

**POSSIBLE POINTS OF CONTRADICTION BETWEEN
FISCAL POLICY AND DEBT MANAGEMENT OBJECTIVES
(IN DEVELOPING COUNTRIES)**

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Introduction

The joint paper of the International Monetary Fund and the World Bank “Guidelines for Public Debt Management” (2001) provides instructions for the implementation of a debt management policy based on the experience of both developed and developing countries. Although economic theory strives to generalize its models and usually avoids differentiations we argue that in the field of fiscal policy and debt management (as a component of fiscal policy for indebted countries) it is necessary to outline the particular features of developing economies and to specify the possible points of contradiction between the implementation of fiscal policy and the achievement of debt management objectives. The governments should know the sources of potential conflicts in order to undertake measures to maintain a stance of fiscal policy which is conducive to successful debt management operations.

Section 1 provides some evidence of a number of differences between developed and developing countries, which create dissimilar conditions for fiscal policy and debt management implementation. These differences are due to two major characteristics of a developing economy – the low income level (higher level of poverty, low saving rate, etc.) and the fragile confidence in the policies commitments and their implementation. A conclusion might be drawn that a developing country is more inclined to maintain fiscal deficits and opt for debt-financing (external) in order to alleviate current social problems and to boost up economic growth. However, the outcome might be a high level of indebtedness and a heavy burden of debt service, which withdraws a growing amount of domestic resources.

Section 2 develops a simple set of equations, based on the considerations of section 1, and used for outlining the patterns of fiscal policy in a developing economy and their relation to debt dynamics. The equations pretend to reveal the asymmetry in government’s preferences – its unwillingness (inability) to raise taxes and willingness to satisfy an expanding range of social needs. Due to this asymmetry a commitment of an indebted developing country’s government to balance the budget in order to guarantee future debt payments may be implausible. The lack of

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confidence is embedded in the risk premium on government debt required by the investors. A growing risk premium may provoke acceleration of debt accumulation.

Section 3 steps on the equations of section 2 and the intertemporal budget constraint in order to consider the debt accumulation process and to discuss the possible points of contradiction between the fiscal policy and debt management objectives. Three phases in the debt accumulation process are considered. They differ by the expectations of investors about the credibility of fiscal policy commitments incorporated in the dynamics of risk premium on debt. The risk premium is a function of investors' expectations about the future fiscal policy stance, their perception of debt sustainability level and their assessment about the ability of the government to fulfil commitments for policy adjustments. The possible conflicts between fiscal policy and debt management objectives arise when the speed of debt accumulation accelerates and investors' claim an increasing risk premium. Even when the government has made the necessary adjustments in the fiscal policy (tightening) and the debt-to-GDP ratio stabilizes it needs years before the risk premium on debt starts to decline. Debt management operations may be effective only under the conditions of a slow rate of debt accumulation and stable risk premium or in the period of risk premium deceleration.

Section 4 provides a brief overview of the Bulgarian experience in the implementation of fiscal policy and debt management in the period 1990-2003 as an illustration of the conclusions in the previous sections.

An indebted country should build up the capacity for effective debt management but before getting involved in any debt operations it should assess the investors' perceptions. The last section based on the findings in the paper gives recommendations about how to identify the position of a country on the debt accumulation path.

1. Debt-financing in developing countries – expectations and outcomes

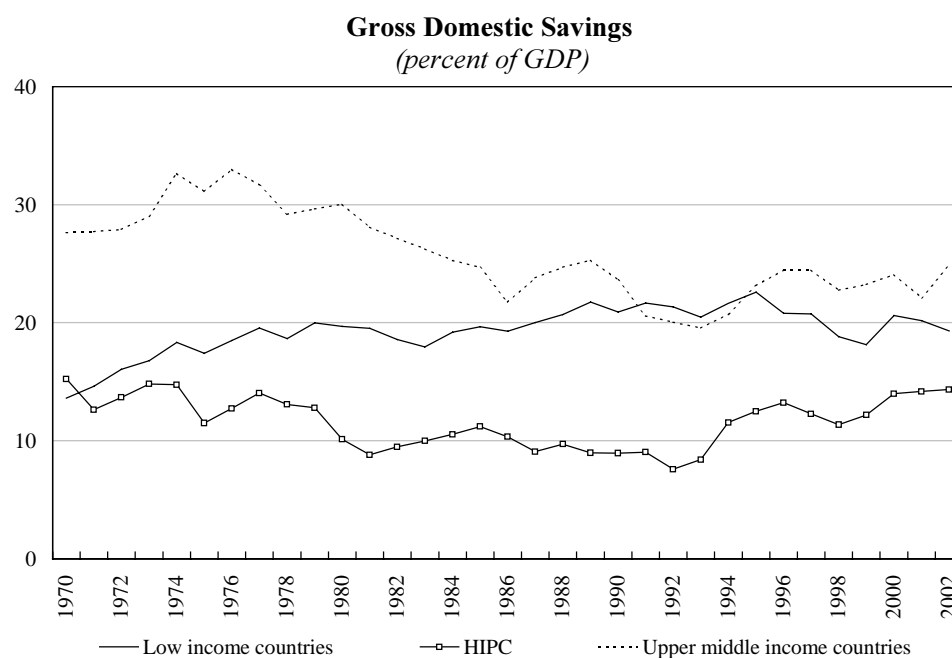
The role of government in the broad sense is a topic of incessant discussions of ideological nature and strong philosophic flavour. The question of the debt-financing of government expenditure attracts even more acute attention. There is a vast and exhaustive literature about the interrelations between fiscal policy and debt accumulation, about the reasons and consequences of debt financing in the developed economies. However, the existing theoretical models should be modified when applied for analysis of developing countries' sovereign debt accumulation process in order to capture in a better way the specific features of a developing country and especially to provide an appropriate set of recommendations on fiscal policy targets and instruments.

Empirical analysis makes open the existing differences in debt management and fiscal policy targets and implementation between developed and developing

economies (Daniel, Callen, Terrones, Debrun and Allard, 2004). These differences are due to two major characteristics of a developing economy – the low income level (higher level of poverty, low saving rate, etc.) and the fragile confidence in the policies commitments and their implementation. The share of population in poverty is relatively high in a developing country and hence, the level of budget revenues is relatively low. As far as budget expenses are concerned governments are much more egalitarian and inclined to alleviate poverty by increasing transfers or implementing other social programs; they are easily persuaded to increase the scope of public goods supplied, too. The infrastructure might be underdeveloped or obsolete while the private sector incapable to launch any important projects for infrastructure building, repair and maintenance. Financing infrastructural projects, and construction projects in education and health care, by debt issue might be considered a reasonable fiscal policy. The last but not the least, developing countries' governments are generally weak, with less experience in sound macroeconomic policy management and feeble political support for radical structural reforms; the fiscal process and framework are quite unstable and vulnerable to reversals and time inconsistencies, which undermines the confidence in economic policy as a whole.

