

### Ministry of Finance of the Republic of Macedonia

Public Debt Management Department



Skopje, July, 2008

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 24 July, 2008, adopted the following:

## Public Debt Management Strategy of the Republic of Macedonia for the period 2008 to 2010

#### 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:

•establishing the optimum structure of debt portfolio and its harmonization with the national macroeconomic policy;

•harmonizing the debt portfolio costs with the ones set in the government budget for each year individually and on medium term; and

•restricting and eliminating the effect of the financial risks on public debt sustainability in the medium and long run.

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

The presented data in the Public Debt Management Strategy are based on actual data by September 2007, while projections for the period to come are subject to changes depending on the priorities for financing and development of the government securities market.

#### II. INTERNATIONAL ENVIRONMENT

During 2006, according to the IMF projections, the global economy grew by 5.4%. This growth was a result of the growth in smaller developing countries and the positive performances of the giants USA, China, Russia and India.

However, in the first half of 2007, problems resulting from global imbalances surfaces, primarily the US current account deficit and surpluses on the current accounts of the Asian exporting countries and oil producing companies. Taking into account the most recent events on the energy sources market and the reaching of the psychological barrier of US\$ 100 per barrel, there is a serious risk of slowdown of global growth and increase of the global level of budget deficits.

When we take into account the ultimate uncertainty of the outcome of the negotiations between USA and China regarding their trade relations, as well as the continuous depreciation of the US dollar as a reserve currency, especially the "petrodollars", there is a serious threat of further depreciation of the US\$ and implementation of the "beggar thy neighbor policy" by the US. With regard to the projections of the level of interest rates in the US, the position of the analysts in the large investment banks and academic circles with regard to the US situation is that USA faces serious recession in 2008, Whereby FED will continue reducing its interest rate so as to prevent the already visible decline in employment and export of US products, as well as to mitigate the investor panic on the capital market by releasing additional liquidity in the economy. But the reduced interest rates cause lower capital inflows due to the less attractive interest rates, and accordingly, abandonment of the US\$ on the currency markets. If the decline of interest rates continue in 2008 and if the projections for reduction of the 2.25% FED target rate come true, in order to revive the economy, further depreciation of the US dollar value compared to other currencies is pending. In 2007 only, the US\$ lost 13% of the value in relation to the euro, and having in mind the expected levels of interest rates for 2008 the exchange rate is projected to be 1.52 US\$ for 1 euro.

The monetary policy rigidity from this side of the Atlantic and the instruments available to the European Central Bank (ECB) lead to reduced competitiveness of the EU products. The reduced export, pressured by the enormous rise of prices of metals and energy, but also the higher aggregate demand by Asian consumers of raw materials, imposes risk of stagflation. As a proof of the threat of higher inflation are the latest concerns expressed by the Food and Agriculture Organization that the production of biodiesel fuels in the past 2-3 years is a reason for the enormous growth of the price of agriculture products. Facing those consequences, ECB reacted by raising the interest rates so as to mitigate potential problems with inflation. According to the most prognoses, the European Central Bank during 2008 plans to keep the level of the reference interest rate at 4% so as to prevent inflationary pressures, however, having in mind the reduced rate of FED, ECB rate would most probably decline slightly to a level of 3.5%, so as to prevent the detrimental effect from the almost imminent US recession to spill over in the European continent.

TED, ECD, BOS and BOE fates							
	FED	ECB	BJ	BOE			
Current rate in %	3,5	4	0,5	5,5			
2008		Date of	meeting				
January	30						
February		7	15	7			
March	18	6	7	6			
April		10	30	10			
May		8	20	8			
June	25	5	13	5			
July		3		10			
August	5	7		7			
September	16	4		4			
October	29	2		9			
November		6		6			
December	16	4		4			
End of 2008	3,25	3,5	0,7	4,5			
Decrease							
Increase							

FED, ECB, BoJ and BoE rates

Source: FX Crossroads- Danske bank, January 23, 2008

Table 2	FX projection	ns vs. USD			
	Current	After 1 month	After 3 months	After 6 months	After 12 months
EUR	1,46	1,48	1,52	1,50	1,40
JPY	105,90	106,00	105,00	100,00	105,00
GBP	1,96	1,97	2,01	2,03	1,94
CHF	1,09	1,08	1,07	1,08	1,13

Source: FX Crossroads- Danske bank, January 23, 2008

Table 3	Interest rate futures (in %)					
	March 2008	June 2008				
3 month USD futures	2,72	2,35				
3 month EUR futures	4,00	3,72				
3 month CHF futures	2,38	2,14				
3 month JPY futures	0,67	0,56				
Source: Bloomberg, January 2008						

In the corporate sector, the general instable environment and excessive strive towards risky investments resulted in higher number of deteriorated rating at the detriment of those whose reputation improves. The past 2-3 years will be remembered as record-breaking regarding the number and the size of corporate mergers and acquisitions. This trend slowly declines in intensity, primarily due to higher interest rates and the increase of capital costs.

The challenge of ever increasing indebtedness level of the population in the developed countries, in parallel with the aging of the population could cause negative consequences over the economic growth and its deviation from the potential, causing crises on the market of other production factors, especially real estate. Developing countries also face problems of demographic nature, but opposite. The trend of growth of rate of births in the poorest countries means increased unemployment in these countries and decline of their GDP per capita and ever increasing gap between rich and poor countries.

The bigger gap and the expanded scope of financial markets, greater foreign trade, the elimination of barriers to movement of free capital and bigger foreign direct investments will be followed by bigger oscillations on the global capital and foreign currency markets. The existence of derivative financial instruments and the exponential growth of their scope which, as a comparison, is 10-fold compared to the global GDP, will be an opportunity for economic entities and governments to protect or diminish numerous risks.

Trends in international markets for the public debt of the Republic of Macedonia have several effects. According to the projections for reduction of interest rates on US\$ and maintaining or slightly declining the existing level of the interest rates of the euro, this would result in relatively lower interest costs in the Budget of the Republic of Macedonia, from the aspect that the reduction of interest rates on uS\$ variable interest rate loans. The fact that the Republic of Macedonia is small and open economy leads to great interdependence of the growth rate of the domestic economy with the growth rate and the economic situation of the countries in the euro-zone. Accordingly, the potential slowdown of growth of European economies would cause decline in the trade with the Republic of Macedonia, and thus reduction of the GDP growth below the potential.

On the other hand, the projections for exchange rate trends on the international market and expectations for further depreciation of the US\$ compared to the euro has two-fold effect for the Republic of Macedonia:

1.savings on the basis of positive exchange rate differences as a result of the servicing of the US\$ liabilities with the euro deposits; and

2.regarding the significant share of euro-denominated debt in the total public debt portfolio, US\$ depreciation makes the portfolio more expensive, and thus the cost for servicing of the liabilities are higher compared to the US\$ denominated debt.

# III. MACROECONOMIC TRENDS, FISCAL INDICATORS AND PUBLIC DEBT IN THE REPUBLIC OF MACEDONIA

Economic performance in the Republic of Macedonia in 2007 is the best in the transition period so far, whereby positive trends are also recorded in all sectors of the economy. This is the first test and a confirmation of the success of the ambitious economic program of the Government of the Republic of Macedonia, supported by the disciplined fiscal and consistent monetary policy.

A confirmation of the improvement of the macroeconomic environment are the higher grade Macedonian received by international credit rating agencies: Standard and Poor's, Fitch and JCRA. Standard & Poor's assigned Macedonia in 2007 with BB+/Stable outlook for foreign currency and BBB-/Stable outlook for domestic currency; Fitch assigned Macedonia with BB+/Positive outlook for domestic and foreign currency; and the JCRA assigned Macedonia BB+/Stable outlook for foreign currency.

According to the reports from the international credit rating agencies, there is an improvement of the assigned ratings, above all due to the prudent fiscal and macroeconomic stability of the country, as well as of the continuous economic and fiscal stability and implementation of comprehensive structural reforms aimed at further economic development. Assigned better ratings also reflect the progress in political stability, supported by the tendency for membership in the European Union and the status of candidate country, as well as membership in the NATO.

So far, according to the assigned ratings, the Republic of Macedonia is a step before obtaining an investment ratings.

#### III.1 Expected medium-term economic trends

Main objective of the Government of the Republic of Macedonia in the period 2008 – 2010 will be to maintain, as well as to accelerate the high economic growth experienced in 2007, accompanied by low and stable inflation rate, having significantly positive effect over the available income of the citizens, thus contributing to the living standard. In the period 2008-2010 the average GDP growth rate is expected to be somewhat higher than in 2007, between 6 and 6.5%. Thereby, driving force to the economic growth from the aspect of the expenditure side of GDP will be personal consumption and investments (especially foreign direct investments - FDI). From a production aspect, the main driving force will be the services due to their dominant share in GDP, and somewhat lower growth is expected in the industrial production, which would lead to further shift of the domestic production to services, similar to the situation in the Western developed countries.

