0	3.6	2.4	5.8	4,4

Source: MoPF

<sup>11</sup> Means average remaining maturity.

<sup>12</sup> Does not includes the guarantees issued under special laws.

### Interest rate risk

Given the small portion of debt contracted at variable rates (see Table 3), interest rate and refinancing risks are similar: high for local currency obligations and low for foreign currency ones. The proportion of the debt portfolio that resets the interest rate in 2013 is 46.9% for the local currency denominated debt and 28.6% for the foreign currency denominated debt. Accordingly a 1% increase in interest rates in 2013 will increase debt service payments by RON 419 million, 0.4% of central government revenues, in the local currency debt and RON 232 million, 0.2% of central government revenues, in the foreign currency debt.

Although the proportion of debt contracted at fixed interest rates at the end of 2012 is high, 88.5%<sup>13</sup>, it does not account for the high proportion of short-term debt in the government debt portfolio that is exposed to interest rates fluctuations.

**Table 3: Interest risk indicators**

	2011 <sup>14</sup>			2012		
	Domestic currency debt	Foreign currency debt	Total	Domestic currency debt	Foreign currency debt	Total
Share of fixed rate <sup>15</sup> debt (% of total)	99.5	79.7	85.6	100.0	80.9	88.5
Debt re-fixing in 1 year (% of total)	48.0	<b>27.0</b>	36.0	46.9	28.6	35.9
Average time to re-fixing – ATR (years)	1.7	4.8	3.3	2.4	4.8	3.8

Source:MoPF

In sum, refinancing and interest rate risks for lei denominated debt are the most important risks associated to public government debt portfolio, whereas the exposure to currency risk is less important but cannot be neglected because of uncertainty regarding the timing of adoption of the EUR.

## 4. Macroeconomic background in Romania

In 2012, Romanian continued the fiscal consolidation, being one of the few EU member states that have experienced economic growth, albeit a small one (0.2% to GDP). Low GDP growth in 2012 was due to the severe drought that adversely affected agricultural production, the recession in the euro zone which reduced external demand, the limited absorption of structural funds following the interruption of EU funded programs, and budgetary constraints.

During 2013-2015, economic growth will remain below its potential with an estimated average rate of 2.2%, mainly reflecting the perspective for slow economic recovery in the EU. In the face of difficult external conditions, domestic demand will be the main driver of growth with unemployment and inflation expected to decrease. Public sector

<sup>13</sup> Includes T-bills with 6 months and 1 year maturities for domestic market (it's a constraint of World Bank model used to calculate risk indicators for the next period).

<sup>14</sup> Idem 12.

<sup>15</sup> Idem 13

investments supported by an improved EU funds absorption rate will also help the economic activity over the next three years.

The external sector is expected to continue paying the price for the dismal economic performance of the Euro zone. A weak performance of exports in the region will be partly offset by a slow demand for imports reflecting the subpar economic activity and the current account deficit is expected to remain at around 4.2 % of GDP, much lower than in the years before the crisis.

In this environment of slow economic growth and continued fiscal consolidation, the NBR should not face major difficulties to keep the inflation targets in a target band of 2.5% +/-1 percentage points. The domestic currency therefore is expected to remain relatively steady with respect to the Euro and is projected stable at 4.4 until 2015. The macroeconomic assumptions for Strategy 2013-2015 are presented in table 4.

**Table 4: Baseline macroeconomic projections**

<i>Indicator</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Nominal GDP (RON billion)	587.5	623,3	660,6	696,3
GDP growth (%)	0.2	1.6	2.2	2.8
Central government deficit <sup>16</sup> (% in GDP)	-2.4	-2.1	-1.8	-1.9
Current account deficit (% in GDP)	-3.8	-4.2	-4.3	-4.2
Inflation (end of the year %)	4.95	3.5	3.0	2.5
Inflation (annual average %)	3.33	4.3	3.3	2.8
Average exchange rate RON/EUR	4.46	4.50	4.45	4.40
Average exchange rate RON/USD	3.47	3.46	3.42	3.38

Source: NCP, MoPF, NBR

In 2012 fiscal consolidation continued and the general consolidated budget deficit in cash terms shrank to 2.5% of GDP from 4.3% recorded in 2011. In the years to come the target is to achieve an structural deficit of 1% of GDP, in accordance with the *Stability, Coordination and Governance Treaty of the Economic and Monetary Union*<sup>17</sup> signed by Romania in March 2012. With relatively small budget deficits, the gross funding needs are primarily the results of the refinancing of the government public debt. For 2013 - 2015 the expected borrowing requirements are as follows:

**Table 5: Projections of the financing needs**

Source: MoPF

<i>Indicator</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
Central government revenues (RON billion)	95.8	108.5	117.3	123.4
Central government expenditures (RON billion)	109.9	121.7	129.0	136.4
Central government deficit <sup>18</sup> (I) (RON billion)	14.0	13.2	11.7	13.0
Refinancing of public government debt <sup>19</sup> (II) (RON billion)	53.3	55.1	31.6	30.3
Gross financing needs (I+II) (RON billion)	67.3	68.3	43.3	43.3

<sup>16</sup> Based on cash methodology.