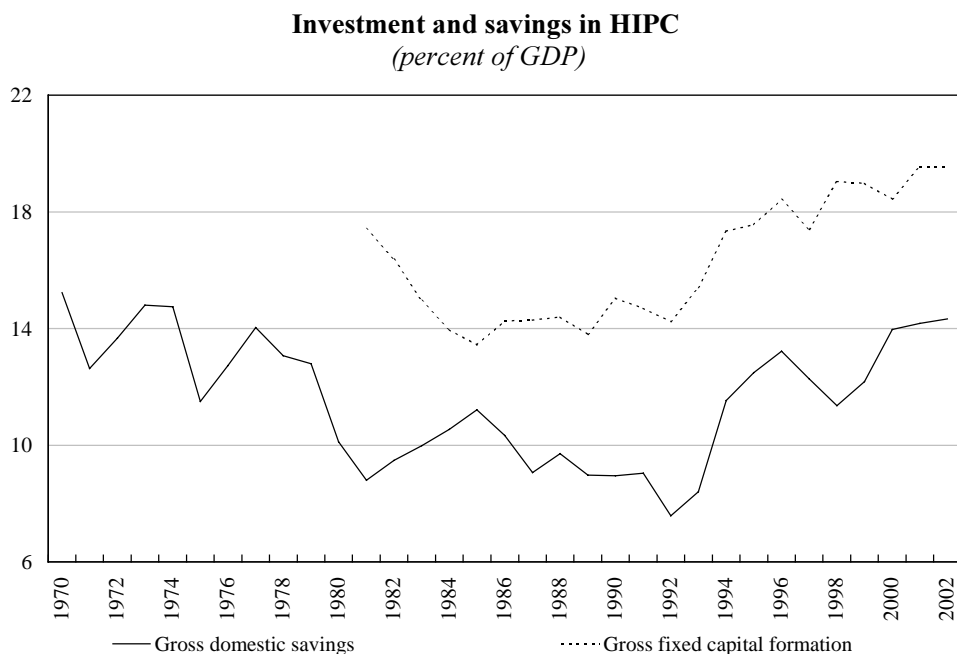
As a consequence the domestic pressure exercised over developing countries' governments to spend more than revenue collection allows for is likely hard to resist

Figure 1



Source: World Bank.

Figure 2

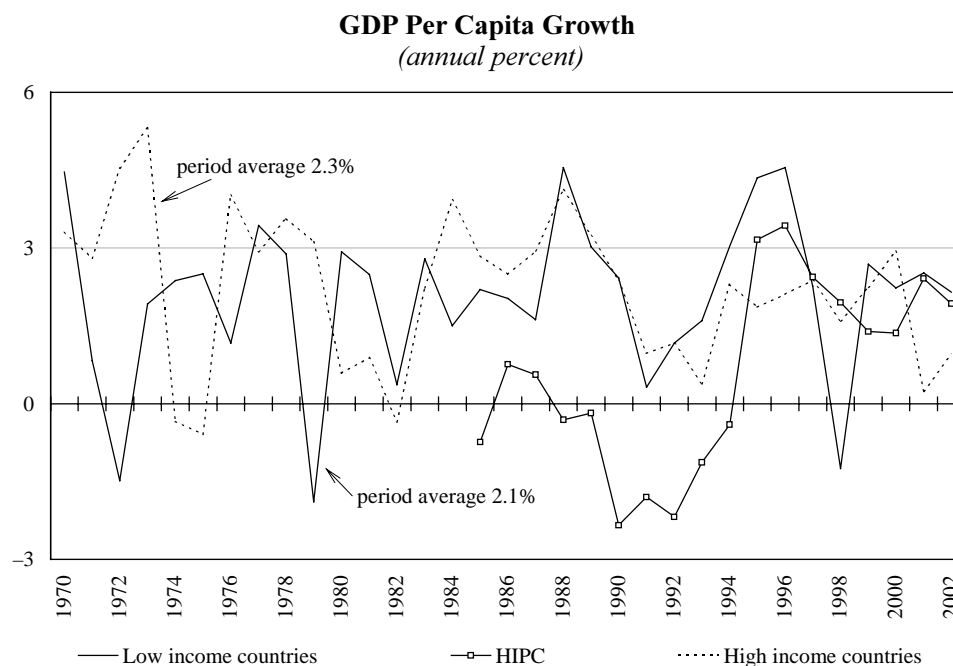


Source: World Bank.

and debt accumulates progressively. Debt service also goes up for two reasons – first, the initial risk premium on debt is relatively high due to frail confidence in developing country's government, and second, as debt accumulates the risk premium on debt goes even higher.

One way to solve the problems generated by low income and backwardness is to make efforts to stimulate the economy to grow faster resorting to external financial resources. In the Fifties, when the International Monetary Fund and the World Bank started their operation they applied a simple growth model – the Harrod-Domar model, stating that in order a developing country to achieve a particular growth rate it needs to make investments corresponding to the incremental capital output ratio (ICOR). If domestic saving rate is not enough to finance the required investment rate then the government may use external resources (grants or loans) to cover the financing gap (Easterly, 1997). Thanks to the foreign resources the economy might be pushed to a higher trajectory of the production function, acquire higher growth rates in the transition period and ultimately ends with a higher income level. By achieving a higher level of income the country will become able to pay back the debt without strong economic tension. Expectations for future economic growth and easier financial conditions prompted developing countries government to sustain fiscal deficits.

Figure 3



Source: World Bank.

A brief overview of data exhibits that the basic assumption of the above cited model – the relatively low level of saving rate and the efforts to increase the investment rate by indebtedness (Figures 1-2 and Figure 4), especially for the heavily indebted poor countries, have been well secured.¹

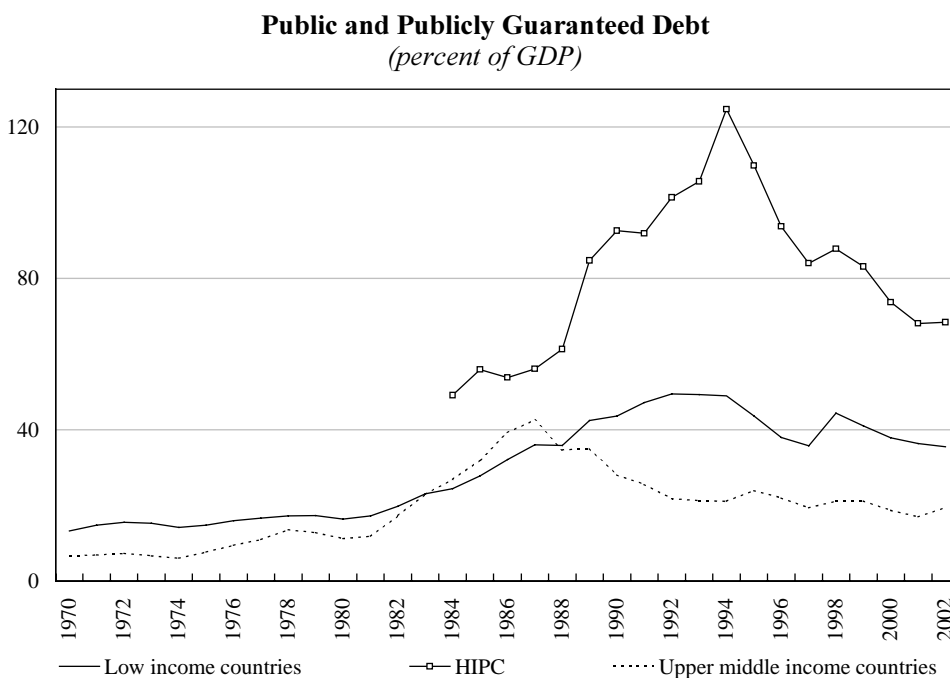
Although the growth rates in less developed countries overran the rates in developed economies as far as the GDP per capita growth is concerned the outcome was quite disappointing (Figure 3). The basic problem of poverty alleviation has not been achieved while the indebtedness of the poor countries mounted up (Figure 4).