The contribution of the personal consumption to GDP is expected to be 3.5 and 4 percentage points in the period 2008-2010.

This assumption is based on the projected growth of salaries in the public and private sector, the growth of credits to the population by 30% on annual level and the expected stable level of private transfers.

Personal consumption will also be affected by the introduction of the flat tax, i.e. reduced PIT from 15%, 18% and 24% in 2006 to 10% in 2008.

In line with the commitment of the Government of the Republic of Macedonia to disciplined fiscal policy, (general government budget deficit not exceeding 1.5% of GDP), share of public consumption in GDP in the period to come will range between 0.5% and 1 percentage point, and in the coming period we expect greater percentage of utilization of capital investments that would contribute to more intensive GDP growth. In the coming period, in line with the intensive reform agenda of the Government of the Republic of Macedonia, the improved business climate, the

expected membership in NATO and the expected initiation of the negotiations with the EU, investment activity is expected to intensify. The reduction of the profit tax from 15% to 12% in 2007 and to 10% as of 2008 as well as the exemption of reinvested profits from taxation is an additional impetus for greater investment activity, according to the projections, by around 15%.

The inflation rate, according to the projections, on the medium term, will be low, single-digit and in accordance with the expected employment growth, salary growth and personal consumption, as well as with the projections on the trends in the prices of energy sources on the global markets. The inflation rate in the analyzed period is expected to be between 2.5 and 3%, at a planned annual employment growth by 4% ad productivity growth by 4-5%.

At the same time, the application of the strategy for targeting the Denar nominal exchange rate to the EURO will continue, thus the maintenance of the Denar exchange rate stability will be an indirect monetary goal. Money demand will increase in line with the inflation and GDP growth, and more intensive crediting to the private sector is expected, in accordance with the greater competition in the banking sector, as well as the growth of the average salary in the Republic of Macedonia.

Trade deficit and current account deficit are expected to grow, and this process is present in all economies in transition that realize high growth rates. The current account deficit will be around -5% of GDP, with a tendency to decline after 2009. As a result of the high import dependence and the high import component of FDI, import is expected to grow by 14% in 2008 and 9% in 2009. As a result of the measures to be undertaken by the Government so as to improve the business climate and the competitiveness of the corporate sector, as well as to increase the share of Macedonian products on international markets, the export of goods is expected to grow by (9% in 2008 and 12% in 2009).

Real sector	2005	2006	2007 Projectio ns	2008 Projectio ns	2009 Projectio ns	2010 Projectio ns
Gross Domestic Product						
- Real growth rate	4,10	4,00	6,00	6,00	6,50	6,50
- current prices, Denar million,	286.6 20	308.7 72	333.845	364.315	397.695	434.134
- EUR million (nominal)	4.676	5.046	5.456	5.954	6.500	7.095
Inflation (costs of living, average)	0,5	3,2	2	3	2,5	2,5
Salaries (monthly average, net)						
nominal growth	4,0	7,3	3,8	7,5	8,0	8,5
- real growth	3,5	4,1	1,8	4,5	5,5	6,0
Employment increase (%)	1,5	4,3	4,0	4,0	4,0	4,0
External sector						
Export (FOB), US\$ million	2040	2400	3254	3518	3918	4324
Import (FOB), US\$ million	3097	3681	4794	5461	5932	6341
Trade balance (US\$ million)	-1057	-1281	-1540	-1943	-2014	-2017

#### Table 4 - Basic macroeconomic indicators

Trade balance (FOB) (% of GDP)	-18,2	-20,2	-22,5	-26,0	-24,7	-22,7
Current account deficit (US\$ million)	-81	-24	-200	-396	-431	354
Current account deficit (% of GDP)	-1,4	-0,4	-2,9	-5,3	-5,3	-4,0
Foreign direct investments (US\$ million)	97	350	363	403	495	443
- % of GDP	1,7	5,5	5,3	5,4	6,1	5,0
Fiscal sector						
General government budget deficit (% of GDP)	0,3	-0,6	-1	-1,5	-1,5	-1,5

Source: Ministry of Finance and NBRM, December 2007

#### III.2 Medium-term fiscal framework

Medium-term planning of public finance actually provides fiscal framework for the total public revenues and expenditures of central and local governments and is a basic control mechanism for further implementation of disciplined budget policy.

Projected fiscal policy will ensure further strengthening of fiscal consolidation, expressed through reduction of the level of public consumption and tax burden, which will provide for fiscal sustainability on the medium run and support to the development of both the economy and the private sector.

Regarding the coming medium term, projected revenues and expenditures maintain the level of budget deficit of around 1.5% of the projected GDP. Maintaining this level of deficit, as clearly defined fiscal anchor, will provide greater credibility for the country, benefits from the economic expectations and significant support to the fixed exchange rate regime.

The budget of the Republic of Macedonia in the next medium-term period will be characterized with relatively low level of deficit of around 1.5% of the planned GDP, including the central budget deficit and the deficit of the Road Fund.

Central budget deficit in the period 2006-2008 is planned at around 1.3% in 2008 and 2009 (including credit disbursements by budget users to their own accounts in the amount of around 0.3% of GDP) in relation to the planned GDP.

Financing of the projected central budget deficit in the next medium-term period will mainly be provided from domestic sources, via continuous issues of government securities and bond, as well as via usage of government deposits. Foreign borrowing, as a source of financing, would be used by budget users for specific projects and by the Road Fund in accordance with the concluded contracts for construction of certain road sections of the national roads in the country.

Denar million	2007	2008	2009	2010
(Denar million)				
Consolidated general government budget - Revenues	125,515	136,484	145,985	154,860
% of GDP	37.6	37.4	36.7	35.7

#### Table 5 Consolidated general government budget

Consolidated general government budget - expenditures	129,011	142,025	151,849	161,368
% of GDP	38.6	39.0	38.2	37.2
Consolidated general government budget - deficit	-3,496	-5,541	-5,864	-6,508
% of GDP	-1.0	-1.5	-1.5	-1.5
Central Budget - revenues	77,507	83,454	84,700	88,870
% of GDP	23.2	22.9	21.3	20.5
Central Budget - expenditures	79,999	87,651	90,424	94,878
% of GDP	24.0	24.0	22.7	21.8
Central Budget - deficit	-2,492	-4,197	-5,724	-6,008
% of GDP	-0.7	-1.2	-1.4	-1.4
Extrabudgetary funds - revenues	33,804	35,854	38,965	42,366
% of GDP	10.1	9.8	9.8	9.8
Extrabudgetary funds - expenditures	34,808	37,198	39,105	42,866
% of GDP	10.4	10.2	9.8	9.9
Extrabudgetary funds - deficit	-1,004	-1,344	-140	-500
% of GDP	-0.3	-0.4	0.0	-0.1
Local government budget - revenues	14,204	17,176	22,320	23,624
% of GDP	4.3	4.7	5.6	5.4
Local government budget - expenditures	14,204	17,176	22,320	23,624
% of GDP	4.3	4.7	5.6	5.4
Local government budget - deficit	0	0	0	0
% of GDP	0.0	0.0	0.0	0.0
Gross Domestic Product	333,845	364,492	397,888	434,345

Source: Ministry of Finance

#### III.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 Public Debt Law which varies from the data presented according to the GFS methodology since it excludes the debt of the National Bank of the Republic of Macedonia (central bank bills and government securities for monetary purposes).

According to this methodology, the public debt of the Republic of Macedonia in the next three years is envisaged to be between the set targets. Total public debt of the Republic of Macedonia compared to December 2006 declined by EUR 257.8 million and as of September 2007 amounted to EUR 1.498,1 million, i.e. 27.7% of GDP. This decline is a result of the active measures for public debt management during 2007, above all to the early redemption operations of the debt towards the Paris Club of Creditors, part of the credits towards the International Bank for Reconstruction and Development, part of the credits to the European Investment Bank and early redemption operations affected the improvement of the public debt portfolio from the aspect of interest, currency and maturity structure and thus the reduction of the exposure of the portfolio to market risks and the refinancing risk.

