INTERNATIONAL MONETARY FUND AND WORLD BANK

Armenia, Georgia, Kyrgyz Republic, Moldova, and Tajikistan: External and Fiscal Sustainability—Background Paper

Prepared Jointly by European II Department of the IMF
and the Europe and Central Asia Region of the World Bank

(In consultation with other departments)

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February 6, 2001

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I. Introduction

1. This paper contains background materials on the debt situation in Armenia, Georgia, the Kyrgyz Republic, Moldova, and Tajikistan. It is based on debt sustainability analyses prepared for each country by the staffs of the Fund and the World Bank. Section II contains summaries of the findings for each country and the individual country cases are presented in the following sections.

2. The results of the analysis should be interpreted with caution given the experience of the five countries during the past decade and the uncertainty of making 10-year projections. In particular, growth rates for exports and real GDP have been lower than expected at the onset of the transition process and subject to large fluctuations. Countries remain vulnerable to external shocks (as evidenced by the effects of the Russian financial crisis in 1998) and regional/intercountry tensions continue to be an important factor. Nonetheless, given the low starting base in most of these countries, the potential for rapid growth, especially in the next few years, is present.

3. All scenarios assume further adjustment by each country over the next decade and the concomitant assumptions about macroeconomic variables are presented in the Statistical Annex. But given the often volatile external environment and the difficulty of predicting the links between fiscal and external adjustment and other macroeconomic variables, the country cases present two alternative scenarios to illustrate a possible range of outcomes. Furthermore, while an effort has been made to make the country notes comparable, country projections are made on the basis of information available to the staff and the specifics of the particular situation. Specifically, the projections in Scenario One are consistent with those presented in recent Fund-supported programs.[1] As a result, there are differences between the cases regarding, for example, the terms of gap financing, privatization or commitment of external assistance.

4. Finally, while the data on external debt are relatively reliable, other data frequently are weak, including those on exports and national accounts, which make interpretation of level indicators at times problematic.

II. Summaries

A. Armenia

5. The government and government-guaranteed external debt of Armenia has risen rapidly from negligible amounts at the time of independence in 1991 to $855 million at end-1999. From 1995 to 1999, the structure of the external debt remained broadly constant with multilateral debt constituting about ¾ of total debt. In net present value (NPV) terms,

[1] Armenia (forthcoming), Georgia (EBS/00/258, the Kyrgyz Republic (EBS/00/182), Moldova (EBS/00/249), and Tajikistan (EBS/00/206).

outstanding debt at the end of 1999 is estimated at $549 million. Relative to exports, fiscal revenue, and GDP, the NPV of debt amounted to 154 percent, 167 percent, and 30 percent, respectively.

6. Scenario One assumes that a strong adjustment program will be in place, including a significant tightening of the fiscal stance so as to attain by 2003 a medium-term target of an externally-financed budgetary deficit of 2.0 percent of GDP. Consistent with this, external disbursements are expected to remain substantial, of which IDA will remain the most important source of new financing. In Scenario One, the NPV of debt as a share of exports is projected to decrease from 154 percent in 1999, to 135 percent by 2003, and to 118 percent by 2010, as exports are expected to grow substantially. The debt-service ratio will remain well below 15 percent of exports of goods and services from 2001 onward and fall below 10 percent toward the end of the projection period. During the same period, the NPV of debt relative to central government revenues is projected to gradually decline from 168 percent to just over 150 percent, and the share of debt service in government revenues should fall from 22 percent to a modest 8 percent.

7. Scenario Two evaluates the macroeconomic consequences of a less favorable external environment and/or the slower output response to the same policies than in Scenario One. In the event, and reflecting lower export growth, the NPV of debt-to-exports ratio would increase throughout the projection period, reaching 250 percent in 2010. The debt-service ratio would also gradually increase to about 25 percent. Similarly in terms of central government revenues, both the NPV of debt and the debt-service ratio would increase to 400 and 30 percent, respectively, by the end of the projection period, severely crowding out other expenditures.

B. Georgia

8. Georgia's government and government-guaranteed external debt at end-1999 was about $1.7 billion, of which 50 percent was owed to multilateral institutions. Debt owed to bilateral creditors accounted for the rest, with debt to the CIS countries, mainly Turkmenistan and Russia, amounting to about 30 percent of the total. In NPV terms, the total debt stock at end-1999 was about $1.5 billion, equivalent to 213 percent of exports of goods and services, and an exceptionally high 688 percent of central government revenues.

9. Scenario One is predicated on a strong economic adjustment program, supported by the IMF, the World Bank, and bilateral creditors. It assumes strong investment and export-led economic growth which, in tandem with declining inflation and a stable exchange rate, would allow an improvement in the external current account over the medium term. It also assumes a strengthening of general government revenues from 15.8 percent of GDP in 1999 to 20 percent per annum on average in 2004-10.

10. Based on these assumptions, Georgia's external debt, as a share of its GDP is projected to decline steadily from 2003 from a level of about 60 percent in 1999-2002. Following a planned restructuring of debt to bilateral creditors in 2001, external-debt service as a share of exports of goods and services would average 12 percent in 2000-02, rising to 18–20 percent in 2003–04, and gradually declining over the medium term. The NPV of

external debt as a share of exports of goods and services would fall below the 150 percent in 2004. As a share of central government revenue, the NPV of external debt would decline gradually and fall below 250 percent only in 2008. If the government were to service a major share of energy sector debt (estimated at about $0.5 billion), the debt situation would be worse, albeit only modestly if repayment terms were reasonably generous.

11. Thus, while Georgia faces a difficult debt position, especially with regard to fiscal indicators, a strong economic adjustment program, combined crucially with an early rescheduling of bilateral debts, could eventually allow a resolution of the external debt problem. There are, however, considerable risks to this outlook. The fundamental risk is of policy failures and economic mismanagement that would undermine the growth assumptions underpinning the analysis. A less favorable response to reform or external environment could also seriously derail the recovery outlook. Scenario Two was simulated assuming that exports and output grow significantly slower (respectively by about 3 and 2 percentage points a year on average) than in Scenario One, despite implementation of the same economic reform program. As a result, under Scenario Two, Georgia is likely to face significantly higher financing gaps, which dramatically changes the trends in medium-term debt sustainability indicators: the NPV of debt as a share of exports and of central government revenues stays above 150 and 250 percent, respectively, before deteriorating in the later years. The debt-service ratio is also projected to increase, exceeding 25 percent in every year after 2003. Debt service as a share of central government revenues, instead of continuously declining from the highs of 2003-04, increases in the outer years, and remains at unsustainable levels of over 60 percent. It should be noted that these projections are highly sensitive to the terms of new financing that might be available to Georgia (a grant element of 20 percent is assumed for these projections).

12. The sustainability of the external debt situation would also be undermined if the terms of restructuring Georgia's debt to bilateral creditors were significantly less favorable than the assumptions incorporated in the analysis. There is also a risk, given the poor quality of Georgia's trade statistics, that exports have been overstated and the debt problem in relation to exports consequently understated. Considerable caution is therefore required in drawing inferences regarding external debt sustainability using data on exports. Finally, to the extent that the government's contingent liability arising from the energy sector debt is larger and/or the terms of repayment less generous than assumed in the analysis, debt sustainability would be undermined.

C. The Kyrgyz Republic

13. At end-1999, the Kyrgyz Republic's total external debt was estimated at $1.7 billion, about $1.4 billion of which was government and government guaranteed. Of the total debt more than ⅔ percent was owed to multilateral institutions, mainly the IMF, World Bank, and Asian Development Bank (AsDB). A major portion of the debt is on concessional terms, and thus its NPV is around $1.2 billion, or 67 percent of GDP. The Kyrgyz Republic's largest bilateral creditors are Russia and Japan.

14. Projections under Scenario One show that even with determined implementation of macroeconomic and structural adjustment programs and some debt rescheduling, debt indicators are likely to remain high over the next decade, suggesting that further debt rescheduling may be unavoidable.

15. Under Scenario One, the ratio of the NPV of both total and government debt-to-GDP may gradually decrease, although it is not expected to fall below 50 percent until 2007. The ratio of debt-to-exports of goods and services (in NPV terms) is projected to peak in 2001 and to remain above 150 percent until 2009. Moreover, the structure of the debt will become less amenable to rescheduling because the share owed to multilateral institutions would rise as commercial debt is paid off. The debt situation is particularly difficult in terms of the fiscal situation. Projections show that the ratio of government debt service to revenues will peak at close to 47 percent in 2001. With improved revenue collection and some tax measures the ratio should decline over the next several years as a large part of the nonconcessional debt contracted early on will be paid off. However, it is projected to remain well above 20 percent (except for an exceptional year when gold production peaks), implying that, without additional revenue measures, room for current expenditures will continue to be limited. As a result, it will be difficult to significantly increase social spending, which could negatively affect initiatives to reduce poverty. The ratio of the NPV of debt to revenues is expected to peak at over 500 percent in 2000 and drop below 250 percent only in 2009.

16. Scenario Two illustrates the severity of the problem if the external environment would be less favorable and/or the domestic output response were weaker. The NPV of debt-to-exports and debt-to-central government revenue ratios would actually increase over the 10-year projection period and debt-service ratios would similarly rise, demonstrating a clearly unsustainable debt situation.

D. Moldova

17. Moldova’s total external liabilities increased from almost zero debt at the beginning of the 1990s to approximately $1.5 billion (or 112 percent of GDP) at end-1999, consisting of $936 million in government and government-guaranteed debt (almost 65 percent), $416 million in energy payment arrears (approximately 30 percent), and $105 million in private sector debt. Almost ⅔ of the country’s government and government-guaranteed debt is owed to multilateral institutions (mainly the IMF, the World Bank, and the EBRD).

18. Underlying this development were large external current account deficits in the second half of the 1990s and a sharp depreciation of the leu following the Russian crisis. These obligations were contracted on only moderately concessional terms; the NPV of government and government-guaranteed debt was estimated at $895 million at end-1999.

19. Debt indicators could improve substantially over the medium term under a scenario of strong export-led growth that is supported by sound economic and financial policies and strong structural reforms. However, even under favorable assumptions in this Scenario One, Moldova is likely to face cash-flow problems in the short run, particularly in 2002 and 2003, when large repayments fall due. Moreover, in terms of fiscal indicators the debt situation is more difficult, as the ratio of the NPV of government and government-guaranteed debt to

central government revenues will remain in excess of 250 percent during 2001–02, despite a relatively high level of central government revenue collection (about 19 percent of GDP).

20. The short-term problems would be exacerbated should the economic recovery take longer to materialize, or if the external environment were less favorable. Indeed, under Scenario Two with slower export and real GDP growth rates, Moldova's cash-flow problem would become more serious and durable. The indicators improve only for several years at a much slower pace and then deteriorate again by the end of the projected period. Debt service as a share of exports and central government revenues would both remain above 25 percent for most of the projection period. In relation to exports, the NPV of debt would remain between 150 and 200 percent throughout the period. Fiscal sustainability indicators also look much worse: the NPV of debt in relation to central government revenues stays above 250 percent for the whole projection period.

21. This analysis indicates that the burden of debt service will limit Moldova's ability to alleviate poverty. Assuming stable central government revenues and the need to meet debt-service requirements, and in the face of increasing public investment and high levels of private savings necessary to sustain economic growth, the availability of resources for public and private consumption will be dramatically constrained. Consequently, the government will have difficulty avoiding a further decline in service delivery for health, education, and social assistance at a time when households will be hard pressed to help themselves.

E. Tajikistan

22. At end-1999 the total stock of external debt in Tajikistan was about $1.2 billion, of which $888 million was government or government-guaranteed. About 35 percent of the debt was owed to multilateral institutions (mainly the IMF, the World Bank, and the EU). Debt to the two largest bilateral creditors, Russia and Uzbekistan, amounted to close to 50 percent of the government debt.

23. With strong adjustment and a favorable external environment, Tajikistan's debt appears sustainable from the balance of payments point of view (Scenario One). However, in fiscal terms, Tajikistan will face serious difficulties until 2007. The ratio of government debt service payments to relevant exports peaks at 16 percent in 2001 and averages about 11 percent for the remainder of the decade.[2] In contrast, the ratio of government debt service to central government revenue peaks at 61 percent in 2001 and averages 46 percent during 2002–04. A combination of strong GDP growth, improved revenue performance, and reduced expenditures in selected areas (e.g., economic services), would shrink the ratio of the NPV of government debt to central government revenue (including grants) to less than 250 percent by 2007. In this case, the ratio of government debt-service costs to fiscal revenue would average about 28 percent during 2006–10.

[2] Relevant exports exclude barter transactions in alumina and electricity.

24. In Scenario Two, with a less favorable external environment and/or weaker domestic response and as a result slower export and GDP growth, debt and debt-service indicators worsen dramatically. The NPV of debt-to-exports ratio would peak at 132 in 2003 and then decline gradually to 116 by 2010. The fiscal problems noted in Scenario One would be exacerbated, with the NPV of debt to revenues increasing to 618 percent by 2003 and staying above 500 percent in 2004–08. Debt service as a share of revenues will remain above 60 percent, after a small dip.

III. Armenia[3]

A. Background

25. The medium- and long-term external debt of the public sector of Armenia has increased rapidly from negligible amounts at the time of independence in 1991 to $855 million in 1999.[4] In 1999, the build-up of external debt slowed markedly (with the debt growing at single-digits rates for the first time since independence), but with sluggish growth of exports—reflecting, inter alia, the fallout from the August 1998 currency crisis in Russia—the NPV of debt-to-export ratio further increased, exceeding 150 percent for the first time.

26. Nominal external debt increased from under $400 million in 1995 to $855 million in 1999. The structure of the debt remained broadly constant over this period, with multilateral debt constituting about ¾ of total debt and bilateral debt about ⅕ (in addition there were modest outstanding commercial, mostly energy-related, credits). Among the multilateral creditors, the biggest creditors are the IMF and the World Bank (with 66 percent of total debt, up from 45 percent in 1995) and among bilateral creditors, the largest is Russia (with 13 percent of total debt, down from 23 percent in 1995).

27. In NPV terms, outstanding debt at the end of 1999 is estimated at $549 million. Relative to exports, fiscal revenue, and GDP, this debt amounted to 154 percent, 168 percent and 30 percent, respectively.[5] The debt's 36 percent grant element reflects the large share of highly concessional IDA-credits and the small share of nonconcessional commercial debt. Two-thirds of the debt is denominated in SDRs (credits from IDA, IFAD, and IMF) and less than one-fourth carries variable interest rates (including all commercial credits, loans from the EBRD, EU, and IBRD as well as outstanding purchases from the IMF). This composition somewhat protects Armenia against higher international interest rates or significant shifts in the value of the major international currencies.[6]

28. Information about private sector nonguaranteed debt (including debt of state-owned enterprises) is incomplete both as regards the stock of debt as well as the associated debt service. At end-1999, such debt (part of which was in arrears) was conservatively estimated at $53 million. Most of this debt has been contracted by state-owned enterprises to finance

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[3] Prepared by country teams headed by Tom Wolf (IMF) and Judy O'Connor (World Bank).

[4] Armenia signed the 'zero option' agreement in 1993.

[5] For NPV to export ratios only, exports are calculated as a three-year moving average of exports of goods and services centered on the preceding year.

[6] For instance, a 1 percentage point change in international interest rates changes the stock of NPV of debt by less than 1 percent. In terms of debt service, a 1 percentage point increase in international interest rates would increase debt service over the 2001–03 period by slightly more than 1 percent and substantially less than 1 percent thereafter.

energy or energy-related imports; major debtors include the nuclear power plant and the natural gas distribution company.

B. Outlook for 2001-2010

29. Under a favorable macroeconomic outlook, it is projected that Armenia will be able to service its debt without much difficulty during the next 10 years, as debt-service indicators will remain reasonably low. However, a less favorable external environment or weaker economic response to the reforms, could jeopardize this outlook unless stronger adjustment is pursued.

Scenario One

30. This scenario assumes that by the second quarter of 2001 a PRGF arrangement will be in place. The prospective arrangement is expected to buttress macroeconomic stability, to provide the framework for reinvigorated structural policies, and to help catalyze international donor support.[7]

31. Economic growth is projected to accelerate to 6 percent annually during 2001–03, reflecting a rebound from the slowdown in 1999, the impact of the further privatization, and the financial and physical rehabilitation of the energy sector. Over the medium term, a trend growth rate of 5 percent is to be supported by investment equivalent to 22 percent of GDP annually (of which 6 percent is public sector investment mostly financed by public sector savings). Benefiting from the continued privatization of state-owned enterprises, foreign-financed private sector investment is projected to increase from 3 percent of GDP in 2000 to over 6 percent in 2003, but is then expected to gradually decrease to 4 percent by 2010. As private sector savings gradually increase, owing to increased confidence in financial intermediaries and higher income levels, private investment is assumed to be maintained at about 16 percent of GDP, notwithstanding the decreased reliance on foreign savings in the outer years.

