


**Ministry of Finance of the Republic of Macedonia**

*Public Debt Management Department*

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**Public Debt Management Strategy  
for the period 2007 - 2009**

Skopje, December 2006

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Pursuant to Article 7 paragraph 2 of the Law on Public Debt (Official Gazette of the Republic of Macedonia, no. 62/05), the Assembly of the Republic of Macedonia at its session held on 21 February, 2007 adopted a PUBLIC DEBT MANAGEMENT STRATEGY FOR THE PERIOD 2007 – 2009.

## **I. Introduction**

Basic principles taken into account when setting the public debt portfolio, i.e. the drafting and implementation of the Public Debt Management Strategy are the following: setting an optimum structure of the debt portfolio and its harmonisation with the macroeconomic policy of the country; harmonisation of debt portfolio costs with the state budget costs for each year, individually and on medium term; and limiting and elimination of the effect of financial risks on the medium and long term public debt sustainability.

The public debt management strategy sets the level of public debt and sovereign guarantees, the maximum amount of new borrowing, the structure (maturity, interest and currency) of public debt, as well as public debt management and servicing.

With the adoption of the Public Debt Management Strategy, the Assembly of the Republic of Macedonia provides a framework for the Government, and above all, the Ministry of Finance, to act focusing on prudent public debt management on medium term, i.e. in the next three years.

## II. Macroeconomic trends, fiscal indicators and public debt

### II.1. Expected macroeconomic trends in 2007, 2008 and 2009

Basic objectives of the economic policy in 2007 are the following: maintenance of macroeconomic stability, economic growth intensification via deep and comprehensive reforms, as well as unemployment and poverty reduction. Hence, projected real GDP growth for 2007 is 6%, while inflation will continue to be relatively low at 3%. Taking into account the ambitious Government programme, GDP growth in the next period will be driven by investments (real GDP growth of 11% to 15% was envisaged), as well as by private consumption (5% growth).

Taking into account relatively low average GDP growth rate in the previous years, in the period 2008-2009 the growth of the Macedonian economy is expected to intensify with an average growth rate of 6% to 6,5%. Investments and export would be drivers of economic growth. The reforms that would be implemented in almost all areas of economy and social life, such as tax system, finances, cadastre, courts, reduction of corruption, etc., would improve the business environment, having positive effect on investments. As a result of the high share in GDP structure, main driving force of the economic growth will be the industrial production, with projected rates of 6% annual growth; and growth is also expected in the other economic sectors.

No greater changes are expected in inflation, whereby the price stability will continue to be one of the basic components of the macroeconomic environment. The average annual inflation, measured via the costs of living will remain low at around 2% and 3%.

Monetary policy will be aimed at further maintenance of price stability in the economy, as main monetary goal. At the same time, strategy of targeting nominal Denar exchange rate to the Euro will continue to be applied, thus the maintenance of the Denar exchange rate stability will be an indirect monetary goal. In this period, more intensive crediting to the private sector is expected, being one of the basic preconditions to intensify the economic growth.

Table 1

Trends in macroeconomic indicators in the Republic of Macedonia in 2007-2009

	2007	2008	2009
GDP in current prices (million MKD)	325.509,0	353.666,0	386.070,0
Stock of public debt (million MKD) according the Public debt Law	117.807,6	120.267,5	119.311,7
Budget revenue (million MKD)	66.756,0	68.419,0	72.689,0
Budget expenditure (million MKD)	69.047,0	70.449,0	74.807,0
Budget deficit (million MKD)	2.291,0	2.030,0	2.118,0
Real GDP-growth	6,0	6,0	6,5
Budget deficit of R.M. (% from GDP)	0,7	0,6	0,5
Inflation-measured by living expanses	3,0	2,5	2,5
Stock of public debt (% of GDP)	36,2	34,0	30,9

Source: Ministry of Finance and NBRM

### II.2. Trends in fiscal indicators in 2007, 2008 and 2009

The defining of the macroeconomic framework for the current year and projections of the basic indicators until 2009; as well as the assumptions and risks determining the medium-term projections of budget revenues and expenditures and policies of the Government for the next years sets a solid basis for achievement of the fundamental goals of the medium-term fiscal policy. 2007-2009 fiscal policy is designed so as to:

- maintain macroeconomic stability and intensify economic growth;
- achieve the strategic government priorities of the Government of the Republic of Macedonia and accelerate the integration processes into EU and NATO;
- maintain the public debt within internationally acceptable frameworks;
- reduce unemployment and poverty by continuing with the existing and commencing a series of new medium-term and long-term structural reforms; and
- support private sector development.

Medium-term fiscal policy of the Republic of Macedonia supported by 3-year structural arrangement with the IMF, fully confirms its harmonization with the Maastricht criteria, taking into account the exceptionally low level of deficit of the consolidated government budget, sustainable tax burden, controlled and earmarked budget expenditures and regular servicing of domestic and external public debt.

In order to achieve consolidated public finance management, general government budget, incorporating total public revenues and expenditures of central and local governments, in the period 2007-2009 is planned in terms of fiscal sustainability on medium term, public debt sustainability and slight loosening of the multi-year fiscal policy to the end of further maintenance of macroeconomic stability.

<b>Consolidated General Government Budget</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
( MKD million)				
<b>Consolidated General Government Budget-Revenues</b>	<b>117.752</b>	<b>115.975</b>	<b>123.800</b>	<b>131.485</b>
% of GDP	39,7	35,6	35,0	34,1
<b>Consolidated General Government Budget-Expenditures</b>	<b>120.178</b>	<b>119.369</b>	<b>128.201</b>	<b>134.637</b>
% of GDP	40,5	36,7	36,2	34,9
<b>Consolidated General Government Budget Deficit</b>	<b>-2.426</b>	<b>-3.394</b>	<b>-4.401</b>	<b>-3.152</b>
% of GDP	-0,8	-1,0	-1,2	-0,8
<b>Central Budget-Revenues</b>	<b>75.244</b>	<b>74.510</b>	<b>79.971</b>	<b>85.031</b>
% of GDP	25,4	22,9	22,6	22,0
<b>Central Budget-Expenditures</b>	<b>76.252</b>	<b>77.315</b>	<b>83.249</b>	<b>88.456</b>
% of GDP	25,7	23,8	23,5	22,9
<b>Central Budget-Deficit</b>	<b>-1.008</b>	<b>-2.805</b>	<b>-3.278</b>	<b>-3.425</b>
% of GDP	-0,3	-0,9	-0,9	-0,9
<b>Non-Budget Funds-Revenues</b>	<b>30.746</b>	<b>30.855</b>	<b>23.963</b>	<b>25.521</b>
% of GDP	10,4	9,5	6,8	6,6
<b>Non-Budget Funds-Expenditures</b>	<b>32.177</b>	<b>31.444</b>	<b>25.086</b>	<b>25.248</b>
% of GDP	10,8	9,7	7,1	6,5
<b>Non-Budget Funds-Deficit</b>	<b>-1.431</b>	<b>-589</b>	<b>-1.123</b>	<b>273</b>
% of GDP	-0,5	-0,2	-0,3	0,1
<b>Local Government Budget-Revenues</b>	<b>11.762</b>	<b>10.610</b>	<b>19.866</b>	<b>20.933</b>
% of GDP	4,0	3,3	5,6	5,4
<b>Local Government Budget-Expenditures</b>	<b>11.749</b>	<b>10.610</b>	<b>19.866</b>	<b>20.933</b>
% of GDP	4,0	3,3	5,6	5,4
<b>Local Government Budget-Deficit</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>
% of GDP	0,0	0,0	0,0	0,0

Source: Ministry of Finance

### **II.3. Trends in the public debt of the Republic of Macedonia**

Under the Law on Public Debt (Official Gazette of the Republic of Macedonia, no. 62/2005), public debt of the Republic of Macedonia comprises the government debt and all financial liabilities incurred via borrowing by the municipalities and the city of Skopje, as well as borrowing by the public enterprises and companies being fully or predominantly owned by the state, which is the **national methodology for calculating public debt**. All data presented in the Strategy are calculated according to the Methodology set in the Law on Public Debt

According to this methodology, public debt of the Republic of Macedonia is within the pre-set objectives and targets and no major deviations or increase in public debt was evident in the previous period. The stock of public debt and other parameters showing the trends in public debt are shown in the table below (Table 2), while more detailed data on domestic and external debt are shown separately in Annex 1.

Table 2  
Trend in public debt and key parameters

	2007	2008	2009
Total Public debt ( EUR million)	1.921,5	1.961,6	1.946,0
General government debt ( EUR million)	1.708,7	1.732,6	1.710,1
Domestic public debt as % of total Public debt	33,3%	31,6%	30,8%
Foreign public debt as % of total Public debt	66,7%	68,4%	69,2%
<b>Total public debt as % of GDP</b>	<b>36,2%</b>	<b>34,0%</b>	<b>30,9%</b>
<b>General government debt as % of GDP</b>	<b>32,2%</b>	<b>30,1%</b>	<b>27,2%</b>
Interest payment on total public debt as % of total budget revenues	5,7%	6,2%	5,8%
Servicing of the Public debt as % of GDP	3,9%	4,2%	4,0%
Servicing of the Public debt as % of total budget revenues	19,1%	21,5%	21,4%
Interest payment on total public debt as % of total budget expenditures	5,5%	6,0%	5,7%

Source: Ministry of Finance and NBRM

### III. Risks in Public Debt Management

Against a background of economic growth, continuous development of financial markets and number of turbulences in the international financial area, when managing the public debt of the Republic of Macedonia there is a need to identify and manage the risks affecting the portfolio. This is due to the fact that debt-based liabilities, i.e. debt servicing on medium and long term is uncertain. Uncertainty is determined by numerous economic factors, political decisions, geographic surrounding etc. Hence, this Chapter identifies the basic risks affecting the public debt in the Republic of Macedonia, coupled by indicators for assessment of the respective risks.

This strategy would introduce risk measurement indicators for the first time, as follows:

- average time to maturity;
- average time to re-fixing; and
- duration.

*Three periods were used for calculation (end-2005, first half of 2006 and projection for end-2006). On the basis of the results obtained from the analysed periods, the trend of movement of the relevant risks in the next periods is projected, while following the global experience in calculation of such indicators. General government debt was taken as base for risk calculation, i.e. the debt of public enterprises was not included in the calculation.*

Risk analysis and public debt management model analysis (Annex 2) would enable setting of a framework for public debt management so as to establish optimum ratio of costs on medium and long term on one hand and an optimum risk level on the other.

