

NATIONAL BANK OF SERBIA

SERBIA'S EXTERNAL DEBT SUSTAINABILITY

Belgrade, 4 June 2004

Contents

Introductory Note

Summary

1. Serbia's External Debt	1
1.1. Developments in Serbia's External Debt in the 2000-2003 Period	1
1.2. Relative Position of Serbia Compared to Other Transition Countries	3
2. Link Between the Current Account Deficit and External Debt Sustainability	6
2.1. Importance of Foreign Savings	6
2.2. The Current Account Deficit and External Debt Sustainability	6
2.3. The Structure of the Current Account Deficit and Its Financing	8
2.4. The Projected Trade Deficit and the Outstanding Debt Stability	9
3. Model Projections of External Debt Sustainability	12
3.1. Foundations of Empirical Analysis	12
3.2. The Results of Model Projection	14
3.2.1. Basic Scenario	14
3.2.2. Scenario Without Concessional Loans	17
3.2.3. Scenario with a Slower Growth	18
3.3. Overall Assessment of the Model Projection Results	20
Appendix	22

Introductory Note

The purpose of this study, based on the analysis of the factors predetermining the country's capacity to regularly service its debt obligations, is to point to the necessary macroeconomic and structural policies that contribute to enhanced efficiency of the utilization of committed resources or securing the lacking development funds under favorable conditions.

As regards Serbia's national per capita income, the country is placed at the bottom of the ladder of medium-developed countries according to World Bank criteria. However, taking into account the high share of official sources of finance, Serbia is more similar to low-income countries. With the latter country group external debt sustainability i.e., the capacity of a country to regularly meet its current and future liabilities depends above all on the assessment by international financial organizations of their track record in implementing macroeconomic and institutional reforms. Therefore, the attitude of private creditors as manifested on the capital markets through interest rates reflecting the poor credit rating of the country remains in the background.

Even a relatively high external debt like this country's can be smoothly serviced in the long run on condition that a) official creditors and donors are ready to provide a 'positive net financial transfer' in the form of medium- and long-term concessional loans, b) the country in the meantime becomes capable to obtain easy financing terms on the capital market, and c) the debt service costs are sustainable in the near and medium term. Similarly, it is possible that a country's debt suddenly becomes unsustainable if the official foreign funds inflow is discontinued that is international financial organizations find that the criteria of agreed macroeconomic and structural policies are not being met.

Thus, external debt sustainability, macroeconomic stability and economic growth are causally interlinked since a country's borrowing capacity depends on the creditor assessment of the performance of committed financial resources. Recognizing the significance and complexity of the issues in question, and based on the foregoing observations, the concept of sustainability of Serbia's external debt, in addition to the usual criteria of external position vulnerability, has been considered in the context of assumptions of a sustainable economic growth in the medium- and long run.

Summary

The need for perceiving the ability of Serbia to regularly service its foreign financial obligations, without resorting to debt restructuring or accumulation of arrears, arises from the fact that even after the agreement reached with the Paris Club creditors Serbia continues to be a highly indebted country.

In assessing the level of indebtedness of a country, the World Bank uses two criteria and two limit values. Empirical analyses for developing countries have shown that a country starts confronting debt service difficulties when the ratio of the debt's present value to gross domestic product (GDP) exceeds 80%, and/or when the ratio of the debt value to export of goods and services exceeds 220%. Since it suffices that one of the above-mentioned criteria is met for a country to be classified into the group of highly indebted countries, Serbia belongs to highly indebted countries in 2003 in terms of the criterion of the present debt value/goods and services export ratio. Namely, outstanding external debt as of 31 December 2003 was for Serbia equal to USD 13.482 billion¹ (see Tables 1-3), which represents 387% of goods and services export, and 71% of GDP estimated for 2003².

When one takes into account the above facts, i.e. the risk that because of the level of indebtedness and the existing volume of foreign trade deficit of the country – in case of reduced or interrupted capital inflows – illiquidity occurs and, consequently, the impossibility to service current obligations, the problem of external debt service sustainability is of paramount importance.

The issue of external debt service sustainability is a complex one and calls for a comprehensive analytical approach. The current debt/BDP ratio is an important indicator, which inevitably requires seeking the answer to the issue of *sustainability*; however, it is not crucial for the answer per se. Firstly, the answer depends on the impact of numerous factors in the framework of current economic and development policies. The crucial factors are (a) the rate of real GDP growth, (b) the speed of export increase, and decline of the share of the current balance of payment deficit in GDP, (c) the increased share of investments in GDP that is the speed of investment growth and that of changes in the structure of GDP utilization in

¹ Out of this figure, short-term debt was USD 1,056 million, of which USD 1,014 million got the character of medium-term debt to be repaid in four equal installments starting in 2008 and ending in 2011. On 31 December 2003, the parity was: EUR 1.00 = USD 1.25. It has to be taken into account, though, that increase in the debt value in dollar terms (from 10.8 billion in 2000 to 13.5 billion at 2003-end) is mostly due to inter-currency changes (drop in the dollar value). In EUR terms, the value of the debt was 11.6 and 11.4 billion, respectively. The expected 15% write-off of the debt owed to the Paris Club creditors is also included in the current debt figure.

² When the unsettled debt of Kosovo and Metohija is excluded, it turns out that export of goods and services and GDP (also excluding Kosovo and Metohija) are burdened with the debt equal to 350% and 64% thereof, respectively.

favor of investments as well as foreign direct investments (FDI), (d) a slower rise of overall consumption and, within it, an even slower growth of public consumption than that of GDP, and finally d) social endurance of such changes. Introduced into the structural model by which we were seeking the answer to the principal question – the one of sustainability of external debt service – different target (economic – political) are the variables that define such changes and their influence on external debt service sustainability indicators. It is noteworthy that those variables are not mutually independent – future economic growth and growth of exports depend on the meeting of the investment target and the possibilities to finance the current account deficit, as well as on the structure of imports and foreign trade deficit, etc. The second crucial component is shown in the balance of payments – (a) the level and the ratio of FDI to credits, and (b) the structure of such credits in terms of grace period, repayment terms and interest rate.

In the search for concrete answers to the questions relating to external debt sustainability, three scenarios were tested for the period until 2010.

A steady economic growth of about 5%, growth of exports and real investment growth by about 15% and the financing of current balance of payments deficit (with a clearly declining share of such deficit and of the deficit in the trade of goods and services³ in GDP), mainly through FDI and concessional loans (with a long grace period, long repayment terms and low interest rate) – are the basic assumptions for external debt sustainability⁴ and avoidance of an external liquidity crisis, particularly in the critical period from 2007 to 2009. Commercial credits will have to remain within the limits of 10% of total investments.

Realization of these assumptions requires adequate political conditions – they have to allow a stable functioning of the economic system, a fast resumption of privatization and an efficient macroeconomic policy that will ensure the price stability within one-digit inflation, and fiscal adjustment with a lowering of fiscal burden and budget deficit. In the circumstances of a declining trade deficit, the rate of consumption growth has inevitably to be lower than the GDP growth rate. An environment is required that will stimulate investments from domestic and foreign savings, and the raising of investment levels to at least 25% of GDP by the end of this decade.⁵ Full international economic cooperation and a favorable treatment in international

³ Deficit in the trade of goods and services represents additional assets for distribution in GDP balance, and was 23.5% of GDP in 2003; by 2010, this share needs to fall to less than 13%.

⁴ This concept also includes, from the balance of payments view, the payments of households' frozen foreign currency deposits not embraced by liquidity indicators, but are embraced as a negative item in the capital portion of the balance of payments and thus exert impact on the level of the new borrowing for the purpose of covering the deficit in current balance of payments.

⁵ The Czech Republic, Estonia, Hungary and even Albania recorded in the 2001-2002 period a share of investments in GDP above 25%.

financial organizations are also one of the imperatives. In case of a favorable turn of events, a more optimistic scenario could also be realized – with an accelerated growth of GDP in the second half of the decade, for example, to 6%-8%, with a maximum rise in the share of FDI to approximately one-third of total investments (the Hungarian example). That would also create room for a faster rise of productivity (the empirical analysis of the successful countries in transition shows a direct link between the rise in productivity and the rise in exports), and for a faster growth of consumption, and the standard of living. However, a prerequisite for such development would require that an almost ideal political environment be created in a very short period of time.

For external liquidity to be preserved, it appears that the lowest limits are the economic growth (real growth of GDP) of 3% and a rise in the dollar value of exports by 13% per annum. The analyzed parameters may change somewhat under the influence of the exchange rate policy and inter-currency relations; however, their expected effect is marginal in relation to those that are emphasized here. It would be difficult to maintain in practice this scenario with the minimal growth rate, because even the maintenance of such growth requires such investment dynamics that leaves no room for the growth of consumption and living standards. This means that it is a socially unsustainable scenario that would worsen the conditions for investment. It would transform into a scenario (tentatively denoted as *pessimistic*) in which, two or three years later, the rate of economic growth would further reduce and in which a financial gap of at least half a billion dollars would be created in international economic relations. It would not be possible to finance such a gap – and regular external debt servicing in the critical period would, most certainly, be unsustainable. In order to prevent a real drop in consumption (its keeping at "zero" rate of real growth), investments would be reduced, as would their share in GDP, which would cause recession⁶.

Therefore, all economic policy makers should keep in mind that the time is a decisive factor in avoiding a deep and long-lasting economic crisis. Most assumptions for a sustainable economic growth (and sustainability of external debt servicing for that matter), based on structural changes, have to be ensured as early as in 2004.

⁶ Such a scenario was already experienced in Serbia (within the SFRY) during the eighties, but at a much higher absolute level of the social product. Investments were falling annually, with negative efficiency, by 6% in real terms. The social per capita income stagnated in the 1979-1989 period (average rate of growth: 0%).

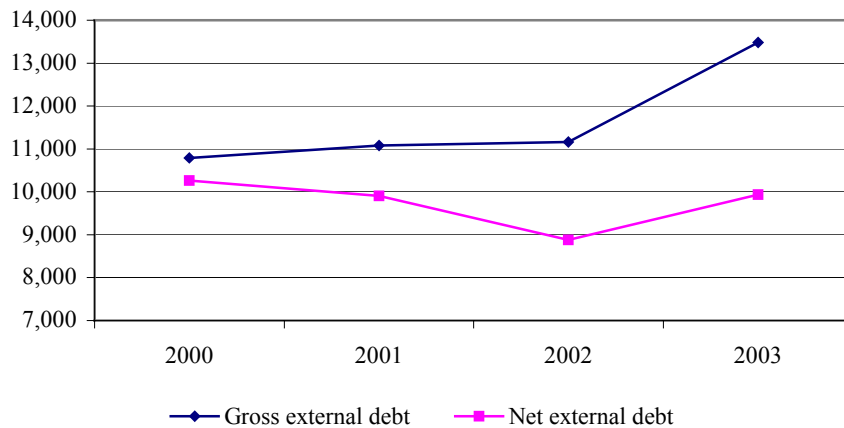
1. Serbia's External Debt

1.1. Developments in Serbia's External Debt in the 2000-2003 Period

The outstanding gross external debt of Serbia as of 31 December 2003 amounted to USD 13,482 million (See Tables 1-3 in the Appendix). In the period under review it grew, while net external debt (total external debt less gross foreign exchange reserves) in 2001 and 2002 fell as a result of a faster increase in foreign reserves than in total external debt. However, 2003 saw an increase in net external debt, too.