32. The projections assume a significant tightening of the fiscal stance to attain, by 2003, a medium-term target of an externally-financed budgetary deficit of 2.0 percent of GDP. Consistent with this target, external disbursements are expected to remain in line with average annual disbursements in 1998–2000 of close to $90 million. IDA is expected to remain the most important source of new financing. Other sources of new disbursements include Japan, Germany, and the American Lincy and Huntsman foundations. Disbursement projections for the 2001–03 period are based on donors' specific project commitments; these are all on concessional terms with a weighted average interest rate of less than 1 percent and maturity of up to forty years. The expectation is that Armenia will refrain from contracting

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[7] Neither scenario incorporates the economic effects of a possible resolution of the Nagorno-Karabakh issue or a lifting of border blockades in the region. Normalization of trade relations with neighboring countries would constitute a positive economic shock and could necessitate a significant revision to the medium-term outlook.

any new credits on commercial terms, but for the period after 2003 it is assumed that new bilateral credits will be less concessional than the already committed bilateral credits in the current aid-pipeline.[8]

33. Over the period 2001–04 a combined financing gap of $250-300 million, including prospective IMF disbursements under the PRGF arrangement of about $90 million and World Bank structural adjustment lending of $50 million in 2001, is projected. The residual gap is expected to be filled by additional donor support (a Consultative Group meeting may be convened in 2001), debt restructuring,[9] and possible additional World Bank adjustment lending credits.

34. The medium-term projections further incorporate the following assumptions.[10] Exports in U.S. dollar terms will expand by 11 percent annually over the 2001–03 period and 9.4 percent thereafter. Initially the very buoyant export growth is on account of an expected strong increase in tourism, but over time a broader-based expansion of exports (e.g., metals and food products) are expected. Imports are projected to grow at 4 percent annually in dollar terms in 2001–03 as market-driven import substitution continues. Import growth is expected to converge toward the growth of GDP by the end of the projection period (7 percent over 2006–10). Workers' remittances and private transfers are assumed to grow in line with the nominal GDP. Official transfers (mostly humanitarian assistance) are assumed to remain constant at $85 million annually excluding budgetary grants expected from the EU in 2001–03. Gross international reserves are projected to remain at the level of 3.5 months of imports. After 2003, the balance of payments is not expected to strengthen sufficiently to help generate the net inflows needed for gross reserves to increase concomitantly with imports and, consequently, financing gaps are projected to remain through 2010. The real effective exchange rate is assumed to remain constant at its end-2000 level.

35. Under Scenario One, the NPV of debt will increase from $549 million in 1999 to $754 million in 2003 and to about $1.2 billion by 2010. As a share of exports, the NPV of debt is projected to decrease from 154 percent in 1999 to 135 percent by 2003 and further to 118 percent by 2010. External debt service will remain relatively low from 2001 onward at less than 15 percent of exports, and toward the end of the projection period falls below 10 percent of exports.

[8] More specifically, it is assumed that new bilateral disbursements in 2004–10 will carry an annual rate of interest of 2 percent and will be repaid over the 2011–20 period. For each 1 percentage point higher interest rate, the NPV of debt-to-export ratio in 2010 will be about 2 percentage points higher.

[9] In 2000, Armenia restructured its obligations to Turkmenistan on nonconcessional terms, changing the repayment period from 2000–02 to 2002–04. In 2000, Armenia incurred debt service arrears to Russia, the regularization of which is currently under discussion.

[10] The current projections exclude debt prepayments financed out of the Special Privatization Account, given the uncertainty about the possible amounts available for such prepayments.

36. The NPV of debt relative to central government revenues is projected to decline gradually from a peak of 189 percent in 2001 to just under 160 percent over the period 2004–10. Debt service as a share of revenues is projected to fall from 22 percent in 2000 to a modest 9 percent by 2008. In this scenario, non-interest expenditures would increase from 19.4 percent of GDP in 2001 to 20.7 percent by 2010, leaving room for increases in social expenditures.

Scenario Two

37. Scenario One builds on the expectation that the maintenance of prudent macroeconomic policies within the framework of a more market-friendly policy setting will elicit a strong private sector response on the basis of which the economy can expand quickly. Scenario Two evaluates the consequences of a less favorable external environment and/or a weaker response of foreign investors and the domestic private sector to the government's economic policies than what is projected in Scenario One.

38. In particular, export growth is assumed to be about ⅓ slower per year than in Scenario One, and GDP growth is 2.4 percentage points lower. Import growth is projected initially to be somewhat higher than in Scenario One, but should decline over time with the slower GDP growth. FDI also is assumed to be lower on average by about 1 percent of GDP per annum.

39. As a result of these changes, both the current account deficit and financing gaps are projected to be significantly higher than in Scenario One. The higher financing gaps in Scenario Two necessitate a more rapid build-up of external debt. Under Scenario Two, the NPV of debt relative to exports increases throughout the projection period, reaching 248 percent by 2010. In tandem, the debt-service ratio also shifts up gradually, reaching 15 percent in 2002–05 and remaining above 10 percent for the rest of the decade.

40. The higher debt and debt service in Scenario Two will also impact the fiscal position significantly. The NPV of debt-to-revenues ratio would increase to over 300 percent by the end of the projection period. The share of revenues needed for debt service would also increase to about 20 percent in 2000–04, before declining to 15 percent by 2010, severely squeezing non-interest expenditures compared to Scenario One.

Stress testing

41. Hardening the terms of new borrowing would cause a sharp deterioration in debt ratios. A 50 percent reduction in the average grant element of new borrowing would have a significant impact on external sustainability, particularly under Scenario One. The NPV ratios jump by an average of 11 percentage points in the first five years. Since harder borrowing terms rapidly translate into larger borrowing needs, the cost is much higher in the outer years, when the NPV ratios climb by 24 percentage points on average. The impact on short term indicators is even more striking, where the increase in debt service ratios compared to Scenario One ranges from 18 percent in 2001-05 to over 50 percent in the outer five years. This implies that Armenia would not be able to carry nonconcessional terms for

much of the projection period and that borrowing on harder terms could quickly lead to a possibly unsustainable situation.

42. For illustrative purposes, a rescheduling operation was simulated for Armenia, in line with typical terms granted to low-income countries by the Paris Club. Specifically, it was assumed that the country's external debt would be subject to a two-thirds reduction in NPV terms, applied to all bilateral official and commercial debt (excluding nonguaranteed debt of the private sector). This debt relief was assumed to be applied in two rounds—first to the debt arrears outstanding and to the debt service due over 2001–03 (flow rescheduling), and then to the remaining stock of debt (stock rescheduling). These simulations imply that Armenia might not need a rescheduling, under either Scenario, since the unsustainable path for debt service under Scenario Two is driven by new borrowing (to close large and persistent external gap) and not by the burden of debt service on the old debt. In any event, the external debt position would remain sensitive to the terms and the availability of new financing even in the event of deep debt relief.

IV. Georgia[11]

A. Background

43. This debt sustainability analysis aims at assessing the medium-term dynamics of external debt in Georgia. It presents macroeconomic and external debt projections through 2010, based on loan-by-loan data provided by the Georgian authorities along with information provided by some creditors.[12] However, the debt estimates and NPVs discussed here may need to be reconciled with creditors. In addition, since a full accounting of debts contracted or guaranteed by the government in the energy sector has not yet been completed, the study makes only a guarded assessment of the impact of such debt on medium-term sustainability.[13]

44. At end-1999, Georgia's total external debt—excluding nongovernment energy debt—was estimated at $1.7 billion (63 percent of GDP), of which about 50 percent was owed to multilateral institutions, including to the Fund ($319 million or 19 percent) and the World Bank ($379 million or 22 percent). Debt owed to Russia and other countries of the former Soviet Union amounted to $595 million (35 percent), of which Turkmenistan and Russia accounted for about $350 million (20 percent of total) and $179 million (10 percent of total), respectively. In NPV terms, the total debt stock at end-1999 amounted to about $1.5 billion, equivalent to about 213 percent of exports of goods and services, and an exceptionally high 688 percent of central government revenues.[14] With external debt-service obligations, amounting to almost 45 percent of central government revenues (excluding extrabudgetary revenues and grants) in 1999, expenditures on key poverty reduction areas have had to be reigned in over the past few years.

45. Georgia's stock of external debt has increased by almost 70 percent since end-1994, with significant changes in the composition. At end-1994, almost 80 percent of Georgia's total external debt was to bilateral creditors, and in particular to the CIS countries which were its major trading partners. Debt outstanding to Turkmenistan and Russia accounted for almost 75 percent of debt accruing to bilateral creditors, a large share of which was related to energy imports. In particular, debt to Turkmenistan was related to gas shipments made during 1993–94. With little by way of new credits, the share of debt to bilateral creditors in the total

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[11] Prepared by country teams headed by David Owen (IMF) and Judy O'Connor (World Bank).

[12] A reconciliation of the data on debt outstanding as of end-1998 revealed very small discrepancies between the records of the Fund and the Ministry of Finance, explained, in large part, by differences in exchange rate assumptions.

[13] BIS data on Georgia's short-term debt, which is not included in either official or Fund estimates of external debt, need to be verified, both in terms of volume and appropriateness for inclusion in the study, and at this point have been excluded from the analysis.

[14] Or 350 percent of general government revenues (including grants).

has declined since 1995. By contrast, over the same period, the share of multilateral institutions in total debt, and particularly that of the IMF and the World Bank, has continued to rise.

46. In 1995–97, Georgia obtained a rescheduling of its bilateral external debt, mostly to CIS countries, based on the stock of debt at end-1994. Since the exercise was conducted on a bilateral basis, the terms and conditions of the agreements varied across creditors. While the interest rate for rescheduling was set uniformly at 4 percent, the amortization and grace periods varied considerably.[15]

47. While most recent borrowing by Georgia has been on concessional terms, Georgia has accessed resources on nonconcessional terms through borrowings and/or guaranteeing loans from the EBRD.[16] In addition, debt rescheduling granted by bilateral creditors has, in some instances, been on nonconcessional terms. Moreover, government liabilities regarding energy sector debt, a large share of which is currently in arrears, remain unclear since this debt has not been fully audited.

48. Georgia has accumulated arrears amounting to $166 million on principal payments to Turkmenistan through September 2000. Arrears on principal payments to Russia began to accrue since the first quarter of 2000 and amount to about $17 million through September 2000 (repaid in December). Georgia has, however, remained current on all external interest obligations.

B. Outlook for 2001-2010

49. The outlook for Georgia's balance of payments and external debt position is quite difficult. The rapid accumulation of arrears, a hump in external debt-service payments in the near term, and large financing gaps in the balance of payments, clearly indicate that Georgia needs to engage its bilateral creditors in another round of debt rescheduling. The impact of relatively large debt service payments over the near term is further compounded by Georgia's current fiscal problems. Central government revenue as a share of GDP, at about 8 percent, remains among the lowest in the world and prospects for a rapid improvement appear bleak, owing to the long-term nature of efforts to improve tax administration.

Scenario One

50. In order to examine the implications for external vulnerability, a debt sustainability analysis has been carried out. Under Scenario One, which is consistent with the

[15] Following the cancellation of penalties amounting to about $46 million, Georgia's stock of outstanding debt to Turkmenistan was valued at $394 million. The debt rescheduling terms were three-years grace, eight-years maturity (as of end-March 1995), and 4 percent interest.

[16] Georgia has also accessed GRA resources from the Fund under the STF and SBA. Until early 2000 Georgia was technically a blend IDA/IBRD country although it only made use of IDA resources. Georgia is now classified as IDA only.

Fund-supported PRGF program, the underlying macroeconomic assumptions are as follows. Average annual real GDP growth is projected to increase from 3.5 percent during 1998–2003 to 4.6 percent during 2004–10. Annual average inflation (measured by the GDP deflator) is assumed to fall steadily from 6.5 percent during 1998–2003 to 4 percent through the end of the projection period, in line with inflation in partner countries. Average export growth is assumed to rise from 5.6 percent per annum during 1998–2003 to 8.4 percent per annum during 2004–10. Over the same time period, average import growth per annum is projected to increase steadily from 3.6 percent to around 6.2 percent. Transfers are projected to decline as a share of GDP from 5.5 percent per annum during 1998–2003 to around 3.5 percent per annum during the remainder of the projection period. The composition of transfers is expected to change, as private transfers, mainly in the form of workers' remittances, replace the inflow of official transfers. It is also assumed that, over the medium term, there will be a modest reserve accumulation that would provide cover for about two months of imports of goods and services by 2003.

51. A strong fiscal adjustment will be necessary to achieve a sustainable debt situation over the medium term. It is assumed that general government revenue (including grants), as a share of GDP, will rise steadily from 16.5 percent per annum during 1998–2003 to 20 percent per annum during 2004–10. To achieve the necessary fiscal adjustment, non-interest expenditures and net lending of the general government will fall from 16.7 percent of GDP in 2000 to 15.6 percent in 2002, before recovering to 18.1 percent by 2007. The overall government balance is assumed to move from a deficit of around 3.5 percent of GDP per annum during 1998–2003 to a surplus of 0.6 percent of GDP by 2007.

52. This scenario also assumes that Georgia will successfully seek a rescheduling from bilateral creditors, and that principal obligations falling due to bilateral creditors in 2001 through 2002 and the stock of arrears at end-2000 would be rescheduled.

53. Based on these assumptions, the current account deficit is projected to remain rather large over the near term, averaging about 7 percent per annum between 2000 through 2002, before declining to more sustainable levels between 2003 through 2010. The capital account is projected to improve over the medium term, largely because of an increase in external disbursements and FDI. The projected financing gaps through 2003 in the balance of payments are assumed to be fully covered by debt relief from bilateral creditors (based on the rescheduling scenario noted above) and possible Fund financial support for a strong economic reform program.

54. Under this scenario, the proposed debt rescheduling provides relief from the bunching of obligations falling due to bilateral creditors in 2000–02 arising from the previous round of rescheduling. As a result, debt-service obligations would decline sharply in 2000 (to 13 percent of exports of goods and services) relative to debt service due under the previous rescheduling. Over the medium and long term, debt servicing, while increasing in 2003 through 2004 and declining steadily thereafter, would follow a more smooth and sustainable path. External debt as a share of GDP remains flat at about 59 percent through 2002, and declines steadily thereafter. The NPV of external debt (government and government guaranteed) as a share of exports of goods and services, while declining from 1999, continues

to remain high before falling below the threshold of 150 percent in 2004; it declines steadily thereafter. As a share of central government revenue, the NPV figures under this scenario will remain large. Beginning from a high of about 688 percent in 1999, the NPV of external government and government-guaranteed debt as a share of central government revenue (excluding grants) declines gradually and falls below the threshold of 250 percent only in 2008. Debt service as a share of revenues would peak in 2004 at 58 percent, but then starts to decline gradually to below 35 percent in 2009.

55. Overall, Scenario One appears to allow for a difficult but nonetheless sustainable path for external debt serving over the medium term. However, this will need to be accompanied by the adoption of a strong economic reform program, including a sizeable fiscal adjustment, which could pave way for financial support from multilateral and bilateral creditors, as a way of reducing Georgia's external vulnerability.

Potential energy sector debt

56. To highlight the additional debt burden that could arise from the government assuming part or all of the energy sector debt, the analysis is extended to capture the impact of such debt on medium-term sustainability. For illustrative purposes, it is assumed that the estimated $0.5 billion of energy sector debt will be fully assumed by the government, but that repayments would be rescheduled over a 15-year horizon with a 3-year grace period at 4 percent rate of interest. Based on these assumptions, the medium-term debt situation worsens, although the impact would be muted by the concessional terms of rescheduling. The NPV of debt as a share of exports of goods and services remains high in the near term and declines below the threshold of 150 percent only by 2006. The NPV of debt as a share of central government revenue remains high through the projection period and falls below 250 percent only in 2010.

Scenario Two

57. Scenario One is predicated upon ambitious economic growth assumptions that would depend crucially upon the ability of the government to adopt and sustain a credible economic adjustment program. At the same time, it is possible that, even with adjustment, developments will turn out less favorably. Therefore, an alternative scenario has been developed, which assumes that, because of an external environment that is less favorable, exports will grow more slowly (by about 2–3 percentage points a year) than envisaged in Scenario One, leading to slower GDP growth (by an average of about 2 percentage points). While the lower growth affects import demand negatively, this cannot fully compensate for the lower exports, resulting in somewhat higher current account deficits (about 1.5 percentage points on average during 2001–05 as compared to Scenario One) growing in the outer years (4.9 percentage points higher during 2006–10) and higher financing gaps.

58. The implications of this scenario for medium-term debt sustainability are quite dramatic. The NPV of debt as a share of exports and of central government revenues continues to remain high and above 150 and 250 percent, respectively, through the projection period. Under this scenario the debt-service ratio would increase steadily to over 25 percent in 2004, and stay above that level for the remainder of the projection period. Debt service as

a share of revenues, instead of gradually declining from 2004, would rise again and stay above 60 percent for the rest of the projection period.