<sup>17</sup> The Treaty allows to the member states with the ratio of the general government debt to GDP significantly below 60 % and low risks in terms of long-term sustainability of public finances to have a limit of the medium-term objective for structural deficit of at most 1.0 % of GDP.

<sup>18</sup> Idem 13.

<sup>19</sup> Principal repayments of public government debt according to national legislation based on the outstanding at end-2012 (includes guarantees and does not includes temporary financing).

### *Risks to baseline projections*

Deviations from the baseline macroeconomic projections described above could result from the amplification of the sovereign debt crisis in Europe, adverse climate conditions or substantial volatility in the capital flows after the inclusion of local currency Romanian bonds in benchmark indexes of Barclay's and JPMorgan. No risks related to contingent liabilities were identified<sup>20</sup>.

The deepening of the sovereign debt crisis in the Eurozone would reduce the credit to the economy, increase the cost of foreign financing and increase the borrowing requirements. In addition, the vulnerabilities of the Romanian economy to external shocks could trigger a significant loss of foreign exchange reserves and awake pressures on the exchange rate.

As has occurred in the past, extreme weather conditions could severely contract the agricultural output bringing down growth and government revenues which again can trigger higher financing needs than anticipated.

The announcement regarding the inclusion of Romanian bonds in the regional benchmark indices (Barclays' EM Local Currency Government Index and JP Morgan GBI-EM Index Series) determined the increase of non-residents investors and substantial capital inflows. Supplementary demand for Romanian bonds, caused by the inclusion of them in reference index of JP Morgan starting with March 2013, could be limited, having in view that non-residents investors have already increase their holding by 3.5 billion USD until January 2013. A strong demand for these securities can cause the appreciation of the local currency and compress yields of these instruments to unattractive levels. This situation could be followed by capital outflows and could induce a destabilization of the domestic debt market.

Political stability achieved after December 2012 and macroeconomic performances have strengthened the positive perception of foreign investors as a result of the fulfillment of necessary conditions. Romania's exit from the excessive deficit procedure, expected to be achieved in May 2013 will reinforce this perception.

In sum, the baseline macroeconomic projections indicate that lower and stable inflation together with stable foreign exchange rates may facilitate the extension of maturities for local currency government securities and make external funding less costly compared with domestic sources. Significant risks to the baseline macroeconomic assumptions include the amplification of sovereign debt crisis in the euro zone, adverse climate conditions, and potential capital outflows. The deepening of crisis in the euro zone may temporarily close Romania's access to the international capital markets while adverse climate conditions may further slowdown economic growth and significantly increase the government borrowing requirements.

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<sup>20</sup> Contingent liabilities stemming out from state guarantees are mitigated according to public debt legislation, establishing annual issuance ceilings in the Medium Term Fiscal Budgetary Strategy. Moreover, for the First House programme, which accounts for half of the outstanding guaranteed governmental debt, the introduction in 2011 of the balanced burden sharing with the banking sector was an important tool to reduce the associated risk for the state.

## 5. Funding sources

Romania covers its financing needs issuing government securities in the domestic market, contracting foreign loans from official institutions (IFIs and government agencies) and commercial banks and by issuing securities in the international capital markets.

### 5.1. Domestic market

In the domestic market the government issues T-Bills with maturities up to 1 year and benchmark bonds denominated in RON up to 15 years and in EUR with 3 and 4 years maturity. Benchmark bonds are regularly reopened until they reach an issue size of equivalent of 1 to 1.5 billion EUR. The market for government securities is limited mostly to short and medium-term instruments reflecting an investor base<sup>21</sup> comprising mainly commercial banks (approx. 57%), while pension funds and insurance companies represent around 11% and non-residents 21%<sup>22</sup>.

Over the period 2013-2015, commercial banks should remain active buyers of government securities as the subpar economic growth indicates limited demand for credit from the private sector. The demand from institutional investors is supported by the pension system reform in the public sector and by mandatory and voluntary private pension system (Pillar II and Pillar III) and also by the investment funds. Pension fund assets are expected to grow by about RON 550 million a year as the contribution rate to 2<sup>nd</sup> pillar pensions increase gradually from 3.5% of the participants gross income in 2012 to 6% in 2016. It is also estimated that investment funds market in Romania, estimated at EUR 2 billion, could rise by 20-30% in 2013, while in 2012 rose by 25%, due to lower interest rates on bank deposits but also the improvement in the political and economic climate.

Renewed interest from non-residents during last months has appeared in response to the eligibility of Romanian local currency bonds to be included in benchmark indices of JPMorgan and Barclays starting with March 2013 and to the strengthening of political and economic stability. While a significant volume of transactions by these investors was related to carry trades using short-term government securities, since late 2012 the interest shifted to medium-term maturities. Indeed, between December 2012 and January 2013 the securities held by non-residents as a proportion to the total securities issued in the domestic market increased from 14.2% to 21.1% while holdings of T-bills in total holdings of non-residents decreased from 35% to 20%<sup>23</sup>.