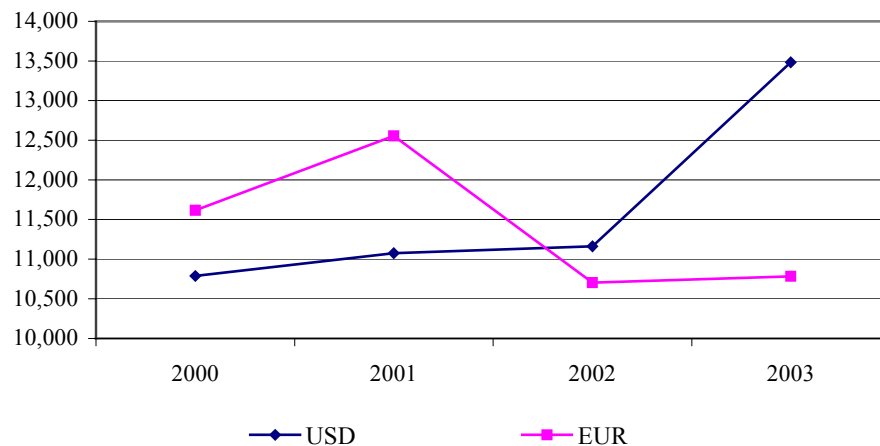
The growth in external debt expressed in U.S. dollars was, inter alia, the result of intercurrency changes. Namely, in euro terms, gross external debt in the period under review was reduced from EUR 11,615 million at end-2000 to EUR 11,037 million at end-March 2004.

Serbia's Gross and Net External Debt
(In million U.S. dollars)



Source: NBS

Serbia's Gross External Debt
(In million U.S. dollars)



Source: NBS

If we look at the ratio of net external debt to GDP, we shall observe that it was steadily decreasing in all of the encompassed years thanks to the GDP growth expressed in U.S. dollars at the average trend rate of 28.4% and external debt expansion at the annual rate of –1.4%. In 2004, further decline in the share of external debt in GDP is expected according to forecasts.

Serbia's Gross and Net External Debt and GDP

Year	External debt, in % of GDP		GDP
	Gross	Net	In USD million
2000	132.0	125.6	8,174
2001	103.9	92.9	10,661
2002	78.2	62.2	14,282
2003	71.0	52.3	18,984
2004	65.7	44.8	21,365

Source: NBS

In assessing the degree of indebtedness, the World Bank classifies the countries by using two criteria and two limit values, according to the following formula⁷:

	Severely indebted	Moderately indebted	Less indebted	Serbia in 2003
Debt/GDP	$x > 80\%$	$48\% < x \leq 80\%$	$x \leq 48\%$	71%
Debt/Exports	$y > 220\%$	$132\% < y \leq 220\%$	$y \leq 132\%$	387%

Source: IBRD; NBS Research Department estimate for Serbia.

Empirical analyses for the developing countries have shown that a country starts facing debt servicing difficulties when the ratio of the present debt value to GDP exceeds 80%, and/or when the ratio of the present debt value and export of goods and services exceeds 220%. To be classified into the group of highly indebted countries, it suffices that one of the two criteria is met. In 2003, Serbia is a highly indebted country, in view of the criterion based on the present debt value / goods and services export ratio.

In this and in the preceding decade most developing countries (except Argentina) experienced serious difficulties in debt servicing as a result of liquidity disruptions in the current account of their balance of payments.

The readiness of a government to regularly meet its obligations may become a problem even when it is solvent because, in some situations, it is not politically opportune to use domestic output for debt service. On the other hand, creditors are affected not only by the assessment of the current economic situation but also by their impression as to whether a government will continue meeting its current obligations in case of an exogenous shock.

⁷ There are many criteria of indebtedness in technical literature; the IMF criteria are even more austere (in relation to those of the World Bank).

In further text we are also expounding practical criteria used by international institutions and investors when adopting an assessment of sustainability of the external position of selected countries and Serbia.

Indicators of Serbia's External Position

	2001	2002	2003	2004 estimation
INDICATORS OF EXTERNAL LIQUIDITY in %				
Foreign exchange reserves/imports of goods and services (in months)	2.2	3.5	4.1	4.2
Foreign exchange reserves/short-term debt	97.9	212.3	336.2	326.1
Foreign exchange reserves/GDP	9.4	15.2	18.7	16.6
Debt service/GDP	1.0	1.6	2.2	4.0
Debt service/exports of goods and services (in months)	4.1	7.7	12.1	19.3
INDICATORS OF EXTERNAL SOLVENCY in %				
Debt/GDP	103.9	78.2	71.0	65.7
Debt/exports of goods and services	429.5	383.2	387.0	317.0
INDICATORS OF FINANCIAL RISK EXPOSURE in %				
Foreign exchange reserves/M1	116.6	135.9	191.5	162.6
Foreign exchange reserves/reserve money	132.4	184.3	291.2	244.8
DEGREE OF ECONOMIC OPENNESS in %				
(EXPORTS+IMPORTS)/GDP	67.2	63.7	60.7	62.4
MEMORANDUM ITEMS in million U.S. dollars				
GDP	10,661	14,282	18,984	21,624
External debt	11,076	11,162	13,482	14,200
External debt service	107	223	423	865
NBS foreign exchange reserves	1,170	2,280	3,550	3,600
Current account (after grants)	-230	-1,434	-1,928	-1,810

Source: *International Financial Statistics*, IMF, February 2004; NBS.

Methodological explanations:

Foreign exchange reserves / imports of goods and services (in months) – the ratio of average monthly NBS foreign exchange reserves to average monthly imports of goods and services.

Foreign exchange reserves / short-term debt (in %) – the ratio of the stock of foreign exchange reserves to the stock of short-term debt at the end of the year.

Foreign exchange reserves / GDP (in %) – the ratio of average annual foreign exchange reserves to GDP.

Debt service / GDP (in %) – the ratio of annual debt service to GDP.

Debt service / exports (in %) – the ratio of debt service to the exports of goods and services.

Debt / GDP (in %) – the ratio of the stock of debt at the end of the year to GDP.

Debt / exports (in %) – the ratio of the stock of debt at the end of the year to the annual value of the exports of goods and services.

Foreign exchange reserves / M1 (in %) – the ratio of the stock of foreign exchange reserves to the stock of M1 at the end of the year.

Foreign exchange reserves / reserve money (in %) – the ratio of the stock of foreign exchange reserves to the stock of reserve money at the end of the year.

1.2. Relative Position of Serbia Compared to Other Transition Countries

The ratio of Serbia's foreign exchange reserves to the country's short-term debt is rather high, and this is one of the key indicators showing that it is not threatened by any immediate international liquidity crisis.

The coverage of the amount of imported goods and services by the amount of national holdings of foreign exchange reserves reported in Serbia for 2003 was slightly above the value of four months imports, or relatively lower compared to other observed transition countries, excluding Hungary where the indicator was equal to the value of imports reported in 2.8

months. This level of coverage was higher than the minimum which is equal to the three-month imports and by international criteria considered necessary for a country's adequate debt servicing.

Relative to other countries, the best indicator for Serbia in 2003 was the debt service share in the country's GDP (no more than 2.2%). However, a negative aspect to it is that due to a very low level of Serbia's exports the ratio of debt repayments to the country's exports of goods and services amounted to 12.1% in 2003 and tends to rise to 19.3% in 2004, which points to a relatively low level of external component in the national GDP (a low level of exports).

External Liquidity Indicators for Selected Transition Countries in 2003										
	Bulgaria	Russia	Czech Rep.	Slovakia	Romania	Poland	Croatia	Slovenia	Hungary	Serbia
INDICATORS OF EXTERNAL LIQUIDITY, in %										
Foreign exchange reserves/imports of goods and services (in months)	5.5	5.2	5.5	5.6	5	5.4	5.7	6	2.8	4.1
Foreign exchange reserves/short-term debt	269.3	206.8	194.4	180.2	193.7	179.8	524.2	187	220.3	336.2
Foreign exchange reserves/GDP	28.8	17.7	31.6	37.4	18.3	16.2	28.9	29	15.5	18.7
Debt service/GDP	5.5	3	4.2	7.2	6.6	6.3	8	7.8	10.3	2.2
Debt service/exports of goods and services	10.1	8.8	6.1	9.2	18.4	19	15.2	13.6	15.6	12.1
INDICATORS OF EXTERNAL SOLVENCY, in %										
Debt/GDP	65.6	42	40.8	48.5	33.9	49.5	83.1	41.7	51.2	71.0
Debt/exports of goods and services	120.7	121.5	61.8	62.1	93.9	149.3	158	72.3	82.9	387.0
INDICATORS OF FINANCIAL RISK EXPOSURE, in %										
Foreign exchange reserves/M1	129.3	108.2	85.4	145.4	300.8	80.3	262.5	200.8	66	191.5
Foreign exchange reserves/reserve money	197.1	139.9	251.4	387.1	345.9	191.6	290.1	549.5	127.1	291.2
DEGREE OF ECONOMIC OPENNESS, in %										
(Exports+Imports)/GDP	80	57.9	134.3	158	80	69	113.3	115.5	127.9	60.7
MEMORANDUM ITEMS										in million U.S. dollars
GDP	19,857	433,524	85,411	32,481	57,023	209,641	28,335	27,152	82,734	18,984
External debt	13,032	182,100	34,861	15,757	19,328	103,806	23,557	11,330	42,387	13,482
External debt service	1,091	13,186	3,561	2,336	3,786	13,209	2,262	2,127	7,975	423
Central banks' foreign exchange reserves	6,705	76,938	26,955	12,149	10,455	33,975	8,190	8,517	12,791	3,550
Current account	-1,580	35,854	-5,621	-392	-3,358	-4,126	-2,039	15	-7,346	-1,928

Source: The NBS Research Department calculations and estimates based on information of the central banks of the selected countries; *International Financial Statistics*, IMF (various issues); and *Economist Intelligence Unit*.

Methodological explanations:

Foreign exchange reserves / imports of goods and services (in months) – the ratio of average monthly foreign exchange reserves to average monthly imports of goods and services.

Foreign exchange reserves / short-term debt (in %) – the ratio of the stock of foreign exchange reserves to the stock of short-term debt at the end of the year.

Foreign exchange reserves / GDP (in %) – the ratio of average annual foreign exchange reserves to GDP.

Debt service / GDP (in %) – the ratio of annual debt service to GDP.

Debt service / exports (in %) – the ratio of debt service to the exports of goods and services.

Debt / GDP (in %) – the ratio of the stock of debt at the end of the year to GDP.

Debt / exports (in %) – the ratio of the stock of debt at the end of the year to the annual value of the exports of goods and services.

Foreign exchange reserves / M1 (in %) – the ratio of the stock of foreign exchange reserves to the stock of M1 at the end of the year.

Foreign exchange reserves / reserve money (in %) – the ratio of the stock of foreign exchange reserves to the stock of reserve money at the end of the year.

Serbia's low GDP external component results in the narrow degree of its economic openness measured by the ratio of exported and imported goods and services to the overall economic activity. Among all observed countries except Russia which is, being a large country with the extensive internal market, less oriented to the global market, Serbia has the lowest degree of domestic economic openness (61%), with all resulting adverse effects – inability to use international comparative advantages more intensively, insufficient strengthening of competitiveness, difficulties in using the opportunities of economies of scale in production and reducing unit labor costs, and finally, problems in smooth foreign debt servicing.

In terms of Serbia's external solvency, a rather adverse indicator is the ratio of external debt to the GDP reported at 71.0% in 2003. In 2003, a higher percentage of foreign debt within the GDP was reported only by Croatia (83.1%). Positive developments are that a downward trend has been apparent in the ratio of Serbia's debt to its GDP, from 103.9% in 2001 down to the projected 65.7% in 2004.

The least favorable indicator for Serbia, both in relative and absolute terms, is the ratio of the country's overall debt to the value of its exported goods and services, which was reported at 387.0% in 2003. This figure is projected to decrease down to 317.0% in 2004. The ratio, although just one of the two World Bank criteria, was sufficient to classify this country into a group of highly indebted ones.

In the period 1991-1996 the above-mentioned ratio for highly indebted transition countries (e.g. Bulgaria and Poland) much exceeded the 220% limit due to the high current account deficits, which had caused an increase in borrowing during the 80ies. The declining share of debt as a percent of exports (an external liquidity indicator) after 1996 was the result of the write-off and rescheduling of debt owed to the Paris Club and the London Club creditors (e.g. Bulgaria, and Poland).

2. Link Between the Current Account Deficit and External Debt Sustainability

2.1. Importance of Foreign Savings

The main reason for external disequilibrium is to be found in the real sector i.e., in the difference between national savings and investments. If investments exceed savings a need arises for financial resources from abroad. Capital inflow may be in the form of FDI or loans (borrowing). Experience in transition countries shows that the most foreign capital inflows stemmed from direct and portfolio investments. Growth of investment should lead to increase in production capacity, higher output and exports, which should generate resources for debt servicing. To illustrate, private sector investment in production capacity in tradable goods industry make the trade deficit sustainable, unlike investment in real estate.