Expectations that future growth will improve the fiscal balance and ease financial conditions for debt service came out to be wrong, too. In 1997 the international financial institutions launched the initiative of HIPC debt reduction.

Based on the above considerations a conclusion might be drawn that a developing country is predisposed to opt for debt financing in order to alleviate

¹ Data extracted from database <http://sima-ext.worldbank.org/query/>. The groups follow the definitions of the World Bank. Most of the countries in the group of heavily indebted poor countries (HIPC) are part of the group of low income countries.

Figure 4



Source: World Bank.

current social problems and to boost up economic growth, most probably by using external sources. The share of external debt to total debt in developing countries is about 50 per cent compared to the structure of developed countries' debt (about 25 per cent is external debt) (Daniel, Callen, Terrones, Debrun and Allard, 2004). However, the outcome achieved has been a high level of indebtedness and a heavy burden of debt service, which withdraws a growing amount of domestic resources.

2. Patterns of fiscal policy and debt dynamics

To outline the possible patterns of fiscal policy, based on the considerations stated in Section 1, and their relation to debt dynamics we use the definition of a primary balance (in real terms):

$$D_t = T_t - (G_t + Tr_t) \quad (1)$$

where T_t stands for tax revenues, G_t indicates government purchases of goods and services and Tr_t represents government transfer payments to households.

We also use the debt accumulation equation:

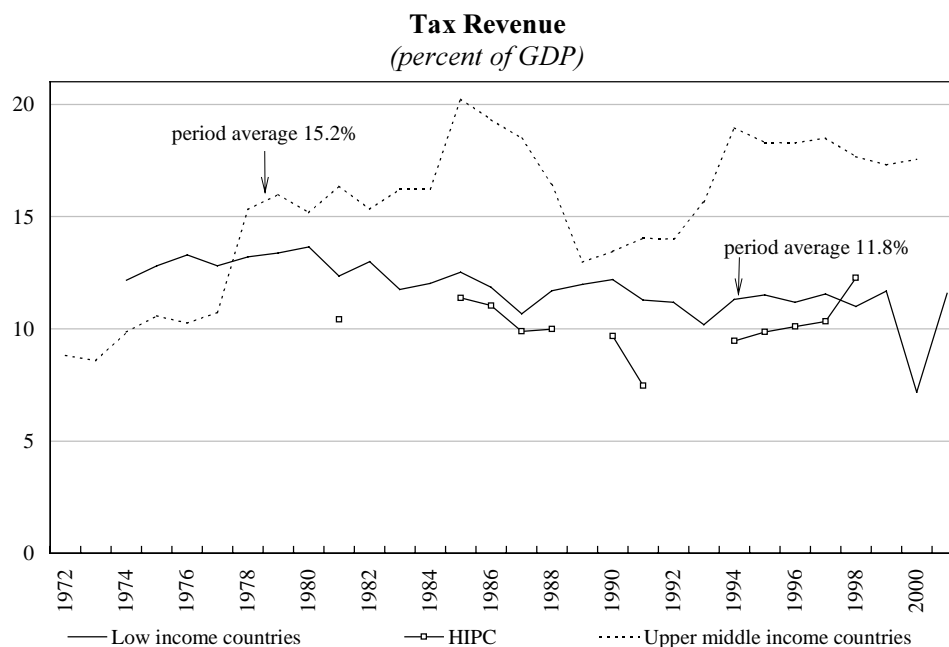
$$B_{t+1} = R_t * B_t - D_t \quad (2)$$

where B_t and B_{t+1} stand for debt at the end of the corresponding period, $R_t = (1+r)$, where r is the real interest rate on debt and D_t is the primary balance estimated as the difference between revenues and non-interest government expenditures.

We can describe the possible paths of fiscal policy by making assumptions about the likely dynamics of the different components entering the primary balance equation (1).

Emerging economies are subject to tight constraints in the implementation of their tax policy. Since tax evasion is a wide spread phenomenon (due to low incomes) raising tax rates or making tough efforts to increase tax collection may be politically unacceptable, and it may easily provoke a fresh impulse for tax evasion. It is possible that tax evasion outperforms the expected tax collection or necessitates an escalation of tax collection costs. An important consequence of tax evasion is its significant distortionary impact on economic activity and fiscal policy. Usually renowned firms suffer both from the higher tax rates and the unfair competition of successful tax evaders (with a negative impact on foreign direct investments and the national investment rate). If the government is willing to minimize economic distortions it should be cautious in planning changes in the tax system.

Figure 5



Source: World Bank.

Constraints over the tax systems in low income countries are manifested through the lower tax revenue to GDP ratios (Figure 5).

In modelling tax revenues we may assume that governments are unwilling to increase tax rates and they concentrate their efforts to keep tax revenues in constant proportion to real GDP.

$$T_t = \tau * Y_t, \quad 0 < \tau < 1, \quad \tau = const \quad (3)$$

Equation 3 states that tax revenues in real terms (T_t) will increase during a boom and will decline during recession at the same rate as real output (Y_t).

It is a wide spread practice in emerging markets to impose upon the government (usually by law) obligations for sustaining a high level of fixed expenditures (G_{const}) – spending on wages, defence, internal security, health, education and a contingency fund, which are independent of output variability, and of short and medium term budget revenues fluctuations in particular. The flexibility of the government to implement its own expenditure policy may be constrained to a volatile component ($g * \Delta Y_t$), which is positively related to economic growth and may be zero in periods of recession. If we do not impose the restriction that $g = 0$ in recession it will mean that the government should reduce G_{const} in order to balance the budget – a not acceptable policy measure.