Fundamental risks affecting debt portfolio of the Republic of Macedonia are the following:

- Refinancing risk; and
- Market risk, involving the following risks:
  - Interest rate risk
  - Exchange rate risk

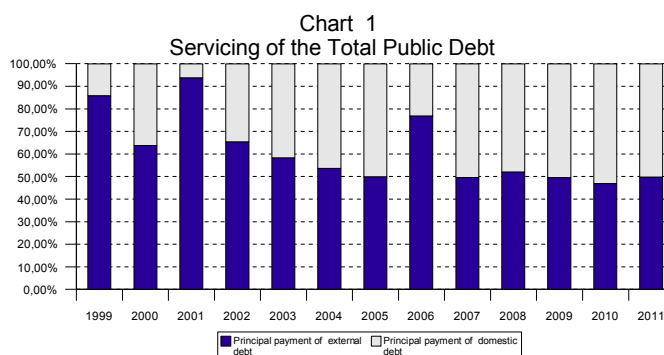
In addition, the public debt portfolio is subject to other risks, being the following:

- Liquidity risk
- Risks associated with contingent liabilities
- Operational risk

#### III.1. Refinancing risk

Refinancing risk refers to the capability of the country to service the due liabilities with new debt issue, i.e. with new borrowing. This risk is closely connected to the debt repayment period, the availability of financial resources for debt repayment, costs related to new borrowings and the level of development of financial markets.

The need to monitor it arises in the countries with high debt level, unstable macroeconomic situation and undeveloped (shallow) financial markets, while in developed countries, the significance of refinancing risk is marginal.



Refinancing risk is managed by preventing major part of the liabilities to fall due at once at any time and providing evenly distributed maturity of debt-related liabilities. The exposure of public debt portfolio to the refinancing risk is measured via the debt repayment profile and the indicator average time to maturity (ATM).

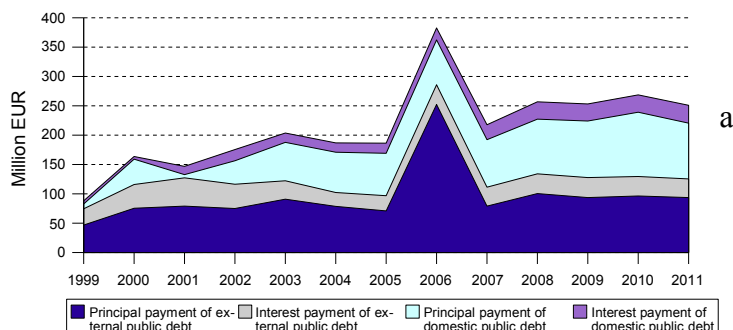
### III.1.1. Public debt repayment profile

Total public debt repayment profile (Chart 2) shows evenly distributed repayments of domestic and external public debt, as well as evenly distributed interest payment, with the exception of the repayment amount in 2006, which was result of the buyback of debt towards the London Club of Creditors.

Refinancing risk of the domestic public debt gains in significance as a result of the greater share of the continuous government securities (GS) issued on regular basis. The

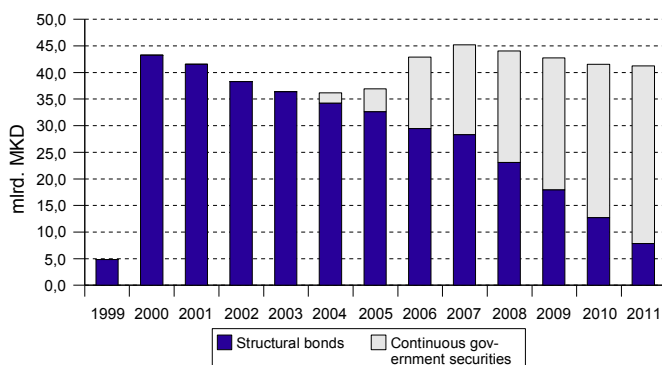
development of the government securities market is inversely correlated with the refinancing risk. In 2006, government securities market in the Republic of Macedonia evidenced significant progress, supported by the constantly rising demand for continuous government securities, the decline in interest rates thereon, as well as

Chart 2  
Principal and interest payment of Total Public Debt



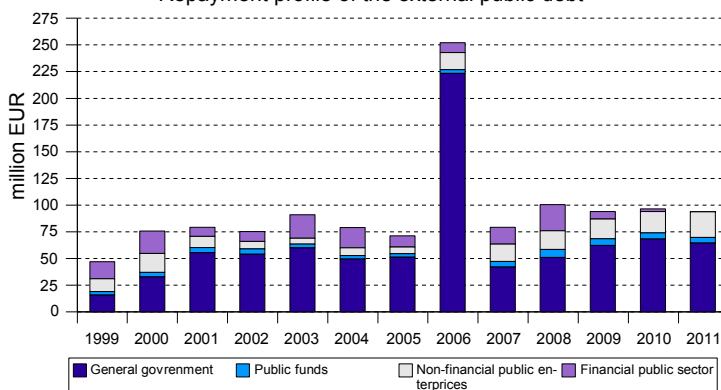
gradual extension of maturity periods of the portfolio of government securities. The domestic public debt repayment structure includes structural bonds, i.e. bonds issued for the purpose of bridging structural problems in Macedonia (denationalisation process, rehabilitation and privatisation of the banking sector), the share of which on medium term declines in favour of the share of continuous government securities (Chart 3).

Chart 3  
Repayment profile of the domestic public debt



External public debt structure, shown in Chart 4 shows evenly distributed repayments (with the exception of the repayment amount in 2006, when the buyback of debt towards the London Club of Creditors was performed) meaning that public debt portfolio is not subject to more significant debt refinancing risk.

Chart 4  
Repayment profile of the external public debt



### III.1.2. Average time to maturity (ATM)

Average time to maturity is an indicator measuring the refinancing risk, i.e. the average time to the maturity of debt. The greater the indicator, the less the uncertainty, i.e. the refinancing risk.

	31.12.2005	30.06.2006	31.12.2006
External debt	9,5	9,2	9,0
Domestic debt	3,7	3,6	3,0
<b>Total debt</b>	<b>7,4</b>	<b>7,2</b>	<b>6,7</b>

Source: Ministry of Finance

Average time to maturity of external public debt has declined from 9,5 years in December 2005; 9,2 years in June 2006 and is expected to be 9 years at end-2006.

Domestic public debt matures in shorter period and this indicator at end-2005 was 3,7 years; in June 2006 it declined to 3,5 years, while the end-2006 projection is 3 years.

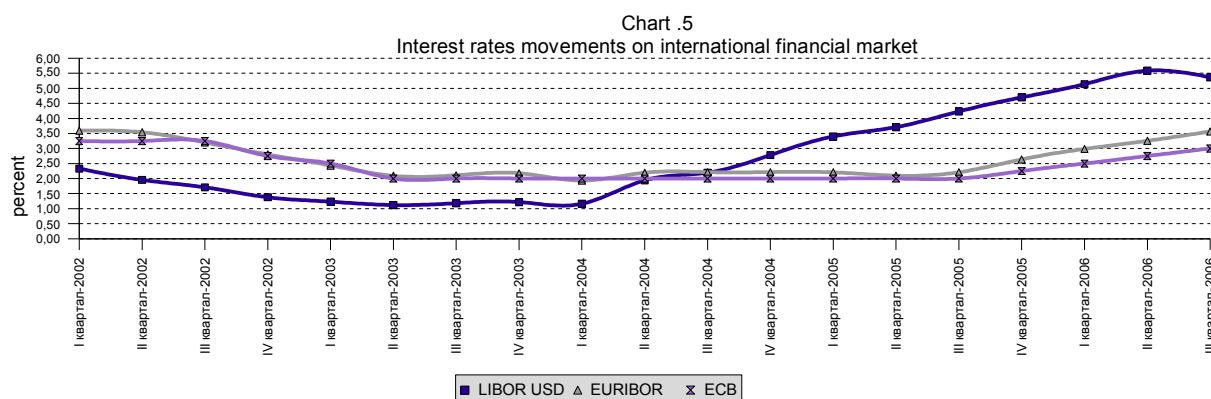
projection is 3 years.

In general, the maturity of the overall public debt shows a declining trend in maturity in all three categories of debt (Table 3). Reduced maturity period of the domestic public debt portfolio is a result of the decline of the share of structural bonds in the debt structure, which have longer maturity period compared to the continuous government securities.

Shorter maturity period of external public debt is a result of the reduction of credits concluded under favourable terms in the external public debt portfolio. The Republic of Macedonia, due to its higher economic growth and increase of GDP per capita, is no longer classified in the category of countries eligible to borrow under concessional conditions, involving longer repayment periods and low interest rates, which means that the share of such credits in the debt portfolio is not renewed, but reduced.

### III.2. Market risk

Market risk is determined by the exposure of debt to economic variables, especially the variation of interest rates on the domestic and the international capital market and the movement of foreign exchange rates. This risk involves two sub-categories of risk, i.e. the interest rate risk and exchange rate risk. Identifying and managing market risks in the Republic of Macedonia is crucial for the public debt portfolio since this risk is determined mainly by external factors, i.e. variations in interest rates on the international financial markets (Chart 5), where, due to their constant turbulences, the medium and long term trend is very difficult to project.



Source: Ministry of Finance and NBRM

#### III.2.1 Interest Rate Risks

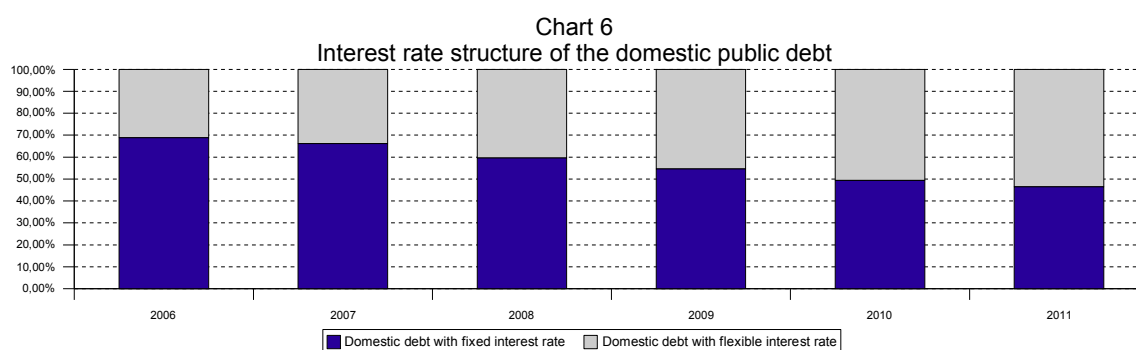
The variation of interest rates on the domestic and international markets affects the debt-related costs, especially when the fixed interest rate debt should be refinanced or on the day when the interest is re-set for variable interest rate debt. Hence, the close connection between the interest rate risk and the refinancing risk is evident. What makes them different is the fact that the refinancing risk is focused on interest rate fluctuations only in the moment of debt refinancing, while interest rate risk is more general, i.e. interest rate fluctuations is determined by number of other factors not affecting the debt refinancing. Measuring the interest

rate risk is especially significant in the countries where domestic financial markets are underdeveloped and the need to borrow is covered from external sources under non-concessional conditions, where exposure to interest rate risk is greater. Appropriate mix of fixed and variable interest rate debt means diversification of interest risk, as well as reduction of debt-related costs. Interest rate risk in the Republic of Macedonia becomes increasingly serious due to the fact that public debt with longer period of maturity is refinanced with short-term debt and, therefore, is subject to interest rate fluctuations. By building market capacity, via increased issues of fixed interest rate government bonds, both refinancing and interest rate risk are reduced.