Since the aftermath of the global financial crisis the MoPF continues extending the maturities of the issuances in the domestic market in parallel with the consolidation of the government securities along the yield curve. Starting in 2011 MoPF issued again benchmark bonds with 10 years maturity and in February 2012 issued the first benchmark bond with 15 years maturity. This year the MoPF will reopen the 10-years maturity bond issued in January 2013 and the 15 years maturity bond issued last year.

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<sup>21</sup> At end-January 2013. Source : MoPF

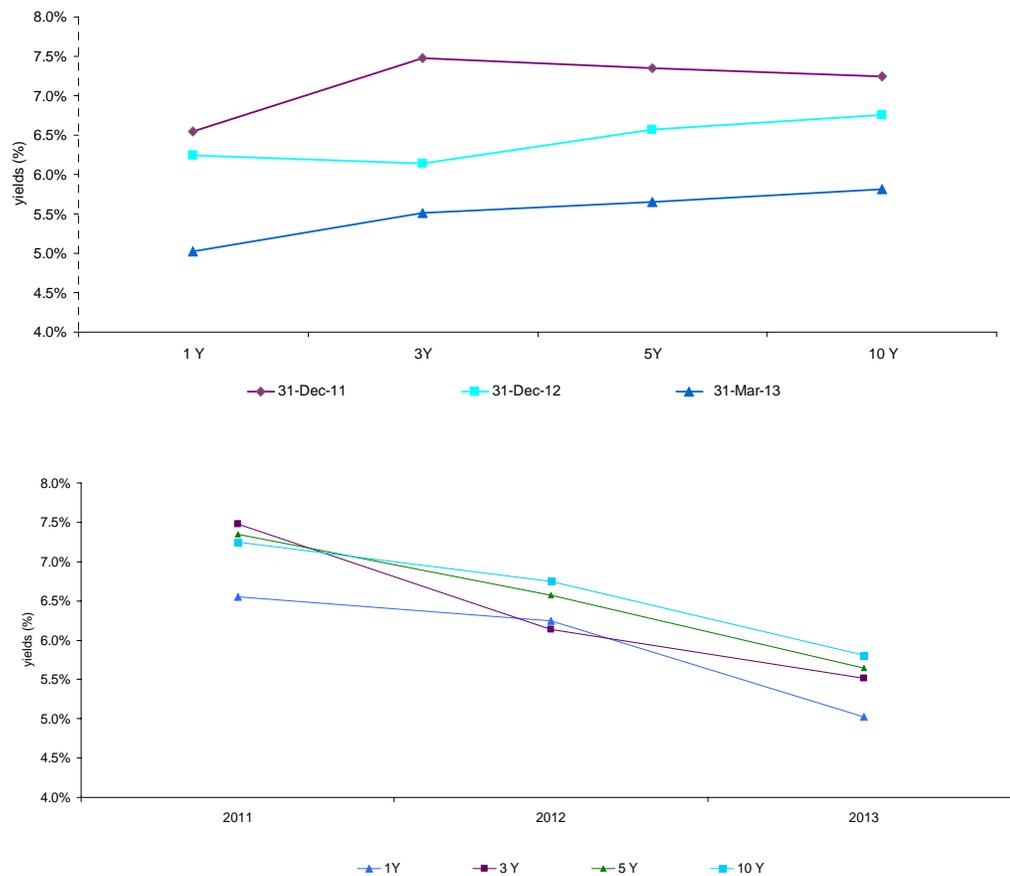
<sup>22</sup> Including securities in Clearstream.

<sup>23</sup> Source : MoPF

Concerning the expected levels for interest rates, the yields for treasury bills and benchmark bonds have decreased since January 2009, as the NBR lowered policy rates from 10.25 % in August 2008 to 5.25 % in May 2012. Due to strong demand, including recently from non-residents, the yield curve over the last two years has moved downwards.

In graph 7 it is presented the yield curve for government securities, as well as the performances on points of maturity for government securities at the end of 2011, 2012, and March 2013.

**Graph 7: Government securities yields on domestic primary market**



Source: MoPF

Yields of government securities to be issued in the domestic market over the next three years may increase slightly according to the forward curves in Bloomberg but this might be offset by improvement in the macroeconomic fundamentals, reductions of NBR's policy rate and increased demand from the investors.

To encourage trading of government securities in the secondary market MoPF and NBR, as state agent for government securities, have revised the eligibility and performance criteria for primary dealers (PDs). Starting in 2013 PDs performance will be assessed also by their activity in the secondary market, taking into account the maturities of government securities being traded. MoPF's actions plan to improve the liquidity, transparency and predictability in the domestic market of government securities are presented in the Annex.

## *5.2. External markets*

Romania has issued in the international capital markets both in EUR and USD with maturities between 5 and 10 years. Since 2011 the Global Medium Term Note program (GMTN) has been the vehicle used for providing access to medium and long term external funding in USD and EUR and will continue further on, as the Government plans to increase the size of the program. While the USD market offers longer tenors than EUR market, the interest rates are estimated to be at comparable levels on medium term.