Under the assumptions made the expenditure equation might look as follows:

$$G_t = G_{const} + g * \Delta Y_t, \quad g > 0 \text{ when } \Delta Y_t > 0, \quad g = 0 \text{ when } \Delta Y_t < 0 \quad (4)$$

Transfer payments to households usually contain a fixed component (pension schemes and other types of social insurance schemes), not dependent on income fluctuations, and a volatile component (unemployment benefits and income related social aid) sensitive to income fluctuations. Most likely governments are quite constrained by law in any adjustments in transfer payments they may wish to make.

$$Tr_t = Tr_{const} + s * \Delta Y_t, \quad s < 0 \text{ when } \Delta Y_t < 0, \quad s = 0 \text{ when } \Delta Y_t > 0 \quad (5)$$

If we assume that the primary balance is zero in the previous year ($D_{t-1} = T_{t-1} - G_{const} - Tr_{const} = 0$) and debt is zero, too, then the primary balance to GDP ratio for the current year is a function of the GDP growth rates and depends on the relations between the coefficients τ , g , s :

$$\frac{D_t}{Y_t} = \frac{Y_{t-1}}{Y_t} * [\tau - g - s] \quad (6)$$

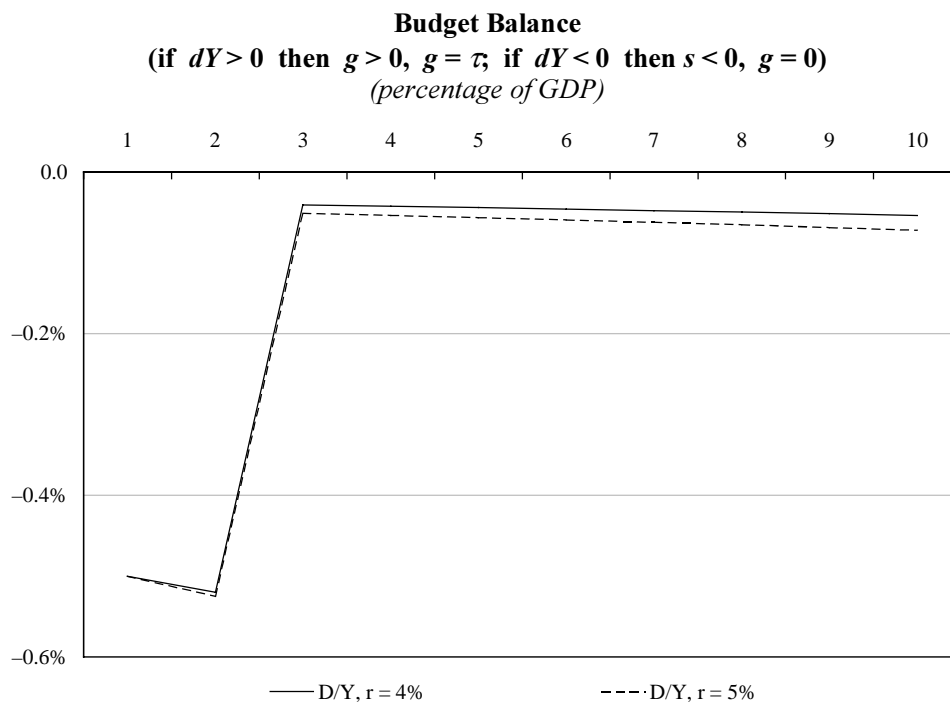
According to our assumptions the term $(\tau - s)$ is positive ($\tau > 0$, $s < 0$ or $s = 0$) and whether the primary balance will be on a deficit or surplus depends on the relation between the coefficient g and $(\tau - s)$.

Table 1

Economic Cycle and the Primary Balance

In a boom: $\Delta Y_t > 0$ $g > 0, s = 0$ $D_t/Y_t = [(\Delta Y_t / Y_{t-1}) / (Y_t / Y_{t-1})] * (\tau - g)$		
Case 1	$D/Y = 0$	If $g = \tau$
Case 2	$D/Y > 0$ (surplus)	If $g < \tau$
Case 3	$D/Y < 0$ (deficit)	If $g > \tau$
In a recession: $\Delta Y_t < 0$, $g = 0, s < 0$ $D_t/Y_t = [(\Delta Y_t / Y_{t-1}) / (Y_t / Y_{t-1})] * (\tau - s)$		
1	$D/Y < 0$ (deficit)	Since $(\tau - s) > 0$

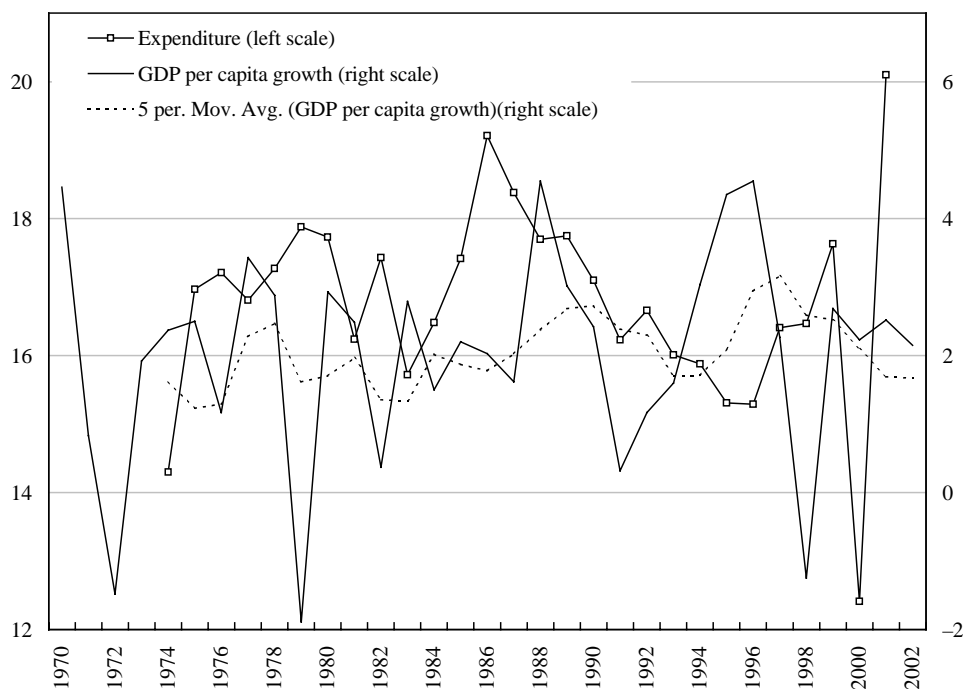
Figure 6



Note: X-axis - Time (recession in periods 1 and 2, growth in the remaining time span).
 Source: Authors' calculation.