59. It is clear from Scenario Two that unless the government adopts and consistently pursues a strong economic and structural adjustment program, and the external environment is reasonably favorable, the external debt situation could well become unsustainable.

Stress testing

60. Hardening the terms of new borrowing would cause a sharp deterioration in debt ratios. A 50 percent reduction in the average grant element of new borrowing would have a significant impact on external debt sustainability of Georgia. The NPV-to exports ratio jumps by 14–24 percentage points, making an already stressed debt situation unsustainable from the external perspective. The impact on the fiscal ratios is less pronounced, ranging from an increase of 5 percentage points in the next five years to 18 percentage points in the outer years. Under Scenario One, harder borrowing terms alone could cause a severe cash-flow problem; under Scenario Two, Georgia might not be able to cover its external financing needs, and might face a sustainability crisis.

61. For illustrative purposes, a debt rescheduling operation was simulated for Georgia, in line with typical terms granted to IDA-only low-income countries by the Paris Club. Specifically, it was assumed that the debt would be subject to a two-thirds reduction in NPV terms, applied to all bilateral official and commercial debt (excluding nonguaranteed debt of the private sector). This debt relief was assumed to be applied in two rounds—first to the debt arrears outstanding and to the debt service due over 2001–03 (flow rescheduling), and then to the remaining stock of debt (stock rescheduling). Under Scenario One, the simulations suggest that a flow rescheduling in 2001–03 would be sufficient to achieve sustainable short-term and long-term debt indicators. Under Scenario Two, both flow and stock treatment might be barely sufficient to enable Georgia to achieve external debt sustainability. The country's external debt position would remain sensitive to the terms and the availability of new financing even in the event of deep debt relief.

V. THE KYRGYZ REPUBLIC[17]

A. Background

62. This debt sustainability analysis aims at assessing the medium-term dynamics of external debt in the Kyrgyz Republic. It presents macroeconomic and external debt projections through 2010, based on loan-by-loan data provided by the Kyrgyz authorities as well as information from some creditors.

63. At end-1999, the Kyrgyz Republic's total external debt was estimated at $1.7 billion, of which $1.4 billion was government and government-guaranteed debt. About 68 percent ($933 million) of the outstanding government and government-guaranteed debt was owed to multilateral institutions,[18] including IDA (26 percent), the AsDB (17 percent), the IMF (14 percent), and the EBRD (8 percent). Debt owed to bilateral institutions amounted to $449 million (32 percent), mostly to Russia (12 percent), Japan (11 percent) and Turkey (3 percent), while nonguaranteed debt owed to commercial creditors totaled $300 million, largely on account of the Kumtor gold project. In 1999, the Kyrgyz Republic incurred debt service arrears to Russia, Pakistan, India, and Turkey, together amounting to about $26 million.

64. A major portion of the debt is on concessional terms, and thus, in NPV terms, the total debt stock amounted to about $1.2 billion at end-1999. Excluding Kumtor-related debt,[19] the stock of government and government-guaranteed debt in NPV terms amounted to $852 million at end-1999. The concessional portion of the government and government-guaranteed debt stock (in NPV terms) included multilateral debt to the IMF ($157 million), IDA ($126 million), and the AsDB ($86 million), as well as bilateral debt to Japan ($97 million), Uzbekistan ($14 million) and Germany ($13 million). Nevertheless, a substantial part of the debt is on nonconcessional terms (e.g., debt owed to the EBRD ($105 million), Russia ($150 million), and Turkey ($38 million)).

65. The long-term debt indicators for the Kyrgyz Republic are quite high.[20] At end-1999, the NPV of debt-to-GDP ratio was 94 percent, and the NPV of debt-to-export ratio reached

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[17] Prepared by country teams headed by Harry Trines (IMF) and Kiyoshi Kodera (World Bank).

[18] Including $65 million of loans to the Kumtor gold mine by the EBRD and IFC. These loans are not guaranteed by the government.

[19] The Kumtor gold project is a joint venture between the Kyrgyz government and a Canadian company. While the Kyrgyz government is the majority shareholder, the authorities deem the external loans borrowed by the joint-venture as private external debt given the structure of the financing arrangement.

[20] The NPV of debt-to-export ratios reported are calculated using the three-year average of exports of goods and services centered on the preceding year, while the debt-service ratios are measured in relation to current-year exports. The discount rates used are six-month CIRR

(continued)

188 percent. However, the debt-servicing burden remained moderate: the ratio of debt service to exports of goods and services and to government revenues both were about 24 percent. Nevertheless, in view of the fact that the country started with a clean slate in 1991 since it did not inherit any debt from the former Soviet Union under the zero option agreement, these ratios indicate a rapid accumulation of external debt over a short period of time.

66. There are a number of reasons for the large build-up of external debt. In the first years following independence, enterprises found it relatively easy to obtain credits to finance imports of machinery with government guarantees. In 1992 and 1993, with lax payments discipline and problems in the payments system, enterprises also incurred debts to Russia, Kazakhstan, Uzbekistan, and Turkmenistan under bilateral trade agreements through central bank correspondent accounts, which were subsequently rescheduled as a government debt. These debts represented about 16 percent of the total debt stock as of end of 1999.

67. Since 1994, the country has run up annual fiscal deficits (on a cash basis) on the order of 12 percent of GDP, most of which has been financed through external balance of payments support and project financing.[21] Especially since 1996, a growing public investment program mostly financed by external creditors (9.5 percent of GDP in 1999 alone) has been the major component of these deficits. A relatively large share of these investments is in infrastructure, and thus does not generate immediate returns. While debts related to the public investment program accounted for only 20 percent of the total external debt at end-1999, commitments for an additional $0.5 billion have already been signed. Finally, the impact of the 1998 Russian crisis and the resulting sharp depreciation of the som and drop in exports since 1998 have led to a substantial increase in the debt and debt-service ratios in relation to GDP, fiscal revenues, and exports.

68. While virtually all the new debt contracted in the last few years is concessional, significant obligations from external debts contracted by enterprises and guaranteed by government in the first few years after independence will need to be repaid over the next few years. These could impose a disproportionate burden on the budget, because many of the borrowing enterprises no longer are able to repay. In line with the increasing debt stock, the share of interest payments in the budget has increased rapidly from less than 1 percent of GDP in 1996–97 to close to 3 percent in 1999. This, combined with weak revenues, has meant that there is increasingly less room for social expenditures, which have been drastically reduced in real terms. It also has contributed to the inability of the government to raise government wages and pensions since 1997,[22] which has been a factor in the worsening

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averages ending June 2000, while the conversion to U.S. dollars is based on end-1999 exchange rates. A breakdown of scheduled debt-service payments by creditor is provided in the Statistical Annex. For purposes of the paper, external debt indicators in relation to exports include all debt (including Kumtor), while fiscal indicators exclude the Kumtor debt.

[21] Based on state government finances, which include both the central and local governments.

[22] Wages and pensions were raised by 20 percent in August/September 2000.

poverty in the country. Based on household surveys, in 1999 more than 60 percent of the Kyrgyz population had incomes below the poverty line, with more than 20 percent living in extreme poverty.

B. Outlook for 2001-2010

69. The analysis shows that the Kyrgyz Republic faces a very difficult medium-term outlook and even with determined implementation of macroeconomic and structural adjustment programs debt indicators are projected to remain high throughout the next decade. The immediate situation has somewhat improved, however, compared to earlier analyses, since agreements in mid-2000 with several bilateral creditors will reduce the bunching of payments in 2001–03. In particular, agreements in principle were reached on the rescheduling of debt to Russia, Pakistan, and Turkey.[23]

Scenario One

70. Scenario One is predicated on strong policies to achieve macroeconomic stabilization and structural reforms in the key areas of the Kyrgyz economy over the next decade in the framework of Fund-supported PRGF programs. The projections are greatly influenced by the expected activity in the Kumtor gold mine, which accounts for about 40 percent of exports and 10 percent of GDP. Based on the latest information received from Kumtor, production and exports would peak in 2003 and decline gradually thereafter until 2007, with the mine being decommissioned in 2008. Gold prices are projected to grow only modestly over the medium term.[24] Macroeconomic stabilization is expected to reduce annual inflation to single digits by mid-2003 and to about 5 percent over the medium term. Export volumes (excluding gold) are expected to grow at 8.5 percent before stabilizing at about 6–7 percent annually over the medium term, on account of increases in agricultural, mineral and electricity exports. The fall in gold exports starting in 2003 is expected to be only partly offset by the coming on stream of smaller gold projects, for which discussions on financing and private management are currently ongoing. Exports to CIS countries are expected to grow a bit faster than to other countries as trade relations normalize and growth picks up in the CIS. Import growth is projected to be relatively restrained, reflecting the slowdown of the activities of the Kumtor gold mine, as well as lower imports of capital goods. Still, the volume of non-Kumtor and nonproject related imports is projected to grow a bit slower than GDP, reflecting

[23] The agreement with Pakistan entails a graduated repayment of outstanding debt over six years at an interest rate of Libor plus 1. The terms of the rescheduling of debt to Russia and Turkey still need to be finalized, but, based on preliminary indications, are likely to involve a significantly longer repayment and grace periods, and lower interest rates. An agreement to reschedule debt-service arrears owed to Russia was signed in early 2000.

[24] The gold price assumption of $280 per troy ounce for 2000 is based on available information on current gold prices. The Kumtor gold mine has hedged its operations at $310 per troy ounce for the year as a whole. In the balance of payments, this hedge is recorded in the capital account.

the underlying assumption that aid dependence may need to be reduced over the medium term. This is compatible with the overall assumption for growth, as a substantial amount of key assets are currently underutilized (including some land in the north), and can be brought to a much higher level of productivity with minor investments and the import of low value technology. The terms of trade are assumed to remain broadly unchanged as is the real exchange rate.[25]

71. A strong fiscal adjustment, the bulk of which is projected to take place up-front in anticipation of the large economic shock from the decommissioning of the Kumtor gold mine, will be necessary to achieve a sustainable debt situation over the medium term. This is also reflected in the savings-investment ratios, which show an increase in government savings to around 5 percent of GDP and higher private sector investment. Again, the effects of the closing of the Kumtor mine are clear: both savings and investment peak in 2003, then fall before resuming an increase in 2006.

72. Based on these assumptions, the current account deficit is expected to decline sharply between 2000 and 2003 when gold production is expected to peak. It will rise in the subsequent years to over 7 percent of GDP, reflecting the need for foreign savings over the medium-term. The current account should improve starting in 2007 when the drag on the economy on account of the gold mine will come to an end. The gross reserves position would remain well above three months of imports, peaking in 2003, when the payments by Kumtor on its outstanding debt are scheduled to be completed and profit transfers to the government should be highest.[26] Except for 2003, financing gaps are projected throughout the period under this scenario, but the amounts would be relatively small, peaking at 3.2 percent of GDP in 2006. Under the assumption of strong policy performance it may be possible to finance these gaps through concessional borrowing from bilateral and multilateral sources.[27]

73. The ratios of the NPV of both total and government debt to GDP are projected to gradually decline throughout the period considered, although they are not expected to fall below 50 percent until 2007. Both the debt service and the NPV of debt-to-exports ratios are affected by the slowdown in exports starting in 2003 and as a result, these ratios exhibit increases for 2005–08 before improving thereafter. The ratios of debt to exports (in NPV terms), both including and excluding Kumtor-related debt, are projected to peak in 2001, but are expected to remain above 150 percent until 2008. The structure of the debt will become less flexible as the share of the outstanding debt owed to multilateral institutions is likely to

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[25] A terms of trade improvement is expected in 2001 as the contract for gas imports from Uzbekistan was renegotiated at a lower price.

[26] This reserve level could improve further if the National Bank is able to terminate contracts on some $60 million in pledged reserves.

[27] The concessional terms assumed here are 3 percent interest, 7- years grace period and 25 years maturity, implying a grant element of 39 percent, which is based on the average of the terms on loans received in the recent past.

rise further from about 55 percent of the total external debt in 1999 with the commercial debt gradually being paid off and new resources likely to come mostly from multilateral sources.

74. An important consideration to determine whether the debt situation is sustainable is the fiscal situation. Projections show that the NPV of debt in relation to central government revenues should decline gradually from over 500 percent in 2000 (with the expected decline in 2003–04 on account of Kumtor profits) over the medium term, but should remain above 250 percent until 2009. The ratio of government debt service[28] to fiscal revenues (of central government, excluding grants) will peak in 2001–02 at close to 46 percent. With improved revenue collection and some tax measures, this ratio should decline over the next several years as a large part of the nonconcessional debt contracted early on will be paid off. However, with the exception of 2003, when profit transfers from Kumtor should be the highest, this ratio is projected to remain above 25 percent throughout the decade, implying that, without additional revenue measures, room for current expenditures will continue to be limited, which could negatively affect initiatives to reduce poverty. Debt service from the budget (including principal payments) is expected to remain around 4 percent of GDP and on average about 24 percent of total expenditures. Nonetheless, in this scenario non-interest expenditures in relation to GDP (18.5 percent of GDP in 2000) would remain stable at around 17–18 percent of GDP over the projection period, allowing real social expenditures to be maintained in real terms, as a minimum in line with real GDP growth, or even to increase somewhat with a reallocation of expenditures.

75. Overall, this scenario indicates a heavy debt burden throughout the projection period, especially on the budget, suggesting that fiscal adjustment alone might not be sufficient to achieve a sustainable situation, and that some type of debt rescheduling might be needed.

Scenario Two

76. Scenario One is predicated on relatively optimistic assumptions on GDP and nongold export growth, based on continued sound macroeconomic policies and an ambitious structural reform program. However, in view of past experience, and in order to gauge the sensitivity of the analysis to the assumptions, an alternative Scenario Two has been prepared that illustrates the consequences of an external environment that is less favorable, or a response of macroeconomic parameters to adjustment programs that is weaker than in Scenario One.

77. In particular, export growth is assumed not to pick up significantly and to remain around 3 percent a year in volume terms. Without the stimulus from the export sector and with the declining production of Kumtor, real GDP growth is assumed not to exceed 2 percent on average.[29] Import growth is assumed to decline as well, but not sufficiently to

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[28] The portion of debt service that is paid by the budget, i.e., excluding debt service to the Fund which is paid by the National Bank.

[29] It should be pointed out that this is well below the 3.5 percent average for 1998–2000.

compensate for the lower exports. Combined with lower FDI (2 percent of GDP less than under Scenario One) this would result in substantially higher financing gaps, which are projected on average to exceed 6.7 percent of the GDP over 2001–10 compared to only 1.8 percent under Scenario One.

78. The higher financing gaps in Scenario Two necessitate a much more rapid build-up of external debt. Reflecting this, the NPV of debt relative to exports in Scenario Two would increase starting in 2004 and reach close to 300 percent by the year 2010. In tandem, the debt service to exports ratio would shift up, reaching respectively 22 and 24 percent.

79. The higher debt and debt service in Scenario Two will also impact the fiscal position significantly. The NPV of debt-to-revenues ratio, instead of gradually declining, would increase starting in 2005 and exceed 400 percent in 2008–10. The share of revenues needed for debt service would fluctuate between 21 and 34 percent, throughout the 10-year projection period, leaving little room for any additional social expenditures.

Stress testing

80. Hardening the terms of new borrowing would cause a sharp deterioration in debt ratios. A 50 percent reduction in the average grant element of new borrowing could hurt the already fragile external sustainability. Under Scenario One, the NPV ratios would rise by 2–8 percentage points, while short-term ratios would increase even more–by 2-15 percentage points, which could create cash-flow problems. Under Scenario Two, the impact is much greater (reflecting much larger gap financing needs). The long-term ratios deteriorate by 7–22 percent, while the short-term ratios reach unsustainable levels after merely three–four years of borrowing on harder terms. Later in the projection period the debt-service ratios could exceed 60 percent of exports and 70 percent of central government revenue. This implies the Kyrgyz Republic can only afford to borrow on highly concessional terms in the next 10 years.

81. For illustrative purposes, a rescheduling operation was simulated for the Kyrgyz Republic, in line with typical terms granted to IDA-only low-income countries by the Paris Club. Specifically, it was assumed that the debt would be subject to a two-thirds reduction in NPV terms, applied to all bilateral official and commercial debt (excluding nonguaranteed debt of the private sector). This debt relief was assumed to be applied in two rounds—first to the debt arrears outstanding and to the debt service due over 2001–03 (flow rescheduling), and then to the remaining stock of debt (stock rescheduling). Under Scenario One, the simulations suggest that the long-term ratios would remain relatively high for most of the 10-year period with flow rescheduling, thereby indicating that debt stock relief may be needed. Under Scenario Two, even the full stock and flow rescheduling package does not seem to be sufficient to achieve both external and fiscal debt sustainability. The external debt position remains sensitive to the terms and the availability of new financing even in the event of deep debt relief.