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	2008 proj.	2009 proj.	2010 proj.
GDP	5.954,0	6.499,5	7.095,0
Total public debt (EUR million)	1.762,4	1.807,5	1.870,6
Total public debt as % of GDP	29,6%	27,8%	26,4%
Target for total public debt	40,0%	40,0%	40,0%
General government debt (EUR million)	1.541,7	1.590,0	1.659,5
General government debt as % of GDP	25,9%	24,5%	23,4%
Target for general government public debt	35,0%	35,0%	35,0%
Room for new borrowing for total public debt ( EUR million)	619,24	173,08	175,04
Room for new borrowing for general government debt ( EUR million)	542,23	142,65	138,87
Target for guaranteed debt	6,0%	5,6%	5,0%
Guaranteed debt as % of GDP	3,3%	3,1%	2,7%
Room for new borrowing for guaranteed public debt (EUR million)	160,74	1,73	0,68
Interest payment on general government debt as % of total budget revenues	2,1%	2,4%	2,3%
Interest payment on general government debt as % of total budget expenditures	2,0%	2,3%	2,2%
Public debt servicing as % of GDP	4,8%	4,8%	4,1%
Servicing of the Public debt as % of total budget revenues	12,7%	13,1%	11,5%

#### Table 6 Projection for the movement of public debt and key parameters \*

Source: Ministry of Finance

Borrowing room (P) is a result of the difference between the maximum level of set target (Tmax) and the projected debt level (D), multiplied by the value of GDP (BDP). Each following year, the previous borrowing is deducted so as to obtain the borrowing room on annual basis (P (t-1)).

*P*=((*Tmax-D*)\**BDP*)-*P*(*t*-1)

Presentation of the projections for different categories of public debt is based on the following:

- dynamics of disbursing resources related to signed credits;
- projected issuance of government securities and
- projected future issues of denationalization bonds

<sup>•</sup> data on concluded partnerships, framework agreements and agreements on future cooperation between the the Republic of Macedonia and the international financial institutions envisaging framework for new borrowings;

Public debt projection is fully consistent with the medium-term fiscal strategy. But, in accordance with the analysis of sustainability of public debt, targets are set (explained in this strategy) the higher level of which enables additional room for forrowing in the next three years. Therefore the category "room for new borrowing" refers to the difference between the projected level of debt and the maximum allowed level according to the set limits.

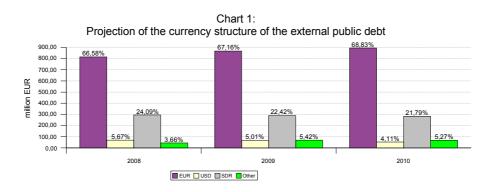
#### IV. OBJECTIVES FOR THE MOVEMENTS IN TOTAL PUBLIC DEBT PORTFOLIO

#### **IV.1 Primary objectives**

Primary objectives from the point of view of public debt management in the next three years will be aimed at improving public debt currency structure. This is a result of the public debt risk analyses (discussed in Chapter 6 in this Strategy), simultaneously attaining the lowest costs for debt servicing, as well as in line with the current trends on the international money and capital market, and the expectations for their future trends.

With respect to external public debt portfolio, focus in the next three years will be placed on the increase of the share of the Euro in its structure through direct borrowing on the international capital markets in euros or through using financial derivatives aimed at achieving this objective.

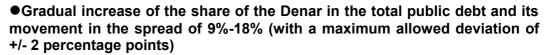
# •Share of euro-denominated debt in the total external debt of 67%-70% spread (with a maximum allowed deviation of +/- 3 percentage points)

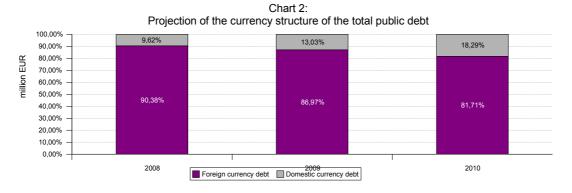


Source: Ministry of Finance

In addition, primary objective of the domestic money and capital market is development of the government securities market, i.e. broadening the investment base on this market, thus increasing the share of the Denar in the total currency structure of the public debt.

Financing the budget deficit, as well as refinancing the public debt, will be in line with the above-mentioned objectives.





Source: Ministry of Finance

#### **IV.2 Other objectives**

In order to provide sources for financing the needs of the state, with the lowest costs possible on medium- and long-term, simultaneously maintaining sustainable risk level, several medium-term objectives are set pursuant to the Law on Public Debt, as well as objectives pertaining only to the next year.

#### **IV.2.1 Medium-term objectives**

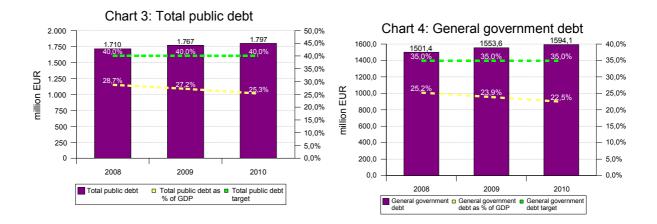
Medium-term objectives set the framework for public debt trends in the next three-year period. Medium-term targets limit the movement of the total public debt in relation to GDP, the share of the guaranteed public debt in relation to GDP, setting the interest structure of the public debt.

#### IV.2.1.1 Total public debt to GDP ratio

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. Taking into account the projections on public debt trends in relation to GDP in the period 2008 – 2010, it is expected decreasing trend due to modest fiscal policy, especially due to the significant increase of GDP rate, planned to be realized in the coming period.

In order to protect the public debt from its uncontrolled increase, which adversely affects both the budget and the economy, the following objectives are defined:

### -level of general government debt not to exceed 35% of GDP in the coming three years.



-level of public debt not to exceed 40% of GDP in the coming three years.

#### Source: Ministry of Finance

Source: Ministry of Finance

In line with the shown projections on the amount of the public debt and the general government debt, there is room to be used for new borrowing, provided it is line with the Medium-Term Fiscal Strategy and the signed medium-term partnerships, the framework agreements and the agreements for future cooperation of the Republic of Macedonia with the international financial organizations, or to be used as off-budgetary financing through issuance of government securities on the domestic or the foreign market or borrowing by the public enterprises. Possible new borrowing would lead to changes in public debt structure, thus also changing the risk level of the portfolio, depending on the type and the features of the borrowing.

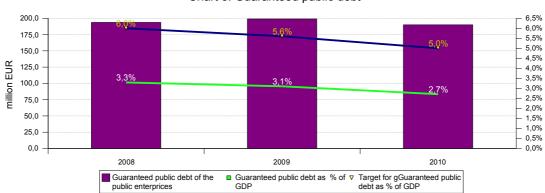
#### IV.2.1.2 Guaranteed public debt to GDP ratio

Issuance of sovereign guarantees is a contingent liability for the Republic of Macedonia to call the guarantees up. Therefore, financing of public projects by issuing guarantees entails additional risks, thus entailing additional costs to the Budget of the Republic of Macedonia. According to analyses on the guaranteed public debt in the period 2008 – 2010, it is expected for the guaranteed debt to gradually decline, thus leading to decline of the large risks our country can face in future in case the guarantees are called-up. Thus, future policy of the state will be aimed at applying restrictive approach in extending the guarantees, especially to the public enterprises that often face liquidity problems, i.e.

### -amount of guaranteed public debt not to exceed 6% of GDP in 2008, 5.6% in 2009 and 5% in 2010.

#### Source: Ministry of Finance

According to Chart 3, showing the projections on the trends of guaranteed debt, its gradual decline is evident. However, maximum limit of the guaranteed debt is 6%. This means that according to this Strategy, additional issuance of sovereign guarantees is allowed for the level for which the risk of the contingent liabilities would increase. Therefore, prior to any new issuance of sovereign guarantee, detailed credit analysis of the credit applicant would be made, under which the Ministry of Finance would deliver a positive opinion only for those credit applicants that could service their own liabilities.





#### IV.2.1.3 Interest structure of the total public debt

In order to protect the public debt portfolio against possible future market shocks and adverse changes of interest rates that directly lead to increase of the costs to the Budget of the Republic of Macedonia, gradual increase of the part of debt with fixed interest rate is one of the objectives at which public debt managers should aim. However, in the next three-year period, the Republic of Macedonia will strive for **maintenance of the current interest structure**, due to the following reasons:

1.regarding the external debt, new borrowings with the international financial institutions are most often concluded with variable interest rate, and

2.existence of insufficiently developed domestic government securities market, lacking sufficient potential for issuance of long-term instruments.

#### IV.2.2 Objectives pertaining only to 2008

These objectives pertain only to one year and are in line with the medium-term objectives.

#### IV.2.2.1 Maximum amount of new borrowings in 2008

Maximum amount of new borrowings refers to the amount of the newly concluded credits in the course of the years and the new borrowings on the basis of issuance of government securities. Projected newly concluded credits are within the prior determined objectives and can be intended for various projects (Appendix: Annex 1, Table 1), which, on the basis of the financing priorities, can be further intended for other projects as well.