The greater is GDP, the greater the economic growth as well as the expected profitability of investments. The higher growth of social product brings about a higher expected income in future. In this way, the share of debt in GDP declines, which increases debt service capacity.

A drop in private, or public savings (due to a high budget deficit) may cause a current account deficit. Growth of the budget deficit is more problematic because it is the result of high budgetary spending (lower public savings) and generally is of structural nature. On the other side, low domestic savings often are transitory (when expectations that GDP will increase turn into expectations that incomes will grow, which causes current consumption to rise). When the expected income growth occurs, savings usually recover.

2.2. The Current Account Deficit and External Debt Sustainability

Deficit in current transactions with the rest of the world is a significant indicator of economic performances in every open economy. The current account deficit may be a consequence of capital inflow, which will induce GDP growth, or of an unsustainable external debt accumulation.

In the first case, it is an indicator of ‘strength’ of a transition economy as it measures the resources entering the country to finance domestic investment demand that is greater than domestic savings. From that standpoint, the current deficit reflects the success of structural reforms, entailing capital inflow, investments and, consequently, GDP growth.

In the second case, the current account deficit may point to a dangerous disequilibrium between domestic savings and investments and to accumulation of debts that cannot be serviced. In other words, the current deficit may be the result of mismanaging the transition

process, when disequilibrium becomes unsustainable. This is followed by the external sector crisis, which may take the form of currency crisis or external debt crisis.

Change in the level of this country's external debt both in gross and net terms is not correlated, based on theoretical assumptions, with the level of the current account deficit. So, for example, a more or less stable level of the country's external indebtedness, despite the continuing trend in the current account deficit, is projected for the period until the end of this decade. Moreover, thanks to the upward trend in foreign exchange reserves some reduction in net external indebtedness is forecast.

The absence of the link between the current account deficit and the level of the country's external indebtedness, as caused by a relatively high capital import that does not increase debt (FDI and part of exchange of foreign currencies for dinars via exchange offices within the capital account) will in large measure facilitate achieving external debt sustainability. To that end, in addition to reduction in current account deficit, a broadly unchanged level of gross external indebtedness, some decline in net external indebtedness, it is necessary to attain an economic growth rate above 5%, as well as a faster expansion of exports than imports of goods and services.

If the National Bank of Serbia continued pursuing the policy of creating reserve money and the money supply in line with developments in net foreign assets (NFA) as well as the policy of a managed floating of the dinar exchange rate, difficulties in external debt servicing should not be expected to occur. So, for example, under the circumstances of lower than projected net capital imports, NFA of the NBS would decline. That would then bring about a reduction in reserve money and the money supply as well as an increase in supply of and a shrinking of demand for foreign currencies thereby enabling an unimpeded servicing of external debt. Moreover, in the conditions of falling net foreign currency reserves the NBS could scale down its sales in the foreign exchange market. That would induce a decline in the international value of the dinar, increase the supply of and decrease the demand for foreign currencies thereby making normal external debt servicing possible.

With a high correlation between the NFA dynamics and reserve money and the money supply, as now is the case in the country, the dynamics of the current account deficit is not an autonomous category. Change in the current account deficit is a dependent variable with regard to net capital imports, including external debt repayments. Thus, for example, a possible drop in net capital imports contributes to a decline in the current account deficit via the mechanism of reducing central bank NFA and reserve money and the money supply as well as weakening the international value of the national currency. Conversely, increased net capital imports entail

growth in central bank NFA, expansion of reserve money and the money supply and the rise in the international value of the national currency, which is in the end reflected in the build-up of the current account deficit.

The high current account deficit of this country in 2003 did not have an autonomous character but was the result of high net capital imports. The clear proof thereof lies in the fact that, despite the high deficit, the supply of foreign currencies, under the circumstances of external convertibility of the national currency, exceeded the demand, which was reflected in the high expansion of foreign exchange reserves.

Based on the foregoing, there follows a conclusion that – on condition that in the period ahead the authorities continue the monetary policy geared to linking reserve money and the money supply to developments in NFA of the NBS and accompany it by the policy of managed floating of the dinar exchange rate – the current account deficit should be sustainable. That deficit would be of consequential and not of autonomous nature that is it would be a function of the amount of net capital imports and the maintenance of the country's foreign exchange reserves on the adequate level.

Having in mind the earlier defined adjustment mechanism and the assumptions adopted in the basic scenario, Serbia will not be faced with external debt crisis until 2010.

2.3. The Structure of the Current Account Deficit and Its Financing

The high trade deficit is a more problematic component of the current balance of payments than negative net invisible transactions, as it may mean that the structural problem of competitiveness is in question. Accordingly, it is of a longer-term nature, unlike other current balance of payments components that are subject to reversibility, such as net income from exchange operations, net current transfers and grants.

Percent Share of Serbia's Balance of Payments Components in GDP

	Trade balance	Interest (net)	Remittances (net)	Grants (official aid)	Exchange transactions	Current account balance	Foreign direct investment (net)
2000	-17.3	-0.0	2.6	3.2	1.4	-2.4	0.6
2001	-18.8	-0.2	0.3	5.3	7.1	-2.2	1.5
2002	-22.9	-0.7	1.1	3.5	9.0	-10.0	3.3
2003	-24.0	-0.8	2.0	2.5	8.0	-10.2	7.2

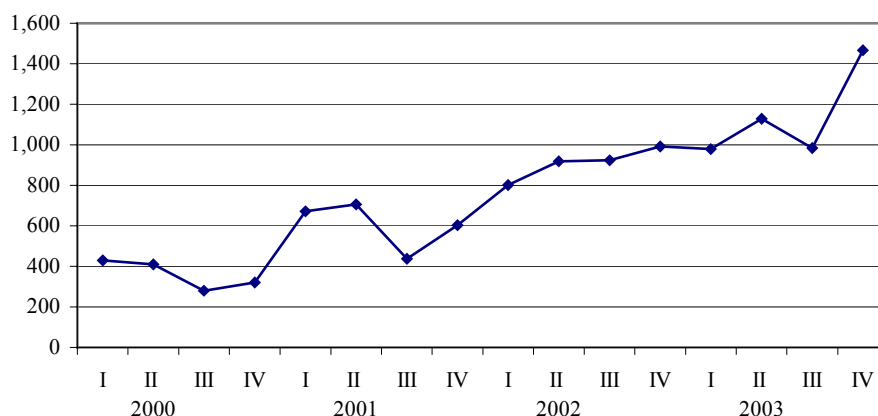
Source: NBS

The overall balance on goods and services in the 2000-2003 period substantially worsened with the deficit rising from USD 1,489 million (17.3% of GDP) in 2000 to USD 2,004 million

in 2001 (18.8% of GDP), USD 3,272 million in 2002 (22.9% of GDP) and to USD 4,558 million (24.0% of GDP) in 2003.

In the period under review, revenues from remittances as well as other current transfers, official aid and net revenues from exchange operations had a positive contribution to the covering of the trade imbalance. Inflows from abroad in the form of loans and the growth of FDI allowed covering the current deficit and a steady growth of foreign exchange reserves of the country.

Deficit in Trade in Goods and Services
(In million U.S. dollars, by quarter)



2.4. The Projected Trade Deficit and the Outstanding Debt Stability

The main elements for deriving trade deficit/surplus that ensures the stability of outstanding debt are the level of external debt, the GDP growth rate and the interest rate on external debt or:

$$tb_t^R = (r_t - g_t) d_t,$$

where:

tb_t^R - the required level of trade deficit/surplus (relative to GDP)

d_t - the ratio of total external debt to GDP

r_t - the average effective interest rate on external debt

g_t - the rate of GDP growth in the year $m+1$ relative to the year m

In the above-outlined way are calculated the required amounts of trade deficit (tb_t^R) in preceding and subsequent years that would guarantee the stability of the outstanding debt. To that end, it was assumed that the indebtedness volume in the 2004-2009 period would remain at the level from end-2003. That assumption was adopted so as to establish the present volume of indebtedness (without assuming further borrowing) in the period ahead. We have estimated

the interest rate on debt at 3.2% based on the outstanding debt and the debt repayment schedule for the coming period while varying the GDP rate in the 2-5% range.

The financial resources gap represents the difference between the actual and the required trade deficit. From the next table it is visible that the gap in the 2000-2003 period kept widening and that the main reason for such development was the growth in the share of the balance on goods and services in GDP. On the existing projections for 2004 that gap is expected to narrow.

Year	GDP growth rate	Interest rate ¹⁾	Debt/GDP	Required trade deficit (In % of GDP)	Actual trade deficit (In % of GDP)	Gap	Debt (In USD m)
2000	5.0	3.0	1.32	-3.30	-17.31	-14.01	10,789.3
2001	5.5	3.0	1.04	-1.04	-18.80	-17.76	11,076.3
2002	4.0	3.0	0.78	0.00	-22.91	-22.91	11,162.2
2003	3.0	3.0	0.71	-1.07	-24.01	-22.94	13,482.1

¹⁾ Source: Estimate of the NBS Research Department

The required deficit and the gap between the required and the projected ⁸ balance on goods and services are shown in the following tables by year and by different GDP growth rates. Business activity expansion is of crucial importance for the stability of external debt i.e. reduction of its share in GDP. It is apparent that with each year of growth the gap will narrow more and more. With GDP growth rates higher than the interest rate on external debt we would also have room for the deficit in the balance on goods and services. However, in case of lower rates of GDP growth we should even achieve a surplus in the goods and services balance.

The Required Trade Surplus (Deficit)¹⁾ as a Percent of GDP (at different GDP growth rates)

Year	2%	3%	4%	5%
2000	-3.30	-3.30	-3.30	-3.30
2001	-1.04	-1.04	-1.04	-1.04
2002	0.00	0.00	0.00	0.00
2003	-1.07	-1.07	-1.07	-1.07
2004	0.75	0.12	-0.50	-1.12
2005	0.73	0.12	-0.48	-1.07
2006	0.72	0.12	-0.46	-1.02
2007	0.71	0.11	-0.44	-0.97
2008	0.69	0.11	-0.43	-0.92
2009	0.68	0.11	-0.41	-0.88

¹⁾ Assumption: Total external debt in the years under review is at the level of 2003 while the interest rate on external debt is derived from the projected repayment schedule of the external debt owed to the IMF.

⁸ The projection of the National Bank of Yugoslavia and the IMF staff.

The Gap Between the Required and the Projected Deficit¹⁾ as a Percent of GDP (at different GDP growth rates)

Year	2%	3%	4%	5%
2000	-14.92	-14.92	-14.92	-14.92
2001	-17.76	-17.76	-17.76	-17.76
2002	-22.91	-22.91	-22.91	-22.91
2003	-22.94	-22.94	-22.94	-22.94
2004	-20.48	-19.85	-19.23	-18.61
2005	-21.57	-20.75	-19.95	-19.17
2006	-22.21	-21.19	-20.21	-19.26
2007	-22.92	-21.68	-20.51	-19.39
2008	-23.05	-21.61	-20.26	-18.98
2009	-23.06	-21.43	-19.90	-18.49

¹⁾ Assumption: Total external debt in the years under review is at the level of 2003 while the interest rate on external debt is derived from the projected repayment schedule of the debt owed to the IMF.

If the trade deficit kept decreasing (increasing) each year, we would record narrowing (widening) of the gap. In the extremely optimistic variant, a 10% reduction in trade deficit (expressed in U.S. dollars), coupled with an annual GDP growth rate of 5%, would bring about a drop in the gap by –7.9% of GDP in 2009. On the other side, in the pessimistic variant, if trade deficit in the period ahead grew at an annual rate of 10%, with GDP rising at an annual rate of 2%, the gap in 2009 would attain even –28.4% of GDP.

The necessary although not sufficient condition for a country's solvency is that the outstanding debt as a share in GDP does not increase (of course, that does not apply when debt is extremely high). When the share of debt in GDP grows, the financial gap i.e. the difference between the actual trade balance and the trade surplus (deficit) that is required to stabilize the ratio of debt to GDP. The gap will widen if the share of debt in GDP goes up and/or the real average interest rate on external debt is higher than the real GDP rate of growth.