Figure 7

**Budget Expenditures to GDP and GDP Per Capita Growth Rate
in Low-income Countries**
(percent)

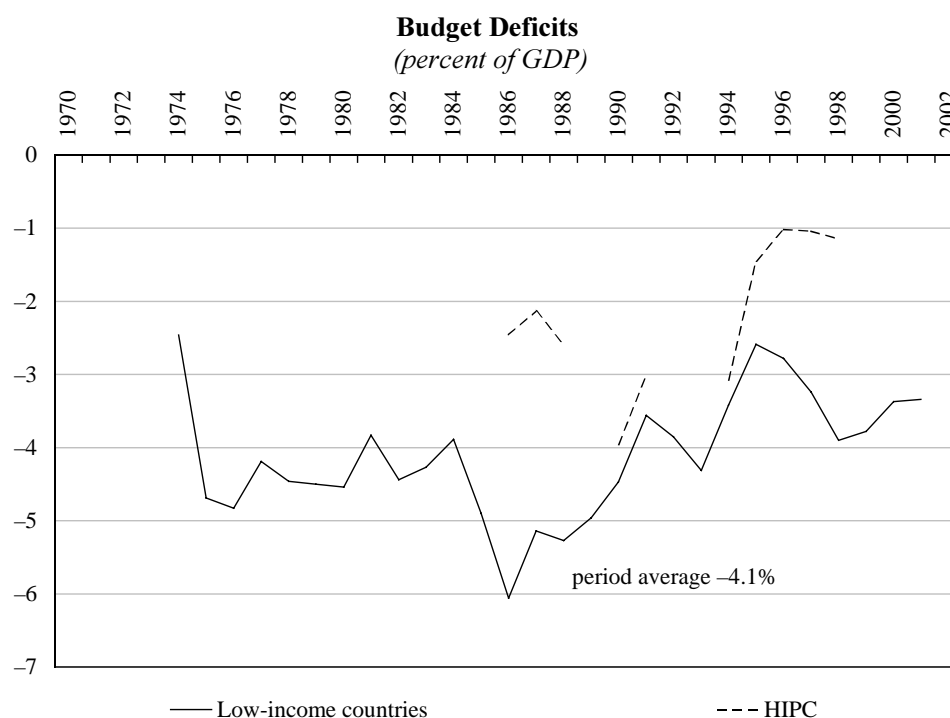


Source: World Bank.

Equations (3) to (6) describe three possible scenarios of fiscal policy during boom and a singular pattern of fiscal policy in recession. Figure 6 illustrates case 1 – a fiscal policy of zero primary balance after two years of recession. Because of interest payments on debt accumulated during the recession the cash balance will be on a deficit and debt will continue to accumulate.

It is obvious that if the government wishes to extinguish the debt accumulated during the recession period it should maintain during the boom period a primary surplus large enough to cover the debt service. However, experience shows that there is an acceleration of optimism in periods of boom. In an environment of economic growth the governments are usually pressed to spend more and even to add resources to the fixed component of expenditures and transfers – increasing wages of government employees, pensions, expenses on education and health care, the level of unemployment benefits and the like. In that case the surpluses (if any) accumulated during economic growth will be much lower than the absolute value of deficits accumulated during recession. The gap might be financed by debt issue even

Figure 8



Source: World Bank.

during boom. Optimism based on expectations for growth persistence may induce the sentiment of easy debt service.²

In general, when designing the fiscal policy a government may consider that allowing for a temporary increase of non-interest expenditures today it would be able to reduce their level in the future. For instance, in the future the income level will go up and the share of population in poverty will fall down or the private sector will strengthen enough to engage in the supply of some goods and services produced today by the government. The feeling of higher flexibility of spending today granted by the expectations that adjustments would be made more easily in the future may be a good excuse for resorting to debt financing.

Sometimes in periods of boom the government may even commit itself to huge contingent liabilities, which it assesses as socially and politically beneficial but less likely to be executed in the foreseeable future. Unfortunately, those

² Economic history provides evidence that the periods of recession are usually shorter than periods of growth (see Romer, 1996). A developing country may enjoy longer periods of high growth rates.

commitments should be fulfilled in the period of recession or economic turbulence (for instance, Argentina in 1977-82).³

It should be admitted that governments demonstrate an asymmetry in their preferences. They are unwilling to raise tax rates while they are willing to satisfy an expanding range of social needs even under the threat of debt accumulation and adjustment costs in the future – an example either of short-sightedness or of ill will (Dornbusch and Draghi (eds.), 1990). In the case of planned debt accumulation the commercial banks will raise the interest on government debt and on private sector lending. The latter may cause a deceleration of growth or even a recession.

We may draw the following conclusions about the fiscal policy patterns in developing countries:

- Governments are unwilling to raise tax rates; at best they may increase efforts for a better tax collection. They may expect an increase in revenues in the future, in particularly based on expectations of better economic performance. This is a reasonable argument to resort to debt financing today and promising to pay back by better tax performance in the future;
- Governments are unwilling to reduce expenditures today, but they may draw a plan for a future reduction of spending. This is another good argument in favour of debt financing. Debt might be paid back by a future reduction in spending.

The elaborated arguments are well founded if the governments finance a temporary gap between revenues and expenditures in a recession and intend to pay back the debt by the surpluses accumulated during the boom. However, as it was stated above, due to the weak institutions and misleading expectations, the volatile component of expenditures (positively correlated to growth), and the risk premium calculated in the interest on debt, future surpluses might not be enough to pay back the debt. The temporary debt financing may turn into a progressive accumulation of debt.

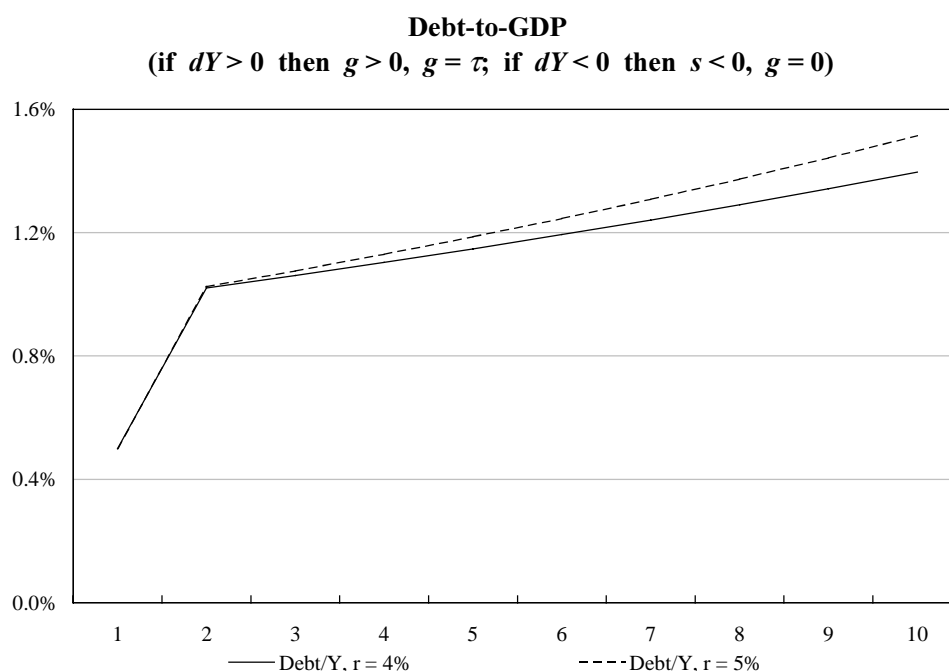
3. Phases in debt accumulation and the possible points of contradiction

If the government decides to run a zero primary balance in a period of economic growth while it has accumulated debt in the recession period, due to interest payments a budget deficit will still persist and will lead to further debt accumulation. The higher is the interest rate on debt, determined to a great extent by the risk premium, the higher will be the speed of debt accumulation.

³ See Francisco Buera, Juan Pablo Nicolini, Gerardo della Paolera and Pablo Guidotti, "On the debt management policy of Argentina: 1974-1997", January 25, 1999.