#### -new borrowings in 2008 are planned in the amount of EUR 530 million.

This objective is related to the new announced loans, arising as a result of the concluded partnerships with the international financial institutions, and is fully harmonized with the Medium-Term Fiscal Strategy. However, one project can be replaced with another provided that the total amount of the borrowing is not exceeded, and is in line with the Government priorities.

Amount of the new borrowings on the basis of continuous government securities can be changed according to the budget needs in the course of 2008 so as to finance the budget deficit.

#### IV.2.2.2 Maximum amount of newly issued guarantees in 2008

In order to reduce the risk of potential liabilities in public debt portfolio, the central government defines the annual amount of the newly issued guarantees.

## -in the course of 2008, the Republic of Macedonia can issue sovereign guarantees up to the amount of EUR 150 million at the most.

#### V. MEASURES TO IMPLEMENT PUBLIC DEBT MANAGEMENT STRATEGY

#### V.1 Development of government securities market

•Ministry of Finance will continue to issue government securities (GS) in the period to come. The intention is to maintain the present maturity, meaning regular issuance of treasury bills (TB) with the present maturity of 3, 6 and 12 months, as well as increased presence and issuance of government bonds (GB) with 2 and 3-year maturity, with a possibility to issue GS with longer maturity depending on the impulse of the market (Appendix: Annex 2, Calendar of Issue of Government Securities). So-far experience in issuing GS points out to the fact that frequency of issuing securities corresponds to the market needs, and the Ministry of Finance will continue with the same dynamics. Net issuance of GS will be increased in the coming years as well in line with the plan and projections for government securities issuance. Thus, projected net issue in 2008 will amount to Denar 4 billion, unlike the planned gross issue of Denar 10 billion.

•Regarding the introduction of primary dealers, Ministry of Finance continues to monitor of the participating banks on the auctions, which started in May 2006. Ministry of Finance will adopt decision on establishment of primary dealers system, i.e. it will select a limited number of banks to have exclusive right to purchase at the auctions on the government securities primary market, at the same time setting rigorous obligations for placement of GS, listing on the secondary market, etc. It is expected for the primary dealers to contribute to the increase of the competitiveness among the banks, and to provide for more efficient implementation of the primary issue of government securities. Ministry of Finance has come to a conclusion that the current conditions on the GS market do not reach the necessary level of development, and therefore the decision for introduction of primary dealers is postponed by 2008.

As a result of the so-far observations, Ministry of Finance will set precise criteria for determining the primary dealers for both the primary and the secondary market.

With respect to primary market, primary dealers will be obliged to regular listing and purchase of a certain percentage of GS volume at annual level.

Regarding the secondary market, primary dealers will be obliged to listing when selling and purchasing within define margins, as well as to minimal trading volume GS.

The most important segment will be the cooperation between the Ministry of Finance and the primary dealers, by organizing regular individual meetings, according to the world practice, exchanging experience and observing the market signals.

In addition, primary dealers will be obliged to regularly inform the Ministry of Finance, daily and periodically, on the achieved results on the primary and the secondary market.

Ministry of Finance will undertake the obligation for the term "primary dealers" to establish an acknowledged level of confidence, thus contributing to improved placement of GS and financing of the Budget of the Republic of Macedonia.

Preparatory activities for introduction of repo operations with the primary dealers and the other participants from the financial sector are part of the strategic commitment of the Ministry of Finance, which, in addition to encouraging the development of GS market, also means better staffing and technological equipping.

•Following the introduction of non-competitive offers in 2007, enabling the investors to participate in the government securities auction only with amounts, being awarded the average weighted interest rate achieved at the auction, in 2008, it is envisaged for the existing base of investors, being provided access to the auctions, to be expanded, i.e. instead of the existing access only to natural persons, in the coming period access will be provided to the legal (non-banking) entities as well. Non-competitive offers provide for huge advantage, especially for the smaller investors, as well as for increasing of the popularity of government securities, being of great importance for the development stage of the government securities market in the Republic of Macedonia.

•Ministry of Finance, within the public debt management, determines the requirements (price, currency, deadlines) regarding the new borrowings. This is achieved through constant monitoring of the interest rate trends on the domestic financial markets, as well as on the international ones.

•Ministry of Finance also makes efforts to develop the cash management, meaning better management of the Single Treasury Account.

Public Debt Management Department, after receiving the information on the trends of the Single Treasury Account from the Treasury, should set the optimal amount thereto. Setting the optimal amount on the treasury account can be made after a certain period of monitoring its cash flows. After optimal level is set, adequate cash management instruments need to be developed, i.e. placement of excess of cash in different market instruments, thus generating additional inflows of cash, as well as using instruments for collecting cash to cover the shortage of cash.

Within the cash management, it is planned to provide for optimization of the interest rates on denar and foreign currency deposits. Efficient cash management requires adequate training of the staff to be included in this process.

•Undertaking further measures, in cooperation with NBRM, for improvement of the electronic system for government securities auctions and creating reviews for the Ministry of Finance for more efficient monitoring of the primary market participants.

•Mandatory listing on the OTC markets – in line with the amendments to the Rulebook on the Manner and the Procedure for Trading and Settling Transactions in Securities on Over–the-Counter Market, obligations has beet prescribed for the participating banks owing continuous government securities to list them regularly on daily basis. This obligation is binding for the amount of Denar 1,000,000.00, although not all the participating banks, owing GS, respect it on regular basis.

Therefore, Ministry of Finance, together with NBRM, will commit to enhanced monitoring, in the interest of better discipline, to the end of adhering to the legal regulations on one hand, and increasing transparency on the other.

#### Municipal bonds

Ministry of Finance supports the commitment of the municipalities for they to realize their financing, i.e. the financing of the capital investments, through issuance of municipal bonds. Thus, multiple positive development effects will be attained, such as:

- de facto decentralization implementation, providing for the municipalities to be able to independently finance themselves through issuance of bonds, in line with the needs and the financing purposes,

- market verification, depending on the success achieved regarding the realized issue of bonds,

- determining the cost of the capital, i.e. introducing system of reference prices on the municipal capital market, and

- deepening the financial market and creating impulse to the development of the secondary market in the Republic of Macedonia.

Ministry of Finance is ready to take part in the expertise for introduction of municipal bonds, as well as in providing logistic support, to the end of successful introduction of this new instrument on the Macedonian financial market.

#### V.2 Active application of financial derivatives

Application of the modern practice of financial engineering, which functions on the basis of the principle of disassembling the financial instruments into their components and their repackaging depending on the needs to be met, is also a challenge to public debt management in the Republic of Macedonia. The fact is that, at the moment, the only way of having an influence on the characteristics, and to the risks and the costs respectively, of the public debt portfolio is its composing. Predominating project financing through credits from international financial institutions does not leave enough room for free and flexible adjustment to the new borrowings and to the total portfolio. Accordingly, possibilities to protect the sensitivity of debt portfolio to the domestic and international circumstances and the uncertainties should be sought in the introduction of operations with derivative financial instruments, as a way for efficient and effective risk controlling.

Thus, at this moment the Republic of Macedonia will focus on signing ISDA Agreement and reviewing the possibilities to use currency and interest swap operations of the existing public debt portfolio, as well as on risk diversification through swap operations of newly issued debt. Thus determined objectives will contribute to aiming the public debt portfolio within the set framework.

#### **VI. PUBLIC DEBT MANAGEMENT RISKS**

Against a background of economic growth, permanent increase of the volume and the dynamics on the international financial markets, as well as the influence of the numerous unanticipated events of political and other nature, it is necessary to precisely determine, assess and manage the risks to which the public debt portfolio of the Republic of Macedonia is exposed.

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

- -Refinancing risk
- -Market risk including the following risks:
  - Interest rate risk
  - •Exchange rate risk
- -Liquidity risk and
- -Risk associated with the contingent liabilities

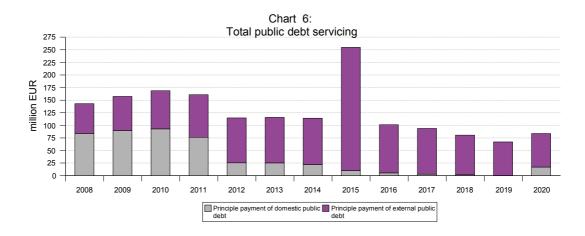
#### VI.1 Refinancing risk

The need for monitoring the refinancing risk arises in the countries having high level of debt, instable macroeconomic conditions and underdeveloped (shallow) financial markets, whereas the refinancing risk in the developed countries is of marginal significance.

The refinancing risk is managed by preventing major part of the financial liabilities to fall due at once at any time and providing evenly distributed maturity of the liabilities on the basis of the debt. The exposure of public debt portfolio to refinancing risk is measured by profile of the debt repayment and the indicator showing the average time to maturity of the debt.