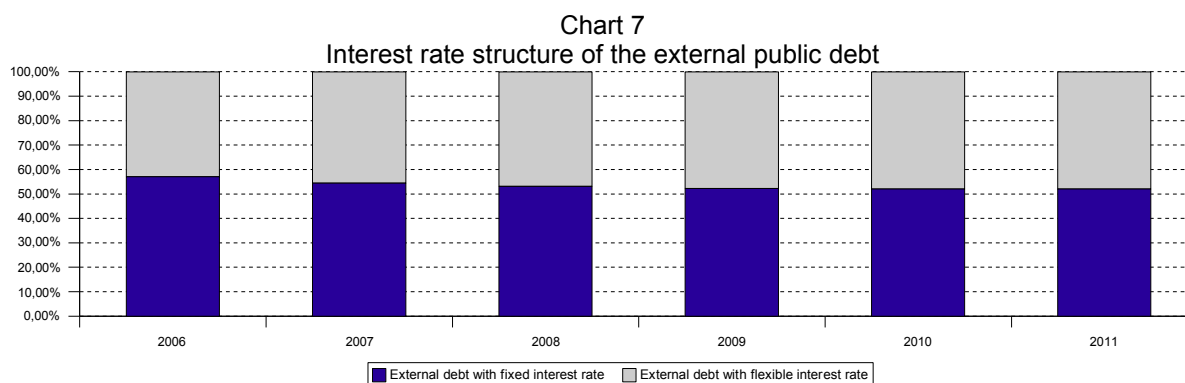
In this area, measuring the interest rate risk will be made via the ratio between fixed and variable interest rate debt, as well as indicators for measuring average time to refixing and duration.

### III.2.1.1. Interest structure of debt

The interest structure of the domestic public debt shows that there is no serious interest rate risk in domestic public debt, since 31% of the total domestic public debt is exposed to interest rate risk. Variable interest rate debt includes the debt with maturity period less than a year and debt where interest rates are fixed in intervals less than a year, i.e. short-term debt.



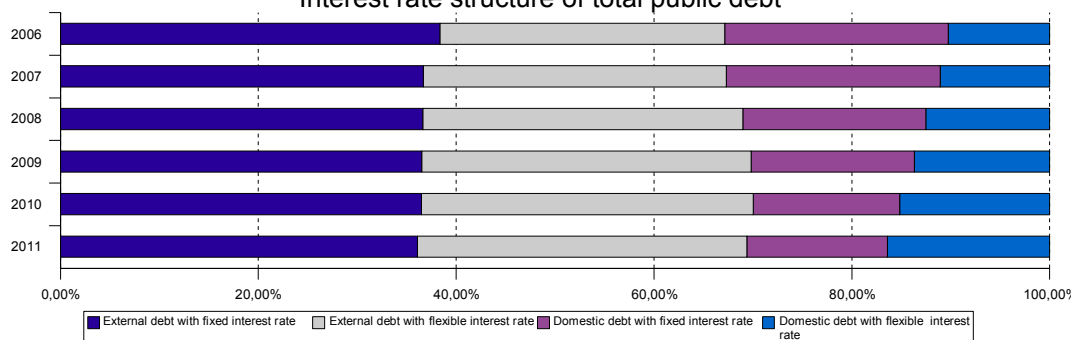
Source: Ministry of Finance and NBRM



Source: Ministry of Finance and NBRM

In the interest structure of the external public debt, fixed interest rate debt accounts for 57% meaning an improvement of the portfolio structure compared to the previous year, when the fixed interest rate external public debt accounted for 47%. This is a result of the issuance of the eurobond (fixed interest rate debt) and the buyback from the London Club of Creditors (variable interest rate debt).

Chart 8  
Interest rate structure of total public debt



Source: Ministry of Finance and NBRM

### III.2.1.2. Average time to refixing (ATR)

ATR indicator measures the average time to refixing of interest rates. Higher value of this indicator means that greater portion of the debt portfolio will not be subject to interest rate fluctuation and this portfolio is called lower risk portfolio.

	31.12.2005	30.06.2006	31.12.2006
External debt	7,2	6,2	6,0
Domestic debt	3,1	3,0	2,7
Continuous government securities	1,0	1,0	0,9
Structural bonds	3,3	3,3	3,1
<b>Total debt</b>	<b>5,7</b>	<b>5,1</b>	<b>4,9</b>

Source: Ministry of finance

The trend of continuous reduction of the indicator during the previous year shows that the external debt portfolio involves greater interest rate risk. As mentioned above, this is a result of the reduced share of loans under concessional conditions, while increasing loans under non-

concessional conditions. For example, World Bank stopped granting IDA credits (with long repayment period and low fixed interest rate), while IBRD loans increased, which are granted under shorter repayment periods and variable interest rate.

### III.2.1.3. Duration.

This indicator shows how soon the interest rate fluctuations would affect the debt-related cost, i.e. what is the change in the value of securities resulting from 1% variation in interest rates. Higher value of this indicator means that the interest rate has not fluctuated during a longer period for the major portion of the debt. This indicator takes into account the net present value of money flows, meaning its calculation includes the debt repayment interest cost.

The indicator was calculated only for the domestic public debt portfolio and its gradual reduction is a result of

	31.12.2005	30.06.2006	31.12.2006
Duration of the structural bonds	2,8	2,8	2,6
Duration of the continuous government securities	0,9	0,9	0,8
<b>Duration of total domestic debt</b>	<b>1,2</b>	<b>1,1</b>	<b>0,9</b>

the lower share of fixed interest rate securities, i.e. long-term securities. This trend is a result of the reduction of time to maturity of the 5-year government bond, as well as the reduction of the stock of fixed interest rate structural bonds in the debt portfolio.

Source: Ministry of Finance

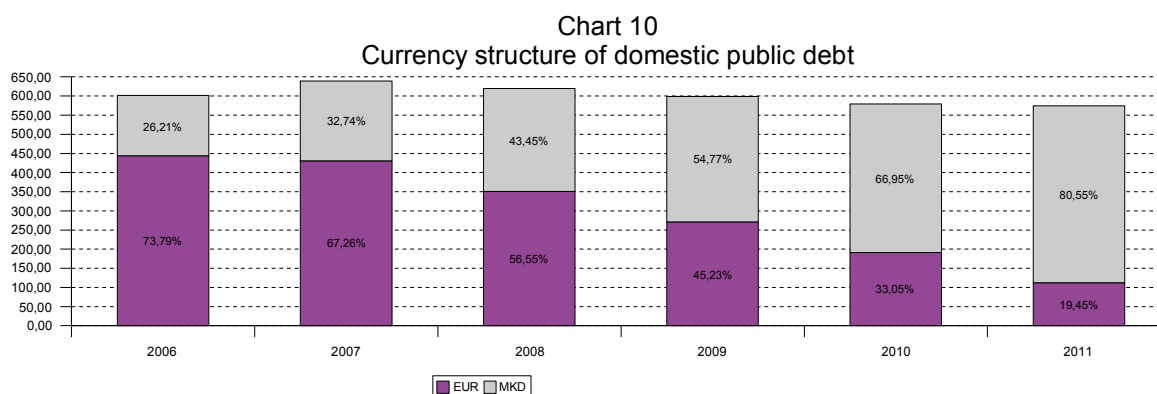
### III.2.2. Exchange rate risk

Exchange rate risk refers to debt indexed or denominated in foreign currency. Major portion of the debt denominated in foreign currency in relation to the total public debt means higher exchange rate risk. This risk is crucial for the countries where external public debt is fully indexed, and major portion of the domestic public

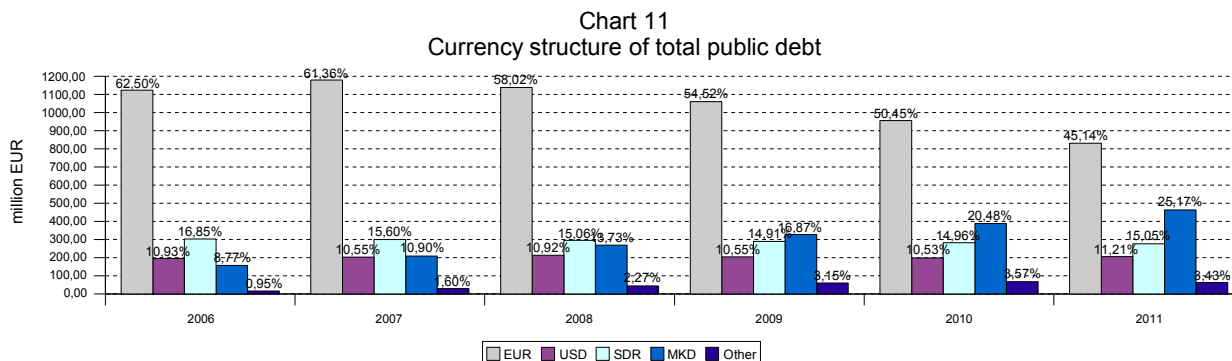
debt is denominated in foreign currency. The modest share of only 8,8% of public debt denominated in denars shows that the debt portfolio in the Republic of Macedonia is exposed significantly to this risk. Changes in the exchange rate risk could largely affect, i.e. increase the envisaged costs for repayment of public debt – denominated in foreign currency. But, taking into account the fact that since 1995, the Republic of Macedonia applies de facto fixed exchange rate of the denar in relation to the German Mark, and since 2002 onwards, in relation to the euro, the exposure to such risk would be measured also as a share of the euro in the total public debt portfolio, which is actually prevalent currency with 62,5% share in the total debt structure. This means that public debt currency structure improves not only by increasing of the denar-denominated debt, but by increasing of the debt denominated in other currencies in the structure of public debt.

From this aspect, public debt currency structure has significantly improved compared to the last year, i.e. the portfolio in US dollars declined (which, at end-2005 accounted for 22%, while in 2006 it accounted for 10,9%), while the share of the debt in euros increased.

Source: Ministry of Finance and NBRM



Source: Ministry of Finance



Source: Ministry of Finance and NBRM

### III.3. Liquidity risk

Liquidity risk is a result of the inability of the country to service short-term liabilities with liquid resources necessary to finance them. The objective of management with this risk is to ensure optimum amount of liquid resources so as to be able to pay the liabilities falling due. The main instrument of liquidity management used by the government is the balance of liquid financial assets on accounts with the NBRM. The level of these deposits guarantees safe financing of the government's needs and protects the budget from financial crises which would prevent the raising of funds by borrowing on the financial market.

Liquidity risk management encompasses keeping liquid assets at optimum level by improving the process of planning and monitoring government budget liquidity as well as by managing the liquid assets.

The Republic of Macedonia in the past period noted significant progress in planning the liquidity. On the other hand, debt servicing costs are largely a predictable category and are within the government's cash flow needs.

But, from the aspect of the share of debt falling due within a year in relation to the tax revenues (Table 6), upward trend with regard to its share can be observed as a result of the development of government securities market in the Republic of Macedonia, above all, with short-term securities.