Going forward Romania's presence in the capital markets facilitates the diversification of funding sources, attracting new category of investors, while providing a transparent and credible price benchmark for the country risk which facilitates the access of private sector borrowers to the foreign markets. Interest rates over the next three years may increase slightly according to the forward curves in Bloomberg but this might be partly offset by improvement in the macroeconomic fundamentals and the corresponding reduction in Romanian risk premium.

Borrowing from the external capital markets is subject to the risk of sudden stops which can materialize following the exacerbation of tensions in international financial markets caused by sovereign debt crises in Euro zone and spillover effects.

In parallel with developing the yield curve on the domestic market, MoPF is interested in maintaining a yield curve in Euro specifically for maturities between 5 to 10 years and to consolidation its position in international capital markets. The foreign issuances denominated in USD or other currencies will be opportunistic taking advantage of the possibilities provided by these markets.

Foreign loans are usually signed with IFI's such as IBRD, EBRD, EIB, JICA an other bilaterals. Most of these are denominated in EURO and bear long maturities and leveled amortization profiles. Potential disbursements are estimated as a function of undisbursed amounts at end-2012, progress in project implementation, as well as the budgetary allocations for these projects. The associated cost for this funding is lower than market sources and offer access to longer maturities, but need long period for preparing the documentation and for loan approval. It also presents uncertainty about the time when the transfer of the foreign exchange takes place taking into account the

need to meet some reform measures or conditionalities if they were attached to these loans.

The current liquidity on external markets which keeps interest rates at historically low levels is expected to remain until the end of 2013 given the slow pace in the global economy. However, as in the case of domestic market debt instruments, the forward curves from Bloomberg indicate that the interest rates are expected to increase after 2014.

The potential funding sources from domestic and external sources and the expected interest rates for each debt instruments are presented in table 6.

**Table 6: Financial conditions of the potential funding sources**

	Maturity/ grace period (years)	Interest rate (%)			Amounts (billion. currency)		
		2013	2014	2015	2013	2014	2015
<i>Domestic market</i>							
1. Treasury bills	6M and 1Y	5.0% - 5.5%	5.0%-5.5%	4.8%-5.3%	20-25	20-30	20-25
2. Benchmark bonds in RON	Up to 15Y	5.5%-6.0%	5.3%-5.8%	5.1%-5.5%	25-35	25-35	25-35
3. Bonds in EUR	3Y	3,15%	3,0%	2,9%	1-2	1-2	1-2
<i>External market</i>							
1. GMTN program							
- Eurobonds in EUR	Up to 10Y	10Y-4,5%	10Y-4,4%	10Y-4,5%	1-2	1-2	1-2.5
- Eurobonds in USD	10-30Y	10Y-4,3%	10Y-4,2%	10Y-4,1%	1- 2	1-2	1-2.5
2. Loans from international financial institutions							
- EIB and CEDB (EUR)	15Y/ 2-5Y	3.1	3.3	3.5	0.3-0.8	0.6- 1.2	0.3-0.7
- IBRD (EUR)	10Y	6M EURLIBOR + 0.5%			0.2-0.6	0.2- 0.4	0.2
- EBRD (EUR)	8Y	6M EURIBOR + 1%			0.0-0.1	0.1	
3. bilateral agencies (JICA) (EUR equiv.)	22Y/ 5Y	1.6	1.6	1.6	0.0-0.1	0.0-0.1	0.1

Source : MoPF

## 6. Analysis and strategic guidelines

The strategic guidelines for managing public government debt in Romania reflect the cost-risk tradeoffs in the current debt portfolio<sup>24</sup>, the plans to deepen the debt market in RON and the medium-term macroeconomic program.

<sup>24</sup> At the end of 2012

### *6.1. Inputs to the analysis*

In the existing government debt portfolio the exposures to refinancing and interest rate risks are substantial for the domestic debt whereas the exposure to currency risk is less important but cannot be neglected dismissed because of uncertainty regarding the adoption of the Euro.

Current market conditions allow relatively unlimited access to USD and EUR funding in the international capital markets at medium and long tenors, while a significant increase in the demand for government securities in the domestic market from institutional investors and non residents should follow the increase in the assets of pension funds and insurance companies and the inclusion of Romania in local currency bond indices. At present, interest rates in the domestic and external markets are at historical lows and could remain at these levels in the near future.

Baseline macroeconomic projections indicate that net financing needs in 2013 will be comparable to the previous fiscal year while lower and stable inflation together with steady foreign exchange rates may facilitate the extension of maturities for government securities in local currency while making external funding less costly compared with domestic sources.

Significant risks to these baseline assumptions include the amplification of sovereign debt crisis in the euro zone, adverse climate conditions, and potential capital outflows. The deepening of crisis in the euro zone may temporarily close Romania's access to the international capital markets while adverse climate conditions may further slowdown economic growth and significantly increase the government borrowing requirements.