82. One important variable in the projections is the Som/U.S. dollar exchange rate because of its impact on the U.S. dollar level of GDP and fiscal ratios. As shown in Appendix I, the main reason why the debt situation, in particular vis-à-vis the budget, is so

much worse than expected in 1997, is the very sharp depreciation of the som following the 1998 Russian financial crisis. Scenario One assumes that the exchange rate will remain constant in real terms. To illustrate this factor , a one-off 10 percent real depreciation was simulated in 2001, assuming the share of central government revenues in GDP would remain unchanged. This shock would cause the ratios of NPV of debt to revenues and debt service to revenues to worsen by about 30 percentage points on average for the former, and about 3 percentage points for the latter.

VI. MOLDOVA[30]

A. Background

83. This debt sustainability analysis provides information on Moldova's debt situation based on loan by loan information provided by the Moldovan authorities and staff estimates.[31] Moldova's external government and government-guaranteed debt has grown from almost zero in the early 1990s to an estimated face value of $934 million at end-1999, equivalent to 71.7 percent of GDP. Including external payment arrears on imported energy supplies and private debt, Moldova's total external liabilities amounted to about $1.4 billion at the end of 1999 (112 percent of GDP).

84. This indebtedness was driven by large and growing external current account deficits in the second half of the 1990s (that averaged 9.7 percent of GDP) and the sharp nominal depreciation of the leu in the aftermath of the Russian crisis. Typically, these obligations were contracted on nonconcessional or moderately concessional terms; the NPV of the government and government-guaranteed debt was estimated at $895 million (68.7 percent of GDP) at end-1999.[32] The NPV of debt-to-export ratio (three-year average ending in 1999) and the debt-to-fiscal-revenue ratio (central government) reached 130 percent and 365 percent, respectively, while the total external debt service represented 37 percent of exports of goods and services, putting into question the capacity of Moldova to meet its external debt-service obligations in full, without recourse to debt rescheduling, accumulation of further arrears, and/or without unduly compromising growth.

85. By end-1999, accumulated arrears on government and government-guaranteed debt amounted to about $95 million (7.3 percent of GDP), of which $89 million represented arrears to Russia (including a credit from Oneximbank), pending the completion of the rescheduling negotiations in 2000, and $6 million represented arrears on government guarantees granted to the EBRD and other European commercial creditors.

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[30] Prepared by country teams headed by Rick Haas (IMF) and Roger Grawe (World Bank).

[31] The reconciliation of data on debt stock outstanding and flows as of end-1999 revealed small discrepancies between Fund records and the records of the Ministry of Finance and the National Bank of Moldova. Data presented in this note do not cover Transnistria.

[32] The difference between the face value and the NPV of debt (i.e., the discounted value of all future debt-service payments due on the debt disbursed and outstanding at a given point in time) is called the grant element. A positive grant element implies that the interest rate on a given loan is lower than the discount rate used to calculate the NPV, and therefore, that the loan has a concessional element. Moldova was granted IDA eligibility by the World Bank in April 1997 and became IDA-only in early 2000. It became ESAF-eligible in March 1999.

86. As to the composition of Moldova's debt, almost ⅔ of the outstanding public debt was owed to multilateral institutions, including to the IMF ($175 million or 19 percent of the total), the World Bank ($287 million or 31 percent), the EBRD ($72 million or 8 percent) and the EU ($62 million or 6 ½ percent). Debt owed to bilateral official creditors represented 20 percent of total debt, including Russia ($68 million),[33] the United States ($65 million) and Japan ($37 million). Other official obligations amounted to about 16 percent of the total and included a five year $75 million Eurobond (issued in 1997 with bullet repayment in 2002) and a number of direct and publicly guaranteed credits from foreign banks ($60 million).

87. Moldova has also accumulated large external payment arrears on imported energy supplies (gas, electricity, and oil) during 1994–99. By end-1999, the stock of energy arrears was tentatively estimated at $416 million (32 percent of GDP), of which up to $270 million could be considered as government obligations and about $150 million to be owed by private operators.[34] The main creditors were Russia on gas imports, Ukraine and Romania on electricity imports, and Romania on oil imports.

88. In 2000, steps were taken to reduce arrears on debt-service obligations and energy payments. In March, $137 million of arrears due to Gazprom were settled through: (i) the issuance of promissory notes, valued at $90 million, to pay off the debts on account of the natural gas deliveries of 1996 and 1997; and (ii) an agreement on a debt-equity swap in the gas sector, whereby Gazprom acquired 51 percent of Moldovagaz in return for the clearance of $47 million of arrears. In April, a rescheduling agreement with the Russian authorities covering debt to Russia, including that to Oneximbank, was signed.[35] Also, rescheduling discussions were successfully launched with a number of commercial creditors on government guarantees.

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[33] Moldova's debt to Russia originates from restructured loan in the amount of $88.6 million granted in 1996 on account of two previous Russian credits and a $15 million loan extended by the Oneximbank in 1996 and guaranteed by the Russian government.

[34] A full audit of Moldova's external arrears on energy imports still has to be completed. The actual outstanding public obligations or potential government contingent liabilities on energy imports are unclear. In particular, there is no official record of the payments already made through various intermediaries in the form of barter or trilateral clearing operations. Accordingly, the reported amount of energy arrears should be considered as an upper limit.

[35] According to the agreement, the debt obligations of Moldova to the Russian Federation (including penalties) were set at $122.1 million, including $30.4 million owed by the Transnistrian region. A separate agreement was reached between the Moldovan government and the administration of Transnistria region, in which the latter assumes responsibility for servicing the $30.4 million.

B. Outlook for 2001-2010

89. Notwithstanding these efforts to reach rescheduling agreements with creditors and to normalize relations with energy suppliers, the sustainability of Moldova's external debt is at risk given the recent deterioration of debt indicators. In order to assess this sustainability, two scenarios corresponding to two different external environments (i.e., baseline and low case) were developed to assess whether Moldova is in a position to maintain a sustainable external current account balance and to service its external obligations over time.

Scenario One

90. Scenario One is predicated on the pursuit of sound economic and financial policies and accelerated structural reforms in the framework of a Fund-supported PRGF program. This scenario also assumes that Moldova's external environment will remain favorable, in particular, that the Russian and other CIS markets will continue to recover. As Moldova is a small and land-locked economy, its strategy aims at achieving higher sustainable economic growth through trade promotion and the rationalization of energy imports. The scenario assumes a sustained recovery of both exports and nonenergy imports over the medium term coupled with a gradual diversification of the export base toward non-CIS markets. After the sharp decline in 1998–2000, the GDP growth rate is projected to pick up from around 5 percent in 2001, peaking at 8 percent in 2004-05, and then stabilizing at 6 percent during 2006-10, as key sectors open up to strategic private investors.[36] In relation to GDP, exports should recover by 2005 to the level prevailing in the mid-1990s, while imports would remain temporarily below the historical levels as energy imports are being rationalized. By 2010, exports and imports of goods and services are projected to reach 58 percent and 68 percent of GDP, respectively, making Moldova a more open economy. Achieving this rate of economic growth will critically depend on increasing domestic private savings and private investment, as the public sector continues to reduce its role in productive activities and public savings rise (see below). Gross domestic investment is assumed to grow from 26 percent of GDP in 1999 to 27 percent in 2005, and 30 percent in 2010, while total saving is projected to reach 25 percent of GDP by 2010.[37] As a result of these savings-investment balances, the external current account deficit (with grants) would display modestly positive trend, shrinking from 7 percent of GDP in 2001 to 4.7 percent in 2010.

91. Scenario One assumes that the fiscal consolidation achieved in 1999 will be pursued vigorously over the medium term and that a primary fiscal surplus on a commitments basis (excluding project loans) of between ½ and 2 percent of GDP is maintained, to stabilize, and then reduce the stock of debts accumulated since independence. Accordingly, it assumes that: (i) the deficit of the general government (on a commitment basis, including project loans)

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[36] Under this scenario, the GDP measured in U.S. dollars would recover to its 1997 level (pre-Russian crisis) in 2004.

[37] There are considerable shortcomings in Moldova's national accounts data, which complicates interpretation of savings and investment levels.

would not exceed 3¼ percent of GDP over the medium term; (ii) the share of central government revenue to GDP would remain stable at 19 percent throughout the period; (iii) no privatization proceeds will be received in the years after 2000, and there will be no clearance of domestic expenditure arrears;[38] (iv) new loans from bilateral creditors will be used to finance the budget; and (v) 17 percent ($70 million) of external energy arrears will be absorbed by the central government in 2001. The tight fiscal stance will not reduce the government's social commitments, as spending on health and education will remain stable in real terms and total public investments are projected to increase from ½ percent of GDP in 2000 to 2 percent in the steady state.[39]

92. The pursuit of a prudent monetary policy should contribute to sharply reduce inflation in 2001–02. In particular, it is assumed that the National Bank of Moldova (NBM) would be able to restore the financial stability that prevailed before the Russian crisis and that confidence in the leu will strengthen over time. Official reserves are projected to reach the equivalent of 3.5 months of imports of goods and services starting in 2003 and to increase gradually to reach 4 months of imports of goods and services by 2010. Following an initial appreciation in 2000, the real exchange rate of the leu vis-à-vis the U.S. dollar is projected to appreciate by 2 to 3 percent per year over the medium term, as the economy recovers and productivity increases.

93. This scenario also assumes that Moldova will maintain a liberal exchange regime free of restrictions and remain current on all external debt obligations falling due. In particular, it is assumed that part of the remaining energy arrears ($70 million) currently owed by state-owned enterprises would be assumed by the government—after a comprehensive audit—and rescheduled in 2002 using terms similar to that of the recent rescheduling with Gazprom.[40]

94. Scenario One also provides for stable external inflows of income (compensation of employees) and current transfers (workers' remittances) in real terms. FDI is projected to pick up in 2000 to 10 percent of GDP as a result of exceptional privatization operations in the energy sector and to return to more conservative levels in 2001–10 at 5.3 percent of GDP per year. Under this scenario, Moldova will continue to benefit from concessional official bilateral and multilateral support (for a total of about $100 million per year) and increasing financing from external private creditors at commercial terms. All new financing from the World Bank is assumed to be concessional on IDA terms. Additional concessional support in

[38] Although the amounts are forecast very conservatively, any privatization proceeds (for example, from the sale of Moldtelecom) will need to be used to reduce wage and pension arrears and/or retire nonconcessional external government debt.

[39] The medium-term fiscal deficit of 1 percent is defined as excluding World Bank project loan spending (and financing).

[40] The promissory notes issued in 2000 had a seven-year maturity at the interest rate of 7.5 percent with a two-year grace period, implying a grant element of only 7 percent.

the form of balance of payment assistance, including from the Bank and the Fund under a PRGF arrangement, is expected to close the financing gap.

95. On the basis of a current account deficit averaging 5.9 percent of GDP over the period 2001–10, external debt indicators will significantly improve over the medium term. The external government and government-guaranteed debt is projected to increase to around 74 percent of GDP in 2000 and to gradually decline over the medium term to 24 percent by 2010. As new highly concessional financing from the World Bank and the IMF becomes available, the improvement in the debt situation would be even more pronounced on an NPV basis. The NPV of debt-to-exports (total debt) and debt-to-revenue ratios (government and government guaranteed debt) are also expected to reach comfortable levels of 50 percent and 86 percent, respectively, by 2010. The debt service on total external debt would also decline sharply to 11 percent of exports of goods and services, and government and government-guaranteed debt service will represent 17 percent of central government revenues by 2010.

96. While debt indicators point in the right direction over the long-term horizon, the situation looks more problematic in the short term. The NPV of debt-to-export ratio is projected to remain above 100 percent in the four coming years and above 140 percent in 2001–02. In terms of the sustainability of the fiscal position, the NPV of debt-to-revenue ratio is projected to exceed 250 percent throughout 2001–02. The year 2002 looks particularly difficult with the bullet repayment of the $75 million Eurobond. Accordingly, privatization proceeds and exceptional sources of financing will need to be secured to avoid excessive domestic financing.

Scenario Two

97. Scenario One is subject to numerous assumptions regarding the course of future economic developments, starting with the path of economic growth, the size of the current account deficit and the amount of nondebt creating inflows. While the thrust of the analysis would remain broadly the same, if both the deficit of the current account and the amount of FDI were projected to be higher, the scenario would be different if the virtuous cycle described above in terms of economic growth would fail to materialize.

98. Accordingly, Scenario Two has been developed to assess the sustainability of Moldova's external debt under a situation where sound economic and financial policies and accelerated structural reforms are pursued, but under less favorable circumstances affecting export growth. It has been assumed that both export and GDP growth would be significantly lower (by more than half) compared to Scenario One. It is also assumed that FDI inflows would be less robust (3 percentage points of GDP lower than in Scenario One), and productivity gains would be slower to come. Workers' remittances are assumed to be $38 million per year higher than in Scenario One on average, reflecting the likely reaction of labor market participants to lower domestic job opportunities and growth. However, in order not to alter too many parameters, other transfers, and official support from bilateral and multilateral creditors were maintained as in the first scenario.

99. On the basis of correspondingly higher current account deficits (averaging 8.2 percent versus 6 percent of GDP in Scenario One), the debt indicators would worsen over the

medium term. The NPV of total external debt-to-exports of goods and services ratio would worsen to about 159 percent by 2010. The external government and government-guaranteed debt-to-revenue ratio is projected to improve slowly, but to remain above the critical level of 250 percent throughout the whole projection period. The total external debt service would remain in the range of 25 to 30 percent of exports of goods and services, showing a dangerous rising trend at the end of the period. Government and government-guaranteed debt service would also continue to require a larger share of revenues than in Scenario One, declining to 37 percent by 2010. As in Scenario One, 2002 and 2003 will be the most difficult years.

100. Overall, while the assumptions in Scenario Two, especially on growth and export growth may be pessimistic, it is possible that this less favorable scenario could occur, even in the presence of good policies. In this low-case scenario, Moldova's cash-flow problem could be prolonged by several years and key ratios would not improve, or would improve only slightly.

Stress testing

101. Hardening the terms of new borrowing would also cause a noticeable deterioration in debt ratios. A 50 percent reduction in the average grant element of new borrowing would have a significant impact on external sustainability. The NPV ratios increase by 15 to 30 percentage points; the rise in short-term (scheduled debt service) ratios is more modest (3-6 percentage points), as financing gaps are projected to remain relatively low. Under Scenario One, harder borrowing terms imply that external debt sustainability could be reached at a slower pace. Under Scenario Two, harder terms alone could make Moldova's debt path unsustainable.

102. For illustrative purposes, a rescheduling operation was simulated for Moldova, in line with typical terms granted to IDA-only low-income countries by the Paris Club. Specifically, it was assumed that the debt would be subject to a two-thirds reduction in NPV terms, applied to all bilateral official and commercial debt (excluding nonguaranteed debt of the private sector). This debt relief was assumed to be applied in two rounds—first to the debt arrears outstanding and to the debt service due over 2001–03 (flow rescheduling), and then to the remaining stock of debt (stock rescheduling). Under Scenario One, the simulation suggests that the flow rescheduling alone in 2001–03 would be sufficient to achieve sustainable short-term and long-term debt indicators. Under Scenario Two, Moldova will need both flow and stock treatment, which would return its debt indicators into comfortable boundaries. The external debt position would remain sensitive to the terms and the availability of new financing even in the event of deep debt relief.

Domestic debt

103. There are several additional factors that may further worsen the overall debt position. One such factor is the accumulation of domestic debt. In other countries covered by this study, domestic debt is generally not expected to play a significant role. However, Moldova is an exception. Before the regional financial crisis of August 1998, the stock of domestic debt amounted to 17.5 percent of GDP, the average treasury bill interest rate was just above

20 percent with an average maturity of about seven months. Since then, the treasury-bill market has contracted to 15 percent of GDP and interest rates have returned to the 20 percent region while maturities have shortened dramatically to an average of about two months. The short maturity and high interest rates create worrisome levels of domestic debt service relative to state budget revenues. Using the assumptions of Scenario One and assuming a gradual lowering of real interest rates and lengthening maturity structure, the ratio of domestic interest to state budget revenues will average 12 percent over the next five years, bringing total interest payments to state budget revenues to an average of 30 percent, clearly signaling a degree of risk.

C. Social Sustainability Assessment

104. The debt sustainability analysis suggests that the debt service burden may constrain public consumption (as a share of GDP) and thereby limit efforts to tackle poverty alleviation in Moldova. The macroeconomic framework calls for underlying growth of 6 percent of GDP, with increased investment financed by greater total savings. Public consumption is projected to remain relatively stable, as a percentage of GDP (around 16 percent) implying an increase in public consumption in real terms.