Chart 6

Indicator for liquidity decreasing risk				
	2004	2005	2006	2007
General government debt due in a period shorter than 1 year	32.021.176	57.398.353	84.904.734	100.244.037
Tax revenues	872.272.060	913.146.306	961.148.263	1.006.719.948
Indicator for liquidity decreasing risk	0,04	0,06	0,09	0,1

Source: Ministry of Finance

### III.4. Risks associated with contingent liabilities

Sovereign guarantees pose serious threat to public finance management due to the following:

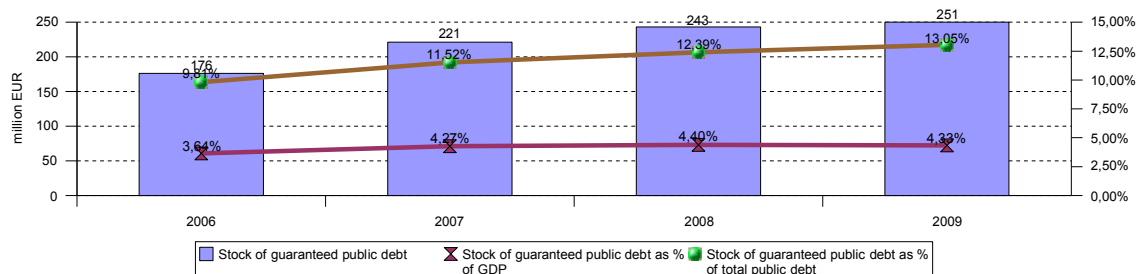
- 1.The rise in the stock of guarantees affects the public debt stock;
- 2.Debt servicing costs rise as a result of the calling up of the guarantees.

At end-2006 guaranteed public debt as percentage of the overall public debt in the Republic of Macedonia is expected to be 9,9%. But, according to the projections, the trend of continuous rise in the issued guarantees during the next years is a cause of concern.

The aforementioned points to a conclusion that contingent liabilities pose a serious threat to the liquidity of government assets and thereby the process of issuance of new guarantees should be strictly controlled, to be subject to certain criteria and to involve risk assessment during budget planning.

Chart 12

Trend in the total guaranteed public debt



Source: Ministry of Finance and NBRM

### III.5. Operational Risk

In most of the countries, operational risk includes the settlement risk and the error risk. Settlement risk is expressed if number of non-automated activities is used during data processing. Error risk often refers to the manner of segregation, division in executing the transactions and function related to settlement in the units within the Public Debt Management Department. In most of the countries, there are formal procedures for overcoming the risk.

Basic way to reduce operational risk and simplify the internal control procedures is through written procedures delegating responsibilities and clearly explaining the individual tasks within the debt management.

In the last decade, large number of public debt management agencies is set at different levels of independence by their ministries of finance, starting from their functioning as departments within the ministry to their full autonomy. As part of this process, public debt management agencies have assumed numerous new

obligations when implementing the human resources management framework, as well as IT system development and management, which themselves are susceptible to operational risks while operating.

Public debt management in the Republic of Macedonia is carried out within the Ministry of Finance, by a special department in charge of that.

Significant progress was achieved within the department in 2006, aimed at reducing the operational risks. In fact, world practice in public debt management imposes establishment of a unit in charge of public debt management policy and risk analysis (Middle Office), being of essential importance for most of the control and operational activities in the public debt management. Absence of such unit implied operational risk in the quality of the department operations. Changes in the systematization act of the Ministry of Finance has led to establishment of such unit in December 2006, and the Department was equipped with the appropriate number of units and sufficient number of employees.

In addition, significant progress in the department operations was attained in terms of “the six-eye principle”, whereby double control exists within the unit, while the third control is performed by the Head of Department.

At the same time, each employee within the Department is assigned direct tasks, as well as indirect obligations, which he/she performs in case of absence of an employee in charge of the direct task. This means that such reorganization within the Department cannot lead to non-performance of certain tasks due to absence of employees.

In addition, there is improvement of the electronic system which the Ministry of Finance uses in the process of auction of government securities. We would like to point out the preparation of reports on the basis of which the Ministry of Finance is able to easier monitor the trends on the government securities market. Upgrading the electronic system has led to a progress in the submission of offers by the authorized direct participants submit during the auctions.

Issues of software and electronic system are of special relevance. In fact, pursuant to the Public Debt Management Law, a need arises for comprehensive records on overall domestic and external debt in the Ministry of Finance. Public debt can be successfully managed only by having comprehensive records and simple and fast access to data, without a possibility for errors and saving time and human resources.. Software procurement procedure has commenced and it is envisaged for the software to be procured during 2007, thus significantly reducing the operational risk.

\* \* \*

*Above mentioned points out to the relevance of the risks in debt management and the necessity to identify, analyze and manage them. Right treatment of risks enables for the debt portfolio to move in a desired course, without serious deteriorations as a result of the numerous expected or unexpected shocks.*

*Regarding the public debt portfolio of the Republic of Macedonia, one can conclude that significant progress in reducing certain risks was achieved last year. What is of primary importance is the buyout of the Paris Club of Creditors' debt (thus reducing the interest risk sensitivity), issuance of Eurobond and increase of the Euro-denominated debt with fixed interest rate, as well as significant efforts aimed at marginalizing the operational risks. In addition, there is significant progress on the domestic market, confirmed by the ever greater interest in government securities, successful issues of long-term securities and permanent drop of interest rates.*

*However, on the other hand, quantitative indicators for risk measurement point out to a danger of increase of the risks in future, due to numerous factors, mainly economical ones. In fact, prior to attaining a certain level of economic growth, Republic of Macedonia no longer belongs to the group of countries that can used funds from multilateral creditors under favorable conditions, i.e. approval of so called concessional loans (long repayment period and low fixed interest rates), meaning reduction of such loans in the debt portfolio and their replacement with loans under less favorable conditions, implying increase of both interest rate risk and risk of debt refinancing.*

## IV. Objectives, measures and targets of 2007 - 2009 Public Debt Management Strategy

To the end of protecting public debt portfolio of the Republic of Macedonia against identified risks, as well as reduction of financing costs, it is necessary to define the objectives, targets and measures to be undertaken in the coming period to create optimal debt portfolio.

When determining the objectives, measures and targets for the period 2007 – 2009, debt of the monetary authorities has not been taken into account, i.e. all objectives and targets are set pursuant to the Law on Public Debt, according to which debt of the National Bank of the Republic of Macedonia, as well as the treasury bills for monetary purposes do not account for in the total public debt. This is due to the fact that targets and objectives set in the Public Debt Management Strategy are defined only from the point of view of the fiscal policy, rather than from the point of view of the monetary policy.

In addition, objectives and targets are a result of the analysis of projected total public debt portfolio, whereby certain contingent liabilities that can additionally influence the increase of the debt have not been taken into account, such as the debt of Macedonian railways and the liabilities that can arise when resolving the issues related to succession of the debt of Former Yugoslavia.

### IV.1. Objectives of the Strategy

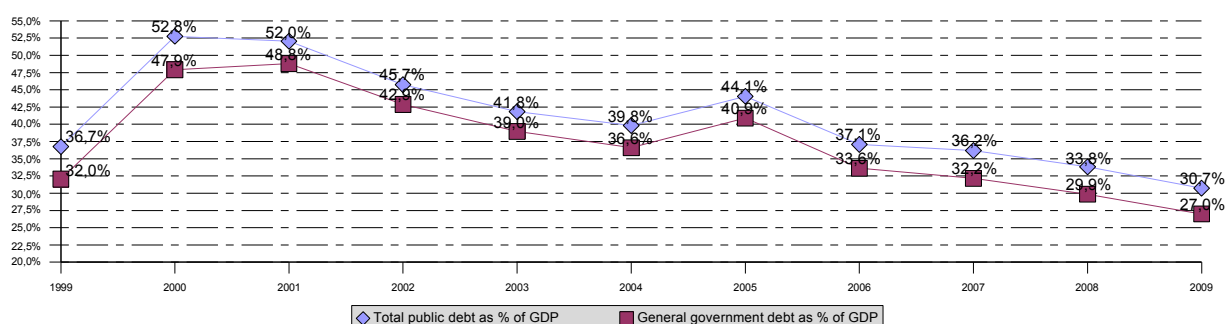
#### IV.1.1. Reducing the public debt in relation to GDP

Size of public debt in relation to GDP is one of the key objectives to be adhered to when managing public debt. Public debt level is considered sustainable if it enables timely servicing and refinancing for a longer period. Sustainable level of public debt in relation to GDP depends on many factors: level of economic development, inflation rate, development of the domestic financial market, etc.

General government debt stock as of October 2006 inclusive is below the limits set in the Maastricht criteria and it is 33% in relation to GDP. Total public debt in relation to GDP is by few percentage points higher in relation to general government debt and is 36%. Taking into account the projections on public debt trends in relation to GDP in the period 2007 – 2009, it is expected for this trend to be reduced due to modest fiscal policy, especially due to the significant increase of GDP rate, planned to be realized in the coming period (Chart 13).

Chart 13

Trend of public debt in relation to GDP



Source: Ministry of Finance and NBRM

#### IV.1.2. Improvement in public debt currency structure

➤ *Increasing the proportion on debt denominated in Denars*

Denar, i.e. debt denominated in domestic currency has relatively small share in the total public debt portfolio, i.e. as of October 2006 inclusive, it is only 7.8%. High share of the debt denominated in foreign currency exposes, to a great extent, the total public debt portfolio to exchange rate risk.

Therefore, it is recommendable for the share of the Denar-denominated debt to gradually increase in the coming years through issuance of government securities and credits in domestic currency.

➤ *Increasing the proportion of Euro-denominated debt in the structure of the external public debt*

Share of Euro-denominated debt in 2006 increased by 12.4 percentage points in relation to 2005 and it was a significant step towards reduction of the exposure of external public debt to exchange rate risk at the non-Euro currencies. Therefore, it is recommended for the share of Euro-denominated debt in the external public debt to permanently increase. To attain this objective, it is necessary to make efforts for the new borrowings to be in Euros. At the same time, it is necessary to use the possibility to restructure the currency structure of the existing debt by early buyout of part of the debt denominated in different non-Euro currencies and by using different financial derivatives offered on the international market.

➤ *Increasing the proportion of domestic public debt while decreasing external borrowing*

When managing public debt, it is necessary to strive for the exchange rate risk to which debt portfolio is exposed to be reduced to minimum by attaining relevant portfolio structure. Thus, it is necessary to increase the share of the domestic public debt, i.e. the Denar-denominated debt in the total public debt portfolio. This will also influence the further development of the domestic securities market and will reduce the dependence on foreign borrowings which carry additional risks as a result of the various fluctuations on the international financial market.