Taking into consideration the projections for the repayment profile in the coming years, one can conclude that there is relatively flat repayment profile regarding the external debt in the 2008-2010. Excluding 2007, when there was early repayment of the debt towards the Paris Club of Creditors, part of the debt towards World Bank and European Investment Bank, there is no serious threat in the coming years, regarding the maturity of large portion of the debt in relatively short period of time thus jeopardizing the regular servicing of the external debt. Such first next challenge is expected even in 2015, when the Eurobond issued in 2005 in the amount of EUR 150 million will fall due.

From the point of view of repayment of the domestic public debt, certain stable profile of the principal repayment is also noticed. As a result of the last instalment of the bonds for the old foreign exchange saving in 2011, certain relaxation of the repayments in the coming years is obvious.



#### Source: Ministry of Finance

#### IV.1.1 Average time to maturity-ATM

The greater the value of this indicator, the lower the uncertainty, i.e. the refinancing risk.

Average time to maturity of the public debt						
	ATM (in years)					
	2007	2008	2009	2010		
Structural bonds	3,2	3,0	2,7	2,6		
Continuos government securities	0,6	0,7	0,9	1,2		
External debt with fixed interest						
rate	10,4	9,8	9,3	8,8		
External debt with floating interest						
rate	5,6	6,1	6,8	6,6		
Total public debt	6,9	6,4	6,4	6,0		

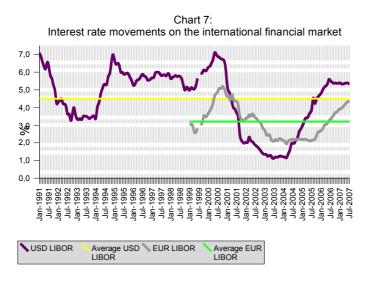
#### Chart 7 Average time to maturity of the public debt

#### Source: Ministry of Finance

Continuous decrease of the average time to maturity of the total public debt is expected in the period 2008-2010, thus the projection of 6,9 years at the end of 2007 will be reduced to 6 years in 2010. Relative share of the individual components in the total debt is changing, whereby the share of the components having shorter average time to maturity (continuous government securities and external variable interest rate debt) will gradually increase by 2010, while the share of the components with longer average time to maturity (external fixed interest rate debt and structural bonds) will decline. The reasons for such situation lie in the fact that the Republic of Macedonia is no longer classified in the category of countries eligible to borrow under concessional terms with lower interest rates and long maturity deadlines, such as the credits from the International Development Agency (affiliate of World Bank).

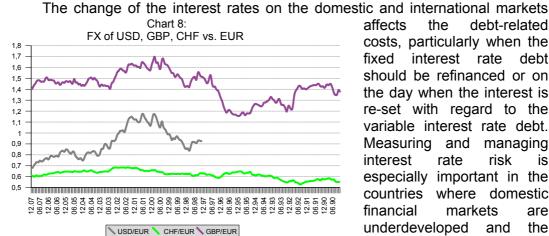
With regard to structural bonds, decrease of the average time to maturity is result of their gradual maturity. Due repayment amounts of structural bonds will be refinanced with continuous government securities, having shorter maturity due to the underdevelopment of the government securities market.

#### VI.2 Market risk



Market risk is determined by the exposure of the public debt portfolio to economic variables. especially the variation of interest rates the on domestic and the international capital markets and the movement of foreign exchange rates. Market risk may be divided into two components, i.e. the interest rate risk and the 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, where, due to their constant turbulences, the medium and long -term trend is very difficult to project.



affects the debt-related costs, particularly when the fixed interest rate debt should be refinanced or on the day when the interest is re-set with regard to the variable interest rate debt. Measuring and managing interest rate risk is especially important in the countries where domestic financial markets are underdeveloped and the need to borrow is covered

from external sources under non-concessional terms, where exposure to the interest rate risk is greater.

Table 8 Sensitive analysis of the debt servicing as a result of the movements on the international financial markets

	2	2008	2009		2	010
		Difference		Difference		Difference
		( in EUR		( in EUR		( in EUR
	Index	million)	Index	million)	Index	million)
Basic scenario (FX and interest rates as of						
November 2007)	100*	-	100	-	100	-
Scenario I (decreasing of the referent interest						
rates for 0,5 % points)	98,9	-2,3	98,8	-2,5	98,7	-2,8
Scenario II (increasing of the referent interest						
rates for 0,5 % points)	101,1	2,3	101,2	2,5	101,3	2,8
Scenario III (decreasing of the referent interest						
rates for 1% points)	97,9	-4,6	97,6	-5,1	97,5	-5,7
Scenario IV (increasing of the referent interest						
rates for 0,5 % points)	102,1	4,6	102,4	5,1	102,5	5,7
Scenario V (appreciation of the EUR vs. other						
currencies for 10%)	99,4	-1,3	99,4	-1,2	99,4	-1,4
Scenario VI (Depreciation of the EUR vs. other						
currencies for 10%)	100,7	1,6	100,7	1,5	100,8	1,7

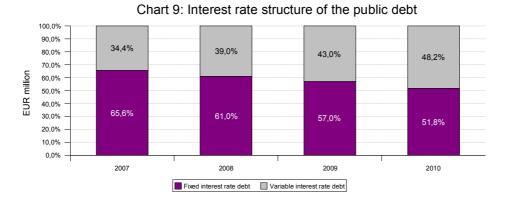
\*In the basic scenario the indexes are equal to 100

Source: Ministry of Finance

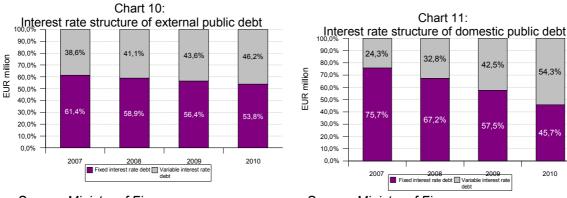
The carried out sensitivity analysis of public debt portfolio, as a result of oneoff isolated shocks of the size of interest rates and foreign exchange rates, leads to the following conclusion: in the period 2008-2010, there is no serious threat to regular and smooth public debt servicing, since the variations from one to other scenario amount from EUR 1.3 to EUR 4.6 million. Changes of the reference interest rates have greater influence on the repayment-related costs, compared with the changes of the foreign exchange rates of the other currencies in relation to the euro. This is result of the larger share of the variable interest rate debt, unlike the debt denominated in other non-euro currencies.

#### VI.2.1 Interest rate risk

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 debt refinancing risks is evident.



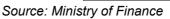
Source: Ministry of Finance



Source: Ministry of Finance

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42.5%

57,5%

54,3%

45,7%

2010

#### VI.2.2 Average time to refixing -ATR

ATR indicator measures the average time to refixing. ATR value of this indicator shows that larger portion of the debt portfolio will not be subject to interest rate refixing and such portfolio is a lower risk one.

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lab	le 9 Average tin	ie to refi	xing (ATR)	
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	2007	2008	2009	2010
Structural bonds	2,7	2,5	2,3	2,2
Continuos government securities	0,6	0,7	0,9	1,2
External debt with fixed interest				
rate	10,4	9,8	9,3	8,8
External debt with floating interest				
rate	0,2	0,2	0,2	0,2
Total public debt	5,6	5,0	4,6	4,2

#### Source: Ministry of Finance

According to the current public debt portfolio features and the projected withdrawals for the new projects by 2010, the average time to refixing is expected to decrease drastically from 5.6 years in 2007 to 4.2 years in 2010. Increase of the stock of continuous government securities also decreases the average time to refixing, due to which, this indicator is of lower value at continuous government securities compared to the average value of the total public debt.

#### VI.2.3 Duration

This indicator shows how the interest rate variations would affect the debtrelated 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 changed during a longer period for the major portion of the debt. This indicator takes into account the net current value of money flows, meaning its calculation includes the interest-related cost when repaying the debt.

#### Table 10 Duration (years)

	2005	2006	2007	2008	2009	2010
Structural bonds	2,8	2,9	2,2	2,1	1,9	1,8
Continuos government securities	0,9	0,6	0,6	0,7	0,9	1,2
Total domestic debt	2,6	2,5	2,0	1,6	1,4	1,4

Source: Ministry of Finance

Calculations for this indicator and its monitoring refer only to the domestic public debt, since it is market debt and it is traded on secondary market, while the foreign public debt is predominated by the credits being non-market debt. Data on this indicator show continuous downward trend of its value, so it will be reduced from 2 years in 2007 to 1.4 years in 2010. Unfavourable trend of this indicator is a result of the falling due of the structural bonds, which is not accompanied by the increase of the maturity of continuous securities, whose volume will be gradually increased in line with the financing needs of the Budget of the Republic of Macedonia and the need to develop the domestic market.