105. In the health sector, current expenditure per capita is projected to increase by \$4.3 (from \$8.7 in 1999 to \$13 in 2010) in Scenario One and by \$1.0 (from \$8.7 in 1999 to \$9.7 in 2010) in Scenario Two. In addition, the projected capital expenditure per capita in the health sector is estimated to rise to around \$1 per annum. Given the need to meet debt-service obligations, total health expenditure per capita would rise to around \$13 by 2010 (Scenario One), of which currently, an average about one-third is spent on energy.[41] Such a level of health expenditure is considered low when compared to the total cost of a basic public health package per capita estimated by the 1993 World Development Report (calculated at \$12 in 1990 in low-income countries or \$21.3 per capita in middle-income countries). The impact of the debt-service burden on education expenditures is similar to that experienced in the health sector. Although the current unit cost for education is projected to rise in both cases, it remains well below (\$22.1 in 2010 in Scenario One and \$16.5 in 2010 in Scenario Two) the 1998 level of \$32.5.

106. Even in a situation where real social expenditures are fixed, social service delivery and outcomes will improve if expenditures are better targeted and more efficient. The projections assume spending is more efficient and better targeted (e.g., shifting of resources toward basic education and primary health, installation of heat meters with regulatory capacity, etc.) Similarly, improved targeting of social transfers to the most needy will facilitate the protection of the most vulnerable within the available resource constraint.

[41] The projections assume a gradual reduction in energy consumption to about one-third of health expenditures due to measures and select investments to improve efficiency.

VII. Tajikistan[42]

A. Background

107. This note analyzes the sustainability of Tajikistan's external debt, based on data provided by the Tajik authorities and external creditors. At the end of 1999, the nominal value of Tajikistan's total external debt was approximately $1,214 million, or 117 percent of GDP, while government and government-guaranteed debt was about $888 million.[43] Of the latter amount, most is owed directly by the government. The amount of private sector debt guaranteed by the government was relatively small, about $40 million, at end-1999 and consists of loans made to the cotton sector in 1998. It is assumed that this debt will be repaid by mid-2001. At the end of 1999, about 36 percent of the outstanding government and government-guaranteed debt was owed to multilateral institutions, including the IMF ($100 million or 11 percent), the World Bank ($126 million or 14 percent), and the EU ($76 million or 9 percent). The two largest bilateral official creditors, Russia with $288 million and Uzbekistan with $142 million, accounted for 48 percent of the government debt at end-1999.

108. The NPV of government and government-guaranteed debt was $564 million at end-1999, about 64 percent of the nominal value. The lower NPV reflected concessional lending from the IMF and the World Bank, as well as effective and expected debt rescheduling agreements on concessional terms obtained from a number of bilateral official creditors. Relative to Tajikistan's debt service capacity, the NPV of the government and government-guaranteed debt was equivalent to 78 percent of exports of goods and services at end-1999. When barter trade in aluminum and electricity is excluded, however, the ratio of NPV to exports rises to 128 percent.[44]

109. The NPV of government debt service to central government revenues was about 504 percent at end-1999 and the ratio of government debt service costs to revenues was about 20 percent. The debt service to Uzbekistan, about $20 million in 1998 and $12 million in 1999, was paid in kind through transport services provided by Tajik Rail.

110. The accumulation of a large external debt during the 1990s reflects the difficulty of adjusting to the loss of budgetary transfers during the Soviet period and the cost of the civil war thereafter. At independence, Tajikistan had no foreign debt. A substantive part of the

[42] Prepared by country teams headed by Tapio Saavalainen (IMF) and Kiyoshi Kodera (World Bank).

[43] A substantial portion of external debt is owed by a state enterprise, TADAZ, which produces aluminum, and is not guaranteed by the government.

[44] Alumina and electricity are excluded because imports of these goods do not constitute foreign exchange outflows as they are paid by corresponding amounts of exports of aluminum and electricity (the latter is based on bilateral agreements with neighboring countries).

debt is the result of short-term trade credits and unsettled debit balances on correspondent accounts with other CIS countries, related to bilateral trade agreements. Additionally, Tajikistan borrowed from China, Pakistan, Turkey, the United States, and the EU to finance imports of grains and consumer goods. Because most of the debt was short term, debt-service obligations were large. In October 1995, Tajikistan began negotiating with its creditors to reschedule its outstanding debt on concessional terms. By mid-1998, debt restructuring agreements had been concluded with Kazakhstan, Russia, Uzbekistan, Turkey, and the Kyrgyz Republic, typically with a maturity of 15 years, 5-year grace period inclusive, at 2.8 percent interest rate per annum.[45] More recently, Tajikistan has continued to negotiate with Russia, Uzbekistan, and the EU, Pakistan, and India to further reduce the debt service burden. In mid-2000, Tajikistan reached agreement with China to convert its outstanding debt into a grant.

B. Outlook for 2001-2010

111. Over the medium term, while remaining a concern, under a favorable external environment and strong response of the economy to reforms, Tajikistan's debt appears sustainable from the overall balance of payments view. In fiscal terms, however, it is not sustainable, at least over the next few years. In a less favorable domestic and external environment debt indicators would worsen and remain fiscally unsustainable throughout the 10-year projection period.

Scenario One

112. Under Scenario One, fiscal revenue is expected to increase by about 0.5 percentage points of GDP per year in 2000–08 to reach the current average revenue-to-GDP level in the CIS.[46] The overall balance of the general government is assumed to improve from a deficit of 3.1 percent in 1999 to a deficit of 1.2 percent of GDP in 2000 and move to a surplus in 2002. During 2004–10, a surplus of about 1.4 percent of GDP is assumed. Despite this fiscal consolidation in the first half of the decade, to cover the particularly high external debt service, the economy's investment requirement will need to be largely met with external savings because private savings are expected to remain low. Hence, the external current account deficit is expected to remain at about 6 percent of GDP until 2004. In the second half of the decade, continued fiscal restraint and the expected recovery in private savings will

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[45] The 1996 agreement with Russia had a maturity of 12 years, including a 2-year grace period. As the 1998 agreement with Uzbekistan was rejected by the Uzbek parliament, Tajikistan has been servicing its debt to Uzbekistan on the basis of an earlier agreement, which had a compressed repayment structure and no grace period.

[46] A projected increase in ratio of general government revenue to GDP to 18.2 percent by 2010 assumes that there is a considerable scope to improve collection performance given that currently this ratio is amongst the lowest in the CIS. Such efforts are already underway. Moreover, a projected recovery in real wages and social transfers is likely to have a favorable impact on the growth of the consumption tax base (e.g., VAT and excises).

increasingly meet investment needs and the external current account deficit is assumed to then decline gradually to about 1.3 percent of GDP by the end of the decade. Capital inflows (including financing items) are also projected to increase considerably, assuming that disbursements from multilateral institutions will continue. New borrowing to close the balance of payments financing gap is assumed to be repayable in 15 years including a 5-year grace period, and carrying an interest rate of 2.8 percent. Gross reserves are projected to increase from 1.7 months of imports at end-1999 to about 3 months of imports (excluding aluminum and electricity) by 2002 and be maintained above this level for the remainder of the decade.

113. Scenario One assumes real GDP growth of 5 percent throughout 2000–10. A modest recovery in cotton and aluminum prices is assumed to begin in 2000 and continue thereafter. Reflecting improved macroeconomic stability, inflation declines from 20 percent to about 7 percent in 2003 and stays at that level. Taking into account the potential of the cotton and aluminum sectors as well as an expected rise of other exports (vegetables, fruits, and light manufacturing goods), the dollar value of exports is projected to increase by about 8–10 percent annually between 2002–10.[47] The dollar value of imports is projected to grow by around 8–9 percent per annum.[48] The terms of trade are expected to remain virtually unchanged during the decade.[49]

114. This scenario also assumes that Tajikistan's debt to the EU, Russia, India, and Pakistan will be rescheduled on concessional terms in 2001. Specifically, it is assumed that the debt stock to Russia will be reduced by about $126 million as agreed in principle earlier with Russian authorities. The EU has already agreed to provide refinancing of Euro 60 million as well as annual grants up to Euro 7 million for five years to help Tajikistan to repay its debt, after a significant up-front payment to the EU in 2000. Uzbekistan is assumed to agree to extend the repayment period to 2010. Debt rescheduling with India and Pakistan are expected to be on the same concessional terms as those obtained from other bilateral creditors in the past.

115. Under these assumptions, the nominal value of the government debt is projected to increase from $888 million at end-1999 to $1,161 million at end-2010. The share of multilateral debt (including IMF) would rise from 36 to 81 percent over the same period. The NPV of total government debt is highest in 2000 at 59 percent of GDP and then gradually declines to 23 percent of GDP in 2010. The NPV of government and government-guaranteed debt as a percent of exports (excluding aluminum and electricity) declines from

[47] The growth of export volume is assumed to average 4.7 percent per annum over the same period.

[48] In volume terms, imports are projected to grow by 4½ percent per annum.

[49] The assumptions about export and import prices are consistent with the WEO commodity price projections.

128 in 1999 to 61 percent in 2010. In 2010, the ratio of government debt service to exports of goods and services is only 5 percent of total exports and 9 percent of relevant exports.

116. The burden of Tajikistan's external debt service, however, remains high compared to its fiscal revenue. The NPV of debt-to-revenues (central government) is projected to remain high although declining. If the NPV debt-to-revenue ratio of 250 percent is used as a benchmark for sustainability, then Tajikistan government external debt is not sustainable during the period 2001–07. After that the ratio would continue to fall to around 157 percent by 2010. Debt service on government debt is projected at 56 percent of central government revenues in 2000, would rise in 2001 and then start to decline. However, it would remain above 30 percent until 2007.

117. Scenario One indicates that Tajikistan is facing a high-debt service burden in the next six to seven years. The key constraint is not exports, but the debt servicing costs relative to budgetary revenues. Reducing this ratio to less than 250 percent will require several measures beginning with improved fiscal revenue performance. As Tajikistan's revenue-to-GDP ratio is second lowest among CIS countries and given the potential for improvements in tax administration, the projected increase of gross tax ratio from 13.5 percent of GDP in 1999 to 16.5 percent of GDP by 2005 is deemed achievable. Nevertheless, an increase in government debt service (excluding that to Uzbekistan) from 0.5 percent of GDP in 1999 to 3–3½ percent in 2001–05 will require a very tight fiscal stance. Further it is assumed that the balance of payments financing gap can be filled and that a major part of this support will be available for budgetary financing.

118. The envisioned revenue developments and external financing constraints imply that total general government expenditure can grow on average by 4 to 5 percent per annum in real terms. This medium-term fiscal framework leaves room for a significant real increase in social spending (mainly education, health, pensions, and income maintenance support) which could grow by over 10 percent per year during 2001–05. The feasibility of this spending pattern, however, rests upon the condition that outlays on economic (and other nonpriority) services decline by about 2 percent per year in real terms. Government restructuring to increase efficiency, making public transportation and communication self-financing and improving cost recovery in housing and related services are key reform areas to achieve this outcome.

Scenario Two

119. Scenario Two was prepared to ascertain the likely outcome if the external environment or if the real sector's response to the adjustment program is less favorable than in Scenario One. In particular, it is assumed that exports would grow by about 40 percent less each year than in the Scenario One (i.e., 5 percent a year instead of about 9 percent) and that real GDP growth would only be 2.5 percent a year. With the slower export growth it is assumed that the nominal exchange rate cannot remain constant; a gradual depreciation is assumed, but in real terms the exchange rate is assumed to be constant. As a result of the lower GDP growth and the more depreciated normal exchange rate compared to the base case, imports would grow more slowly, but not by enough to prevent a worsening of the current account compared to Scenario One. This combined with slightly lower FDI (2 versus

2.5 percent of GDP a year) would result in significantly higher external financing gaps that would exceed 3 percent of GDP in 2007–10.

120. In Scenario Two, debt and debt service indicators worsen dramatically. The NPV of debt-to-exports ratio would decline much slower and would stay above 115 percent throughout the projection period. Similarly, the debt-service ratio would remain in the 14 to 15 percentage range, several percentage points higher than in Scenario One. Reflecting the higher debt service associated with the higher financing gaps and a more depreciated exchange rate, the fiscal situation could worsen significantly. In fact, the NPV of debt to revenues would exceed 600 percent starting 2001 and only decline to about 500 percent in 2008–10. Debt service as a share of revenues, following a small decline from 77 to 58 percent in 2001–05, would rise again and remain above 60 percent for the remainder of the projection period.

Stress testing

121. Hardening the terms of new borrowing would cause a sharp deterioration in debt ratios. A 50 percent reduction in the average grant element of new borrowing would have a significant impact on external sustainability. The NPV ratios jump by 11–25 percentage points; the short-term (debt service) indicators, both in relation to exports and central government revenue, also increase, but the impact in the first five years is limited by 7-8 percentage points. However, in the outer years, they deteriorate dramatically (by 35–50 percentage points), indicating an unsustainable situation.

122. For illustrative purposes, a rescheduling operation was simulated, in line with typical terms granted to IDA-only low-income countries by the Paris Club. Specifically, it was assumed that the debt would be subject to a two-thirds reduction in NPV terms, applied to all bilateral official and commercial debt (excluding nonguaranteed debt of the private sector). This debt relief was assumed to be applied in two rounds—first to the debt arrears outstanding and to the debt service due over 2001–03 (flow rescheduling), and then to the remaining stock of debt (stock rescheduling). Under Scenario One, concessional flow rescheduling in 2001–03 would be sufficient to achieve sustainable short-term and long-term debt indicators for Tajikistan (including debt and debt service to revenues), while under Scenario Two, only flow and stock treatment together would return the debt indicators within comfortable boundaries. This simulation also demonstrates that the external debt position would remain sensitive to the terms and the availability of new financing even in the event of deep debt relief.

123. A weaker external environment could give rise to pressures for exchange rate depreciation. To illustrate the impact of this factor, a stress test was run on Scenario Two for Tajikistan, holding other assumptions constant. An exchange rate shock was simulated in 2001, with the real effective exchange rate depreciating by about 27 percent in 2001 (year-on-year), falling further by another 5 percent in 2002, 4 percent in 2003, and 3 percent in 2004, before stabilizing in the outer years.

124. The impact of real depreciation feeds immediately into the fiscal measures of debt burden, as the output and revenues decline sharply in dollar terms. On average, the NPV of

external debt to revenues deteriorates by 124 percent in the four years after the depreciation. Subsequently its effect tapers off. Fiscal ratios in the second half of the decade worsen compared to Scenario Two by 114 percent, since the external gap shrinks.

125. The effect of a real depreciation on external debt ratios is less pronounced than on the fiscal ratios. However, significant additional borrowing needs in the first years after the depreciation give rise to a "debt trap," and a rapid increase in the stock of external debt. By 2010, the NPV of debt to exports ratio is projected to exceed a critical threshold of 250 percent, despite highly concessional terms assumed for new borrowing.

Table 1. Armenia: Summary of Debt Sustainability Analysis, Historical Performance, 1995-1999

	1995	1996	1997	1998	Prelim. 1999	Average 1995-99
Nominal GDP, in millions of U.S. dollars	1,287	1,597	1,639	1,899	1,847	1,654
Exchange rate, LCU/US$ (period average)	404	419	465	509	523	464
Real GDP growth, in percent	6.9	5.9	3.3	7.2	3.3	5.3
GDP deflator	85	17.2	-0.7	8.1	-5.9	20.8
Real effective exchange rate, percent change	24	-23.8	1.7	10.8	-5.1	1.5
Exports GS volume growth, percent change	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Exports GS value growth, percent change	30.7	22.9	-10.3	8.9	6.5	11.8
Imports GS volume growth, percent change	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Imports GS value growth, percent change	74.2	17.4	7.2	5.0	-8.1	19.1
Exports GS, in percent of GDP	23.3	23.1	20.2	18.9	20.7	21.2
Imports GS, in percent of GDP	58.8	55.6	58.1	52.7	49.8	55.0
Current account balance, including transfers, in percent of GDP	-15.7	-13.8	-17.6	-20.7	-16.2	-16.8
Non-interest current account, in percent of GDP 1/	-14.6	-13.0	-16.0	-19.4	-15.1	-15.6
Net foreign direct investment, in percent of GDP	2.0	1.1	3.2	11.6	6.6	4.9
Primary balance, central government budget, in percent of GDP	-8.0	-6.7	-3.2	-3.0	-5.1	-5.2
Overall balance, central government budget, in percent of GDP	-11.1	-9.3	-5.9	-4.8	-7.1	-7.7
Central government revenue, in percent of GDP 2/	8.5	12.9	14.3	16.1	17.7	13.9

1/ NICA excludes interest payments and includes income receipts.

2/ Central government revenue includes extrabudgetary funds and excludes grants.