3. Model Projections of External Debt Sustainability

3.1. Foundations of Empirical Analysis

The analysis of external debt sustainability was done by using a model allowing a simultaneous projection of GDP, balance of payments, prices and the exchange rate.

Testing of various scenarios is based on the variation of target variables representing alternative economic policies. The variables are:

- real growth of GDP,
- export of goods and services share in GDP (including the deliveries to Montenegro and Kosovo and Metohija), which implies growth of exports,
- investments share in GDP,
- goods and services deficit share in GDP (additional assets for distribution),
- FDI as a percentage of total investments,
- Structure of new borrowing, and
- Public consumption share in GDP.

In addition to the above, variables with explicitly or implicitly predetermined dynamics are the following:

- inflation, shown by the rise in retail prices,
- change of the EUR exchange rate in relation to retail prices⁹,
- applied deflators in view of the preceding two items, the EUR exchange rate against the dollar is fixed¹⁰,
- savings in foreign currencies, exchange offices, inflow/outflow in trade with Montenegro and Kosovo and Metohija are estimated in accordance with the GDP growth in dollars,
- grants until 2005, inclusive, according to IMF estimates ("below the line"), and thereafter assessed according to declining dynamics,
- short-term lines of credit in net amount at the 2004 level,
- commercial borrowing is on 5 years and with the annual interest rate of 5%,

⁹ It is assumed that the euro exchange rate in 2004 rises by 2% faster than retail prices and in 2005 by 1%; growth is even in 2006, with the rate lagging behind by 1% in 2007 and 2% in 2008-2010 (convergence of relative prices). In addition, annual price growth in the euro zone is assumed to be 2%. This means a real depreciation of 4% in 2004, followed by 3%, 2% and 1%, respectively in the years 2005-2007 that is convergence of relative prices in the last three years.

¹⁰ EUR 1.00 = USD 1.25

- foreign exchange reserves (NBS and banks) in 2004 according to the projection, and thereafter in the amounts covering 5 months of goods and services imports projected for next year, and
- repayment schedule of the outstanding debt as of 31 December 2003 was defined by taking as assumptions the completion of the arrangement with the IMF, and/or planned write-off of 15% of debt obligations vis-à-vis the Paris Club creditors, and conclusion of the agreement with the London Club creditors under similar terms; provided, however, that the first portion of the principal be paid in 2010.

The external debt repayment schedule and other, above mentioned, general assumptions included in the model are presented in Tables 4-5.

Therefore, the outstanding debt as of 31 December 2003 and its annual repayment schedule are treated as given conditions, according to the structure presented in Table 5. New external debts, beyond the debt stock on the cut-off date, are broken down into guaranteed credits (some loan agreements already concluded, and others estimated in the variants by creditor, grace period, repayment terms and interest rate), and commercial credits. Annual amortization payments per individual scenario were derived therefrom.

Projections in the period up to the year 2010 were analyzed. In all the variants that were analyzed, the sustainability criteria after that year fall to a safe distance from the critical limits, or the debt crisis has already occurred.

In targeting, the target variables were treated as not mutually independent – future economic growth and growth of exports depend on the accomplishment of the investment target, the possibility of financing the current account deficit, and the structure of imports and foreign trade deficit, etc.

As here is analyzed the sustainability of external debt servicing for Serbia, its official balance of payments¹¹ is used; however, because of the type of the relations existing with Montenegro and Kosovo and Metohija there emerges a problem of defining net exports in GDP balance (deficit in the balance on goods and services exports and imports). From standpoint of GDP balance, Montenegro and Kosovo and Metohija are nonresident areas i.e., purchases from and deliveries to these to regions are added to imports and exports, respectively¹².

¹¹ All balance of payments projections start from the performance of the balance of payments of Serbia, with a modification irrelevant to this paper. Namely, USD 100 million worth import of goods was shifted from 2003 to 2002 on the basis of the shifting of the "cut-off" date of the customs declarations processing from 6 to 16 January.

¹² Deliveries to and purchases from these regions are represented by NBS inflow and outflow data pursuant to the Law on Trade in the FRY Territory. This was the same approach as that applied by the Republic Statistics Office in drawing up the GDP balance for 2002, which represented a starting point for assessing the nominal GDP value for 2003, and estimates for subsequent years.

As there are no absolute external debt sustainability criteria given in advance, a number of key indicators are monitored in the model – the debt service ratio, the external debt size in relation to GDP and export of goods and services, external debt service in relation to GDP. Two criteria were chosen as relevant, namely: (1) the rate of debt service defined as a percentage share of the annual principal and interest payments (debt service) in inflow from goods and services; and (2) the debt service share in GDP. Critical value limits of individual indicators are, as a general rule, determined arbitrarily. On the basis of international experience, 25% was taken as a critical limit for the debt service ratio, and 7.5%-8% for GDP burden. Experience shows that certain incidental stepping-over of either of them in the short run does not, generally, lead to external illiquidity. On the other hand, their stepping-over or their maintenance for several years in a row represents a strain, which, as a general rule, leads to interruption of regular debt servicing.

3.2. The Results of Model Projection

3.2.1. Basic Scenario

This scenario starts from the assumption that implementation of the three-year arrangement with the IMF will resume, which implies the announced approval of two tranches in June 2004. It is also assumed that the performance, indicative and structural criteria from the arrangement will be observed, and that the envisaged systemic laws crucial for the growth of investments will be adopted. Further, this also implies stable institutions, key to for bringing the investment risk down to tolerable limits.

Target Variables of the Basic Scenario

	2004	2005	2006	2007	2008	2009	2010
Real GDP growth, in %	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Share of goods and services exports in GDP, in %	19.4	24.2	26.2	27.7	30.0	31.6	32.7
Share of investments in GDP, in %	15.8	17.8	20.0	22.0	23.5	25.0	25.0
Share of goods and services trade deficit in GDP, in %	-20.0	-18.5	-17.0	-15.5	-13.5	-12.0	-11.0
Share of FDI in overall investment, in %	23.7	25.0	26.0	27.0	26.0	23.0	20.0
Share of public (collective) consumption in GDP, in %	19.0	17.0	15.8	15.0	14.2	13.4	12.7
Outstanding new debt, in USD million	1,424	2,572	3,536	4,301	4,681	4,976	5,055
Guaranteed loans	924	1,844	2,590	3,155	3,366	3,463	3,332
Commercial loans	500	728	946	1,146	1,315	1,513	1,723

The shares of exports in GDP were derived from the target shares including deliveries to Montenegro and Kosovo and Metohija (the figure reaches 32.7% of GDP in 2010). In this scenario such shares imply an average growth of export dollar value of 15.4% per annum. Investment levels were projected by taking into account the experience in successful transition countries¹³; in this scenario that means 10% real investment growth in 2005, between 17% and 18% in 2005-2007, which is to be followed by stabilized growth at the rate of about 12%.

In Serbia's investment balance domestic savings bear a negative sign – overall investments are financed from foreign savings (via loans and FDI) and savings of this country's citizens (remittances) with part of those resources being used to cover consumption. According to an estimate, that amounted to 8-9% of GDP in 2003. Domestic savings will keep a negative sign in 2004 and 2005, too. Only in 2006 – provided basic scenario assumptions with respect to growth of GDP and consumption are realized – domestic savings will receive a positive sign thereby becoming a component of overall sources of investment financing.

In view of the general conditions and the hitherto recorded movements in economic activities, the growth expected in 2004 is not questioned. The growth expected in the coming years will be the outcome of continued process of privatization and increased share of the investments in use of GDP. In view of the projected increased share of investments and reduced value of net exports (decline in the negative balance on goods and services), the sharp reduction of real growth of consumption has to be principally reflected in public consumption and outlays for collective spending (to be obligatorily ensured by the economic policy makers in order for the concept to be maintained within socially sustainable limits).

Such defined target variables determine the current account deficit in the balance of payments (before grants)¹⁴, with the exception of the balance on interest whose projection depends on projected borrowing. That deficit and projected foreign exchange reserves increase are covered by the surplus in capital account (and grants). When items "other capital inflow"¹⁵ and the balance on short-term transactions, which is negligible, are excluded – the balance is closed by the balance on long- and medium-term credits and net inflow from FDI. Here are included the already contracted loans, which are calculated (with interest in the current balance) as new guaranteed loans.

¹³ The reply to the question as to whether the projected FDI are high should be looked for in successful transition countries: a characteristic example is Hungary, where the share of FDI in overall investments was, on average, about 29% (or about 8% of GDP) in 1993-97. In Bulgaria, after the introduction of the currency board in 1997, the FDI share in overall investments in the course of five years surged to a 41% average etc.

¹⁴ Here, the current account balance implies its value before grants, while grants are shown separately, as an item that together with the capital account balance surplus covers the current deficit and the increase in foreign exchange reserves.

¹⁵ Balance on advances for export, exchange offices and savings from the country, loro checks, repayment of frozen foreign currency deposits, etc.

Briefly: the external debt sustainability depends on the projected structure of assets by which the remaining gap will be covered, particularly on the relative importance of FDI and the loans terms and conditions (contracted interest, repayment term and grace period). In this scenario, this dilemma is solved in the following way:

- FDI were projected as an indicated share in total investments (in 2003 the realization was 47.8%). As they are given in net amounts, their share is rising until the middle of the projected period – after that it is falling (profit repatriation);
- new guaranteed debt includes the envisaged borrowing and the assumption of the realization of a new World Bank concessional USD 540 million loan (to be disbursed from mid-2005 until mid-2008), of which 90% goes to Serbia, with the following structure: 40% IDA (a repayment term of 20 years, a 10-year grace period, and the interest rate of 0.75%), and 60% IBRD (a repayment term of 20 years, a 6-year grace period, and the interest rate of 2.5%); it is followed by an EIB 250 million euro loan over three years (with a 15-year repayment term, a 5-year grace period, and the interest rate of 4.2%), and an EBRD 300 million euro loan over two years (with an 11-year repayment term, a 5-year grace period, and the interest rate of 4.2%), while the remaining gap is covered through bilateral loans; and
- new commercial borrowing was projected at the level of 10% of total investments.

The basic results of the model simulation¹⁶ are:

- debt is growing in absolute amount (from the initial level of USD 13.5 billion in 2003) until 2007, when it will reach the level of USD 16 billion. Starting from 2008, it will be falling – to USD 15 billion in 2010. The share of the debt in GDP remains high until 2006, about 68%; in 2007 it amounts about 66%; and in 2010 it falls to 50%;
- GDP burden by debt service in 2007 amounts to 5.5%, in 2008-2009 it is greatest, ranging from 6.8 to 6.6%, and in 2010 it falls to 6.1%;
- the debt service ratio is the highest in the 2007-2009 period, but remains in a relatively acceptable range of 20.2-22.6%; in 2010 it falls to 18.8%; and
- the scenario is socially tense because the nominal growth of consumption will have to remain below 2% (in which, personal consumption 2-3% per annum), except in 2010 when it rises to 4% (personal consumption to 5%).

The critical period for external debt service is from 2007 to 2009. The scenario with projected concessional loans ensures a relatively safe passage through that period in view of the fact that maximum burden will extend over three years.

¹⁶ See Tables 6-7.

The risks in this scenario do not lie in concessional loans, but on the other side. The main risk is linked with the economic policy ability to keep the real growth of consumption within the mentioned limits, to decrease the collective consumption in real terms within such limits, and to start implementing such policy already in 2004. In that regard, in a fluid political situation and, practically, in a permanent pre-election situation also permanent is the risk of facing strong social pressures. When speaking about consumption and formation of resources therefor, fiscal policy may be put to the test (both in terms of providing funds for wages and pensions, and for subsidies) – as wage policy in the part of the public sector made up of large public enterprises. A potential halt in privatization increases that risk. Consumption overruns means less investments, reduction of economic and export growth, and an increase in the debt service ratio and GDP burden with the debt service. In turn – such a scenario would raise the issue of sustainability of the projected FDI and concessional loans. It will be shown in the next scenarios how it reflects on the *debt service sustainability*. There is also a risk of the external debt sustainability indicators getting deteriorated if the debt toward London Club creditors is serviced under the terms and conditions less favorable than those assumed in the repayment schedule i.e. under Paris Club conditions. However, an outcome under this scenario that would push the *sustainability* indicators above the critical limits is not likely.