#### **IV.1.3. Improvement in public debt interest structure**

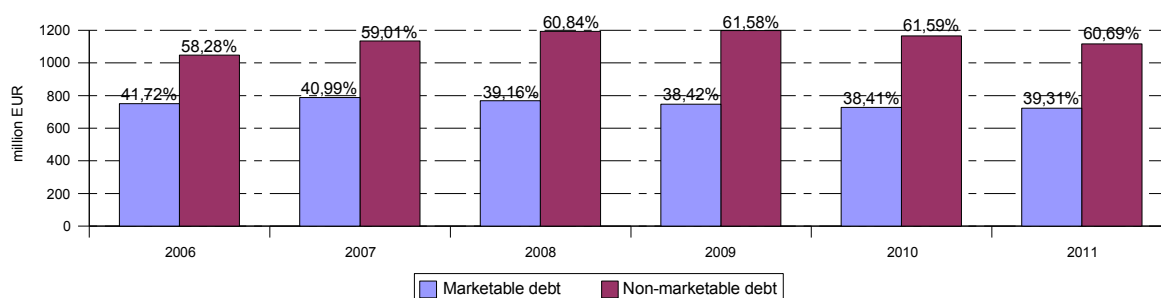
One of the objectives towards which public debt managers should aim in the period up to 2009 is the gradual increase of the part of debt with fixed interest rate, whereby priority should be given to fixed interest rates at each future borrowing, as well as considering the possibility for early buyout of part of the debt with variable interest rate for the purpose of protecting public debt portfolio against possible future market shocks, and against interest rate changes.

#### **IV.1.4. Increasing the market debt, while gradually decreasing the loans from official creditors**

Share of marketable debt (securities) in the total public debt is of great importance for efficient public debt portfolio management. Unlike credits, securities can be traded on the secondary security market, thus enabling reduction of larger number of risks, such as the refinancing risk, liquidity risk, interest rate risk, etc. Thus, in the period up to 2009, it is necessary to undertake measures aimed at increasing the share of securities against loans from official creditors in the total public debt portfolio. Improvement of the credit rating of the country is an alleviating factor when financing various investment projects, as well as for covering the budget deficit by issuing government securities on the international market and on the domestic securities market.

Chart 14

Movement on marketable and non-marketable total public debt



Source: Ministry of Finance and NBRM

#### **IV.1.5. Extending maturity of total public debt**

Public debt management in the period up to 2009 should be aimed at gradual extension of the maturity of both of the domestic and the external public debt. Extending maturity of public debt contributes to protection of the potential periodical economic shocks, as well as to decreasing refinancing and liquidity risk.

#### ***IV.1.6. Ensuring profile of evenly distributed repayments***

Repayments, as well as public debt servicing costs are necessary to be periodically evenly distributed, so as to reduce the refinancing costs, thus reducing the destabilizing effects over the budget.

According to the envisaged projections for total public debt repayment, one can notice that they are well distributed by years and they are no significant burden on the budget in a given period. For the purpose of ensuring profile of smooth repayments, thus reducing the refinancing risk, it is necessary to gradually extend the maturity of new borrowings, as well as increase the share of market debt in the total public debt portfolio. In case of possible uneven burden on the repayments in a given time period, it is necessary for public debt managers to undertake active measures.

#### ***IV.1.7. Restrictive approach when issuing sovereign guarantees***

Current share of guaranteed public debt in the total public debt is 9.9%. Financing of public projects by issuing guarantees entails additional risks, thus entailing additional budget costs for their financing, should these guarantees be called up.

According to carried out analyses, it is expected for the guaranteed debt to gradually increase in the period 2007 – 2009, as a result of the projected issued guarantees to public enterprises, Funds, as well as to the municipalities for different projects.

For the purpose of reducing the large risks the country could face in future, should these guarantees be called up, future policy of the state should be aimed at applying restrictive approach for approval of guarantees, in particular to public enterprises, which often experience liquidity problems.

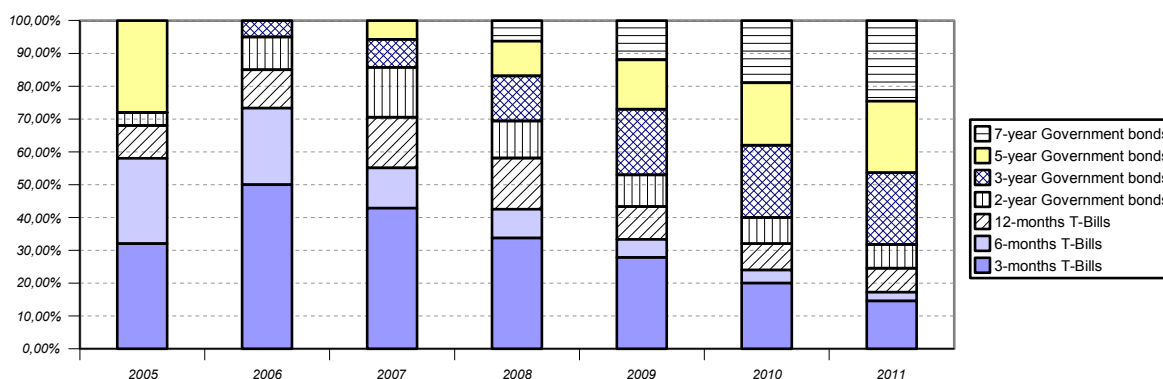
## IV.2. Measures of the Strategy

### IV.2.1. Development of primary market of government securities

1. Ministry of Finance will continue with the issuance of government securities in the period to come in line with the indicative calendar for issuance of government securities (Annex 3). The intention is to increase the maturity period, which would mean more government securities with longer maturity periods unlike in the last, paying special attention to the government bonds. Dynamics for issuance of securities with longer maturity will be intensified through more frequent issuance during the year. Net issuance of government securities will be increased in the coming years as well, according to the plan and projections for government securities issuance.

Chart 15

Projection of the maturity structure for continuous government securities



Source: Ministry of Finance

2. In addition to regular auctions of government securities, in practice there are reopening auctions regarding government securities. When it is a case of reopening, additional amount is offered for a previously issued security. New issue has the same maturity date, ISIN code, interest rate as the original issue, but different issuance date. In the practice so far, Ministry of Finance applied this technique of reopening auctions only at short-term government securities, while in future it is planned to apply this technique at long-term government securities as well. Reopening of an auction will lead to increase at the liquidity of an issued security on the secondary market.

3. Following the completion of the monitoring over the behavior of the banks at the auctions during 2006 and partially in 2007, Ministry of Finance will adopt a decision on introduction of primary dealers system, i.e. it will select limited number of banks to have exclusive right to purchase at the auctions on the primary market of government securities, as well as rigorous obligations for placement of government securities, listing on the secondary market, etc. Ministry of Finance expects that primary dealers will contribute to the increase of the competitiveness among the banks, and will also enable for more efficient implementation of the primary issue of government securities and improvement of services towards the clients related to government securities.

4. Special novelty in 2007 will be the planned introduction of non-competitive offers, thus enabling the investors to participate in the government securities auction only with amounts, while the interest rate to be awarded will be the average weighted interest rate achieved at the auction. Introduction of non-competitive offers will be a huge advantage for the smaller investors, as well as increase of the popularity of government securities, being of great importance for the development stage of the government securities market in the Republic of Macedonia.

5. Promotion of government securities by continuing the marketing campaign for investing in government securities, covering broader range of market entities, including explanation for the purchase procedure. In the course of 2006, the focus of the campaign was put mainly on the legal entities, but in 2007 it is

planned for greater attention to be paid on the promotion of government securities to natural persons, simultaneously training the bank clerks in the government securities purchase procedures. In addition, Public Debt Management Department prepares changes on the web site of the Ministry of Finance, pertaining to government securities, to the end of more frequent updating and enabling easier access and more efficient usage of information by the natural persons and legal entities interested in this segment.

#### **IV.2.2. Secondary market**

In 2007, stronger development in the field of the secondary market is planned, in particular further promotion of the OTC market. This will be mainly a result of the introduction of primary dealers on the government securities market. By introducing this system, which comes as support to the primary market, primary dealers, apart from their main role, can appear as market makers, thus ensuring regular listing of selling and buying prices of government securities so as to maintain market liquidity.

Thus, for the purpose of full institutionalization of the OTC market, Ministry of Finance, in cooperation with the NBRM, will work on changes in the *Rulebook on the Manner and Procedure for Trading and Settlement of Transactions with Securities over the OTC Market*, introducing mandatory listing and trading with government securities by the banks in the amount of Denar 1,000,000.00 (in future, this amount can be subject to further adjustments and harmonization).

#### **IV.2.3. Using the possibilities for restructuring the existing public debt portfolio**

To the end of achieving the previous objectives related to creation of favorable maturity, interest and currency structure, ensuring even profile of public debt repayments, as well as minimizing the financing costs, Ministry of Finance will consider the possibilities for restructuring the existing public debt portfolio, thus enabling active management and creation of favorable debt portfolio. Public debt restructuring can be achieved by **using various techniques and means, such as early buyout of unfavorable debt, i.e. debt which pursuant to market conditions creates additional costs for the Budget of the Republic of Macedonia. Taking into account the carried out analyses of the economic justification by using the method of net present value of the debt towards Paris Club of Creditors, early buyout of this debt can lead to great savings in the Budget of the Republic of Macedonia. Buyout would be realized with the proceeds from the privatization of the energy sector in the Republic of Macedonia.** This will be one of the key objectives of the Republic of Macedonia in 2007, together with the settlement of the debt towards Italy.

In addition, positive restructuring of the portfolio can be attained by using financial derivatives offered on the international market, which could significantly improve the conditions under which certain credits are concluded, in line with the new trends on the international capital market, as well as the economic conditions in the country and abroad.

#### **IV.2.4. Maintain an active dialogue with rating agencies**

In the course of 2007, Ministry of Finance, on behalf of the Government of the Republic of Macedonia, will continue the cooperation with the credit rating agencies. It means provision of complete information on the developments in the country on regular basis. Visit by the two credit rating agencies, Standard and Poor's and Fitch, is planned, for the purpose of annual standard revision of the obtained credit rating, but, it does not exclude the possibility for obtaining third credit rating for the Republic of Macedonia by a third credit rating agency. One of the interested agencies is the Japanese credit rating agency, aiming at promotion of the Republic of Macedonia in front of the Japanese investors.

#### **IV.2.5. Ensuring integrated records**

Ministry of Finance is in the process of procuring software for the needs of the public debt management, to enable full integration of the records on domestic and foreign public debt in a single registry. This system is of great importance for timely monitoring of the changes in the public debt, its analysis and active total public debt management.