Table 2. Armenia: Summary of Debt Sustainability Analysis, Macroeconomic Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Scenario One													
Nominal GDP, in millions of U.S. dollars	1912	2080	2274	2484	2686	2905	3142	3398	3675	3974	4298	2486	3697
Exchange rate, LCU/US$ (period average)	534	547	549	549	549	549	549	549	549	549	549	549	549
Real GDP growth, in percent	4.0	6.5	6.0	6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.7	5.0
GDP deflator	-0.4	2.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	3.0
Real effective exchange rate, percent change	-8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports GS volume growth, percent change	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Exports GS value growth, percent change	16.4	13.7	9.9	9.9	9.5	9.4	9.4	9.4	9.4	9.4	9.4	10.5	9.4
Imports GS volume growth, percent change	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Imports GS value growth, percent change	8.8	7.2	2.0	2.6	4.4	5.0	5.5	6.0	7.0	8.1	8.2	4.2	7.0
Exports GS, in percent of GDP	23.3	24.4	24.5	24.6	25.0	25.2	25.5	25.8	26.1	26.5	26.8	24.7	26.1
Imports GS, in percent of GDP	52.3	51.5	48.1	45.1	43.6	42.3	41.3	40.5	40.0	40.0	40.0	46.1	40.4
Current account balance, including transfers, in percent of GDP	-15.3	-12.8	-11.7	-10.7	-9.6	-8.8	-8.1	-7.5	-7.2	-7.2	-7.2	-10.7	-7.4
Non-interest current account, in percent of GDP 1/	-14.3	-11.9	-10.9	-9.9	-9.0	-8.2	-7.5	-6.9	-6.6	-6.6	-6.6	-10.0	-6.9
Net foreign direct investment, in percent of GDP	8.4	7.7	7.0	6.4	6.0	5.5	5.1	4.7	4.4	4.0	3.7	6.5	4.4
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	-2.7	-1.5	-1.0	-1.4	-1.5	-1.3	-1.2	-1.1	-1.0	-0.9	-1.6	-1.1
Primary balance, central government budget, in percent of GDP	-5.9	-1.9	-1.6	-1.4	-1.5	-1.6	-1.6	-1.6	-1.6	-1.6	-1.7	-1.6	-1.6
Overall balance, central government budget, in percent of GDP	-7.6	-3.5	-3.0	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.8	-2.5
Central government revenue, in percent of GDP 2/	16.5	17.3	17.8	18.2	18.7	18.9	19.0	19.0	19.0	19.0	19.0	18.2	19.0
Scenario Two													
Nominal GDP, in millions of U.S. dollars	1912	2019	2132	2250	2376	2508	2648	2796	2952	3116	3290	2257	2960
Exchange rate, LCU/US$ (period average)	534	544	545	548	551	553	556	559	561	564	567	548	561
Real GDP growth, percent	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
GDP deflator	-0.4	2.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	3.0
Real effective exchange rate, percent change	-8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports GS volume growth, percent change	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Exports GS value growth, percent change	16.4	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Imports GS volume growth, percent change	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Imports GS value growth, percent change	8.8	2.5	3.0	3.5	4.0	4.0	5.0	5.0	5.0	5.0	5.0	3.4	5.0
Exports GS, in percent of GDP	23.3	23.5	23.7	23.9	24.1	24.4	24.6	24.8	25.0	25.2	25.4	23.9	25.0
Imports GS, in percent of GDP	52.3	50.8	49.5	48.6	47.8	47.1	46.9	46.6	46.4	46.1	45.8	48.8	46.4
Current account balance, including transfers, in percent of GDP	-15.3	-13.5	-13.2	-13.9	-13.7	-13.5	-13.6	-13.6	-13.5	-13.4	-13.1	-13.6	-13.5
Non-interest current account, in percent of GDP 1/	-14.2	-12.5	-12.3	-12.9	-12.7	-12.3	-12.4	-12.3	-12.1	-11.8	-11.5	-12.5	-12.0
Net foreign direct investment, in percent of GDP	8.4	6.0	5.5	5.0	4.5	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	-4.8	-3.3	-4.2	-5.1	-5.9	-6.5	-6.3	-5.9	-5.2	-5.0	-4.7	-5.8
Primary balance, central government budget, in percent of GDP	-5.9	-1.7	-1.6	-1.3	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.5	-1.4
Overall balance, central government budget, in percent of GDP	-7.6	-3.4	-3.0	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.8	-2.5
Central government revenue, in percent of GDP 2/	16.5	17.3	17.8	18.2	18.7	18.9	19.0	19.0	19.0	19.0	19.0	18.2	19.0

1/ NICA excludes interest payments and includes income receipts.

2/ Central government revenue includes extrabudgetary funds and excludes grants.

Table 3. Armenia: Summary of Debt Sustainability Analysis, Financing and Rescheduling Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Pipeline financing, in millions of U.S. dollars 1/	85.2	44.7	23.1	6.0	3.6	15.4	0.0	0.0	0.0	0.0	0.0	18.6	0.0
Identified financing, in millions of U.S. dollars	5.2	99.6	90.3	99.5	90.8	81.3	95.5	100.3	91.2	101.3	111.2	92.3	99.9
of which: World Bank	5.0	66.0	25.7	39.0	41.4	40.4	45.0	45.0	45.0	45.0	45.0	42.5	45.0
Average grant element of identified new financing 3/	58.6	50.5	44.3	40.1	37.5	35.6	33.5	31.6	29.8	28.5	26.6		
Gap fill, in millions of U.S. dollars, Scenario One		57.0	35.0	25.0	36.7	44.6	40.0	40.5	41.1	41.7	39.6	39.7	40.6
New financing requirements, in millions of U.S. dollars, Scenario One	5.2	156.6	125.3	124.5	127.5	125.9	135.5	140.8	132.3	143.0	150.7	131.9	140.5
Gap fill, in millions of U.S. dollars, Scenario Two		96.0	70.9	94.3	120.5	148.9	172.9	175.5	173.5	162.0	164.7		
New financing requirements, in millions of U.S. dollars, Scenario Two	5.2	195.5	161.2	193.8	211.3	230.2	268.4	275.8	264.7	263.3	275.8	198.4	269.6
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario One	0.0	-2.7	-1.5	-1.0	-1.4	-1.5	-1.3	-1.2	-1.1	-1.0	-0.9	-1.6	-1.1
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario Two	0.0	-4.8	-3.3	-4.2	-5.1	-5.9	-6.5	-6.3	-5.9	-5.2	-5.0	-4.7	-5.8
Terms of residual gapfill financing	10 year grace/ 20 years maturity / 3% fixed interest rate, implying a grant element of 25%												
Average grant element of new financing, Scenario One 2/	62.4	54.7	45.6	41.5	41.0	40.2	39.2	38.1	37.1	36.3	34.4		
Average grant element of new financing, Scenario Two 2/	62.4	41.4	36.8	34.5	33.6	32.3	31.0	30.0	29.1	28.2	27.1		
Debt rescheduling assumptions	No debt rescheduling												
Energy arrears rescheduling	No energy arrears rescheduling												

1/ Disbursements on loans contracted prior to December 31, 1999.

2/ Grant element is calculated on a stock basis (by dividing the difference between nominal and present value of debt by its nominal value).

Table 4. Armenia: Summary of Debt Sustainability Analysis, Key Debt Sustainability Indicators, 1999-2010 1/

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NPV of debt as share of exports of goods and services												
Scenario One	154	140	142	138	135	130	127	123	121	119	118	118
Scenario Two	154	140	155	160	170	180	190	203	215	228	239	248
NPV of debt as share of central government revenue												
Scenario One	168	185	189	178	170	159	155	152	150	150	151	152
Scenario Two	168	185	193	201	211	218	231	246	264	282	297	313
Total debt service as share of central government revenue												
Scenario One	19	22	18	18	17	16	15	14	13	9	9	8
Scenario Two	19	22	18	20	19	20	19	19	18	15	15	15
Total debt service as share of exports of goods and services												
Scenario One	16	15	12	13	12	12	11	10	9	7	6	6
Scenario Two	16	15	13	15	15	15	15	14	14	11	11	11

1/ External sustainability ratios include both government and government-guaranteed and private non-guaranteed debt (PNG). Fiscal ratios exclude PNG.

Table 5. Armenia: External Debt Service, 1998-2010

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total debt service 1/	66.3	61.3	65.8	61.6	72.1	75.4	81.3	82.3	82.1	82.4	64.6	67.7	68.7
Principal	44.2	42.2	47.3	42.9	53.6	57.0	63.3	64.0	63.0	62.2	43.2	44.3	43.2
Medium-and long-term existing debt	44.2	42.2	47.3	42.3	53.1	56.4	62.8	59.3	55.3	50.3	29.0	20.5	14.8
Multilateral	31.1	23.1	21.5	22.2	31.5	36.6	40.0	41.9	38.9	30.2	23.1	16.0	10.4
Of which:													
IMF	0.6	13.1	16.4	10.0	19.3	23.9	32.0	33.9	27.7	18.4	13.8	5.7	0.0
World Bank	0.2	0.4	0.5	0.5	0.5	0.9	1.3	3.2	6.3	6.8	8.7	9.7	9.8
Other major multilateral	30.4	9.6	4.7	11.7	11.7	11.7	6.7	4.8	4.9	4.9	0.6	0.6	0.6
Official bilateral	8.2	9.8	14.4	16.3	17.8	16.1	20.4	15.0	15.0	15.1	6.0	4.5	4.5
Paris Club	3.4	3.4	12.8	12.7	14.1	12.4	18.6	15.0	15.0	15.1	6.0	4.5	4.5
Of which:													
Russia	3.4	3.4	12.8	12.7	13.5	10.7	10.7	13.3	13.3	13.3	4.0	2.5	2.5
Non-Paris Club	4.8	6.4	1.6	3.6	3.6	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0
Commercial	4.9	9.4	11.4	3.8	3.8	3.8	2.4	2.4	1.3	5.0	0.0	0.0	0.0
Short term	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New debt	…	…	…	0.5	0.5	0.5	0.5	4.8	7.6	12.0	14.2	23.8	28.3
Of which:													
Multilateral	…	…	…	0.5	0.5	0.5	0.5	0.8	2.1	7.6	13.5	19.9	23.7
Bilateral	…	…	…	0.0	0.0	0.0	0.0	4.0	5.5	4.3	0.7	4.0	4.6
Unidentified gap fill	…	…	…	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest	22.1	19.0	18.5	18.7	18.5	18.5	17.9	18.3	19.2	20.2	21.4	23.3	25.5
Medium-and long-term existing debt	22.1	19.0	18.5	17.6	14.8	12.8	10.7	8.8	7.3	5.8	4.4	3.9	3.6
Multilateral	11.9	9.2	9.6	8.7	7.7	6.7	5.6	4.7	4.1	3.5	3.1	2.9	2.7
Of which:													
IMF	3.6	3.0	2.8	2.2	1.8	1.4	1.0	0.5	0.3	0.2	0.1	0.0	0.0
World Bank	2.2	2.7	3.3	3.3	3.3	3.2	3.2	3.1	3.1	3.0	2.9	2.8	2.6
Other major multilateral	6.2	3.5	3.5	3.2	2.6	2.0	1.4	1.0	0.7	0.4	0.1	0.1	0.1
Official bilateral	7.3	6.9	6.6	7.3	5.7	5.0	4.3	3.5	2.7	1.9	1.3	1.0	0.8
Paris Club	5.2	5.9	6.4	5.8	5.2	4.7	4.2	3.5	2.7	1.9	1.3	1.0	0.8
Of which:													
Russia	4.7	5.0	5.6	5.0	4.4	3.8	3.3	2.6	1.9	1.1	0.5	0.3	0.1
Non-Paris Club	2.2	1.1	0.2	1.5	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Commercial	2.8	2.9	2.2	1.6	1.4	1.1	0.8	0.6	0.5	0.3	0.0	0.0	0.0
Short term (if any)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New debt	…	…	…	1.1	3.7	5.7	7.3	9.4	11.9	14.4	17.0	19.4	21.9
Of which:													
Multilateral	…	…	…	1.0	1.7	2.1	2.5	2.9	3.2	3.4	3.7	4.0	4.2
Bilateral	…	…	…	0.1	0.3	0.8	1.2	2.0	2.8	3.8	4.9	5.8	6.9
Unidentified gap fill	…	…	…	0.0	1.7	2.8	3.5	4.6	6.0	7.1	8.4	9.6	10.9
Total debt service after rescheduling 2/	66.3	61.3	65.8	61.6	72.1	75.4	81.3	82.3	82.1	82.4	64.6	67.7	68.7

1/ On a scheduled basis, consistent with the standard balance of payments presentation. Includes debt service on rescheduling agreements already in place.

2/ No rescheduling assumed.

Table 6. Armenia: Expenditures for External Debt Service and Social Sectors

	1995	1998	1999
	(In millions of U.S. dollars)		
Total social sector spending:	118.5	161.4	208.3
Family allowances and other social transfers	23.6	39.5	49.8
Pensions and unemployment benefits	37.7	52.6	59.5
Health	23.8	27.1	25.7
Education	0.0	42.1	73.3
Debt service paid	63.0	77.0	61.0
Debt service due (1)	63.0	77.0	61.0
Net official aid flows (2)	315.0	156.0	189.0
Of which : Grants	197.0	122.0	106.0
	(In percent of GDP)		
Total social sector spending:	9.2	8.5	11.0
Family allowances and other social transfers	1.8	2.1	2.6
Pensions and unemployment benefits	2.9	2.8	3.1
Health	1.9	1.4	1.4
Education	2.6	2.2	3.9
Debt service paid	4.9	4.1	3.3
Debt service due (1)	4.9	4.1	3.3
Net official aid flows (2)	24.5	8.2	10.2
Of which: Grants	15.3	6.4	5.7
Memorandum items:			
GDP (in millions of U.S. dollars)	1,287.0	1,899.0	1,847.0
Average exchange rate (LCU/US$)	406.0	505.0	524.0

Table 7. Armenia: Social Indicators for Armenia

	1990	1995	1998	1999
Education				
Adult illiteracy rate (in percent)	…	…	1.2	…
Primary school enrollment (in percent)	…	…	90.2 1/	…
Male	…	…	87.6 1/	…
Female	…	…	93.0 1/	…
Health				
Population per physician	234.0	297.0	292.0	…
Population per hospital bed	111.0	131.0	150.0	…
Child malnutrition (percent of children under 5)	…	…	3.3	…
Demographic				
Population (per 1,000)	3,545.0	3,760.0	3,795.0	3,781.7
Population growth rate	1.9	0.4	0.4	0.5
Crude birth rate (per 1,000)	22.5	13.0	10.5	…
Crude death rate (per 1,000)	6.2	6.6	6.1	…
Infant mortality (per 1,000 live births)	18.6	14.2	14.7	15.4
Urban population (percent of total population)	69.5	67.3	66.8	66.7
Life expectancy at birth (years)	71.7	72.3	74.4	73.2
Poverty				
Poverty: headcount index (percent of population)	54.7 2/	…	…	43.5 3/

1/ 1997
2/ 1996
3/ At $2.15/day, incompatible with the 1996 number.

Table 8. Georgia: Summary of Debt Sustainability Analysis, Historical Performance, 1995-1999

	1995	1996	1997	1998	Prelim. 1999	Average 1995-99
Nominal GDP in millions of U.S. dollars	1,902.9	3,009.6	3,472.9	3,493.1	2,728.1	2,921.3
Exchange rate, LCU/US$ (period average)	1.3	1.3	1.3	1.4	2.0	1.5
Real GDP growth, in percent	2.6	10.5	10.7	2.9	2.9	5.9
GDP deflator	162.7	40.2	7.6	4.8	10.1	45.1
Real effective exchange rate, percent change	105.8	26.1	3.2	3.8	-33.4	21.1
Exports G volume growth, percent change	-14.3	18.7	27.7	-1.7	-3.5	5.3
Exports G value growth, percent change	-4.7	15.0	18.4	-3.1	-0.3	5.0
Imports G volume growth, percent change	-13.6	5.8	52.0	16.8	-12.5	9.7
Imports G value growth, percent change	-6.1	9.7	37.1	10.6	-12.5	7.7
Exports GS, in percent of GDP	25.5	17.0	19.0	20.6	27.1	21.8
Imports GS, in percent of GDP	42.3	28.8	39.4	41.1	46.4	39.6
Current account balance, including transfers, in percent of GDP	-11.3	-9.1	-10.8	-11.1	-8.0	-10.1
Non-interest current account, in percent of GDP 1/	-7.1	-7.1	-9.6	-9.9	-6.2	-8.0
Net foreign direct investment, in percent of GDP	0.3	1.8	6.8	6.3	2.2	3.5
Primary balance, central government budget, in percent of GDP	…	…	…	-3.5	-3.0	-3.3
Overall balance, central government budget, in percent of GDP	…	…	…	-5.9	-5.9	-5.9
Central government revenue, in percent of GDP 2/	…	…	…	…	8.0	8.0

1/ NICA excludes interest payments and includes income receipts.

2/ Central government revenue excludes extrabudgetary funds and grants.