Based on these considerations, the MoPF has evaluated various financing alternatives. Firstly, borrowing strategies relying increasingly on RON denominated instruments were compared to strategies based on EUR financing to evaluate the cost-risk tradeoffs between domestic and foreign currency debt. Secondly, to analyse the reduction of the exposure to interest rate and refinancing risks in the domestic debt, a borrowing strategy lengthening the tenors of bonds issued in the domestic market was evaluated and compared to the alternative to use more funding in a foreign currency. Thirdly, several borrowing strategies with different composition of foreign currencies (EUR versus USD) were simulated to provide information on the impact of the increased currency risk and on the alternatives for managing foreign currency risk. Finally, all strategies were also run with the higher financing needs resulting from the materialization of macroeconomic risks.

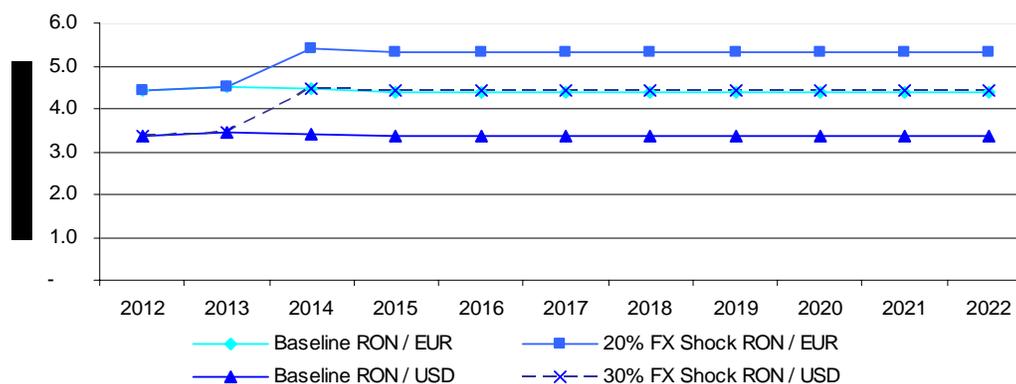
### *6.2. Process for the analysis*

The financing strategies referred to above were compared based on debt servicing projections under alternative scenarios of interest and exchange rates. A baseline scenario, determined as the most likely estimate, was used to calculate the expected cost of the debt strategy whereas risk, measured as the increase in cost, was calculated using stress scenarios on interest and exchange rates. Two cost indicators were used: debt/GDP and interest/GDP both computed at the end of the third year, 2015. The price assumptions for the scenarios are as follows:

## 1. Exchange rate:

- In the baseline scenario the rates used are those published by the National Commission of Prognosis, with a slight depreciation in 2013 followed by a small appreciation in 2014 and 2015;
- The main shock scenario included a 20% depreciation of the RON versus the EUR and 30% depreciation versus the USD; these figures cover 90% of the annual variations of the RON recorded during the last 4 years.

**Graph 8: Baseline and shock scenarios**



Source : MoPF, NCP

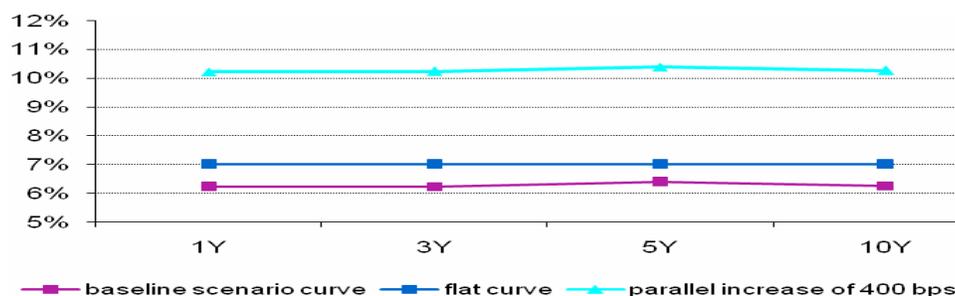
- A separate risk scenario with the same depreciation versus the USD but a much smaller depreciation versus the EUR (7%) was also run based on the developments over the last few years when the volatility of the RON/USD rate has been more than 4 times that of the RON/EUR (see graph 5). This shock was used for the analysis several borrowing strategies with different composition of foreign currencies (EUR versus USD). All shocks were one off depreciations occurring in 2014.

## 2. Domestic interest rates:

- In the baseline scenario the rates used are the forward rates derived from the yield curve for RON<sup>25</sup>;