Present are also the risks of political nature (cooperation with The Hague Tribunal, and the like), which could cause a worsening of borrowing terms and trade with developed countries, a higher estimated risk of investing in Serbia, briefly – that could topple this scenario.

To conclude, external debt servicing and this entire scenario are sustainable if the assumption of political stability and the efficiency of the economic system and economic policy concur.

3.2.2. Scenario Without Concessional Loans

Target variables are identical to those of the basic scenario. The difference is that after the envisaged borrowing the assumption is that there will be no new World Bank loans¹⁷The gap thereby caused will be covered by increased borrowing with other bilateral creditors with a 10 year repayment term and a grace period of one year.

Target Variables of the Basic Scenario Without Concessional Loans (changes in the basic scenario)

	2004	2005	2006	2007	2008	2009	2010
Outstanding new debt, in USD million	1.424	2.572	3.539	4.307	4.778	5.108	5.303
Guaranteed loans	924	1.844	2.593	3.108	3.116	2.971	2.723
Commercial loans	500	728	946	1.199	1.662	2.137	2.580

¹⁷ A USD 550 million loan by the world Bank mentioned in the basic scenario.

In this basic scenario variant, the outstanding debt in the second half of the period is somewhat larger (but not substantially), as additional borrowing for the cover of increased interest payments is included. Principal results of this scenario are the following¹⁸:

- debt is growing in absolute terms up to USD 16 billion in 2007, then falls to USD 14.9 billion in 2010. In relation to GDP, it rises to 68% until 2006, in 2007 it equals 65.7%, while falling down to 49.9% by 2010;
- GDP burden with debt service is somewhat increased: it is 5.75% in 2007, about 7% in 2008-2009, and in 2010 it drops to 6.4%; and
- The debt service ratio is higher (principal and interest service against goods and services export) – 20.8% in 2007; in 2008 and 2009 is the highest, 23.3% and 21.5%, respectively, and in 2010 it falls below 20%.

Maximum value of the debt service ratio in 2008 exceeds that from the first test by 0.7 percentage points. This is below the critical 25%; however, the service is tense during the four consecutive years, which points to increased risk.

To the risks in this scenario may also be added the effects of exchange rate variations. If the average dollar value in the whole period under review is at the level of EUR 1.00 = USD 1.20, that increases the debt servicing ratio by about 0.3 percentage points, etc. On the other hand, each percent of real depreciation (above the projection) increases debt service ratios by approximately one-fourth of one percentage point. For example, if we combine a strengthening of the dollar against the euro by about 10% and additionally depreciate the dinar against the euro by 4%, the critical limit for debt servicing ratio of 25% will be exceeded.

3.2.3. Scenario with a Slower Growth

The purpose of this scenario is to test the threshold of economic growth at which the debt service, though tense, remains sustainable. That is why the projected GDP growth rate was lowered to 3%, except in 2004, and the FDI share in overall investments until 2008 was kept at 24%, approximately equal to the projection for 2004; all other target variables were preserved. A lower inflow of concessional loans is compensated by increasing commercial borrowing to 11% in 2007, and thereafter to 15% of overall investments. Although the same target shares of exports and overall investments are retained, lower real rates of growth in exports, consumption and investment are also implied because of the lower economic growth.

¹⁸ See Tables 7-8.

Simultaneously, that means we are entering critical years with a lower value of GDP and exports. Thus, average growth of export dollar value of about 13% is shown as the bottom export growth limit where the debt service ratio does not exceed the critical value of 25%.

Target Variables of the Slower Growth Scenario (changes in the basic scenario)

	2004	2005	2006	2007	2008	2009	2010
Real GDP growth, in %	5.0	3.0	3.0	3.0	3.0	3.0	3.0
Share of FDI in overall investments, in %	1,424	2,564	3,515	4,256	4,671	4,930	5,046
Guaranteed loans	924	1,843	2,593	3,108	3,116	2,971	2,722
Commercial loans	500	721	923	1,148	1,555	1,959	2,324

Other target variables are the same as the ones in the basic scenario. However, the slower GDP growth, as indicated earlier, results in lower growth rates of exports and investments, with shares in GDP remaining unchanged. Thus, average growth of export dollar value in 2005-2010 amounts to 13.6%. Real investment growth in 2005-2007 is slightly below 15% and about 10% in the two subsequent years.

The basic results of this scenario are the following¹⁹:

- debt rises in absolute amount to USD 16 billion in 2007, and then falls to USD 15 billion in 2010. In relation to GDP, the debt is generally around 70% until 2007, and drops to 56% by 2010;
- GDP burden with the debt service is considerably larger: it is 6.1% in 2007, and in the range between 7.8%-8.1% in the 2008-2010 period;
- in 2007 the debt service ratio rises to 22%; in 2008-2010 it moves between 24% and 26%. This means that the service is tense during four years in a row.

Under the above assumptions, annual GDP growth of 3% is shown as the bottom debt service sustainability limit. However, if such a scenario were launched, it could not be maintained. In this scenario, the debt service ratio would be exceeded due to the lack of concessional loans and lower export growth that would follow because the projected export share in GDP could not be reached. Moreover, this scenario is also socially unsustainable as it implies a real drop in consumption from 2005 to 2009. It would require a reduction of the investment target and, consequently, of the export target, with a further drop in GDP growth as a result. If the export target were reduced to 30% share in 2010 (due to smaller investments), the debt service ratio would rise to 29% - in other words, the debt service - even on condition

¹⁹ See Tables 9-10.

that the write-off of the remaining 15% of debt owed to the Paris Club creditors is realized - s unsustainable!

In essence, economic policy would be geared to maintaining the attained level of consumption. The likely outcome of initiating the slower growth scenario would be a passage to a new scenario with forcibly modified target variables. GDP growth would shrink – after 5% in 2004 and 3% in each 2005 and 2006 – to 1% in the remaining years of the current decade. After 2005, FDI would approximately get cut in half compared to the amounts envisaged by the basic variant (in an environment of recession, retarded reforms and social tensions, and this is an optimistic projection). The targeted investment shares in GDP by 2006 are kept at 16.5% of GDP, and after that - in line with a reduced GDP growth and the necessity that the consumption growth rates do not move in the negative zone – go down to 14.5% in 2010. But that also means lower rates of growth – 5% in 2005-2006 and the negative rates of growth (decline) thereafter. That rules out the prospect of accelerated growth in the years ahead. In such a scenario there would occur a yearly financial gap of USD 600-900 million in the balance of payments. Even without it being covered by new commercial borrowing – which would probably be not possible – the debt service ratio in 2008 would climb to about 30% to remain in the zone above the 25% limit in 2010, too.

Therefore, an external debt crisis would be certain under the foregoing assumptions. The trade deficit would have to be sharply cut if not wholly eliminated. The lesson of the 80ies is that – in the face of the impossibility for economic policy to adjust consumption in the country – there follows a long-term decline in investment, a high inflation and a decade of stagnation (absence of economic growth).

3.3. Overall Assessment of the Model Projection Results

A stable economic growth of about 5%, export growth of about 15% and financing the current account deficit (with a declining share in GDP) mainly by FDI and concessional loans (with long grace periods, long repayment terms and low interest rates) – are the basic assumptions for external debt service sustainability and avoidance of an external liquidity crisis, especially in the critical 2007-2009 period. Commercial credits have to stay within the limits of up to 10% of total investments. Materialization of such assumptions necessarily requires adequate political conditions that will allow a stable functioning of the economic system, a fast resumption of privatization, and an efficient macroeconomic policy. An environment must be created that will stimulate investment from domestic and foreign savings and the raising of investment levels to at least 25% of GDP by the end of this decade. Full

economic cooperation with the rest of the world and a favorable treatment in international financial organizations are also one of the imperatives.

Views are expressed by the public – and by experts, too – that, considering the inherited debt level, any new borrowing and increase of the outstanding debt would be risky and that it needs to be avoided, even in case of concessional loans, which are granted with extremely low rates of interest, very long grace and repayment periods. The loans of that type, as projected here, are essentially the key to external debt sustainability, the key allowing passage through the critical period. Admittedly, they keep the high level of indebtedness (at about two-thirds of GDP) for three to four years but they do not burden the repayments of the principal, and marginally increase interest expenses, thus paving the road for future decrease of the relative debt level. Substitution for such loans can only be larger FDI, and not a faster decrease of deficit in the balance on goods and services. The latter would narrow room for overall domestic demand growth and impose an undesirable choice between lower investment target and negative consumption growth rates. The only right alternative would be faster-than-projected economic growth; however, it would require larger investments in general (FDI included).

For external liquidity to be preserved, the threshold needs to be: economic growth (real GDP growth) of 3% per annum, and the rise in the dollar value of export by 13%. However, this scenario is hard to sustain for social reasons – due to the necessity for consumption to decline in real terms over a period of several years. The analyzed parameters may change under the impact of the exchange rate policy and intercurrency relations but their expected impact is marginal compared to that of the parameters emphasized in this study.

All political activities would have to take into account the fact that time is a scarce commodity when it comes to avoiding a deep and long-lasting economic crisis. The assumptions of a sustainable economic growth (and, accordingly, external debt sustainability) are based on structural changes, which will have to be ensured as early as in 2004.

Appendix

Table 1

SERBIA'S EXTERNAL DEBT¹⁾

In million U.S. dollars

	2000	2001	2002	2003	2004 March
A.MEDIUM-AND LONG-TERM DEBT	9,427.3	9,867.6	9,959.6	12,243.9	12,258.7
International financial organizations	2,197.0	2,399.4	3,322.3	4,479.8	4,393.1
IMF	143.0	256.4	531.6	859.5	816.3
IBRD	1,538.0	1,601.7	1,893.3	2,269.8	2,214.6
IDA	0.0	0.0	167.8	273.1	272.8
EUROFIMA	120.0	122.3	147.9	156.4	148.7
IFC ²⁾	106.0	135.1	169.7	239.5	238.6
EIB	256.0	49.3	107.3	194.8	195.6
EC	0.0	197.5	233.4	324.8	316.9
MIB ³⁾	10.0	11.0	0.0	0.0	0.0
EBRD	0.0	2.0	44.2	131.5	160.0
EUROFOND – CEB	24.0	24.3	27.1	30.3	29.6
Governments and official agencies	4,357.2	4,344.1	3,100.0	3,429.4	3,425.6
Paris Club	3,886.6	3,791.7	2,516.2	2,808.9	2,782.0
- Consolidated debt ⁴⁾	3,872.5	3,776.0	2,432.0	2,658.8	2,620.3
- Debt incurred after 20 Dec 2000	14.1	15.7	84.2	150.1	161.7
Other governments ²⁾	470.6	552.4	583.9	620.5	643.6
China	160.0	224.2	240.7	257.9	266.8
Libya	32.9	34.5	36.2	38.1	38.1
Kuwait	277.7	293.7	306.9	318.0	320.3
Others				6.6	18.5
London Club ⁵⁾	2,235.8	2,267.1	2,408.3	2,698.7	2,708.1
Other creditors	637.2	857.0	1,129.0	1,636.0	1,731.9
B.SHORT-TERM DEBT	1,153.0	1,025.7	1,020.2	1,055.7	1,022.8
Oil and gas	490.0	502.0	512.6	520.2	440.3
Other	663.0	523.7	507.6	535.5	582.4
C. CLEARING COUNTRIES	209.0	183.0	182.5	182.5	182.5
TOTAL OUTSTANDING DEBT (A+B+C)	10,789.3	11,076.3	11,162.2	13,482.1	13,463.9
Of which:					
Kosovo and Metohija	1,215.2	1,150.4	1,104.8	1,322.1	1,297.3

Source: National Bank of Serbia.

Note: At current exchange rates, end of period.