### IV.3. Quantitative Targets of the Strategy

- **Public debt limit** – General government debt in relation to GDP is envisaged to range between **34% to 37%**, while total public debt also has a tendency to continuously decline, ranging between **37% to 40%** of GDP.
- **Domestic-foreign public debt ratio** – In the period up to 2009, it is necessary to strive for the share of domestic public debt to reach the level of **35%**, as opposed to **65%** share of the foreign public debt.
- **Fixed interest rate debt** – It is recommended for this share in total public debt to range between **70% to 80%**.
- **Denar-denominated public debt** – Taking into account the fact that the present share is at very low level, efforts need to be taken for this percentage to increase, having the prospects to achieve **15% to 20%** in relation to total public debt.
- **Euro-denominated foreign public debt** - Gradual increase of the Euro-denominated debt in relation to the remaining non-Euro currencies and achieving the level of **70%** by 2009.
- **Sovereign guarantees limit** – In the period 2007 – 2009, total guaranteed debt should range between 3.7% and 4.1% in relation to GDP, while in relation to total public debt, it is recommended for this percentage to range between **8% and 11%**. To the end of not exceeding the set targets, strategic borrowing by issuing sovereign guarantee will be in the amount of around **EUR 15 million** in 2007. As a result, the stock of guarantees in the reviewed period will slightly increase, and it is projected to amount to around **EUR 220 million**.
- **Maximum amount of new borrowing in 2007** – Total amount of new borrowing in 2007 is expected to be **EUR 203 million**, **EUR 57 million** out of which on the basis of issue of continuous government securities, while the remaining **EUR 146 million** on the basis of borrowing abroad. Out of the amount envisaged for external borrowing, **EUR 31 million** will be on the basis of newly extended credits, and the rest will be on the basis of disbursed tranches under agreements concluded in the previous years. In addition, it should be pointed out that when determining these limits, certain future contingent liabilities (debts) have not been taken into account, such as the unresolved debt with Italy, the debt of Macedonian railways and possible new borrowings of the energy sector, that will additionally burden the Budget of the Republic of Macedonia and the level of public debt (Annex 4).

## V. Annex I

Table 7  
Domestic public debt

<i>In million EUR</i>	2006	2007	2008	2009
Domestic public debt- according to the GFS methodology	701,2	739,4	719,8	699,0
Domestic public debt according to the Public debt Law	601,2	639,4	619,8	599,0
General government debt	699,6	737,8	718,2	697,4
Central government debt	699,4	737,6	718,0	697,2
Structural bonds	480,7	461,8	376,9	292,0
Stopanska bank rehabilitation bond	21,2	15,9	10,6	5,3
Bond for Selective credits	16,9	16,9	16,9	16,9
Stopanska bank privatization bond	68,7	60,1	51,5	42,9
Bond for old foreign savings	254,9	203,9	153,0	102,0
Denationalization bond	118,9	164,9	144,9	124,9
Continuous government securities	218,7	275,8	341,1	405,2
Out of which T-bills for monetary purposes	100,0	100,0	100,0	100,0
Municipalities	0,2	0,2	0,2	0,2
Public enterprises	1,6	1,6	1,6	1,6

Source: Ministry of Finance

Table 8  
Stock of external public debt

Sector/debtor/creditor	2006	2007	2008	2009
External public debt according to the GFS methodology	1237,1	1310,4	1347,5	1347,6
External public debt according to the Public debt Law	1194,96	1282,1	1341,8	1347,0
Government of the Republic of Macedonia	1029,4	1069,2	1112,8	1111,0
Official creditors	878,8	918,8	962,6	961,0
Multilateral creditors	741,7	776,6	823,1	821,5
IBRD/ IDA	463,3	484,9	513,7	520,3
IFAD	12,6	13,1	13,6	14,5
CEDB	18,0	19,9	29,5	39,2
EBRD	43,6	53,7	55,1	54,3
EIB	114,2	115,0	126,2	116,2
EU	90,0	90,0	85,0	77,0
Bilateral creditors	137,1	142,2	139,6	139,5
Paris club-reschedule 1995	77,4	60,2	43,0	25,8
Non-rescheduled debt	6,6	6,6	6,6	6,6
Newly concluded agreements	53,0	75,4	89,9	107,0
Private creditors	150,6	150,4	150,2	150,0
Eurobond	150,0	150,0	150,0	150,0
Other private creditors	0,6	0,4	0,2	0,0
Banks	0,6	0,4	0,2	0,0
National Bank of the Republic of Macedonia	42,1	28,4	5,7	0,6
IMF	42,1	28,4	5,7	0,6
Public enterprises	165,6	212,9	229,0	236,0
Official creditors	82,6	126,6	146,3	163,3
Multilateral creditors	60,3	97,1	108,4	127,9
CEDB	5,0	10,0	10,0	17,0
IBRD	27,6	36,3	48,7	56,9
EBRD	10,1	30,2	27,6	27,6
EIB	12,6	15,5	18,3	22,8
EUROFIMA	5,1	5,1	3,8	3,6
Bilateral creditors	22,2	29,5	38,0	35,4
Newly concluded credits	22,2	29,5	38,0	35,4
Private creditors	83,0	86,2	82,7	72,7
Other private creditors	83,0	86,2	82,7	72,7

Source: Ministry of Finance and NBRM

## VI. Annex II

### Public Debt Management Model

Public debt portfolio, comprising domestic and foreign debt of the public sector, is usually the largest financial portfolio of a country, and it is exposed to large number of risks that can cause financial crisis and instability. Besides, the size of the liabilities arising from the public debt is often uncertain due to reasons determined and dependent on the future trends of the macroeconomic variables, as well as the future political decisions. Thus, the need to define the optimal public debt structure is imposed as a necessity, thus enabling the governments to reduce debt exposure to financial risks, by setting quantitative and qualitative criteria for the currency, maturity and interest rate structure of the debt.

Risks at which current public debt portfolio of the Republic of Macedonia is exposed are explained in Chapter 3. Thereby, market risks, i.e. interest rate risk and exchange rate risk are pointed out as risks having the largest influence on the costs arising from current debt portfolio.

Taking these risks into account, as well as the possible new risks that would significantly influence the costs arising from the debt, Ministry of Finance has prepared simple model so as to define the optimum debt structure to which the country should be focused on medium term. More precisely, the model entails efforts to determine the trade-offs between costs and risks arising from different alternative debt portfolios for certain time period (10 years), assuming that occur the shocks set in several macroeconomic scenarios. Thereby, debt costs are measured through participation of the annual costs for servicing the debt in relation to GDP for that period, while the risk is measured through the potential variations of these costs under the assumptions that occur the shocks envisaged in the macroeconomic scenarios.

When defining the alternative portfolios, four categories (ratios) were determined, as follows:

- Domestic public debt divided as: medium-term (3-year, with fixed interest rate) and short-term debt (3-month, with variable interest rate); and
- external euro-denominated public debt with 10-year maturity, with fixed interest rate and variable interest rate.

Alternative portfolios (borrowing strategies) used in the model are shown in the table below:

Table 9  
Alternative portfolios

Portfolios		1	2	3	4	5	6*
In %							
External public debt	10-year with fixed interest rate	40	40	50	20	10	55
	10-year with flexible interest rate	40	10	20	20	2	29
Domestic public debt	3-year with fixed interest rate	10	20	15	40	25	2
	3-month with flexible interest rate	10	30	15	20	45	14
		100	100	100	100	100	100

\*current portfolio

Source: Ministry of Finance

Novelty in terms of the portfolios included in the analyses of the strategy from the previous year is that the analysis for this year set, for the first time, the effects from the shocks determined in the six macroeconomic scenarios and of the current debt portfolio, being presented in the sixth borrowing strategy. Other 5 borrowing strategies are various combinations of the debt according to maturity, interest rate and currency structure. This is aimed at determining which segment of the debt portfolio is most sensitive to changes in the general conditions (shocks) in the economy, whether domestic or foreign. Trends in the costs arising from the previous

borrowing strategies are tested through the effects from the influence of the six macroeconomic scenarios, as follows:

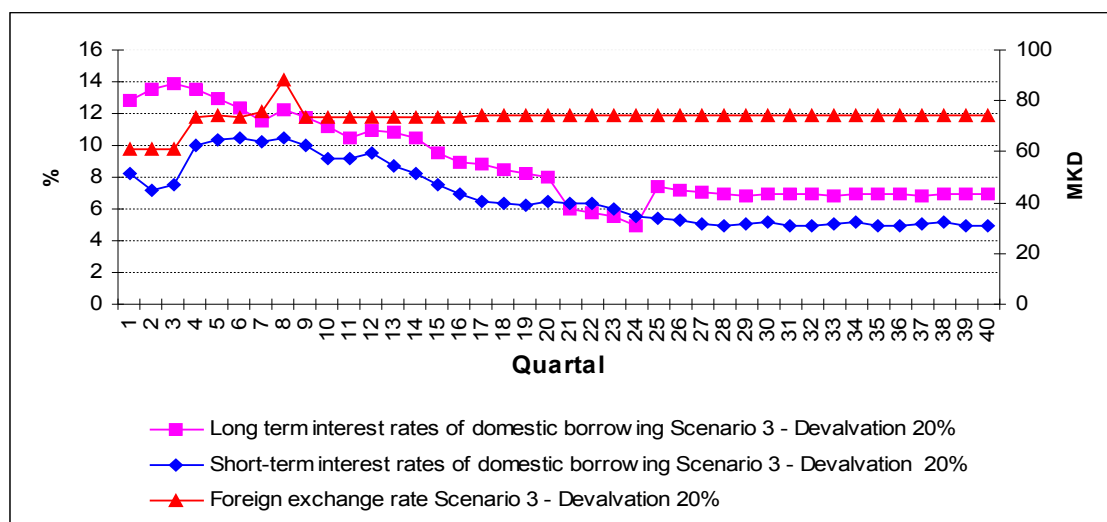
- Scenario 1: basis scenario
- Scenario 2: shock in the world economy
- Scenario 3: 20% devaluation
- Scenario 4: recession in the national economy
- Scenario 5: 30% devaluation
- Scenario 6: two-digit inflation of 15%

**Basic scenario** reflects the current government policy, as well as the policy the government plans to implement in the coming 10 years. This scenario envisages continuous GDP growth on annual level of 6%, and stable exchange rate of the domestic currency in relation to EUR. Interest rates on the domestic financial market, both long- and short-term, record continuous drop by 2010, after which interest rate will keep approximately the same level by the end of 2015.

**Second scenario** shows the trend of the macroeconomic variables, under the assumption that the world economy will experience recession. Such development in the world economy are expected to have large influence on the interest rates on the international financial market (long and short-term), which experience significant increase during the recession period only in this scenario. Interest rates on the domestic financial market keep the same trend as in the basic scenario, but with a slightly lower level. GDP in this scenario experiences growth rate of 4% as well. EUR exchange rate also continuously increases the value from 8% in 2007 and 2008, 5% in 2009 and 2010, 3% in 2011 and 2% in 2014 and 2015.