<sup>25</sup> Source: Bloomberg

**Graph 9: RON interest rates in 2015 in baseline and shock scenarios**



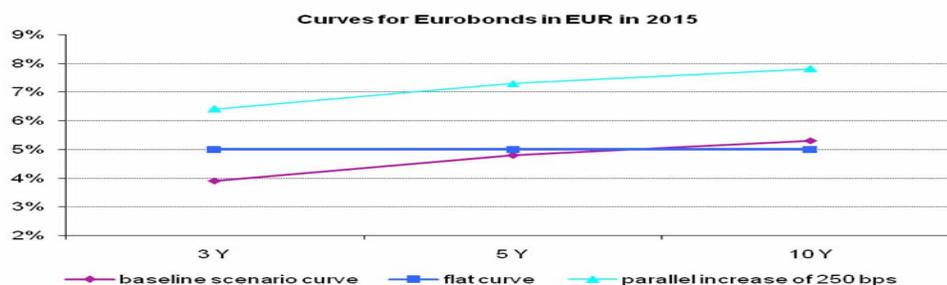
Source : MoPF, Bloomberg

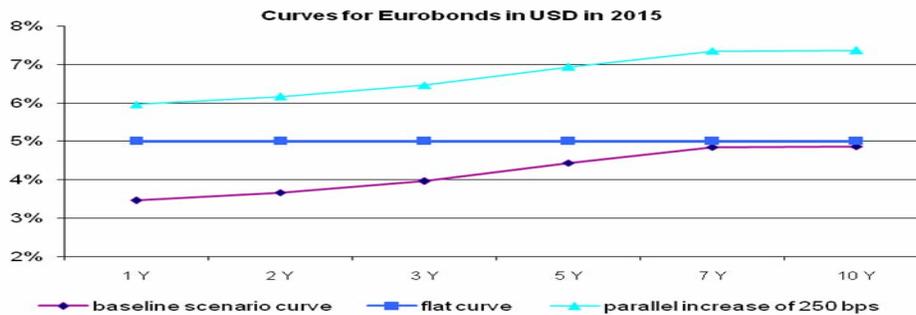
- The shock scenarios included a parallel increase of 400 bps during the horizon of analysis; this order of magnitude reflects the increases in inflation recorded in 2007 and 2010. A second risk scenario included the flattening of the curve at 7% assuming a quick recovery accompanied by tightening of monetary policy with long term rates staying at what suggested by the forwards for the long tenors.

### 3. External interest rates:

- Baseline scenario: eurobonds rates were estimated as the forwards of the risk free rates (US Treasuries for USD and Bundesbank Obligations for EUR) plus the country risk spread: 225 bps in USD and 300 bps in EUR both of which remain constant over the projection period. Interest rates for loans contracted with IFI's were projected using the forward rates relevant for the tenors of the instruments used plus an average spread of 50 bps.
- Two shock scenarios were used. First, a parallel increase of 250 bps in all debt market instruments; similar to the jump in the EMBIG between March and June, 2012. Since this is a widening in the country risk the rates for multilateral loans are not affected. Second, a flattening of the curves at the levels implied in the forward rates for the longer tenors: this would be 5% both in EUR and USD. The rates for the multilaterals are found adjusting the country risk spread.

**Graph 10: External interest rates in 2015**





Source : MoPF, Bloomberg

### 6.3. Results of the cost-risk analysis

Local versus Foreign currency mix: The quantitative analysis shows that strategies with more foreign currency funding are less costly and less risky; this is true when interest to GDP is used as the cost indicator. Switching from a strategy where all net financing is undertaken with local currency instruments to one with all net financing in foreign currency saves approximately 0.10% in interest/GDP in 2015. In the event of a combined shock to interest and exchange rates, the cost of the foreign currency-intensive strategy increases 0.48% compared to 0.54% of the local currency-intensive one. The favorable tradeoff for foreign currency debt however vanishes when debt/GDP is used as the cost indicator: while foreign currency biased borrowing saves 0.21% to debt/GDP, it adds 0.33% when the combined shock materializes. Nevertheless, since macroeconomic projections show a declining debt/GDP ratio, interest/GDP seems a more relevant cost indicator and therefore foreign currency borrowing tends to be preferable from the cost-risk perspective.

Addressing concentrated redemption profile of local currency debt: Addressing the refinancing and interest rate exposures arising from the high share of T-Bills is not too expensive given the current shape of the yield curve in RON and the implied forward rates. A strategy that extends ATM from 2.4 years in 2012 to 5.5 years in 2015 increases cost by 0.01% of GDP compared to a borrowing strategy that increases ATM to 4.2 years. The cost increase is relatively small compared to the improvement in the redemption profile and the protection offered against a sudden and sustained increase in short-term interest rates. More importantly, the extension of ATM significantly reduces the risk of facing difficulties at the time of refinancing the debt maturing. Issuing more long tenor bonds in EUR to extend maturities allows tackling refinancing and interest rate exposures in a cheaper manner compared to issuing longer tenor securities in RON. This results in the differential of 100 to 150 bps between 10-year rates in the two currencies and confirms the tradeoff results described in the previous paragraph.

Composition of the foreign currency portfolio: Concerning the mix of foreign currencies the results of the simulation show a clear preference for the EUR over the USD originating from similar yield levels in conjunction with the fact that the volatility of the RON/USD rate is significantly higher than that of the RON/EUR. The slight advantage

of a more liquid market in USD that translates in a lower premium for USD compared to EUR bonds is canceled by higher volatility of the RON/USD. For instance, a simulation compares a strategy where 100% of the net funding in the next 3 years is raised in EUR with a strategy where this 100% is raised in USD, leads to the following results: the cost and risk indicators (using interest/GDP) for the EUR strategy are 1.62% and 0.09% of GDP compared to 1.60% and 0.13% of GDP in the case of the USD. The advantage of the EUR strategy increases over time and is larger when using debt/GDP as the cost indicator. The cost and risk indicators, using debt/GDP, for the EUR strategy are 35.3% and 2.1% of GDP compared to 35.3% and 2.9% of GDP for USD strategy.