#### VI.2.4 Exchange rate risk

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

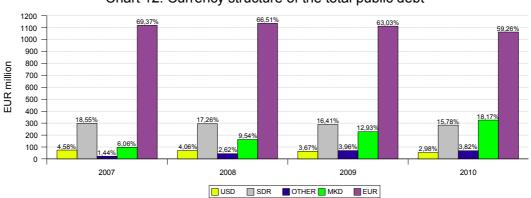


Chart 12: Currency structure of the total public debt

#### Source: Ministry of Finance

Modest share of only 6% of public debt denominated in denars shows that the debt portfolio in the Republic of Macedonia is significantly exposed to this risk. Changes in the foreign exchange rate may largely affect, i.e. increase the envisaged costs for repayment of public debt -denominated in foreign currency. But, taking into

consideration the fact that since 1995, the Republic of Macedonia applies de facto fixed exchange rate of the denar in relation to the Deutch 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 69.4% share in the total debt structure at the end of 2007. Share of the euro-denominated debt will be reduced to 59.3% by the end of 2010, due to the increase of the denar-denominated debt and the debt denominated in other foreign currencies. In fact, the share of the denar-denominated debt increases due to the increase dissue of continuous government securities, while the share of the other foreign currencies increases due to the borrowing in Japanese yen for realization of the project Zletovica.

	2	008	2	009	2010	
	Index	Difference ( in MKD million)	Index	Difference ( in MKD million)	Index	Difference ( in MKD million)
Basic scenario	100	-	100	-	100	-
Scenario I (devaluation of the denar vs. EUR for 10%)	109,2	1.128,6	109,0	1.249,9	108,8	1.299,5
Scenario II (revaluation of the denar vs. EUR for 10%)	90,8	-1.128,6	91,0	-1.249,9	91,2	-1.299,5

#### Table 11 Sensitive analysis of the portfolio of the public debt of the Republic of Macedonia as a result of change in the FX MKD-EUR

#### Source: Ministry of Finance

The sensitivity analysis shows that the public debt portfolio of the Republic of Macedonia is significantly exposed to variations of the denar exchange rate against the euro. This is due to the large share of the debt denominated in foreign currencies. Possible devaluation of the denar by 10% in 2008 against the euro would increase the debt servicing-related costs by 9.2%, i.e. Denar 1,128.6 million. In 2009 and 2010, such devaluation would have smaller influence, i.e. 9 and 8.8% respectively. Such decrease of the sensitivity to the changes would be a result of the increase of the denar-denominated debt, being not subject to the exchange rate risk. In the case of revaluation of the denar, the exposure of the portfolio would be to the same extent, but in the opposite direction, i.e. it would decrease the repayment-related costs.

#### VI.3 Liquidity risk

Liquidity risk is a result of the inability of the country to service the due liabilities due with liquid assets, necessary for their financing. The objective of the liquidity risk is to ensure optimum amount of liquid assets so as to be able to pay the liabilities falling due. The country being the main instrument of liquidity management uses the balance of liquid financial assets on accounts with the National Bank of the Republic of Macedonia. The level of these deposits guarantees safe financing of the country's needs and it protects the budget from financial crises, which would prevent or decrease the raising of funds by borrowing on the financial market.

In EUR million	2008	2009	2010						
Short-term debt maturing within period of one									
year	181,4	242,2	301,1						
General Government revenues	1.946	2.017	2.141						
Ratio of short-term debt compared to General									
Government revenues (in %)	9,3	12,0	14,1						

#### Table 12 Short-term debt movements in relation with General Government revenues

#### Source: Ministry of Finance

Liquidity risk management comprises keeping liquid assets at optimum level by improving the process of planning and monitoring the government budget execution, as well as by managing the surplus of liquid assets. From the point of view of the share of the debt falling due within a year in relation to the budget revenues, upward trend of this share can be observed, thus this indicator accounts for 9.3% in 2008, and it will achieve 14.1% by 2010. This abrupt increase is a result of the development of the government securities market in the Republic of Macedonia, above all, with the short-term securities. This way of borrowing is featured by shorter maturity deadlines, so major portion of the debt falls due within a year and it is necessary to be refinanced. At the moment, the longest maturity period of the debt issued through the continuous government securities is 3 years.

#### VI.4 Risk associated with contingent liabilities

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

1. The rise in the total stock of guarantees affects the public debt stock;

2.Budget costs related to debt servicing occurred as a result of the calling up of the guarantees increase

3. High level of issued guarantees requires keeping of liquid assets at higher level, meaning an additional cost.

Table 13	13 Guaranteed public debt servicing								
		2008	2009	2010					
Scenario I	Guaranteed public debt servicing (in EUR million)*	27,2	29,6	29,5					
	Increase of the public debt servicing of the Ministry of finance	20,9%	21,1%	19,8%					
Scenario II	Payment of 50% of the guaranteed debt (in EUR million)	13,6	14,8	14,7					
	Increase of the public debt servicing of the Ministry of finance	10,5%	10,6%	9,9%					

#### Source: Ministry of Finance

At the end of 2007, guaranteed public debt as percentage of the gross domestic product in the Republic of Macedonia is expected to be 3.2%. In line with the projections by 2010, this percentage is expected to move to the level of around 2.7%. With regard to the total public debt the issued guarantees on medium run by 2010, will retain the share of around 10.6% of the total public debt.

In order for the public debt portfolio not to be exposed to high risk of calling-up of guarantees, the process of issuance of new guarantees is strictly regulated, and it is subject to certain criteria and risk assessment.

#### VI.5 Operational risk

Operational risk includes the settlement risk and the error risk. Settlement risk appears if a number of non-automated activities is used during data processing, while the error risk often refers to the manner of segregation, division in executing the transactions and function related to settlement across the units, within the institution in charge of the public debt management.

Public debt management in the Republic of Macedonia is carried out within the Ministry of Finance, by the Public Debt Management Department. The department consists of three units carrying out the activities related to the borrowing and investing (Front Office), creating public debt management policy and risk analysis (Middle Office) as well as public debt recording, servicing and monitoring (Back Office).

Taking into consideration the fact that the operational risk may be reduced by applying formal procedures, clearly précising the individual tasks and responsibilities of the persons involved in carrying out the debt management function, the Public Debt Management Department prepared and begun to apply procedures, determining in details the manner and procedure of carrying out the working tasks related the public debt. The procedures also determine précised specific tasks for each employee in the department, being directly responsible for their execution, and a deputy is appointed to carry out these activities in case of his absence. Thus, the possibility for occurrence of error due to the insufficiently precise procedure or responsibility when performing certain task or the absence of the responsible persons is largely decreased.

Significant progress in the department operations was attained by introducing the "six-eye principle", meaning that each document prepared within one unit is controlled by two persons in the unit (officer and superior), while the third control is carried out by the head of department.

From the technical assistance point of view, when carrying out the public debt management function, it is important to mention the fact that significant steps aimed at improving this function were made in 2007. Therefore, what is of special importance is to emphasize the upgrading of the platform for carrying out auctions the government securities, thus enabling the preparation of reports, on the basis of which, the department is able to easily monitor the trends on the government securities market, and a significant progress was also achieved in the procedure for submission of offers by the authorized direct participants during the auctions. The platform is projected to be further upgraded during 2008, thus leading to even more successful monitoring and carrying out of auctions.

In addition, it is very important to point out the activities, the department undertakes to the end of procuring public debt management IT system. In fact, pursuant to the Law on Public Debt Management, the department should create and maintain unique base of the public debt. On the other hand, the department can successfully manage the public debt, without room for errors as well as to save time and human resources, only with comprehensive recording and simple and fast access to the data. Having this as a starting point, the Public Debt Management Department undertook intensive activities for procurement of such IT system in 2007, and is expected for the overall system implementation procedure to be completed in 2008.

After the mentioned analysis of the risks to which the public debt portfolio is subject, and by assessing the value of the indicators for the relevant risks, one can make a general conclusion that the public debt portfolio is becoming more risky in

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the coming period compared to the previous one. This is due to several reasons, those being the following:

• Gradual debt repayment concluded under concessional terms, i.e. credits with long repayment period and low fixed interest rates at borrowing from the international financial institutions with variable interest rates and shorter loan repayment period;

•Repayment of structural bonds and reduction of their share in the domestic debt, and borrowing with continuous government securities, having shorter maturity than those of the structural bonds and due to the underdevelopment of this market, major portion of the government securities' portfolio comprises short-term instruments with variable interest rate.

Taking into account the great presence of credits from the international financial institutions within the public debt portfolio, where, at the moment, credits are concluded under non-concessional terms on one hand, and the impossibility to fix the interest rate of these credits, due to the current unfavourable conditions on the international capital market on the other, the main commitment under this medium-term strategy will be aimed at reducing the foreign exchange rate risk, i.e. orientation towards the euro on the international market through borrowing exclusively in euros, but also the increasing of the denar-denominated debt by broadening the investment base on the government securities market. With regard to the other risks, the public debt management, on the medium run, will be focused on maintaining sustainable risk level under the lowest cost.