¹⁾ Serbia's outstanding debt includes Kosovo and Metohija debt under the loans arranged before the arrival of the KFOR Mission.²⁾ The debt owed to these creditors is mostly unsettled and partly in arrears.³⁾ The creditor under this loan is no longer the International Investment Bank, Moscow, but the PFHC Establishment, Liechtenstein, and, as of 2002, the liabilities to this creditor are included in the item 'Other creditors'.⁴⁾ The debt to the Paris Club creditors was consolidated in November 2001, when it was agreed that write-offs and other terms of the debt rescheduling would be applied starting with 22 March 2002.⁵⁾ Excluding the debt repurchased by the National Bank of Yugoslavia and other Yugoslav connected persons.

Table 2

SERBIA'S EXTERNAL DEBT¹⁾

In million euros

	2000	2001	2002	2003	2004 March
A.MEDIUM-AND LONG-TERM DEBT	10,148.8	11,183.9	9,549.9	10,355.1	10,049.0
International financial organizations	2,365.2	2,719.4	3,185.6	3,583.0	3,601.2
IMF	153.9	290.6	509.7	687.5	669.2
IBRD	1,655.7	1,815.4	1,815.4	1,815.4	1,815.4
IDA	0.0	0.0	160.9	218.4	223.6
EUROFIMA	129.2	138.6	141.8	125.1	121.9
IFC ²⁾	114.1	153.1	162.8	191.6	195.6
EIB	275.6	55.8	102.9	155.8	160.4
EC	0.0	223.8	223.8	259.8	259.8
MIB ³⁾	10.8	12.5	0.0	0.0	0.0
EBRD	0.0	2.2	42.4	105.2	131.2
EUROFOND – CEB	25.8	27.5	26.0	24.2	24.2
Governments and official agencies	4,690.7	4,923.6	2,972.5	3,305.2	2,808.1
Paris Club	4,184.1	4,297.5	2,412.6	2,808.9	2,280.5
- Consolidated debt ⁴⁾	4,168.9	4,279.7	2,331.9	2,126.5	2,148.0
- Debt incurred after 20 Dec 2000	15.2	17.8	80.7	120.1	132.6
Other governments ²⁾	506.6	626.1	559.9	496.3	527.6
China	172.2	254.2	230.8	206.3	218.7
Libya	35.5	39.1	34.7	30.4	31.2
Kuwait	298.9	332.8	294.3	254.3	262.6
Others				5.3	15.2
London Club ⁵⁾	2,407.0	2,569.5	2,309.2	2,158.5	2,220.0
Other creditors	686.0	971.4	1,082.5	1,308.5	1,419.7
B.SHORT-TERM DEBT	1,241.2	1,162.6	978.2	844.4	838.4
Oil and gas	527.5	569.0	491.5	416.0	361.0
Other	713.7	593.6	486.7	428.3	477.4
C. CLEARING COUNTRIES	225.0	207.4	175.0	145.9	149.6
TOTAL OUTSTANDING DEBT (A+B+C)	11,615.1	12,553.9	10,703.1	11,345.4	11,036.9
Of which:					
Kosovo and Metohija	1,308.2	1,303.9	1,059.3	1,057.4	1,063.5

Source: National Bank of Serbia.

Note: At current exchange rates, end of period.

¹⁾ Serbia's outstanding debt includes Kosovo and Metohija debt under the loans arranged before the arrival of the KFOR Mission.²⁾ The debt owed to these creditors is mostly unsettled and partly in arrears.³⁾ The creditor under this loan is no longer the International Investment Bank, Moscow, but the PFHC Establishment, Liechtenstein, and, as of 2002, the liabilities to this creditor are included in the item 'Other creditors'.⁴⁾ The debt to the Paris Club creditors was consolidated in November 2001, when it was agreed that write-offs and other terms of the debt rescheduling would be applied starting with 22 March 2002.⁵⁾ Excluding the debt repurchased by the National Bank of Yugoslavia and other Yugoslav connected persons.

Table 3

NEW AND REFINANCED DEBT OF SERBIA¹⁾

In millions of U.S.dollars

	2003	2004 March
Loans arranged after 20 Dec 2000		
A.MEDIUM-AND LONG-TERM DEBT	2,185.1	2,341.8
International financial organizations	1,324.4	1,335.8
IMF	696.6	674.7
IDA	273.1	272.8
EUROFIMA	13.6	13.3
IFC ²⁾	28.8	33.0
EIB	135.8	138.1
EC	45.0	43.9
EBRD	131.5	160.0
Governments and official agencies	156.7	180.2
Paris Club	150.1	161.7
Other governments	6.6	18.5
Poland	6.5	18.4
Hungary	0.1	0.1
Other creditors	704.0	825.9
B.SHORT-TERM DEBT	41.8	89.5
TOTAL OUTSTANDING DEBT (A+B+C)	2,227.0	2,431.4
Refinancing loans after 20 Dec 2000		
International financial organizations	2,885.6	2,794.2
IMF – Post-conflict loan	162.9	141.6
IBRD	2,269.8	2,214.6
EUROFIMA	142.8	135.4
EC (Loan to EIB refinanced)	279.8	273.0
EUROFOND – CEB	30.3	29.6
Paris Club – consolidated debt	2,658.8	2,620.3
TOTAL DEBT UNDER REFINANCED LOANS	5,544.4	5,414.5
TOTAL NEW AND REFINANCED DEBT	7,771.4	7,845.9

Source: National Bank of Serbia.

Note: At exchange rates valid on 31 December 2003 and 31 March 2004, respectively.

1) Outstanding debt of Serbia including Kosovo and Metohija under the loans arranged and refinanced after 20 December 2000.

Table 4

REPAYMENT SCHEDULE OF SERBIA'S EXTERNAL DEBT*

In million U.S. dollars

		2003 Repaid	2004	2005	2006	2007	2008	2009	2010
A. MEDIUM-AND LONG-TERM DEBT OBLIGATIONS	Principal	176	481	496	258	384	335	331	270
	Interest	218	302	317	314	337	356	355	356
<i>Obligations to international financial organizations</i>	Principal	27	264	254	147	208	270	278	217
	Interest	140	185	176	167	161	151	141	132
Of which to:									
MMF	Principal	0	221	195	38	70	139	128	70
	Interest	16	30	21	15	14	10	7	3
IBRD – consolidated debt	Principal	-	-	17	51	68	79	89	89
	Interest	95	114	114	113	110	106	102	98
IDA	Principal	0	0	0	0	0	0	0	0
	Interest	1	2	2	2	2	2	2	2
EUROFIM – I	Principal	-	0	-	-	4	-	-	-
	Interest	6	6	5	5	4	3	2	2
EBRD – IMA loans	Principal	2	21	9	17	15	11	19	5
	Interest	3	6	6	6	5	4	3	2
<i>Obligations to governments</i>	Principal	12	19	26	33	39	44	57	50
	Interest	41	53	65	78	89	99	96	93
Paris Club – old consolidated debt	Principal	0	0	1	8	15	29	45	42
	Interest	37	48	60	75	86	97	94	91
<i>Obligations to other governments (old loans)</i>	Principal	0	0	0	0	0	0	0	2
	Interest	0	4	7	8	11	14	17	19
<i>Obligations to commercial banks (London Club)</i>	Principal	-	-	-	-	-	-	-	8
	Interest	0	16	32	33	49	63	73	83
<i>Obligations to other creditors</i>	Principal	137	199	221	91	158	43	23	21
	Interest	37	44	37	28	28	28	28	29
B. OBLIGATIONS UNDER SHORT-TERM DEBT	Principal	28	42	0	0	0	253	253	253
	Interest	1	59	58	58	58	54	40	25
C. OBLIGATIONS UNDER CLEARING AGREEMENTS	Principal	-	-	-	-	-	-	-	1
	Interest	0	1	2	2	3	4	5	6
TOTAL OBLIGATIONS - REPAYMENTS (A+B+C)	Principal	204	523	501	272	406	611	611	553
	Interest	218	362	377	374	399	414	400	387
DEBT OUTSTANDING, END OF PERIOD			12,959	12,457	12,185	11,780	11,169	10,557	10,004

Source: National Bank of Yugoslavia.

*As per the debt outstanding on 31 December 2003 (including the Kosovo and Metohija loans arranged before the arrival of the KFOR Mission).

Table 5

GENERAL ASSUMPTIONS INCLUDED IN THE MODEL

	2003	2004	2005	2006	2007	2008	2009	2010
USD/Dinar exchange rate	57	58	63	67	70	72	74	76
EUR/Dinar exchange rate	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
GDP deflator, in %	15.0	8.2	6.7	5.2	5.1	5.2	5.3	5.3
Domestic demand deflator, in %	12.1	8.4	7.0	5.3	5.0	5.0	5.0	5.0
Consumption deflator, in %	12.3	8.3	6.9	5.3	5.0	5.0	5.0	5.0
Investment deflator, in %	10.5	8.7	7.4	5.4	4.9	4.9	4.9	4.9
Retail prices (average growth), in %	11.6	8.4	7.0	5.3	5.0	5.0	5.0	5.0
Short-term credit lines, net, in USDm	14	48	48	48	48	48	48	48
Grants, in USD million	476	300	315	250	200	200	0	0