In the period 1977-82 the Argentine government opened the economy to the international capital market and imposed a deposit insurance scheme guaranteed by the government – in case of a banking crisis the liabilities of the financial sector are transformed automatically into liabilities of the central bank. In 1978 an exchange rate guarantee was introduced by the government which should have been activated in case of an exchange rate devaluation sharper than the crawling peg rate of depreciation.

Figure 9



Note: X-axis - Time (recession in periods 1 and 2, growth in the remaining time span).
Source: Authors' calculation.

Under the conditions of low incomes, low saving rate and underdeveloped capital markets, and particularly when the government borrowing requirements are high, the domestic commercial banks might become the single buyer of government debt. In an environment of free movement of capital, the distinction between domestic and external debt becomes irrelevant and domestic commercial banks set their interest rates on government debt based on risk – rate of return considerations and arbitraging between domestic and foreign assets.⁴ Securities issued by an emerging market's government compared to other domestic financial assets have the property of a relatively low risk and low cost of acquisition asset.⁵ However, compared to developed countries' government debt they are risky assets. The size of the risk premium implicit in the required interest rates on developing country's

⁴ In Bulgaria in case a commercial bank operates with government financial resources it is obliged to block an equal amount of government securities, which creates an additional motive for buying government securities.

⁵ Lending to the private sector, especially in an environment of unstable inflation or high probability of firms' bankruptcy, often entails higher costs for projects assessment and performance monitoring and bears higher risks for the commercial bank.

government debt depends on the credibility of the economic policy commitments and implementation. In the dominant number of cases particularly incredible might be a commitment to balance the government budget as a guarantee for the future debt service. In order to float the new debt the government should offer satisfactorily high rate of return under a strong competitive pressure of other emerging economies' governments. The issue of new debt may require a rising interest rate on debt and the government may easily fall into the bad debt trap.⁶

An indebted government has to reconsider its priorities. If during the time of debt financing fiscal policy considerations were of the highest priority, from a certain point of time debt servicing wins the highest position. We may use the solution of the debt accumulation equation (2) to illustrate the possible points of contradiction between fiscal policy and debt management:

$$B(t_0) = - \int_{t_0}^{\infty} e^{-r(t-t_0)} D(t) dt \quad (7)$$

To solve the equation we have used the transversality condition:

$$\lim_{t \rightarrow \infty} e^{-r(t)} B(t) = 0 \quad (8)$$

Equation (7) is commonly applied as an indicator of debt sustainability (and fiscal policy sustainability). The intertemporal budget constraint presents a firm relation between past fiscal policies (the accumulated debt at time t_0) and future fiscal policies (the accumulated expected future primary balances). As far as there is uncertainty about the future level and sign of primary balances the requested interest rate on government debt today (the discount factor) depends on the expectations of investors about the future fiscal policy, based most probably on the track record. The discount factor (implicitly including an assessment of the risk premium) indicates the degree of adjustment in the future fiscal policy: the higher the interest rate (the risk premium) on government debt, the greater adjustment measures are necessary to be made.

We may hypothetically split the debt accumulation process into three phases: the first phase is of debt accumulation; the second is the phase of default; the third phase is the phase of debt reduction. Each phase contains its distinctive points of contradictions between debt management and fiscal policy objectives.

3.1 *The first phase – a phase of debt accumulation*

The first phase represents the debt accumulation process from zero to the level of B_{i0} , the B_{i0} considered by the financial markets as a sustainable debt level. It is obvious that during the period of debt accumulation fiscal objectives have a

⁶ In some cases the debt may emerge instantaneously. In developed countries it happened during wars or major economic contraction. In developing countries it appeared as an activation of contingent liabilities, bail out of state-owned or privately owned enterprises, banks or other entities.

priority – running a budget deficit is based on a number of well endorsed reasons. Debt management operations are also possible but their effectiveness will depend on the speed of approaching the sustainable level of debt.⁷

The speed of debt accumulation should be measured not by the debt growth rates, but by the behaviour of investors incorporated in the risk premium on debt. The speed of debt accumulation may be assessed as moderate if the risk premium remains stable and relatively low. It may be interpreted also in terms of expectations of future fiscal policy – expectations that the government may easily adjust the primary balance and it may keep control over the debt accumulation process maintain the risk premium at a relatively low and stable level.

Government's behaviour during boom periods is indicative for the type of fiscal policy run and its commitment to keep the debt at sustainable level. If investors detect indebted government efforts to adjust so that the interrelation between the coefficients is close to case 2 (Table 1), they may show some patience and keep the risk premium stable. If the government is able to assess rightly the sustainable debt level it may undertake the necessary fiscal adjustment so that either to keep constant the debt level or to undertake measures to reduce it in order to be able to make future debt issues at lower risk premium.

If the speed of debt accumulation is high, which means that either the level of outstanding debt approaches the sustainable level or that the sustainable level is getting lower, it may suggest that the government is losing power over its fiscal policy. If investors perceive that the indebted government follows a fiscal policy of case 1 or case 2 in a boom they may indicate their concerns by shortening the accepted maturity of government debt and raising the risk premium. Debt management operations under the conditions of fast debt growth (in terms of its distance to the sustainable level) will be inefficient and will increase the future costs of debt service. The high speed of debt accumulation narrows the scope of debt management operations and, very important, in this case the sustainable debt level will be much lower than the possible level if debt accumulated at a moderate speed.

The first phase of the debt accumulation process ends when the speed of debt accumulation goes beyond its sustainable level as it is assessed by the markets and the country very quickly approaches the default point. If the government continues with the implemented fiscal policy it enters the second phase.

3.2 *The second phase – the default*

Based on their expectations investors request a higher risk premium and further shorten the acceptable maturity of new issues. During this phase the financial

⁷ Debt management is a policy instrument for indebted countries. The main objective of debt management as stated in the *Guidelines for Public Debt Management* of the IMF and the World Bank (2001) is to “ensure that the government's financing needs and its payment obligations are met at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk”.

markets dictate the conditions on new debt issues and any debt management operation related to reducing risks will increase considerably the costs of debt service. Fiscal policy tasks may be still implemented. There is evidence that the developing countries fiscal response to debt accumulation weakens when the debt-to-GDP ratio exceeds a certain level: 50 per cent has been the average observed benchmark (Daniel, Callen, Terrones, Debrun and Allard, 2004).

However, debt accumulation accelerates further; confidence in the economic policy collapses and the government defaults on its debt since nobody at any terms is willing to buy new debt. A situation of default may appear also in the case of a sudden increase of government debt, when the liabilities are of short term duration and the government cannot allocate resources to cover the claims. In that case it is possible (not very likely because investors usually monitor the overall economic performance of emerging economies) that up to the sudden appearance of the debt interest rates have incorporated a relatively low risk premium.

If a default has been announced the government loses access to financial markets and it is forced to adjust its fiscal policy (Argentina after the default in 2001, Bulgaria in 1989). In the situation of a default negotiations with creditors acquire the highest priority while fiscal policy adjustment involves severe reductions in expenditures and perhaps increases in taxation (if it is possible at all).