### Annex I

Table 14 Projected credits to be concluded in 2008

Ред. бр.	Creditor	Project	Loan / Sovereign guarantee	Currency	Amount in EUR
1	KFW	Irrigation Vardar Valley II	Direct loan	EUR	10.250.000
2	KFW	Project for water supply	Direct loan	EUR	8.600.000
3	To be determined additionally	Power Transmission Line R.Macedonia – R.Serbia	Sovereign guarantee	EUR	11.000.000
4	IBRD	PDPL III	Direct loan	EUR	16.200.000
5	IBRD	Conditional Cash Transfers Implementation project	Direct loan	EUR	18.376.937
6	IBRD	Competitiveness/ Technological Change/Higher Education	Direct loan	EUR	18.376.937
7	IBRD	Municipal Service Improvement Project	Direct loan	EUR	18.376.937
8 9	IBRD CEDB	Transport Sector Project - Local and Regional Roads Prisons Reconstruction Project	Direct loan Direct loan	EUR EUR	70.000.000 10.000.000
10	CEDB	Project for Reconstruction of Hospital Buildings	Direct loan	EUR	30.000.000
11	CEDB	Physical Education Facilities	Direct loan	EUR	12.500.000
12	EIB	Road Project III - Corridore X: Highway Demir Kapija – Smokvica	Direct loan	EUR	55.000.000
13	UIC	Consolidation of the debt toward Hungarian, Bulgarian and Croatian railway	Sovereign guarantee	EUR	15.000.000
14	To be determined additionally	Projec for revitalization of HEC – Il stage	Sovereign guarantee	EUR	27.100.000
	To be determined additionally	Project for Brod Gneotino	Sovereign guarantee	EUR	37.600.000
15	EIB	Water Supply and Waste Water Disposal	Direct loan	EUR	50.000.000
16	EBRD	Transport Sector Project - Local and Regional Roads	Direct loan	EUR	50.000.000
					458.380.811

Source: Ministry of Finance

### Table 15 Active credits<sup>\*</sup> in the public sector

	Original currency	Total amount according to the agreement	Disbursed amount as of September 30, 2007 (in EUR)	Undisbursed amount as of September 30, 2007 (in EUR)
IBRD		136.329.921	17.884.298	118.445.623
SPIL	USD	7.203.759	3.532.121	3.671.638
Health Sector Management Project	USD	7.350.775	1.879.382	5.471.393
Judicial Reform/Court Administration	EUR	10.000.000	1.025.000	8.975.000
Macedonian Railways Restructuring	EUR	15.000.000	787.500	14.212.500
Real Estate Cadastre&Registration Project	EUR	10.300.000	2.959.402	7.340.598
BERIS	EUR	8.800.000	544.000	8.256.000
Project for AD MEPSO	EUR	20.700.000	6.693.414	14.006.586
PDPL II	EUR	23.300.000	0	23.300.000
Education Modernization Project	USD	3.675.387	463.479	3.211.908
TTFSE II - Customs Administration TTFSE II - Roads Fund	EUR EUR	1.400.000 11.000.000	0	1.400.000 11.000.000
TTFSE II - Macedonian Railways	EUR	2.600.000	0	2.600.000
Project for agriculture	EUR	15.000.000	0	15.000.000
EBRD		108.973.738	70.603.263	38.370.474
Road Project II	EUR	40.000.000	32.716.688	7.283.312
Power Transmission (400 kV interconnection Macedonia-Bulgaria)	EUR	40.470.600	12.996.995	27.473.605
Municipal Environmental Action Project (MEAP)	EUR	17.303.138	14.276.167	3.026.971
Civil Aviation Project	EUR	11.200.000	10.613.413	586.587
EIB		73.000.000	45.500.000	27.500.000
Road Project II (60 MEUR)	EUR	60.000.000	33.000.000	27.000.000
ESM s/s in the Republic of Macedonia	EUR	13.000.000	12.500.000	500.000
CEDB		25.000.000	18.500.000	6.500.000
Social Housing Project	EUR	15.000.000	13.500.000	1.500.000
Job creation II Project (MBDP)	EUR	10.000.000	5.000.000	5.000.000
Bilateral creditors		108.118.381	45.535.235	62.583.146
Italy - support of SMEs	EUR	12.704.840	12.642.136	62.704
Irrigation Vardar Valley	EUR	6.646.794	4.408.922	2.237.872
SME promotion III	EUR	7.669.000	6.650.038	1.018.962
Lisice Project-concesional component ICO	EUR	6.869.659	6.113.929	755.730
Lisice Project-commercial component BBVA	EUR	2.944.139	2.620.255	323.884
JBIC-Zletovica Project	JPY	68.701.663	11.517.670	57.183.993
Rationalization of management system and modernization of biomedical equipment in health sector	EUR	2.582.285	1.582.285	1.000.000
Private creditors		57.637.621	21.031.781	36.605.840
ELEM-Brod Gneotino (without sovereign guarantee)	EUR	16.600.000	0	16.600.000
Cyprus-DEPHA Bank-Sv.Petka Project	EUR	41.037.621	21.031.781	20.005.840

#### Source: Ministry of Finance

\* Active credits are those credits concluded in previous year, but the period of their utilization (i.e. disbursement of funds) is not completed yet.

#### Annex II

### Table 16 Calendar for issuance of government securities in 2008

Quarter	Month	Auction code	Date of auction	Auction date	Payment date	Maturity i days/year
		DZ2008/01-91	08/01/08	09/01/08	09/04/08	91
	January	DZ2008/01-182	08/01/08	09/01/08	09/07/08	182
	bandary	DZ2008/02-91	22/01/08	23/01/08	23/04/08	91
		DZ2008/01-364	22/01/08	23/01/08	21/01/09	364
		DZ2008/03-91	05/02/08	06/02/08	07/05/08	91
	February	DZ2008/02-182	05/02/08	06/02/08	06/08/08	182
I.	rebruary	DZ2008/04-91	19/02/08	20/02/08	21/05/08	91
		DO2008/01-0210	21/02/08	25/02/08	25/02/10	02
		DZ2008/05-91	04/03/08	05/03/08	04/06/08	91
		DZ2008/03-182	04/03/08	05/03/08	03/09/08	182
	March	DZ2008/06-91	18/03/08	19/03/08	18/06/08	91
		DZ2008/02-364	18/03/08	19/03/08	18/03/09	364
		DO 2008/02-0311	27/03/08	31/03/08	31/03/11	03
		DZ2008/07-91	08/04/08	09/04/08	09/07/08	91
	April	DZ2008/04-182	08/04/08	09/04/08	08/10/08	182
		DZ2008/08-91	22/04/08	23/04/08	23/07/08	91
		DO2008/03-0510	30/04/08	05/05/08	05/05/10	02
		DZ2008/09-91	06/05/08	07/05/08	06/08/08	91
	May	DZ2008/05-182	06/05/08	07/05/08	05/11/08	182
Ш		DZ2008/10-91	20/05/08	21/05/08	20/08/08	91
		DZ2008/11-91	03/06/08	04/06/08	04/09/08	91
		DZ2008/06-182	03/06/08	04/06/08	03/12/08	182
	June	DZ2008/12-91	17/06/08	18/06/08	17/09/08	91
	bullo	DZ2008/03-364	17/06/08	18/06/08	18/06/08	364
		DO2008/04-0611	26/06/08	30/06/08	30/06/11	03
		20200004-0011	20/00/00	00/00/00	30/00/11	00
		DZ2008/13-92	08/07/08	09/07/08	08/10/08	91
		DZ2008/07-182	08/07/08	09/07/08	07/01/09	182
	July	DZ2008/14-91	22/07/08	23/07/08	22/10/08	91
		DZ2008/04-364	22/07/08	23/07/08	22/07/09	364
		DZ2008/15-91	05/08/08	06/08/08	05/11/08	91
		DZ2008/08-182	05/08/08	06/08/08	04/02/09	182
ш	August	DZ2008/08-182 DZ2008/16-91				
			19/08/08	20/08/08	19/11/08	91
		DO2008/05-0810	28/08/08	31/08/08	31/08/10	02
		DZ2008/17-91	03/09/08	04/09/08	04/12/08	91 192
	O anta l	DZ2008/09-182	03/09/08	04/09/08	05/03/09	182
	September	DZ2008/18-91	16/09/08	17/09/08	17/12/08	91
		DZ2008/05-364	16/09/08	17/09/08	16/09/09	364
		DO2008/06-0911	25/09/08	28/09/08	28/09/11	03
		DZ2008/19-91	07/10/08	08/10/08	07/01/09	91
	October	DZ2008/10-182	07/10/08	08/10/08	08/04/09	182
		DZ2008/20-91	21/10/08	22/10/08	21/01/09	91
		DO2008/07-1010	28/10/08	30/10/08	30/10/10	02
		DZ2008/21-91	04/11/08	05/11/08	04/02/09	91
IV	November	DZ2008/11-182	04/11/08	05/11/08	06/05/09	182
		DZ2008/22-91	18/11/08	19/11/08	18/02/09	91
		DZ2008/23-91	03/12/08	04/12/08	05/03/09	91
		DZ2008/12-182	03/12/08	04/12/08	04/06/09	182
	Decembor	522000, 12 102				
	December	DZ2008/24-91	16/12/08	17/12/08	18/03/09	91

Source: Ministry of Finance The 2008 calendar is indicative and it can be subject to changes, taking into account the shifts that might occur due to the religious and national holidays.