#### *6.4. Including macroeconomic and market development considerations*

The first finding of the cost-risk analysis regarding local versus foreign currency mix indicates preference for EUR denominated debt raised in the international capital market. A strategy leaning too much in this direction however runs counter to the need of developing a reliable funding source that protects the government against sudden stops in the capital flows and to protect the government finances from the risk of a fall in the RON. Furthermore, if the plans to deepen the domestic debt market succeed, the cost of domestic borrowing should fall, making local currency borrowing more attractive.

The second finding on the attraction of strategies that lengthen ATM in the domestic debt portfolio is fully compatible with developing a yield curve for RON denominated securities and with development of the secondary market. As mentioned, these strategies will reduce the portfolio exposure to refinancing risk more than it will increase funding costs; also, to the extent that long tenor securities with significant outstanding volumes become actively traded, the liquidity premium will further reduce funding costs for the government making the cost-risk tradeoff more relevant. Moving towards a more even redemption profile in the local currency portfolio is also consistent with the government need to respond to higher financing requirements in case the macroeconomic risks materialize.

Concerning the mix of the foreign currency debt, the third finding in the cost risk analysis shows there is an apparent contradiction between the cost-risk preference for EUR denominated debt versus the need to diversify funding sources, and take advantage of the highly liquid USD market. This apparent contradiction can be solved by the use of derivative instruments, currency swaps, that delink the currency of issuance from the currency exposure. The possibility of using the financial derivatives provide the authorities with opportunistic access to the USD markets while maintaining the main exposure in EUR. For an active and efficient public government debt management, the MoPF intends to use financial derivatives (currency swaps and interest rate swaps) as hedging tools, as well as liabilities management operations (like bond-exchange and buy-backs), and for this purpose the MoPF will create the methodological and technical framework to use these operations by end of this year.

In the end the government favors a balanced mix between local and foreign exchange currencies for net financing to allow the government rely as much as possible on local currency funding while pursuing a diversification of healthy funding sources including

an opportunistic access to the international capital markets in currencies other than the EUR. Local currency financing won't be used beyond the absorption capacity of the domestic debt market, and the authorities will continue promoting its development as explained in the annex.

### *6.5. Strategic guidelines*

The following guidelines are expressed as indicative targets for the key financial risk indicators: refinancing, interest rate and foreign currency risks, that reflect the composition of the government debt portfolio that best fits with the government debt management objectives.

#### *Foreign currency risk:*

1. The government, through the MoPF, will pursue a balanced funding mix keeping a minimum share of 40% for local currency denominated debt in total government public debt. To the extent that domestic market permits the participation of local currency debt shall gradually increase reflecting the need to protect the government against the risk of sudden stops and the reversal of capital flows. The issuance volumes in the local currency market should be in line with the progress achieved in developing the domestic debt market.
2. Foreign currency should be predominantly contracted in EUR and the minimum share of debt denominated in EUR as a proportion of foreign currency debt is set at 70%. Foreign currency debt will comprise market instruments placed in the domestic and international markets as well as loan contracted with official creditors and other creditors.
3. Romania will access the international capital markets in USD or other foreign currencies when financial conditions result attractive relative to EUR denominated instruments. The share of currencies other than the EUR shall not exceed 30% of the foreign currency debt portfolio.

#### *Refinancing risk*

1. The government will pursue a smooth redemption profile, especially in the local currency and domestic debt portfolios avoiding to the extent possible the concentration of repayments in the short-term. It will follow that the share of debt maturing in the next 12 months remains below 45% for the local currency debt and 25% for the total debt. To the extent that markets permit, the MoPF will attempt to gradually reduce first ratio over the 3-year period.
2. To reduce concentration of repayments beyond the first year the government will endeavor to extend the tenors especially of RON denominated securities. The ATM should not fall below 2.0 years for local currency denominated debt and 4 years for total debt. To the extent that markets permit, the authorities will attempt to gradually reduce first ratio over the 3-year period.
3. The MoPF will continue to maintain a foreign currency buffer of four months of financing needs and if market conditions allow front-load the financing in order to maintain a comfortable liquidity position.
4. Refinancing risk will also be mitigated with contingent credit lines when their conditions are judged favorable for the government debt portfolio.

*Interest rate risk*

1. The government will ensure that the share of debt re-fixing its interest rate in the next 12 months remains at levels that do not expose the budget to undue interest rate risk. This ratio should not exceed 45% for the local currency debt and 35% for the total debt.
2. To maintain control on interest rate risk beyond the first year the ATR should not fall below 2.0 years for local currency debt and 3.5 years for total debt.