3.3 *The third phase – a decrease in debt*

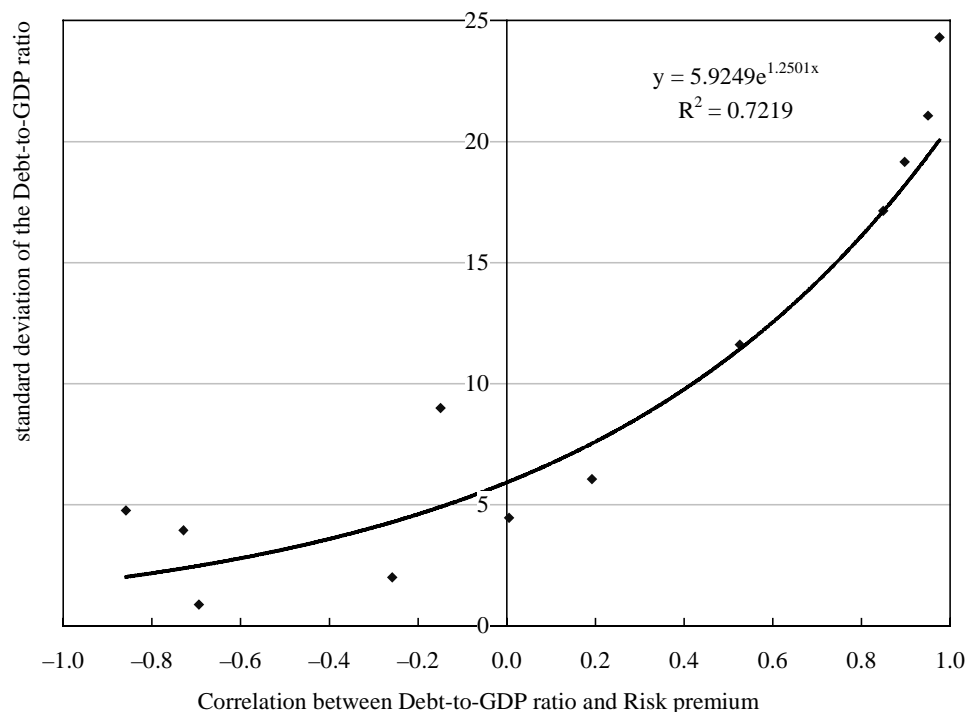
If the government makes the necessary fiscal adjustments during the first phase it means that it subordinates its fiscal tasks to the debt management objectives. The fiscal adjustments are even more severe after a default. The primary objective of the government in the third phase is to take efforts to reduce the risk premium calculated by investors in the required interest on debt. How long the government should maintain fiscal restrictions and how severe the restrictions should be is ambiguous. It depends on the track record and the efforts to rebuild confidence. Years may pass, especially if there has been a default on debt, before the risk premium start to decline. Only when the government has become able to inspire confidence in its future commitments then the risk premium on debt may switch on a decline and the government may gain from opportunities to implement debt management operations.

On the basis of a sample of twelve developing countries (Brazil, Colombia, Ecuador, Mexico, Peru, Venezuela, Philippines, South Korea, Bulgaria, Poland, Russia and Turkey) we have calculated the correlations between sovereign spreads and debt-to-GDP ratios. The correlation is close to unity for the group of countries with fast speed of debt accumulation, implying increasing interest rates when debt is growing. A temporary decline of the debt-to-GDP ratio followed by an increase do not break the vicious circle of high debt – high risk premium. The correlation is negative or missing for the group of countries that have been successful in stabilizing the debt-to-GDP ratio and lowering the speed of debt accumulation.

Based on this sample of countries we may consider that if the standard deviation of the debt-to-GDP ratio is close to or below 6 (Figure 10) the country is likely to be in the first phase. If the standard deviation is over this threshold the country could be entering the second phase. In other words, when debt dynamics is

Figure 10

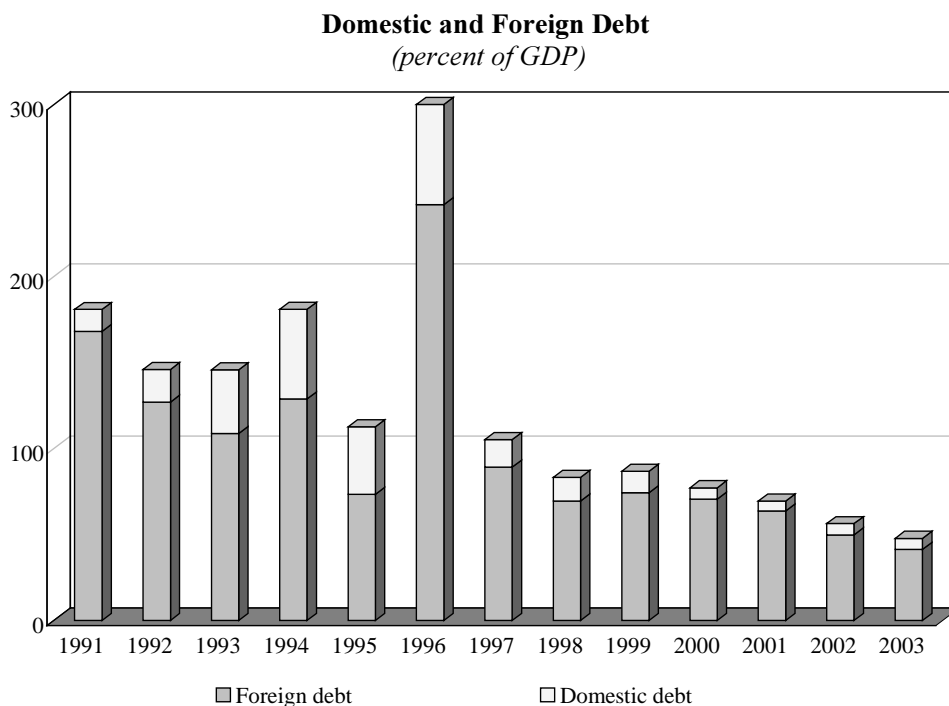
Correlation Between Debt-to-GDP Ratio and Risk Premium and Debt Volatility for a Sample of Countries



Note: Brazil, Colombia, Ecuador, Mexico, Peru, Venezuela, Philippines, South Korea, Bulgaria, Poland, Russia and Turkey.
Source: Deutsche Bank and JP Morgan.

not very volatile, presuming stabilization, debt-to-GDP ratio does not influence the risk premium. A government can lower its risk premium by stabilizing the debt-to-GDP ratio for a period sufficiently long to change the markets attitude to the country. The conclusion is that an indebted developing country has to keep tight fiscal stance until the risk premium declines to an acceptable level.

Figure 11



Source: Bulgarian Ministry of Finance.