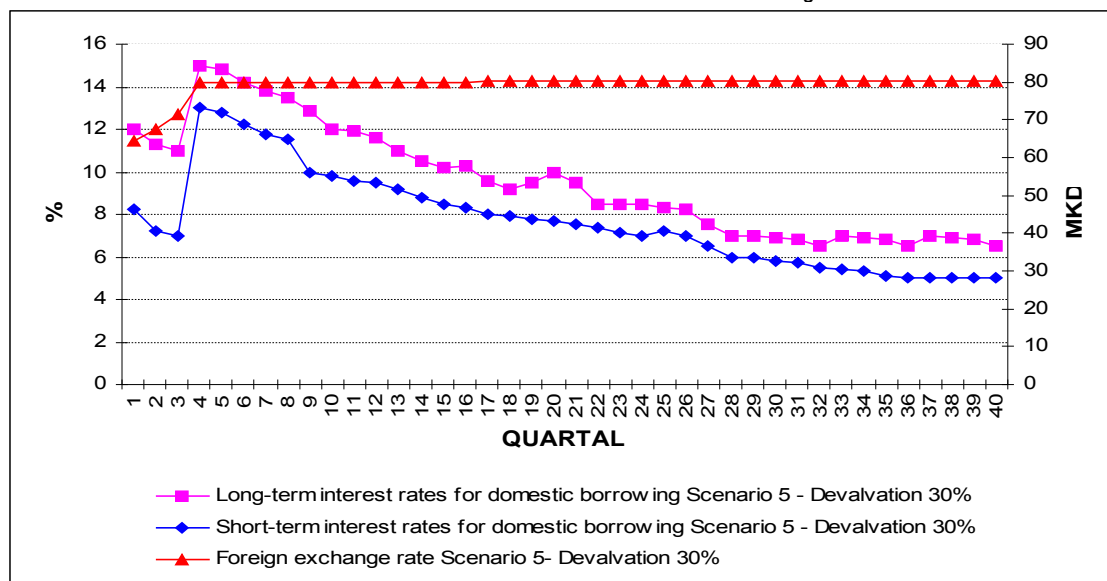
Next four scenarios project the trends of the macroeconomic indicators in conditions of shocks in the national economy, such as devaluation of the domestic currency, recession in the national economy and inflation. **Third and fifth scenarios** respectively envisage devaluation, i.e. drop in the value of the domestic currency by 20%, i.e. 30% by the end of 2006. Such changes in the value of the domestic currency lead to increase in the interest rates on the domestic financial markets at the moment the shock occurs. In the period following the shock, stabilization of the national economy is envisaged, as a result of the fact that interest rates on the domestic borrowing during the whole period after the shock experience downward trend.

Chart 16  
Trends in the interest rates of domestic borrowing under Scenario 3



Source: Ministry of Finance

Chart 17  
Trends in the interest rates of domestic borrowing under Scenario 5



Source: Ministry of Finance

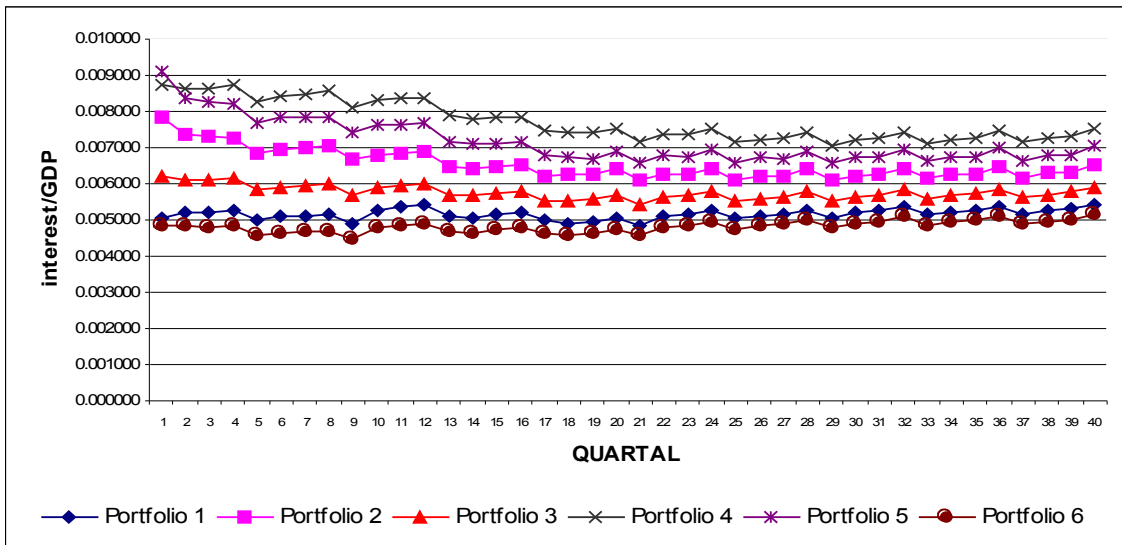
GDP in these scenarios experienced continuous upward trend, with reduced growth rate, i.e. 8% in 2007, 7% in the of period 2008 - 2010 and 6% in the period up to 2015.

Effects from the recession in the national economy over the basic macroeconomic indicators are described in the **fourth scenario**. According to this scenario, GDP growth rate is maintained at lowest level in relation to all other scenarios, i.e. to 4%. On the other hand, interest rates on the domestic borrowing, both long- and short-term, experience highest growth in relation to the other scenarios, reaching the level of 15.5% for the long-term interest rates, and 12% for the short-term ones.

**Sixth scenario** is focused on the effects from the two-digit (15%) inflation, followed by insignificant changes in the value of the domestic currency, significant GDP growth by 12% in 2007, whereby the growth is with reduced dynamics of 8% in 2008 and 2009 and 7% in the period up to 2015. Interest rates on domestic financial markets increase as a result of the anti-inflationary measures, expected to be undertaken by the monetary authorities so as to stabilize the national economy.

The carried out analysis brings to the conclusion that current macroeconomic policy, which envisages downward trend of interest rates on the domestic financial markets, leads, on the long run, to reduction of the interest-related costs of the portfolios in which the domestic currency has larger share. On the other hand, portfolios dominated by foreign currency denominated debt (Portfolios 1, 3 and 6), besides being at lower level that the other scenarios during the whole period, as a result of the continuous increase of the interest rates, costs are experiencing upward trend.

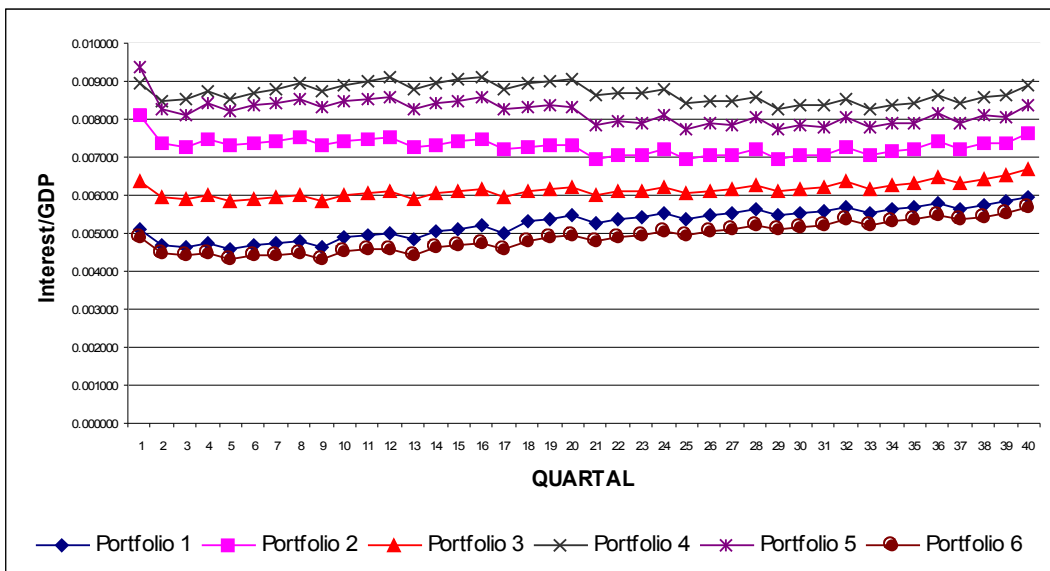
Chart 18  
Interest rate-related costs in relation to GDP  
Basic and macroeconomic scenario



Source: Ministry of Finance

Should the world economy experience shock, i.e. recession, it will result in increase of the interest rates on the international financial markets, which will, on the other hand, lead to increase of the interest rate-related costs of the portfolios dominated by debt denominated in foreign currency.

Chart 19  
Interest rate-related costs in relation to GDP  
Scenario of recession in the world economy



Source: Ministry of Finance

On the other hand, should shock occur in the national economy, it will subsequently influence the value of the national currency and the economic growth, at the same time affecting the interest rates on the domestic financial markets. Such changes will lead to immediate increase of the interest rate-related costs of the portfolios dominated by debt denominated in national currency, which following the stabilization of the conditions will experience continuous downward trend.

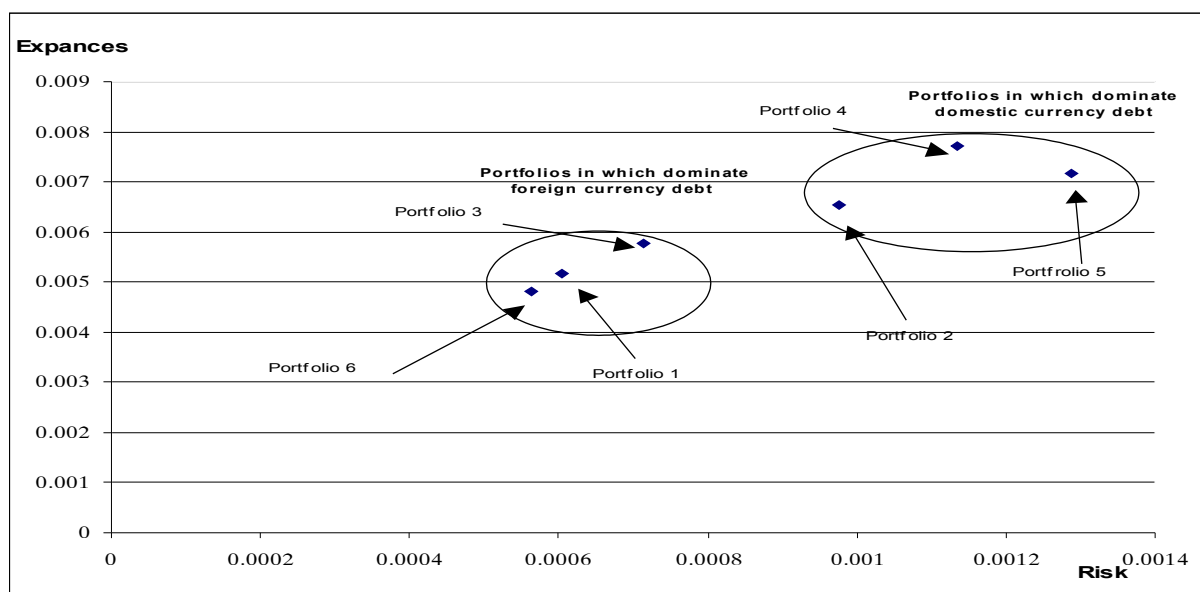
In general, one can conclude that average costs generated by all portfolios are the lowest in conditions presented in the basic scenario and the scenario that envisages recession in the world economy as a result of the change in the oil price, and they are the highest according to the scenarios that envisage change in the macroeconomic indicators as a result of drop in the value of the national currency and recession in the economy in general.

In addition, interest rate-related costs of the portfolios dominated by foreign currency are lower than the costs of the portfolios dominated by national currency. However, on the other hand, costs of the portfolios with dominant domestic debt experience downward trend on the long run in all scenarios, while costs of the portfolios with dominant foreign debt continuously increase.