Table 6

BALANCE OF PAYMENTS – BASIC SCENARIO

	2004*	2005*	2006	2007	2008	2009	2010
A. CURRENT TRANSACTIONS							
Export of goods	3021.0	3888.0	4397.0	4907.0	5685.0	6429.0	7144.0
Export of services	1117.0	1438.0	1626.0	1815.0	2102.0	2378.0	2642.0
Export of goods and services	4138.0	5326.0	6023.0	6722.0	7787.0	8807.0	9786.0
<i>Growth rate of goods and services export</i>	<i>1.2</i>	<i>1.3</i>	<i>1.1</i>	<i>1.1</i>	<i>1.2</i>	<i>1.1</i>	<i>1.1</i>
Import of goods	7898.0	8801.0	9294.0	9812.0	10561.0	11367.0	12234.0
Import of services	878.0	978.0	1033.0	1090.0	1173.0	1263.0	1359.0
Import of goods and services	8776.0	9779.0	10326.0	10902.0	11735.0	12630.0	13593.0
<i>Growth rate of goods and services import</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>
Balance on goods	-4877.0	-4913.0	-4897.0	-4905.0	-4877.0	-4938.0	-5090.0
Balance on services	240.0	460.0	594.0	725.0	929.0	1115.0	1283.0
Balance on goods and services	-4638.0	-4453.0	-4303.0	-4180.0	-3948.0	-3823.0	-3807.0
Interest paid	390.0	474.0	509.0	565.0	604.0	606.0	599.0
- New debt	28.0	96.0	135.0	167.0	190.0	206.0	212.0
a) Guaranteed	28.0	61.0	87.0	106.0	117.0	123.0	118.0
- IMF		21.0	15.0	14.0	10.0	7.0	3.0
b) Commercial	0.0	35.0	48.0	61.0	73.0	83.0	94.0
- Old debt	362.0	377.0	374.0	399.0	414.0	400.0	387.0
Interest collected	90.0	93.0	97.0	102.0	109.0	117.0	126.0
Balance on interest	-300.0	-381.0	-412.0	-463.0	-495.0	-488.0	-472.0
Net current transfers	2593.0	2675.0	2792.0	2949.0	3151.0	3385.0	3636.0
- Exchange offices	1419.0	1464.0	1528.0	1614.0	1724.0	1853.0	1990.0
- Montenegro and Kosovo	365.0	376.0	393.0	415.0	443.0	476.0	511.0
- Other	809.0	835.0	871.0	920.0	984.0	1056.0	1135.0
Current account balance (excl. grants)	300.0	315.0	250.0	200.0	200.0		
Official transfers (grants)							
B. CAPITAL ACCOUNT							
Long-term loans – inflow	1424.0	1266.0	1190.0	1109.0	980.0	897.0	749.0
- Guaranteed	924.0	873.0	730.0	575.0	370.0	200.0	0.0
- Commercial	500.0	392.0	460.0	534.0	610.0	697.0	749.0
Long-term loans – payment	481.0	671.0	539.0	794.0	1152.0	1226.0	1237.0
- Old debt	481.0	501.0	272.0	406.0	611.0	611.0	553.0
- New debt	0.0	169.0	267.0	388.0	541.0	615.0	684.0
- IMF		195.0	38.0	70.0	139.0	128.0	70.0
a) Guaranteed	0.0	5.0	25.0	53.0	100.0	116.0	145.0
b) Commercial (5 years, 5% interest)	0.0	164.0	242.0	334.0	441.0	499.0	539.0
Short-term credit lines – net	48.0	48.0	48.0	48.0	48.0	48.0	48.0
Balance on credit transactions	991.0	643.0	699.0	364.0	-124.0	-281.0	-440.0
Capital investment	997.0	1181.0	1301.0	1553.0	1704.0	1730.0	1634.0
Direct investments – net	800.0	981.0	1196.0	1443.0	1586.0	1604.0	1498.0
Concessions	100.0	100.0					
<i>Share of FDI in overall investments</i>	<i>0.2</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.2</i>	<i>0.2</i>
Savings (new) at home	139.0	143.0	150.0	158.0	169.0	181.0	195.0
One-off exchange offices	376.0	388.0	405.0	428.0	457.0	491.0	527.0
Payment of frozen F/C deposits	-271.0	-260.0	-246.0	-241.0	-242.0	-249.0	-260.0
Other	-147.0	-171.0	-204.0	-235.0	-266.0	-297.0	-326.0
Capital account balance	1988.0	1824.0	1999.0	1917.0	1580.0	1449.0	1194.0
- of which: inflow of capital and loans	2469.0	2494.0	2539.0	2711.0	2732.0	2676.0	2431.0
Errors and omissions	14.0	16.0	10.0	36.0	12.0	23.0	-75.0
Foreign exchange reserves – changes	-42.0	-4.0	336.0	458.0	500.0	547.0	475.0
MEMORANDUM ITEMS							
Outstanding debt	14425.0	15020.0	15671.0	15987.0	15814.0	15485.0	14997.0
Old debt	13001.0	12500.0	12228.0	11822.0	11211.0	10600.0	10046.0
New debt	1424.0	2520.0	3443.0	4165.0	4604.0	4886.0	4951.0
- Guaranteed	924.0	1792.0	2497.0	3019.0	3289.0	3373.0	3228.0
- Commercial	500.0	728.0	946.0	1146.0	1315.0	1513.0	1723.0
Debt service	871.0	1144.0	1048.0	1359.0	1756.0	1832.0	1836.0
Principal amortization	481.0	671.0	539.0	794.0	1152.0	1226.0	1237.0
Interest payments	390.0	474.0	509.0	565.0	604.0	606.0	599.0
Foreign exchange reserves	4393.0	4389.0	4724.0	5183.0	5683.0	6230.0	6705.0
GDP growth rate (in %)	1.1	1.0	1.0	1.1	1.1	1.1	1.1
Debt service ratio	21.0	21.5	17.4	20.2	22.6	20.8	18.8
Share of goods export in GDP	14.1	17.6	19.1	20.2	21.9	23.0	23.8
Share of goods and services export in GDP	19.4	24.2	26.2	27.7	30.0	31.6	32.7
Share of goods and services import in GDP	41.1	44.4	44.9	44.9	45.2	45.3	45.4
External debt/export of goods and services	348.6	282.0	260.2	237.8	203.1	175.8	153.2
External debt/export of goods	477.5	386.3	356.4	325.8	278.2	240.9	209.9
External debt/GDP	67.5	68.2	68.1	65.8	60.9	55.5	50.1
Share of interest in GDP	1.4	1.7	1.8	1.9	1.9	1.8	1.6
Debt service/GDP	4.1	5.2	4.6	5.6	6.8	6.6	6.1
Share of foreign investments in GDP	3.7	4.5	5.2	5.9	6.1	5.8	5.0

* The debt service ratio also includes IMF loan repayments, which are not normally calculated in debt indicators.

Table 7**GDP BALANCE – BASIC SCENARIO (AND SCENARIO WITHOUT CONCESSIONAL LOANS)**

	2004	2005	2006	2007	2008	2009	2010
GDP, in USD million, at current exchange rate	21,365	22,037	23,003	24,295	25,960	27,891	29,957
GDP, real growth	5.0	5.0	5.0	5.0	5.0	5.0	5.0
GDP, at current prices, in billion dinars.	1,236.7	1,385.4	1,530.4	1,688.7	1,866.2	2,063.2	2,280.3
Domestic demand	1,484.0	1,641.7	1,790.6	1,950.5	2,118.2	2,310.8	2,531.1
Consumption	1,288.6	1,395.1	1,484.5	1,579.0	1,679.6	1,795.0	1,961.0
Personal consumption	1,053.6	1,159.6	1,242.7	1,325.6	1,414.6	1,518.5	1,671.4
Public (collective) consumption	235.0	235.5	241.8	253.3	265.0	276.5	289.6
Investment	195.4	246.6	306.1	371.5	438.6	515.8	570.1
Export of goods and services, net	-247.3	-256.3	-260.2	-261.8	-251.9	-247.6	-250.8
Net exports, share in %	-20.0	-18.5	-17.0	-15.5	-13.5	-12.0	-11.0
Consumption, share in %	104.2	100.7	97.0	93.5	90.0	87.0	86.0
Consumption, real growth y %	2.3	1.2	1.1	1.3	1.3	1.7	4.0
Personal consumption, share in %	85.2	83.7	81.2	78.5	75.8	73.6	73.3
Public (collective) consumption, share in %	19.0	17.0	15.8	15.0	14.2	13.4	12.7
Investment, share in %	15.8	17.8	20.0	22.0	23.5	25.0	25.0
Investment, real growth y %	10.1	17.5	17.8	15.7	12.6	12.2	5.4
Trade balance (goods and serv.), in USD million	-4,638	-4,453	-4,303	-4,180	-3,948	-3,823	-3,807
Balance with other Republic, in USD million	365	376	393	415	443	476	511
Total for GDP balance (net exports)	-4,273	-4,077	-3,910	-3,766	-3,505	-3,347	-3,295
USD/Dinar exchange rate	58.0	63.0	67.0	70.0	72.0	74.0	76.0
GDP deflator, in %	8.2	6.7	5.2	5.1	5.2	5.3	5.3
Domestic demand deflator, in %	8.4	7.0	5.3	5.0	5.0	5.0	5.0
Consumption deflator, in %	8.3	6.9	5.3	5.0	5.0	5.0	5.0
Investment deflator, in %	8.7	7.4	5.4	4.9	4.9	4.9	4.9
Retail prices (average growth in %)	8.4	7.0	5.3	5.0	5.0	5.0	5.0

Table 8

BALANCE OF PAYMENTS – SCENARIO WITHOUT CONCESSIONAL LOANS

	2004*	2005*	2006	2007	2008	2009	2010
A. CURRENT TRANSACTIONS							
Export of goods	3,021.0	3,888.0	4,397.0	4,907.0	5,685.0	6,429.0	7,144.0
Export of services	1,117.0	1,438.0	1,626.0	1,815.0	2,102.0	2,378.0	2,642.0
Export of goods and services	4,138.0	5,326.0	6,023.0	6,722.0	7,787.0	8,807.0	9,786.0
<i>Growth rate of goods and services export</i>	<i>1.2</i>	<i>1.3</i>	<i>1.1</i>	<i>1.1</i>	<i>1.2</i>	<i>1.1</i>	<i>1.1</i>
Import of goods	7,898.0	8,801.0	9,294.0	9,812.0	10,561.0	11,367.0	12,234.0
Import of services	878.0	978.0	1,033.0	1,090.0	1,173.0	1,263.0	1,359.0
Import of goods and services	8,776.0	9,779.0	10,326.0	10,902.0	11,735.0	12,630.0	13,593.0
<i>Growth rate of goods and services import</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>
Balance on goods	-4,877.0	-4,913.0	-4,897.0	-4,905.0	-4,877.0	-4,938.0	-5,090.0
Balance on services	240.0	460.0	594.0	725.0	929.0	1,115.0	1,283.0
Balance on goods and services	-4,638.0	-4,453.0	-4,303.0	-4,180.0	-3,948.0	-3,823.0	-3,807.0
Interest paid	390.0	476.0	515.0	576.0	618.0	620.0	611.0
- New debt	28.0	99.0	141.0	177.0	204.0	220.0	224.0
a) Guaranteed	28.0	64.0	93.0	116.0	131.0	137.0	130.0
- IMF		21.0	15.0	14.0	10.0	7.0	3.0
b) Commercial	0.0	35.0	48.0	61.0	73.0	83.0	94.0
- Old debt	362.0	377.0	374.0	399.0	414.0	400.0	387.0
Interest collected	90.0	93.0	97.0	102.0	109.0	117.0	126.0
Balance on interest	-300.0	-384.0	-418.0	-473.0	-509.0	-503.0	-485.0
Net current transfers	2,593.0	2,675.0	2,792.0	2,949.0	3,151.0	3,385.0	3,636.0
- Exchange offices	1,419.0	1,464.0	1,528.0	1,614.0	1,724.0	1,853.0	1,990.0
- Montenegro and Kosovo	365.0	376.0	393.0	415.0	443.0	476.0	511.0
- Other	809.0	835.0	871.0	920.0	983.0	1,056.0	1,135.0
Current account balance (excl. grants)	-2,344.0	-2,162.0	-1,929.0	-1,705.0	-1,306.0	-941.0	-656.0
Official transfers (grants)	300.0	315.0	250.0	200.0	200.0		
B. CAPITAL ACCOUNT							
Long-term loans – inflow	1,424.0	1,265.0	1,175.0	1,144.0	1,045.0	947.0	749.0
- Guaranteed	924.0	872.0	715.0	610.0	435.0	250.0	0.0
- Commercial	500.0	392.0	460.0	534.0	610.0	697.0	749.0
Long-term loans – payment	481.0	671.0	554.0	821.0	1,198.0	1,274.0	1,291.0
- Old debt	481.0	501.0	272.0	406.0	611.0	611.0	553.0
- New debt	0.0	169.0	282.0	415.0	586.0	663.0	737.0
- IMF		195.0	38.0	70.0	139.0	128.0	70.0
a) Guaranteed	0.0	5.0	39.0	81.0	145.0	163.0	199.0
b) Commercial (5 years, 5% interest)	0.0	164.0	242.0	334.0	441.0	499.0	539.0
Short-term credit lines – net	48.0	48.0	48.0	48.0	48.0	48.0	48.0
Balance on credit transactions	991.0	642.0	669.0	371.0	-104.0	-278.0	-494.0
Capital investment	997.0	1,181.0	1,301.0	1,553.0	1,704.0	1,730.0	1,634.0
Direct investments – net	800.0	981.0	1,196.0	1,443.0	1,586.0	1,604.0	1,498.0
Concessions	100.0	100.0					
<i>Share of FDI in overall investments</i>	<i>0.2</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.3</i>	<i>0.2</i>	<i>0.2</i>
Savings (new) at home	139.0	143.0	150.0	158.0	169.0	181.0	195.0
One-off exchange offices	376.0	388.0	405.0	428.0	457.0	491.0	527.0
Payment of frozen F/C deposits	-271.0	-260.0	-246.0	-241.0	-242.0	-249.0	-260.0
Other	-147.0	-171.0	-204.0	-235.0	-266.0	-297.0	-326.0
Capital account balance	1,988.0	1,823.0	1,970.0	1,925.0	1,600.0	1,452.0	1,140.0
- of which: inflow of capital and loans	2,469.0	2,493.0	2,524.0	2,746.0	2,797.0	2,726.0	2,431.0
Errors and omissions	14.0	20.0	45.0	39.0	7.0	35.0	-9.0
Foreign exchange reserves – changes	-42.0	-4.0	336.0	458.0	500.0	547.0	475.0
MEMORANDUM ITEMS							
Outstanding debt	14,425.0	15,019.0	15,640.0	15,964.0	15,811.0	15,485.0	14,943.0
Old debt	13,001.0	12,500.0	12,228.0	11,822.0	11,211.0	10,600.0	10,046.0
New debt	1,424.0	2,519.0	3,413.0	4,142.0	4,600.0	4,885.0	4,897.0
- Guaranteed	924.0	1,791.0	2,467.0	2,996.0	3,286.0	3,373.0	3,174.0
- Commercial	500.0	728.0	946.0	1,146.0	1,315.0	1,513.0	1,723.0
Debt service	871.0	1,147.0	1,068.0	1,397.0	1,816.0	1,894.0	1,902.0
Principal amortization	481.0	671.0	554.0	821.0	1,198.0	1,274.0	1,291.0
Interest payments	390.0	476.0	515.0	576.0	618.0	620.0	611.0
Foreign exchange reserves	4,393.0	4,389.0	4,724.0	5,183.0	5,683.0	6,230.0	6,705.0
GDP growth rate (in %)	1.1	1.0	1.0	1.1	1.1	1.1	1.1
Debt service ratio	21.0	21.5	17.7	20.8	23.3	21.5	19.4
Share of goods export in GDP	14.1	17.6	19.1	20.2	21.9	23.0	23.8
Share of goods and services export in GDP	19.4	24.2	26.2	27.7	30.0	31.6	32.7
Share of goods and services import in GDP	41.1	44.4	44.9	44.9	45.2	45.3	45.4
External debt/export of goods and services	349.0	282.0	260.0	237.0	203.0	176.0	153.0
External debt/export of goods	477.0	386.0	356.0	325.0	278.0	241.0	209.0
External debt/GDP	67.5	68.2	68.0	65.7	60.9	55.5	49.9
Share of interest in GDP	1.4	1.7	1.8	1.9	2.0	1.8	1.6
Debt service/GDP	4.1	5.2	4.6	5.8	7.0	6.8	6.3
Share of foreign investments in GDP	3.7	4.5	5.2	5.9	6.1	5.8	5.0

* The debt service ratio also includes IMF loan repayments, which are not normally calculated in debt indicators.