4. The evolution of government debt and fiscal policy – The case of Bulgaria (1990-2003)

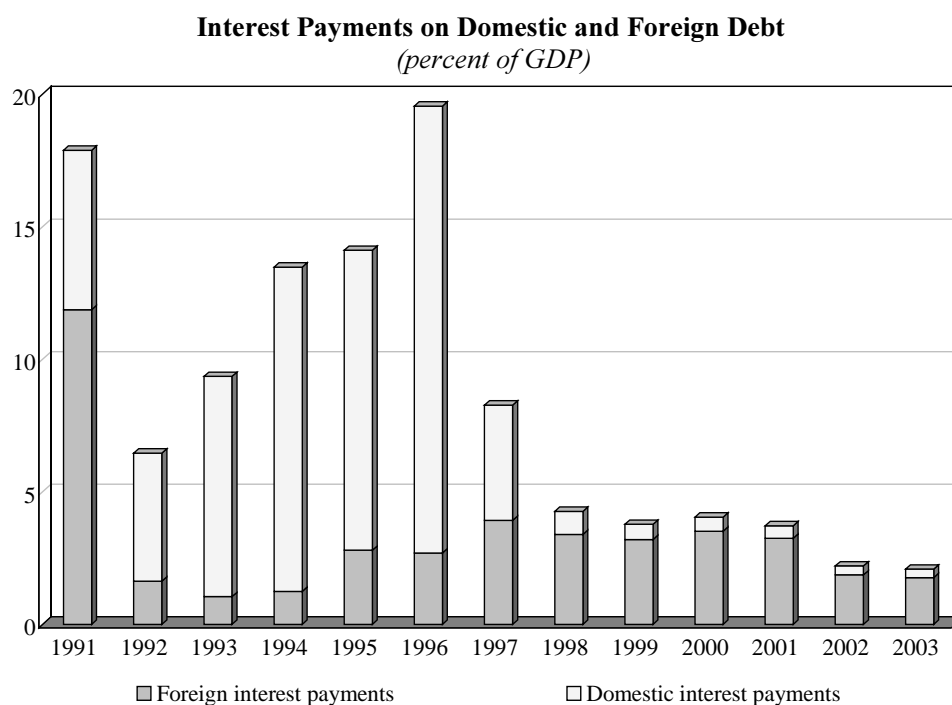
Shortly after the beginning of its transition to market economy Bulgaria defaulted on its foreign debt.⁸ The economic collapse in the years 1990-91 reduced almost thrice the GDP measured in dollar terms, and the debt-to-GDP ratio rocketed to 180.7 per cent (the external debt comprising 90 per cent of total debt).

The debt negotiation process was tough and long. In 1994 Bulgaria signed an agreement with the London Club private creditors which led to the issuance of three types of Brady bonds and achieved a substantial reduction of its foreign debt.⁹ There was also a series of agreements with the Paris club creditors, which ended in 1998. Negotiations about other bilateral and multilateral debts (for instance with the banks from the former Council for Mutual Economic Assistance, CMEA) continued till 2002. During this period one of the main tasks of the debt management was to sign

⁸ 29 March 1990.

⁹ Brady bonds with par value of USD 5.118 billion replaced liabilities of over USD 8 billion with total reduction of the debt for approximately USD 1 billion.

Figure 12



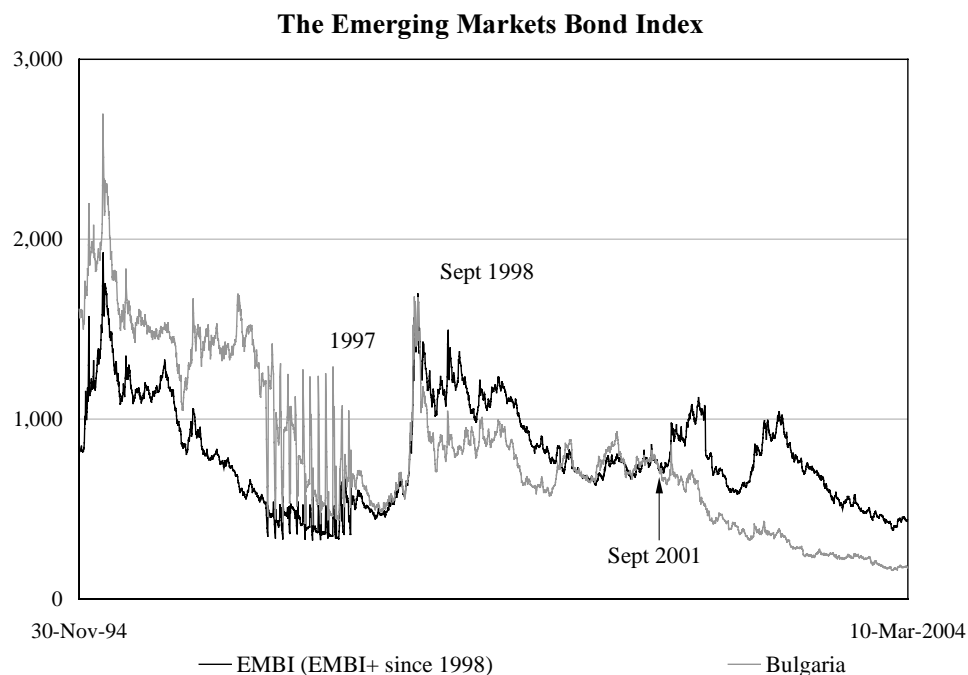
Source: Bulgarian Ministry of Finance.

agreements on all unsettled and outstanding liabilities, so to have a clear view of the exact amount of the debt.

The introduction of the Currency Board Arrangement (CBA) in 1997 splits the period of transition into two distinctive parts – the first one before and the second one after the introduction of the CBA. In a situation of persistent economic instability during the first period, fiscal policy has been under enormous pressure to increase expenditures and to cushion the rapid decline of incomes and growing poverty. This led to rather expansionary primary surpluses, not enough to provide for the lowering of the debt-to-GDP ratio. Interest expenditures were constantly growing, to reach in 1996 the astounding 19.5 percent of GDP. The lack of real sector restructuring and the persistence of soft budget constraints produced huge disequilibria and distortions in economic policy. Monetization of growing cash budget deficits brought a steady growth in the price level and finally, to hyperinflation.

Since 1997 the fixed exchange rate under the currency board arrangement shortly installed stability in the economy. The fiscal policy is designed to support the

Figure 14



Source: JP Morgan.

- What is the dynamics of the government debt – rising (at what speed), stable or declining?
- What is the dynamics of the risk premium on debt – rising (at what speed), stable or declining?
- What is the dynamics of the primary balance?
- How the fiscal policy has influenced the debt and risk premium dynamics in the past?

If the answers to the stated questions reveal that the government is in the first phase of debt accumulation it should know that even if it tightens the fiscal stance and makes the necessary adjustments the debt may continue growing though at a decelerating rate. After a certain period of time the debt-to-GDP ratio may stabilize and only after that the risk premium may start to decline.

If the government is on the verge to enter the second phase of debt accumulation it has to undertake severe adjustments in its fiscal policy in order to prevent the default on debt. Again long after the debt-to-GDP ratio stabilizes the risk on government debt may remain high. Reducing the risk premium implies very tight fiscal policy for a long time.

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