Table 9. Georgia: Summary of Debt Sustainability Analysis, Macroeconomic Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Scenario One													
Nominal GDP, in millions of U.S. dollars	3070	3374	3646	3916	4241	4605	4990	5407	5803	6228	6684	3956	5822
Exchange rate, LCU/US$ (period average)	1.97	2.00	2.02	2.05	2.07	2.08	2.10	2.12	2.13	2.15	2.17	2.05	2.13
Real GDP growth, in percent	1.2	3.8	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.8	4.4
GDP deflator 1/	4.3	5.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.3	4.0
Real effective exchange rate, percent change	-10.0	-5.0	-4.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.2	0.0
Exports G volume growth, percent change	9.9	6.3	7.1	6.9	6.9	6.9	6.9	6.4	5.9	5.6	5.6	6.8	6.1
Exports G value growth, percent change	9.2	9.5	9.2	9.0	9.0	9.0	9.0	8.5	8.0	7.7	7.7	9.1	8.2
Imports G volume growth, percent change	-5.1	10.1	9.3	7.2	4.9	7.9	11.5	15.8	13.4	15.5	8.3	7.9	12.9
Imports G value growth, percent change	8.5	5.9	4.5	4.3	4.8	5.0	6.2	7.3	6.8	7.0	6.0	4.9	6.7
Exports GS, in percent of GDP	26.9	26.9	27.3	28.0	28.3	28.2	28.2	28.3	28.5	28.8	29.0	27.7	28.6
Imports GS, in percent of GDP	44.9	43.3	41.9	40.8	39.6	38.4	37.7	37.3	37.1	37.0	36.6	40.8	37.2
Current account balance, including transfers, in percent of GDP	-8.1	-7.1	-6.2	-4.6	-3.5	-2.9	-2.6	-2.3	-2.0	-1.7	-1.2	-4.9	-1.9
Non-interest current account, in percent of GDP 2/	-6.6	-5.6	-4.7	-3.2	-2.3	-1.8	-1.6	-1.4	-1.1	-0.9	-0.5	-3.5	-1.1
Net foreign direct investment, in percent of GDP	2.6	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.5
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Primary balance, central government budget, in percent of GDP	-1.1	0.2	1.8	1.6	2.4	2.7	2.6	2.5	2.5	2.5	2.5	1.7	2.5
Overall balance, central government budget, in percent of GDP	-3.9	-2.0	-0.6	-0.7	0.2	0.7	0.6	0.6	0.6	0.6	0.6	-0.5	0.6
Central government revenue, in percent of GDP 3/	7.9	8.3	8.6	9.0	9.7	9.9	10.2	10.5	10.5	10.5	10.5	9.1	10.4
Scenario Two													
Nominal GDP, in millions of U.S. dollars	3070	3226	3364	3527	3729	3952	4181	4423	4678	4949	5235	3560	4693
Exchange rate, LCU/US$ (period average)	1.97	2.00	2.02	2.05	2.07	2.08	2.10	2.12	2.13	2.15	2.17	2.05	2.13
Real GDP growth, in percent	1.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
GDP deflator 1/	4.3	5.6	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.3	4.0
Real effective exchange rate, percent change	-10.0	-5.0	-4.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.2	0.0
Exports G volume growth, percent change	9.9	3.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.8	3.9
Exports G value growth, percent change	9.2	4.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.8	6.0
Imports G volume growth, percent change	-5.1	2.0	4.2	3.5	3.2	2.9	3.8	3.8	3.8	3.8	3.8	3.2	3.8
Imports G value growth, percent change	8.5	2.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.0	5.5
Exports GS, in percent of GDP	26.9	26.9	27.3	27.6	27.7	27.7	27.8	27.8	27.9	27.9	28.0	27.4	27.9
Imports GS, in percent of GDP	44.9	43.9	44.4	44.7	44.6	44.4	44.3	44.2	44.0	43.9	43.8	44.4	44.0
Current account balance, including transfers, in percent of GDP	-8.1	-6.0	-6.3	-6.5	-6.5	-6.6	-6.7	-6.8	-6.8	-6.9	-6.9	-6.4	-6.8
Non-interest current account, in percent of GDP 2/	-6.6	-4.2	-4.4	-4.6	-4.8	-4.9	-4.9	-5.0	-5.0	-5.0	-5.0	-4.6	-5.0
Net foreign direct investment, in percent of GDP	2.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	6.0	-0.6	-4.5	-7.0	-7.0	-6.7	-6.4	-6.1	-5.9	-5.7	-2.6	-6.2
Primary balance, central government budget, in percent of GDP	-1.6	0.8	2.1	2.1	3.0	3.2	3.1	3.0	3.0	3.1	3.1	2.2	3.0
Overall balance, central government budget, in percent of GDP	-4.4	-1.9	-0.7	-0.8	0.1	0.6	0.5	0.5	0.5	0.5	0.5	-0.6	0.5
Central government revenue, in percent of GDP 3/	7.9	8.3	8.6	9.0	9.7	9.9	10.2	10.5	10.5	10.5	10.5	9.1	10.4

1/ Changes in the CPI index.

2/ NICA excludes interest payments and includes income receipts.

3/ Central government revenue excludes extrabudgetary funds and grants.

Table 10. Georgia: Summary of Debt Sustainability Analysis, Financing and Rescheduling Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Pipeline financing, in millions of U.S. dollars 1/	114.5	94.4	72.3	38.3	14.8	0.0	0.0	0.0	0.0	0.0	0.0	44.0	0.0
New financing requirements, in millions of U.S. dollars, Scenario One	54.1	450.4	266.3	155.7	148.6	167.4	155.4	148.0	145.7	141.4	141.7	237.7	146.4
New financing requirements, in millions of U.S. dollars, Scenario Two	54.1	450.4	286.6	314.2	409.8	445.3	437.2	430.5	428.8	435.3	440.1	381.3	434.4
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario One	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario Two	0.0	6.0	-0.6	-4.5	-7.0	-7.0	-6.7	-6.4	-6.1	-5.9	-5.7	-2.6	-6.2
Average grant element of new financing, Scenario One 2/	28.8	38.7	33.7	26.0	22.7	23.5	24.6	22.9	23.5	23.8	24.2		
Average grant element of new financing, Scenario Two 2/	28.8	38.7	30.3	22.8	19.6	19.2	18.9	17.2	16.8	16.4	16.0		
Terms of residual gapfill financing	In the Scenario One gap is expected to be filled with possible support from new IMF program and bilateral reschedulings. In the Scenario Two the residual gap is financed through borrowings with 3/10/4 percent terms, implying a grant element of 20 percent.												
Debt rescheduling assumptions	Flows on all bilateral creditors that come due between Jan.01-Dec.02 are rescheduled at 3/10/4 percent. Stock of arrears to Turkmenistan and Russia accumulated till Dec.2001 are rescheduled at 0/10/4 percent, implying a grant element of 18 percent.												
Energy arrears rescheduling	No energy arrears reschedulings in the Upper or Lower cases. An alternative scenario was built to include 475 US$ million of energy arrears that are assumed to be rescheduled at 5/15/3%, imlying a grant element of 29 percent.												

1/ Disbursements on loans contracted prior to December 31, 1999.
2/ Grant element is calculated on a stock basis (by dividing the difference between nominal and present value of debt by its nominal value). Rescheduled debt service has been included in the grant element calculation.

Table 11. Georgia: Summary of Debt Sustainability Analysis, Key Debt Sustainability Indicators, 1999-2010 1/

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NPV of debt as share of exports of goods and services												
Scenario One, w/o energy arrears	213	190	185	175	160	140	126	114	103	94	85	77
Scenario One, incl. energy arrears	265	239	231	218	200	174	154	137	123	110	98	87
Scenario Two	213	190	198	193	192	192	194	198	203	208	213	218
NPV of debt as share of central government revenue												
Scenario One, w/o energy arrears	688	599	544	506	453	376	329	291	257	238	217	199
Scenario One, incl. energy arrears	857	755	680	630	567	466	403	351	306	278	250	224
Scenario Two	688	599	598	579	558	520	511	509	509	522	536	551
Total debt service as share of central government revenue												
Scenario One, w/o energy arrears	45	45	33	37	55	58	50	43	39	35	34	33
Scenario Two	45	45	36	45	67	75	71	66	68	74	81	86
Total debt service as share of exports of goods and services												
Scenario One, without energy arrears	13	13	10	12	18	20	18	15	14	13	13	12
Scenario Two	13	13	13	16	24	27	26	25	26	28	30	32

1/ External sustainability ratios include both government and government-guaranteed and private non-guaranteed debt (PNG). Fiscal ratios exclude PNG.

Table 12. Georgia: External Debt Service, 1998-2010

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total debt service 1/	65.9	99.4	193.8	237.7	275.9	210.4	253.3	237.4	217.0	209.9	203.5	202.8	209.3
Principal													
Medium-and long-term existing debt	23.5	49.2	144.4	184.6	219.2	155.1	201.7	189.9	172.7	168.0	163.7	165.3	174.3
Multilateral	3.7	24.2	34.3	48.0	66.1	80.2	91.4	80.3	68.9	65.3	77.4	72.8	74.1
Of which:													
IMF	1.0	21.5	26.6	27.6	42.9	50.8	60.3	56.6	45.0	39.8	39.8	30.6	28.2
World Bank	0.0	0.0	0.0	0.0	0.0	0.0	1.1	4.2	7.9	14.8	15.9	20.5	24.1
EBRD	2.8	2.8	7.7	9.7	12.2	18.4	18.9	19.4	16.0	10.6	9.6	9.6	9.6
EU	0.0	0.0	0.0	10.7	10.9	11.0	11.1	0.0	0.0	0.0	12.0	12.1	12.2
Official bilateral													
Paris Club	0.0	0.0	22.4	26.6	31.6	32.2	32.3	32.3	32.3	34.2	14.4	15.0	16.0
Of which:													
Austria	0.0	0.0	0.0	4.2	8.4	8.5	8.5	8.5	8.6	8.6	8.6	8.7	8.7
Germany	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.7	2.2	3.1
Japan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.8	2.8	2.9
Russia	0.0	0.0	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	0.0	0.0	0.0
US	0.0	0.0	0.0	0.0	0.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Non-Paris Club	19.8	25.0	79.6	89.3	100.9	22.0	22.0	21.2	11.5	5.7	5.7	5.7	5.7
Commercial	0.0	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	0.0	0.0	0.0
Short term (if any)	..	..	..	..	..	..	..	..	..	..	..	..	..
New debt	0.0	0.0	6.0	18.6	18.6	18.6	54.0	54.0	57.8	60.7	66.2	71.7	78.5
Of which:													
Multilateral	..	..	..	..	..	..	..	..	..	..	..	..	..
Bilateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	6.7	12.2	17.7	24.5
Unidentified gap fill	0.0	0.0	6.0	18.6	18.6	18.6	54.0	54.0	54.0	54.0	54.0	54.0	54.0
Interest													
Medium-and long-term existing debt	42.4	50.1	49.4	53.1	56.7	55.3	51.5	47.6	44.3	41.9	39.7	37.5	34.9
Multilateral	9.1	15.5	17.2	20.5	23.2	21.5	19.4	17.4	15.7	14.6	13.4	11.7	10.0
Of which:													
IMF	5.9	5.1	4.4	3.5	3.2	2.6	2.0	1.3	0.9	0.7	0.5	0.3	0.2
World Bank	1.5	2.6	3.1	3.6	4.1	4.4	4.7	5.0	5.2	5.3	5.3	5.3	5.2
EBRD	1.7	2.4	5.2	8.5	10.8	10.1	8.7	7.3	5.8	4.7	4.0	3.3	2.7
EU	0.0	5.4	4.5	5.0	5.1	4.4	4.0	3.8	3.8	3.9	3.5	2.8	2.0
Official bilateral	31.1	27.8	30.8	30.3	30.1	28.9	25.5	21.3	17.2	13.5	10.2	7.4	4.5
Paris Club	11.4	11.7	11.4	10.9	10.3	9.6	8.6	7.4	6.1	4.9	4.0	3.6	3.1
Of which:													
Austria	3.6	3.6	3.6	3.5	3.3	2.9	2.6	2.2	1.9	1.6	1.2	0.9	0.5
Germany	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.8	0.8
Japan	0.0	0.0	0.1	0.4	0.7	1.0	1.2	1.2	1.2	1.2	1.2	1.1	1.1
Russia	7.2	7.2	6.7	5.8	4.9	4.0	3.1	2.2	1.3	0.4	0.0	0.0	0.0
US	0.3	0.5	0.6	0.6	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7
Non-Paris Club	19.7	16.1	19.4	19.5	19.8	19.3	16.9	13.9	11.1	8.6	6.2	3.9	1.4
Commercial	0.0	0.0	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0
Short term (if any)	..	..	..	..	..	..	..	..	..	..	..	..	..
New debt	2.2	6.8	0.6	1.6	2.8	4.5	6.3	8.7	11.3	13.8	16.1	18.3	20.4
Of which:													
Multilateral	..	..	..	..	..	..	..	..	..	..	..	..	..
Bilateral	0.0	0.0	0.6	1.6	2.8	4.5	6.3	8.7	11.3	13.8	16.1	18.3	20.4
Unidentified gap fill	2.2	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total debt service after rescheduling 2/	65.9	99.4	114.9	111.5	134.4	212.5	257.2	244.0	226.6	225.2	223.9	230.9	248.2

1/ On a scheduled basis, consistent with the standard BoP presentation. Includes debt service on reschduling agreements already in place.
2/ Assumes the stock of arrears at end-2000 would be amortized over ten years with no grace, beginning 2001, while principal obligations falling due in 2000-02 would be rescheduled over 10 years with three year grace. The interest rate for rescheduling is assumed to be 4 percent.

Table 13. Georgia: Total Expenditure for Health, Education, and Debt Service

	1995	1998	1999 (Proj.)
	(In millions of U.S. dollars)		
Total social sector spending			
Health	21.3	14.6	6.9
Refugees and Resettlement	26.6	43.2	26.9
Education	20.8	15.4	11.4
Pension	44.1	27.2	21.4
Debt service paid	20.0	70.8	111.0
Debt service due	132.9	125.0	169.8
Net official aid flows1	352.2	218.0	156.3
Of which: grants	189.2	73.4	68.4
	(In percent of GDP)		
Total social sector spending			
Health	1.1	0.4	0.3
Refugees and Resettlement	1.4	1.3	1.0
Education	1.1	0.5	0.4
Pension	2.3	0.8	0.8
Debt service paid	1.1	2.1	4.0
Debt service due	7.0	3.7	6.1
Net official aid flows	18.5	6.4	5.6
Of which: grants	9.9	2.2	2.4
Memorandum items:			
GDP (In millions of U. S. dollars)	1,902.9	3,415.7	2,796.9
Average exchange rate (LCU/US$)	1.3	1.4	2.0

Sources: Georgian authorities, World Bank, and Fund staff estimates.

1/ Comprises net official transfers plus net official disbursements.

Table 14. Kyrgyz Republic: Summary of Debt Sustainability Analysis, Historical Performance, 1995-1999

	1995	1996	1997	1998	Prelim. 1999	Average 1995-99
Nominal GDP, in millions of U.S. dollars	1,491.9	1,826.7	1,767.3	1,629.4	1,232.0	1,589.5
Exchange rate, LCU/US$ (period average)	10.8	12.8	17.4	21.0	39.2	20.2
Real GDP growth, in percent	-5.4	7.1	9.9	2.1	3.7	3.5
GDP deflator	42.0	35.3	19.3	8.9	36.5	28.4
Real effective exchange rate, percent change	2.8	-3.4	-13.2	-2.8	-12.7	-5.9
Exports G volume growth, percent change 1/	11.6	29.3	-16.5	-8.1	-31.3	-3.0
Exports G value growth, percent change 1/	20.3	29.9	-15.9	-12.9	-28.2	-1.4
Imports G volume growth, percent change 1/	9.1	29.3	-15.1	17.2	-21.5	3.8
Imports G value growth, percent change 1/	18.5	29.8	-12.0	12.8	-28.4	4.1
Exports GS, in percent of GDP	29.5	31.0	37.8	39.8	42.8	36.2
Imports GS, in percent of GDP	48.6	56.7	45.8	57.4	57.3	53.2
Current account balance, including transfers, in percent of GDP	-16.2	-23.2	-7.9	-20.2	-16.3	-16.8
Non-interest current account, in percent of GDP 2/	-14.3	-21.4	-4.7	-16.2	-10.8	-13.5
Net foreign direct investment, in percent of GDP	6.4	2.5	4.7	6.7	3.6	4.8
Primary balance, central government budget, in percent of GDP	-16.0	-8.1	-7.4	-8.7	-9.8	-10.0
Overall balance, central government budget, in percent of GDP 3/	-16.4	-9.3	-9.1	-10.8	-12.8	-11.7
Central government revenue, in percent of GDP 4/	16.4	15.0	15.6	17.4	15.8	16.0

1/ Excluding gold.

2/ NICA excludes interest payments and includes income receipts.