Table 9**GDP BALANCE – SLOWER GROWTH SCENARIO**

	2004	2005	2006	2007	2008	2009	2010
GDP, in USD million, at current exchange rate	21,365	21,617	22,135	22,933	24,038	25,334	26,692
GDP, real growth	5.0	3.0	3.0	3.0	3.0	3.0	3.0
GDP, at current prices, in billion dinars.	1,236.7	1,359.0	1,472.7	1,594.0	1,728.0	1,874.0	2,031.8
Domestic demand	1,484.0	1,610.4	1,723.0	1,841.1	1,961.3	2,098.9	2,255.2
Consumption	1,288.6	1,368.5	1,428.5	1,490.4	1,555.2	1,630.4	1,747.3
Personal consumption	1,053.6	1,137.5	1,195.8	1,251.3	1,309.9	1,379.3	1,489.3
Public (collective) consumption	235.0	231.0	232.7	239.1	245.4	251.1	258.0
Investment	195.4	241.9	294.5	350.7	406.1	468.5	507.9
Export of goods and services, net	-247.3	-251.4	-250.4	-247.1	-233.3	-224.9	-223.5
Net exports, share in %	-20.0	-18.5	-17.0	-15.5	-13.5	-12.0	-11.0
Consumption, share in %	104.2	100.7	97.0	93.5	90.0	87.0	86.0
Consumption, real growth y %	2.3	-0.7	-0.9	-0.6	-0.7	-0.2	2.0
Personal consumption, share in %	85.2	83.7	81.2	78.5	75.8	73.6	73.3
Public (collective) consumption, share in %	19.0	17.0	15.8	15.0	14.2	13.4	12.7
Investment, share in %	15.8	17.8	20.0	22.0	23.5	25.0	25.0
Investment, real growth y %	10.1	15.2	15.5	13.5	10.4	10.0	3.4
Trade balance (goods and serv.), in USD million	-4,638	-4,368	-4,141	-3,946	-3,655	-3,473	-3,392
Balance with other Republic, in USD million	365	369	378	391	410	432	456
Total for GDP balance (net exports)	-4,273	-3,999	-3,763	-3,555	-3,245	-3,040	-2,936
USD/Dinar exchange rate	57.9	62.9	66.5	69.5	71.9	74.0	76.1
GDP deflator, in %	8.2	6.7	5.2	5.1	5.2	5.3	5.3
Domestic demand deflator, in %	8.4	7.0	5.3	5.0	5.0	5.0	5.0
Consumption deflator, in %	8.3	6.9	5.3	5.0	5.0	5.0	5.0
Investment deflator, in %	8.7	7.4	5.4	4.9	4.9	4.9	4.9
Retail prices (average growth in %)	8.4	7.0	5.3	5.0	5.0	5.0	5.0

Table 10

BALANCE OF PAYMENTS – SLOWER GROWTH SCENARIO

	2004*	2005*	2006	2007	2008	2009	2010
A. CURRENT TRANSACTIONS							
Export of goods	2,959.0	3,814.0	4,231.0	4,632.0	5,264.0	5,839.0	6,365.0
Export of services	1,094.0	1,411.0	1,565.0	1,713.0	1,947.0	2,160.0	2,354.0
Export of goods and services	4,053.0	5,224.0	5,796.0	6,345.0	7,210.0	7,999.0	8,720.0
<i>Growth rate of goods and services export</i>	<i>1.2</i>	<i>1.3</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>
Import of goods	7,822.0	8,633.0	8,943.0	9,262.0	9,779.0	10,325.0	10,900.0
Import of services	869.0	959.0	994.0	1,029.0	1,087.0	1,147.0	1,211.0
Import of goods and services	8,691.0	9,592.0	9,937.0	10,291.0	10,866.0	11,472.0	12,112.0
<i>Growth rate of goods and services import</i>	<i>1.1</i>	<i>1.1</i>	<i>1.0</i>	<i>1.0</i>	<i>1.1</i>	<i>1.1</i>	<i>1.1</i>
Balance on goods	-4,863.0	-4,819.0	-4,712.0	-4,630.0	-4,516.0	-4,485.0	-4,535.0
Balance on services	225.0	451.0	571.0	684.0	860.0	1,013.0	1,143.0
Balance on goods and services	-4,638.0	-4,368.0	-4,141.0	-3,946.0	-3,655.0	-3,473.0	-3,392.0
Interest paid	390.0	469.0	508.0	575.0	618.0	624.0	621.0
- New debt	28.0	91.0	134.0	176.0	203.0	224.0	234.0
a) Guaranteed	28.0	57.0	87.0	116.0	125.0	122.0	111.0
- IMF		21.0	15.0	14.0	10.0	7.0	3.0
b) Commercial	0.0	35.0	47.0	60.0	79.0	101.0	123.0
- Old debt	362.0	377.0	374.0	399.0	414.0	400.0	387.0
Interest collected	90.0	91.0	93.0	97.0	101.0	107.0	112.0
Balance on interest	-300.0	-378.0	-415.0	-478.0	-517.0	-517.0	-508.0
Net current transfers	2,593.0	2,624.0	2,686.0	2,783.0	2,917.0	3,075.0	3,240.0
- Exchange offices	1,419.0	1,436.0	1,470.0	1,523.0	1,597.0	1,683.0	1,773.0
- Montenegro and Kosovo	365.0	369.0	378.0	391.0	410.0	432.0	456.0
- Other	809.0	819.0	838.0	869.0	910.0	960.0	1,011.0
Current account balance (excl grants)	-2,344.0	-2,122.0	-1,869.0	-1,641.0	-1,255.0	-915.0	-661.0
Official transfers (grants)	300.0	315.0	250.0	200.0	200.0		
B CAPITAL ACCOUNT							
Long-term loans – inflow	1,424.0	1,098.0	1,203.0	1,260.0	1,147.0	1,080.0	1,001.0
- Guaranteed	924.0	714.0	760.0	705.0	300.0	130.0	0.0
- Commercial	500.0	385.0	443.0	555.0	847.0	950.0	1,001.0
Long-term loans – payment	481.0	671.0	523.0	825.0	1,262.0	1,420.0	1,481.0
- Old debt	481.0	501.0	272.0	406.0	611.0	611.0	553.0
- New debt	0.0	169.0	251.0	420.0	651.0	809.0	928.0
- IMF		195.0	38.0	70.0	139.0	128.0	70.0
a) Guaranteed	0.0	5.0	10.0	90.0	210.0	263.0	292.0
b) Commercial (5 years. 5% interest)	0.0	164.0	241.0	329.0	440.0	546.0	636.0
Short-term credit lines – net	48.0	48.0	48.0	48.0	48.0	48.0	48.0
Balance on credit transactions	991.0	476.0	727.0	483.0	-66.0	-292.0	-432.0
Capital investment	997.0	1,113.0	1,146.0	1,288.0	1,427.0	1,522.0	1,392.0
Direct investments – net	800.0	923.0	1,062.0	1,211.0	1,356.0	1,457.0	1,335.0
Concessions	100.0	100.0					
<i>Share of FDI in overall investments</i>	<i>0.2</i>	<i>0.2</i>	<i>0.2</i>	<i>0.2</i>	<i>0.2</i>	<i>0.2</i>	<i>0.2</i>
Savings (new) at home	139.0	141.0	144.0	149.0	156.0	165.0	174.0
One-off exchange offices	376.0	380.0	390.0	404.0	423.0	446.0	470.0
Payment of frozen F/C deposits	-271.0	-260.0	-246.0	-241.0	-242.0	-249.0	-260.0
Other	-147.0	-171.0	-204.0	-235.0	-266.0	-297.0	-326.0
Capital account balance	1,988.0	1,589.0	1,873.0	1,771.0	1,361.0	1,230.0	960.0
- of which: inflow of capital and loans	2,469.0	2,260.0	2,397.0	2,596.0	2,623.0	2,650.0	2,441.0
Errors and omissions	14.0	48.0	-18.0	10.0	57.0	74.0	10.0
Foreign exchange reserves – changes	-42.0	-170.0	237.0	340.0	363.0	389.0	310.0
MEMORANDUM ITEMS							
Outstanding debt	14,425.0	14,853.0	15,532.0	15,967.0	15,852.0	15,512.0	15,033.0
Old debt	13,001.0	12,500.0	12,228.0	11,822.0	11,211.0	10,600.0	10,046.0
New debt	1,424.0	2,353.0	3,304.0	4,145.0	4,641.0	4,913.0	4,986.0
- Guaranteed	924.0	1,632.0	2,382.0	2,997.0	3,087.0	2,954.0	2,662.0
- Commercial	500.0	721.0	923.0	1,148.0	1,555.0	1,959.0	2,324.0
Debt service	871.0	1,140.0	1,031.0	1,400.0	1,880.0	2,044.0	2,102.0
Principal amortization	481.0	671.0	523.0	825.0	1,262.0	1,420.0	1,481.0
Interest payments	390.0	469.0	508.0	575.0	618.0	624.0	621.0
Foreign exchange reserves	4,393.0	4,223.0	4,460.0	4,799.0	5,162.0	5,551.0	5,861.0
GDP growth rate (in %)	1.1	1.0	1.0	1.0	1.0	1.1	1.1
Debt service ratio	21.5	21.8	17.8	22.1	26.1	25.5	24.1
Share of goods export in GDP	13.8	17.6	19.1	20.2	21.9	23.0	23.8
Share of goods and services export in GDP	19.0	24.2	26.2	27.7	30.0	31.6	32.7
Share of goods and services import in GDP	40.7	44.4	44.9	44.9	45.2	45.3	45.4
External debt/export of goods and services	356.0	284.0	268.0	252.0	220.0	194.0	172.0
External debt/export of goods	488.0	389.0	367.0	345.0	301.0	266.0	236.0
External debt/GDP	67.5	68.7	70.2	69.6	65.9	61.2	56.3
Share of interest in GDP	1.4	1.7	1.9	2.1	2.1	2.0	1.9
Debt service/GDP	4.1	5.3	4.7	6.1	7.8	8.1	7.9
Share of foreign investments in GDP	3.7	4.3	4.8	5.3	5.6	5.8	5.0

* The debt service ratio also includes IMF loan repayments, which are not normally calculated in debt indicators

AUTHORS:**From the National Bank of Serbia**

Branko Hinić

Marina Mladenović-Komatina

Snežana Pajić

Mirko Djukić

Gordana Liješević

Milorad Potić

External consultants of the National Bank of Serbia

Stojan Stamenković

Miladin Kovačević