#### Annex III

# Public debt management strategy model for determining optimum debt portfolio

Public debt portfolio, comprising domestic and foreign debt of the public sector is the largest financial portfolio of a country, and it is usually exposed to large number of risks that might cause financial crisis and instability. In addition, the size of the liabilities arising from the public debt servicing is often uncertain due to the fact that they are determined and dependent on the future trends of macroeconomic indicators. Hence, the need to define the optimum public debt structure is imposed as a necessity, enabling the governments to reduce debt exposure to financial risks, by setting quantitative and qualitative criteria for the currency, maturity and interest structure of the debt.

In order to define the optimum debt structure, on which the Republic of Macedonia should be focused, on medium term, the Ministry of Finance has prepared model, trying to determine the trade-offs between costs and risks arising from different alternative debt portfolios for certain time period (10 years), assuming that shocks occur, being determined in several macroeconomic scenarios. Thereby, debt-related cost is measured through the interest-related cost/GDP indicator, while the risk is measured through the potential variations of these costs under the assumption of occurrence of shocks envisaged in the macroeconomic scenarios.

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

Domestic debt divided into: medium-term (3-year, with fixed interest rate) and short-term (3-month, with variable interest rate); and

External euro-denominated debt with 10-year maturity, with fixed rate and variable interest rate each.

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

Table 17 Portfolios											
%		1*	2	3	4	5	6	7	8 9 1		10
External public debt	10 -year with fixed Interest rate	60	59	58	60	63	40	40	50	20	10
	10-year with variable Interest rate	32	31	30	29	29	40	10	20	20	20
Domestic public debt	3 -year with fixed Interest rate	2	3	4	6	5	10	20	15	40	25
	3 -month with variable Interest rate	6	7	8	5	3	10	30	15	20	45
				100			100	100	100	100	100

Table 17 Portfolios

\* current portfolio of the Republic of Macedonia (beginning of 2007)

Unlike the 2006 model, number of portfolios increased this year, upon which, the effects from the shocks set in the macroeconomic scenarios are determined. Thereby, the first portfolio refers to the current (present) debt portfolio of the Republic of Macedonia, while the other 9 borrowing strategies are various combinations of the debt according to interest, currency and maturity structure, as shown in the following table:

Table 18 Structure of alternative portfolios

Portfolio structure	1*	2	3	4	5	6	7	8	9	10
Currency: Foreign: Domestic	82:8	90:10	88:12	89:11	92:8	80:20	50:50	70:30	40:60	30:70
Interest: Fixed: Variable	62:38	62:38	62:38	66:34	68:32	50:50	60:40	65:35	60:40	35:65
Maturity: Long-term: Short-term	94:6	93:7	92:8	95:5	97:3	90:10	70:30	85:15	80:20	55:45

\* current portfolio of the Republic of Macedonia (beginning of 2007)

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). Such assessment is carried out by testing the trends of the average interest -related costs, arising from the alternative portfolios, under the assumption for shocks determined in six macroeconomic scenarios occur, as follows:

Scenario 1: Basic scenarios

Scenario 2: Shock in the world economy

Scenario 3: 20% Devaluation of the national currency

Scenario 4: Recession in the national economy

Scenario 5: 30% Devaluation of the national currency

Scenario 6: Two-digit inflation of 15% in 2008

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

**Second scenario** shows the trend of the macroeconomic indicators, under the assumption the world economy experience recession. Such events in the world economy are expected to lead to the decline of interest rates (long-term and shortterm) on the international financial market.

Next four scenarios project the trends of the macroeconomic indicators in conditions of shocks in the national economy, such as devaluation of the national currency and inflation.

Third and fifth scenario respectively envisage devaluation, i.e. decline in the value of the denar by 20%, i.e. by 30% by the end of 2007. Such changes in the value of the national 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.

Effects from the recession in the national economy of the basic macroeconomic indicators are included in the **fourth scenario**. Within this scenario, the GDP growth rate is maintained at the lowest level in relation to all other scenarios. On the other hand, interest rates on domestic borrowing, both long-and short-term, show highest growth in relation to the other scenarios.

**Sixth scenario** is focused on the effects from two-digit (15%) inflation, followed by significant changes in the value of the national currency, while the

interest rates on the domestic financial markets increase as a result of the antiinflationary measures, expected to be undertaken by the monetary authorities so as to stabilize the national economy.

With regard to the analysis of trends the average interest -related costs, under the assumption of occurrence of six macroeconomic scenarios, one can conclude that lowest interest-related costs are generated by portfolios, dominated by foreign currency denominated debt, while the highest ones are generated by portfolios dominated by domestic debt. Besides, on the long run, the costs of the portfolios dominated by domestic debt experience downward trend, while the costs of the portfolios dominated by foreign debt continuously increase. This analysis also brings to the conclusion that the interest-related costs of all 10 alternative debt portfolios are the lowest, under the assumption of occurrence of the shock set in the second scenario (shock in the world economy), and they are the highest according to the decline in the value of the national currency and the recession in the economy in general. (Chart 13)

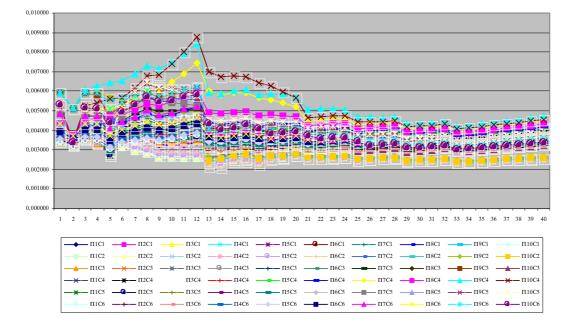
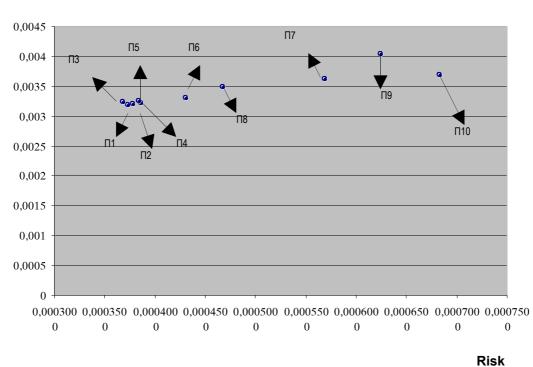


Chart 13: Interest-related costs/GDP of all 10 alternative debt portfolios (under the assumption of occurrence of six macroeconomic scenarios)

#### \*P-Portfolio; S-Scenario

On the other hand, by analyzing the exchange between the average interestrelated costs and their potential variations, one can conclude that the increase of the share of the domestic debt in the portfolios dominated by the foreign debt leads to the increase of the debt servicing-related costs on one hand, but also to reduction of the exposure of portfolios to risks, on the other. On the contrary, portfolios, in which the domestic debt participates with 50-60% in relation to the foreign debt, are characterized with both exceptionally high costs and risk. (Portfolios 7, 9 and 10).

Chart 14: Trade-offs between costs and risks of alternative debt portfolios



#### \*Π-Portfolio

Analyzing the effects from the influence of the changes in the economic conditions in the country and in the world regarding the different debt portfolios, one can conclude that the 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 change in these costs. However, the results from the previous analysis show that it is more than necessary to undertake activities for moderate debt restructuring aimed at gradual increase of the part of the debt denominated in foreign currency, and reducing the foreign deb. This lead to improvement of government securities portfolio, both in quantitative and qualitative terms, i.e. the increase of the amounts of issued securities, as well as continuation of their maturity.

\*

2008-2010 Public Debt Management Strategy entered into force on the day it is published in the "Official Gazette of the Republic of Macedonia" from 30 July, 2008.

Cost