**Table 7: Targets for key risk indicators**

Risk exposure	Indicator	Indicative target
Currency risk	Share of domestic currency debt in total (% of total)	min. 40%
	Share of EUR denominate debt in foreign currency denominated debt (% of total)	min. 70 %
Refinancing risk	Debt maturing in 1 year (% of total)	max. 25%
	Local currency debt maturing in 1 year (% of total)	max. 45% in 2013, and lower thereafter
	ATM for total debt (years)	min. 4 years
	ATM for local currency debt (years)	min. 2 years in 2013 and higher thereafter
Interest rate risk	Debt re-fixing in 1 year (% of total)	max. 35%
	Local currency debt re-fixing in 1 year (% of total)	max. 45% in 2013, and lower thereafter
	ATR for total debt (years)	min. 3.5 years
	ATR for local currency debt (years)	min 2 years in 2013 and higher thereafter

Respecting the guidelines described above the MoPF will follow a flexible approach in selecting the funding sources and timing of issuance taking into account the market conditions as well as expectations regarding the macroeconomic and financial markets environment.

Implementation Strategy 2013-2015 will be monitored monthly by following the debt indicators are in line with targets set and they will be published in the Monthly Bulletin of MoPF on its website.

According to the Government Emergency Ordinance no. 64/2007 on public debt, as amended and supplemented, the strategy is reviewed annually or whenever market conditions and/or financing needs require. As a result, MoPF will elaborate the revised Strategy for the period 2014-2016 by the end of 2013.

## Annex

### Development of the domestic market of government securities

The development of the domestic market of government securities is a strategic long term objective. A developed and liquid domestic market of government securities and a well-defined yield curve are requirements for a developed financing market of the private sector. This helps attenuating foreign shocks on the economy and provides financing solutions on the domestic market when foreign market financing becomes difficult and expensive.

Below a list of actions to address the efficiency of the market, improve its liquidity and enhance the transparency are presented.

1. The *measures for increasing the efficiency* of the government securities market involve actions on the primary and secondary markets, as follows:
  - 1.1. Consolidate and expand the yield curve on the domestic market of government securities:
    - 1.1.1. Use benchmarks as main financing instrument on the domestic market, through reopenings aimed at providing liquidity and representativeness on the yield curve;
    - 1.1.2. Evenly distribute benchmarks across the yield curve;
    - 1.1.3. Consolidate, expand and promote the fixing system organized by NBR as a reference to the domestic market of government securities;
    - 1.1.4. Repurchase low and illiquid issuances distorting the yield curve and replace them with liquid benchmarks after an efficiency assessment.
  - 1.2. Diversify the investor base by increasing the share of non-resident investors:
    - 1.2.1. Regular meetings with non-resident investors on the main foreign markets, including through ad-hoc meetings upon their request;
    - 1.2.2. Secure considerable amounts for foreign issuances, so that these may be eligible for an increasing number of investors;
    - 1.2.3. Adjust the issuance schedule and the financing solutions based on the investors' feedback;
    - 1.2.4. Promote Romania's foreign image in conferences and seminars dedicated to investors.
  - 1.3. Conduct regular meetings with investors and participants on the primary and secondary markets, focused on exchange of information and incorporation of investors' demands in the financing programme.
  - 1.4. Introduce an electronic system to monitor transactions on the secondary market, as a move to increase transparency, liquidity and to expand the investor base.
  - 1.5. Promote the role of government securities as a financing instrument through bond-exchange and sell-buy backs;
  - 1.6. Analyze the opportunity of issuing new debt instruments required by market participants (like index bond), as well as specific investment instruments for the population, with the purpose of enlarging the investor base, supporting the market of government securities and promoting the long term saving.

2. The measures to increase the liquidity of government securities market which may help reducing the yield of government securities include:
  - 2.1. Concentrate the liquidity of government securities in a small number of benchmarks with amounts equivalent of 1–1.5 billion Euros for each issuance;
  - 2.2. Use bond-exchange or buy-back operations to repurchase the government securities with low liquidity and replace them with more liquid medium and long term issuances;
  - 2.3. Direct sell/buy back operations conducted by MoPF on the secondary market with the purpose of increasing liquidity and to help MoPF build and maintain a government securities' portfolio aligned to the Strategy;
  - 2.4. Conduct repos and securities lending with the purpose of supporting the activity of the market makers;
  - 2.5. Adjust the issuance schedule based on the investors' demands;
  - 2.6. Monitoring the entry of foreign investors into the government securities market and holdings of different categories of investors.
  
3. The measures under consideration to increase the transparency and predictability of the government securities market include:
  - 3.1. Update and publish annually the debt management strategy including the objectives, targeted funding composition, targets for risk indicators and guidelines;
  - 3.2. Transparent issuance policy including the annual and quarterly schedules, and the monthly prospectus, with details of individual auctions. Adherence to the announced issuance calendar and timely disclosure with any potential changes in line with the investors' demands;
  - 3.3. Continuous dialogue with the participants to the domestic market to communicate as early as possible the actions under consideration by MoPF;
  - 3.4. Regular and timely publication MoPF website ([www.mfinante.ro](http://www.mfinante.ro)); of information relevant to investors in terms of debt amount and composition;
  - 3.5. Create a page on Bloomberg dedicated to MoFP taking into account the broaden use of it by the majority of non-resident investors;
  - 3.6. Quarterly conference calls with international investor community and non deal road shows to promote the credit story among the international investor community.