Analyzing the effects from the influence of the changes in the economic conditions in the state and in the world regarding different debt portfolios, one can conclude that current public debt portfolio of the Republic of Macedonia is favorable both from the point of view of the costs and its exposure to risk from changes in these costs. However, this does not mean that it should not be changed. On the contrary, additional analyses show that it is more than necessary to undertake activities for moderate restructuring of the debt, aimed at gradual increase of the part of the debt denominated in domestic currency. It would mean improvement of the portfolio of government securities, both in quantitative and qualitative terms, i.e. increase of the amounts of issued securities, as well as improvement of their maturity.

Chart 20

Trade-offs between costs and risks



Source: Ministry of Finance

## VII. ANNEX III

### CALENDAR FOR GOVERNMENT SECURITIES AUCTIONS IN 2007

QUARTER	MONTH	AUCTION CODE	AUCTION DATE	PAYMENT DATE	MATURITY DATE	MATURITY IN DAYS
I	JANUARY	DZ2007/01-91	09/01/07	10/01/07	11/04/07	91
		DZ2007/01-182	09/01/07	10/01/07	11/07/07	182
		DZ2007/02-91	23/01/07	24/01/07	25/04/07	91
		DZ2007/01-364	23/01/07	24/01/07	23/01/08	364
	FEBRUARY	DZ2007/03-91	06/02/07	07/02/07	09/05/07	91
		DZ2007/02-182	06/02/07	07/02/07	08/08/07	182
		DZ2007/04-91	20/02/07	21/02/07	23/05/07	91
		DO2007/01-0209	22/02/07	26/02/07	26/02/09	02
	MARCH	DZ2007/05-91	06/03/07	07/03/07	06/06/07	91
		DZ2007/03-182	06/03/07	07/03/07	05/09/07	182
		DZ2007/06-91	20/03/07	21/03/07	20/06/07	91
		DZ2007/02-364	20/03/07	21/03/07	19/03/08	364
		DO2007/02-0310	22/03/07	26/03/07	26/03/10	03
II	APRIL	DZ2007/07-91	10/04/07	11/04/07	11/07/07	91
		DZ2007/04-182	10/04/07	11/04/07	10/10/07	182
		DZ2007/08-91	24/04/07	25/04/07	25/07/07	91
	MAY	DZ2007/09-91	08/05/07	09/05/07	08/08/07	91
		DZ2007/05-182	08/05/07	09/05/07	07/11/07	182
		DZ2007/10-91	22/05/07	23/05/07	22/08/07	91
		DO2007/03-0509	24/05/07	28/05/07	28/05/09	02
	JUNE	DZ2007/11-91	05/06/07	06/06/07	05/09/07	91
		DZ2007/06-182	05/06/07	06/06/07	05/12/07	182
		DZ2007/12-91	19/06/07	20/06/07	19/09/07	91
		DZ2007/03-364	19/06/07	20/06/07	18/06/08	364
		DO2007/04-0510	21/06/07	25/06/07	25/06/10	03
III	JULY	DZ2007/13-92	10/07/07	11/07/07	10/10/07	91
		DZ2007/07-182	10/07/07	11/07/07	09/01/08	182
		DZ2007/14-91	24/07/07	25/07/07	24/10/07	91
		DZ2007/04-364	24/07/07	25/07/07	23/07/08	364
	AUGUST	DZ2007/15-91	07/08/07	08/08/07	07/11/07	91
		DZ2007/08-182	07/08/07	08/08/07	06/02/08	182
		DZ2007/16-91	21/08/07	22/08/07	21/11/07	91
		DO2007/05-0809	23/08/07	27/08/07	27/08/09	02
	SEPTEMBER	DZ2007/17-91	04/09/07	05/09/07	05/12/07	91
		DZ2007/09-182	04/09/07	05/09/07	05/03/08	182
		DZ2007/18-91	18/09/07	19/09/07	19/12/07	91
		DZ2007/05-364	18/09/07	19/09/07	17/09/08	364
		DO2007/06-0910	20/09/07	24/09/07	24/09/10	03
IV	OCTOBER	DZ2007/19-91	09/10/07	10/10/07	09/01/08	91
		DZ2007/10-182	09/10/07	10/10/07	09/04/08	182
		DZ2007/20-91	23/10/07	24/10/07	23/01/08	91
		DO2007/07-1012	25/10/07	29/10/07	29/10/12	05
	NOVEMBER	DZ2007/21-91	06/11/07	07/11/07	06/02/08	91
		DZ2007/11-182	06/11/07	07/11/07	07/05/08	182
		DZ2007/22-91	20/11/07	21/11/07	20/02/08	91
		DO2007/08-1109	22/11/07	26/11/07	26/11/09	02
	DECEMBER	DZ2007/23-91	04/12/07	05/12/07	05/03/08	91
		DZ2007/12-182	04/12/07	05/12/07	04/06/08	182
		DZ2007/24-91	18/12/07	19/12/07	19/03/08	91
		DZ2007/06-364	18/12/07	19/12/07	17/12/08	364

Source: Ministry of Finance

## VIII. Annex IV

Table 10

## Projected disbursements on the basis of extended and non-extended credits

	In EUR	Final beneficiary	Disbursements in 2007 projections	Disbursements in 2008 projections	Disbursements in 2009 projections
<b>I+II</b>	<b>Public sector</b>		<b>146.219.164</b>	<b>122.447.624</b>	<b>89.862.926</b>
<b>I</b>	<b>General government</b>		<b>87.060.997</b>	<b>91.713.491</b>	<b>66.632.033</b>
<b>I.1</b>	<b>Multilateral creditors</b>		<b>61.488.291</b>	<b>74.179.641</b>	<b>43.500.983</b>
<b>I.1.1</b>	<b>IBRD / IDA</b>		<b>32.992.539</b>	<b>33.972.046</b>	<b>26.398.367</b>
C	Project for reconstruction of irrigation systems	Ministry of agriculture	188.839	0	0
C	Educateion modernization project	Ministry of education and science	514.554	514.554	2.190.024
C	Judicial reforms project	Ministry of justice	1.700.000	3.000.000	3.800.000
C	SPIL	Ministry of labour and social policy	1.869.000	1.778.145	831.726
C	Health sector modernization project	Ministry of health	1.007.512	1.114.809	2.718.725
C	Cadastar project	<b>Cadastre</b>	1.600.000	3.200.000	3.213.176
C	BERIS	Ministry of economics	1.120.000	3.782.368	3.353.632
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>24.992.634</b>	<b>20.582.170</b>	<b>10.291.084</b>
<b>I.1.2</b>	<b>EBRD</b>		<b>14.254.518</b>	<b>7.572.518</b>	<b>6.000.000</b>
C	Road project II	Road fund	10.800.000	7.572.518	0
C	MEAP	Ministry of finance (786)	2.646.826	0	0
C	Civil Aviation Project	Civil aviation	807.692	0	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>0</b>	<b>6.000.000</b>
<b>I.1.3</b>	<b>EIB</b>		<b>11.100.000</b>	<b>23.900.000</b>	<b>2.000.000</b>
C	Road project II (60 million Euro)	Road fund	11.100.000	15.900.000	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>8.000.000</b>	<b>2.000.000</b>
<b>I.1.4</b>	<b>IFAD</b>		<b>641.234</b>	<b>735.077</b>	<b>1.102.616</b>
C	Agriculture Financial Services Project	Ministry of agriculture	641.234	0	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>735.077</b>	<b>1.102.616</b>
<b>I.1.5</b>	<b>CEB</b>		<b>2.500.000</b>	<b>8.000.000</b>	<b>8.000.000</b>
C	Social Housing Project	Ministry of transport	1.500.000	0	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>1.000.000</b>	<b>8.000.000</b>	<b>8.000.000</b>
<b>I.2</b>	<b>Bilateral creditors</b>		<b>25.572.706</b>	<b>17.533.850</b>	<b>23.131.050</b>
C	Italian credit line for SMEs	Ministry of agriculture	1.697.949	0	0
C	Irrigation Vardar Valley	Ministry of agriculture	4.146.485	0	0
C	Lisice Project***-70%-concesional -ICO Spain	Ministry of agriculture	1.981.001	0	0
C	Lisice Project***/30%-comercial	Ministry of agriculture	610.114	0	0
C	JIBC, Japan - Zletovica Project	Ministry of agriculture	16.039.133	17.533.850	18.691.050
C	Rationalization of management system and modernization of biomedical equipment in health sector	Ministry of health	1.098.024	0	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>0</b>	<b>4.440.000</b>
<b>II</b>	<b>Public enterprises</b>		<b>59.158.167</b>	<b>30.734.133</b>	<b>23.230.893</b>
<b>II.1</b>	<b>Multilateral creditors</b>		<b>39.700.000</b>	<b>13.886.460</b>	<b>23.230.893</b>
<b>II.1.1</b>	<b>IBRD / IDA</b>		<b>10.600.000</b>	<b>12.500.000</b>	<b>10.230.893</b>
C	Macedonian Railways Restructuring	Macedonian railway	3.600.000	4.500.000	4.700.000
C	Electric Power Development Project	MEPSO	7.000.000	8.000.000	2.590.583
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>0</b>	<b>2.940.310</b>
<b>II.1.2</b>	<b>EBRD</b>		<b>23.000.000</b>	<b>1.386.460</b>	<b>4.000.000</b>
C	Power Transmission Pipe Line (Dubrovo-Radomir)	MEPSO	23.000.000	1.386.460	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>0</b>	<b>4.000.000</b>
<b>II.1.3</b>	<b>EIB</b>		<b>1.100.000</b>	<b>0</b>	<b>2.000.000</b>
C	ESM s/s in the Republic of Macedonia	MEPSO	1.100.000	0	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>0</b>	<b>2.000.000</b>
<b>II.1.4</b>	<b>CEB</b>		<b>5.000.000</b>	<b>0</b>	<b>7.000.000</b>
C	Job Creation II Project	Macedonian Bank for Support of Development from revolving fund	5.000.000	0	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>0</b>	<b>0</b>	<b>7.000.000</b>
<b>II.2</b>	<b>Bilateral creditors</b>		<b>19.458.167</b>	<b>16.847.673</b>	<b>0</b>
C	Sveta Petka Project	ELEM	14.363.167	5.642.673	0
<b>P</b>	<b>Disbursement from non-concludet projects</b>		<b>5.095.000</b>	<b>11.205.000</b>	<b>0</b>

C-concluded projects

P-projected plans

Source: Ministry of Finance

## IX. ANNEX V

Table 11

Annual amount of projected sovereign guarantees

<i>In EUR</i>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total amount of projected sovereign guarantees	15.000.000,00	10.000.000,00	92.780.037,00

Source: Ministry of Finance

2007 – 2009 Public Debt Management Strategy shall enter into force on the day it is published in the Official Gazette of the Republic of Macedonia.

**PRESIDENT OF THE ASSEMBLY OF  
THE REPUBLIC OF MACEDONIA**  
**Ljubisa Georgievski (in his own hand)**

No. 07-854/1

21 February 2007

Skopje