3/ Accrual basis, including PIP and the deficit of the social fund.

4/ General government revenue, including extrabudgetary funds and excluding grants.

Table 15. Kyrgyz Republic: Summary of Debt Sustainability Analysis, Macroeconomic Assumptions, 2000-2010

	2000 IMF/WB Proj.	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Scenario One													
Nominal GDP, in millions of U.S. dollars	1,240.4	1,457.2	1,571.5	1,691.0	1,815.3	1,944.9	2,082.3	2,230.4	2,389.9	2,560.1	2,742.9	1,696.0	2,401.1
Exchange rate, LCU/US$ (period average)	48.9	50.3	53.9	57.1	59.6	61.3	62.8	64.4	66.0	67.6	69.2	56.4	66.0
Real GDP growth, in percent	4.8	5.3	5.2	5.0	4.7	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.5
GDP deflator	19.7	14.7	10.0	8.5	7.0	5.5	5.0	5.0	5.0	5.0	5.0	9.1	5.0
Real effective exchange rate, percent change	-1.5	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0
Exports G volume growth, percent change 1/	5.8	8.6	6.4	6.4	6.5	6.7	7.0	7.0	7.0	7.1	7.1	6.9	7.0
Exports G value growth, percent change 1/	7.0	9.8	7.6	7.6	7.6	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.0
Imports G volume growth, percent change 1/	-1.0	0.9	0.6	0.5	5.1	4.6	0.5	1.4	-5.9	4.2	4.7	2.3	1.0
Imports G value growth, percent change 1/	-0.2	-0.9	1.8	5.1	6.3	5.8	1.5	2.4	-4.9	5.2	5.7	3.6	2.0
Exports GS, in percent of GDP	44.8	41.1	40.5	42.9	38.9	35.8	33.0	31.0	29.0	29.1	29.2	39.8	30.2
Imports GS, in percent of GDP	56.1	48.3	45.8	45.6	44.2	42.8	40.0	37.7	32.9	32.3	31.8	45.4	34.9
Current account balance, including transfers, in percent of GDP	-12.7	-7.3	-5.4	-2.9	-5.8	-7.3	-7.2	-6.8	-4.1	-3.4	-2.7	-5.7	-4.9
Non-interest current account, in percent of GDP 2/	-6.9	-3.9	-2.6	-0.6	-3.9	-5.7	-5.7	-5.4	-2.8	-2.1	-1.6	-3.3	-3.5
Net foreign direct investment, in percent of GDP	5.6	5.8	6.0	5.9	5.8	5.7	5.5	5.4	5.3	5.2	5.1	5.8	5.3
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	-1.9	-2.3	-0.1	-0.9	-2.7	-3.2	-2.3	-1.9	-1.6	-1.3	-1.6	-2.1
Primary balance, central government budget, in percent of GDP	-4.7	-2.6	-2.3	-1.8	-1.5	-1.6	-1.7	-1.6	-1.5	-1.3	-1.3	-2.0	-1.5
Overall balance, central government budget, in percent of GDP 3/	-6.9	-4.9	-4.1	-3.6	-3.1	-3.1	-3.1	-3.0	-2.9	-2.7	-2.6	-3.8	-2.9
Central government revenue, in percent of GDP 4/	13.8	14.9	15.7	16.5	17.3	17.7	17.8	17.9	18.0	18.0	18.1	16.4	18.0
Scenario Two													
Nominal GDP, in millions of U.S. dollars	1,240.4	1,410.9	1,475.2	1,542.3	1,612.5	1,686.2	1,762.9	1,843.1	1,927.0	2,014.7	2,106.3	1,545.4	1,930.8
Exchange rate, LCU/US$ (period average)	48.9	50.3	53.9	57.1	59.6	61.3	62.8	64.4	66.0	67.6	69.2	56.4	66.0
Real GDP growth, in percent	4.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
GDP deflator	19.7	14.7	10.0	8.5	7.0	5.5	5.0	5.0	5.0	5.0	5.0	9.1	5.0
Real effective exchange rate, percent change	-1.5	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0
Exports G volume growth, percent change 1/	5.8	2.7	2.8	2.8	3.0	2.7	2.9	3.0	3.0	3.0	3.0	2.8	3.0
Exports G value growth, percent change 1/	7.0	3.9	4.0	4.2	4.2	3.9	3.9	4.0	4.0	4.0	4.0	4.1	4.0
Imports G volume growth, percent change 1/	-1.0	0.8	0.3	0.2	5.2	5.2	0.9	1.2	-5.4	2.9	3.1	2.4	0.5
Imports G value growth, percent change 1/	-0.2	-1.0	1.5	4.2	6.4	6.5	1.9	2.2	-4.4	3.9	4.1	3.5	1.5
Exports GS, in percent of GDP	44.8	41.0	40.8	43.8	39.7	36.1	32.6	30.1	27.2	27.0	26.8	40.3	28.8
Imports GS, in percent of GDP	56.1	50.1	49.1	50.1	50.1	50.0	48.1	46.6	42.0	41.7	41.5	49.9	44.0
Current account balance, including transfers, in percent of GDP	-12.7	-8.6	-8.0	-6.3	-10.5	-13.7	-15.1	-16.1	-14.3	-14.1	-14.2	-9.4	-14.8
Non-interest current account, in percent of GDP 2/	-6.9	-5.0	-4.8	-3.5	-7.9	-11.1	-12.5	-13.3	-11.3	-10.8	-10.7	-6.4	-11.7
Net foreign direct investment, in percent of GDP	5.6	3.0	3.5	3.5	3.9	4.3	3.5	3.7	3.7	3.6	3.7	3.6	3.6
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	-3.0	-2.9	-1.6	-3.4	-6.3	-7.9	-8.5	-10.0	-11.1	-12.6	-3.4	-10.0
Primary balance, central government budget, in percent of GDP	-4.7	-2.4	-2.2	-1.6	-1.3	-1.4	-1.4	-1.3	-1.2	-1.0	-0.9	-1.8	-1.2
Overall balance, central government budget, in percent of GDP 3/	-6.9	-4.9	-4.1	-3.6	-3.1	-3.1	-3.1	-3.0	-2.9	-2.7	-2.6	-3.8	-2.9
Central government revenue, in percent of GDP 4/	13.8	14.9	15.7	16.5	17.3	17.7	17.8	17.9	18.0	18.0	18.1	16.4	18.0

1/ Excluding gold.
2/ NICA excludes interest payments and includes income receipts.
3/ Accrual basis, including PIP and the deficit of the social fund.
4/ Central government revenue includes extrabudgetary funds and excludes grants.

Table 16. Kyrgyz Republic: Summary of Debt Sustainability Analysis, Financing and Rescheduling Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Pipeline financing, in millions of U.S. dollars 1/	…	134.9	93.9	76.9	70.9	58.0	50.8	47.6	8.8	5.3	0.0	86.9	22.5
New financing requirements, in millions of U.S. dollars, Scenario One	…	34.8	50.0	18.0	27.3	62.5	77.9	63.2	52.2	45.1	40.0	38.5	55.7
New financing requirements, in millions of U.S. dollars, Scenario Two	…	48.7	56.1	39.9	66.4	116.6	150.7	167.8	201.6	232.8	274.2	65.5	205.4
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario One	…	-1.9	-2.3	-0.1	-0.9	-2.7	-3.2	-2.3	-1.9	-1.6	-1.3	-1.6	-2.1
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario Two	…	-3.0	-2.9	-1.6	-3.4	-6.3	-7.9	-8.5	-10.1	-11.3	-12.8	-3.4	-10.1
Average grant element of new financing, Scenario One 2/	…	34.7	33.1	33.0	34.7	35.7	35.9	35.4	34.4	33.3	32.2	…	…
Average grant element of new financing, Scenario Two 2/	…	35.4	33.7	33.8	35.1	35.6	35.4	35.0	34.4	33.8	33.2	…	…
Terms of residual gapfill financing	7 years grace / 25 years maturity / 3 percent interest rate, implying a grant element of 39 percent.												
Debt rescheduling assumptions	The 2000 flow on the debt owed to Pakistan is rescheduled. The agreement is already in place.												
Energy arrears rescheduling	No energy arrears rescheduling												

1/ Disbursements on loans contracted prior to June, 2000.
2/ Grant element is calculated on a stock basis (by dividing the difference between nominal and present value of debt by its nominal value).

Table 17. Kyrgyz Republic: Summary of Debt Sustainability Analysis, Key Debt Sustainability Indicators, 1999-2010 1/

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NPV of debt as share of exports of goods and services												
Scenario One	188	195	196	178	161	151	148	153	158	158	152	143
Scenario Two	188	195	199	185	173	169	177	197	223	252	278	303
NPV of debt as share of central government revenue												
Scenario One	386	506	423	386	349	317	299	286	272	253	233	214
Scenario Two	386	506	438	413	390	373	372	379	390	400	413	433
Total debt service as share of central government revenue												
Scenario One	24	41	47	46	34	32	31	32	28	27	26	23
Scenario Two	24	41	48	49	37	36	36	39	36	37	37	36
Total debt service as share of exports of goods and services												
Scenario One	24	31	33	32	20	20	18	20	17	17	16	14
Scenario Two	24	31	34	34	21	22	21	24	22	25	25	24

1/ External sustainability ratios include both government and government-guaranteed, and private non-guaranteed debt (PNG). Fiscal ratios exclude PNG.

Table 18. Kyrgyz Republic: External Debt Service, 1999-2010

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total debt service 1/	127.8	145.6	199.4	203.8	142.5	140.6	126.8	135.5	114.2	117.8	120.1	113.4
Principal	60.5	87.8	150.1	160.6	104.4	106.0	94.8	104.3	83.3	86.3	88.8	82.5
Medium-and long-term existing debt												
Multilateral	9.0	12.8	36.5	44.5	51.0	51.1	57.5	74.9	54.9	56.8	54.9	49.1
Of which:												
IMF	7.4	11.5	18.7	25.6	30.5	30.7	32.2	34.4	28.1	22.0	16.2	10.1
World Bank	0.0	0.0	0.0	0.0	1.0	3.3	5.4	7.3	9.7	10.9	12.7	14.6
EBRD	0.9	1.2	12.6	12.6	12.6	10.3	10.3	15.3	5.4	2.9	3.1	2.6
ADB	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.9	5.5	15.0	17.4	17.4
Official bilateral	5.0	6.1	29.3	39.6	25.6	27.0	27.5	29.4	28.4	28.8	31.3	29.7
Paris Club	0.5	0.8	15.8	13.8	10.3	21.1	22.1	23.7	24.4	25.0	26.9	26.9
Of which:												
Russia	0.0	1.6	11.9	10.9	6.2	12.4	12.4	12.4	12.4	12.4	12.4	12.4
Japan	0.0	0.0	0.0	0.0	1.5	4.8	4.8	7.5	9.0	10.0	11.9	11.9
Non-Paris Club	4.5	5.2	13.5	25.8	15.1	5.4	5.0	5.0	3.2	3.0	3.6	2.0
Of which:												
Turkey	0.0	1.5	10.1	21.8	10.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Commercial	46.6	68.9	84.3	76.5	27.9	27.9	9.8	0.0	0.0	0.0	0.0	0.0
Short term	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New debt	0.0	0.0	0.0	0.0	0.3	1.8	2.8	3.0	3.1	3.3	4.7	5.8
Of which:												
Multilateral	0.0	0.0	0.0	0.0	0.1	1.3	2.4	2.4	2.3	1.8	1.3	1.3
Bilateral	0.0	0.0	0.0	0.0	0.2	0.4	0.4	0.6	0.8	0.8	0.8	0.8
Unidentified gap fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.6	3.6
Interest	67.3	57.8	49.3	43.2	38.0	34.6	32.1	31.2	30.9	31.5	31.3	31.0
Medium-and long-term existing debt												
Multilateral	8.5	8.2	16.0	16.5	16.7	16.4	16.1	15.3	14.2	14.1	13.5	12.9
Of which:												
IMF	2.2	2.0	1.1	1.1	1.0	0.8	0.7	0.5	0.4	0.2	0.1	0.1
World Bank	2.4	2.8	3.1	3.4	3.6	3.7	3.9	4.0	4.1	4.2	4.1	4.0
EBRD	2.0	1.2	6.7	6.3	6.0	5.3	4.9	4.3	3.6	3.3	3.1	2.9
ADB	1.3	1.8	2.5	2.8	3.0	3.2	3.4	3.6	3.8	4.2	4.1	4.0
Official bilateral	25.5	8.2	13.9	13.2	12.8	12.5	11.8	10.8	9.9	9.2	8.3	7.5
Paris Club	22.4	5.0	10.7	10.6	11.0	11.0	10.5	9.7	8.9	8.3	7.6	6.9
Of which:												
Russia	18.9	7.5	4.5	4.5	4.4	4.2	3.8	3.5	3.1	2.7	2.3	2.0
Japan	2.7	3.2	4.8	4.9	5.2	5.3	5.3	5.3	5.3	5.2	4.9	4.6
Non-Paris Club	3.1	3.3	3.1	2.5	1.7	1.2	1.1	0.9	0.8	0.7	0.6	0.5
Of which:												
Turkey	1.7	0.8	1.6	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial	33.3	41.4	19.1	12.1	6.6	3.5	0.9	0.0	0.0	0.0	0.0	0.0
Short term	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New debt	0.0	0.0	0.5	1.8	2.8	3.4	4.4	6.1	7.8	9.2	10.4	11.5
Of which:												
Multilateral	0.0	0.0	0.0	0.4	0.7	0.9	0.8	0.8	0.7	0.7	0.8	0.8
Bilateral	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1
Unidentified gap fill	0.0	0.0	0.4	1.4	2.0	2.3	3.3	5.1	6.9	8.3	9.5	10.6
Total debt service after rescheduling 2/ 3/	105.5	111.0	199.4	203.8	142.5	140.6	126.8	135.5	114.2	117.8	120.1	113.4

1/ On a scheduled basis, consistent with the standard balance of payments presentation. Includes debt service on rescheduling agreements already in place.
2/ Assuming that in 2000 arrears to Russia ($26.8 million), Pakistan ($3.7 million), and Turkey ($4.1 million) were rescheduled.
3/ Arrears of $22 million were accrued in 1999, mainly to Russia, Pakistan, Turkey, and India.

Table 19. Kyrgyz Republic: Nominal and NPV Debt Outstanding, end-December 1999

	Nominal Debt			NPV Debt		
	US$ (in millions)	Percent of Total Debt	Percent of Multilateral Debt	US$ (in millions)	Percent of Total Debt	Percent of Multilateral Debt
Total	1682.2	100.0	…	1159.8	100.0	…
Public and Publicly Guaranteed	1358.6	80.8	…	829.9	70.9	…
Multilateral Debt	868.4	51.6	93.0	448.5	38.0	87.7
of which: IDA	354.7	21.1	38.0	126.2	11.0	24.7
AsDB	234.3	13.9	25.1	86.4	7.5	16.9
IMF	192.0	11.4	20.6	156.7	12.6	30.6
EBRD	78.9	4.7	8.4	73.7	6.5	14.4
Others	8.6	0.5	0.9	5.5	0.5	1.1
Bilateral creditors	448.9	26.7	…	341.2	29.4	…
Paris Club	362.1	23.5	…	267.7	25.9	…
of which: Germany	24.7	1.5	…	13.4	1.2	…
Japan	156.6	9.4	…	96.7	8.4	…
Russia	168.4	10.1	…	150.1	13.1	…
Others	12.4	0.7	…	7.5	0.7	…
Non-Paris Club	86.7	5.2	…	73.5	6.3	…
of which: Korea	12.3	0.7	…	6.0	0.5	…
Pakistan	10.0	0.6	…	9.5	0.8	…
Turkey	41.0	2.4	…	37.6	3.2	…
Uzbekistan	16.3	1.0	…	13.9	1.2	…
Others	7.2	0.4	…	6.6	0.6	…
Commercial	41.3	2.5	…	40.2	3.5	…
of which: Swiss banks	30.0	1.8	…	29.0	2.5	…
Others	11.3	0.7	…	11.2	1.0	…
Non Guaranteed	323.7	19.2	…	329.9	28.4	…
Multilateral Debt	65.0	3.9	7.0	63.0	5.4	12.3
of which: EBRD	32.5	1.9	3.5	31.5	2.7	6.2
IFC	32.5	1.9	3.5	31.5	2.7	6.2
Commercial	258.7	15.4	…	267.0	23.0	…
Memorandum item:						
Kumtor	318.4	18.9	…	324.2	27.9	…

Table 20. Kyrgyz Republic: Social Development Performance Indicators

	1991	1995	1996	1997	1998	1999
Education						
Total public expenditures on primary and secondary education, percent of GDP	…	4.3	3.5	2.9	3.0	…
Total public spending on education, as percent of GDP	6.1	6.6	6.2	5.0	4.8	3.5
Education expenditures, as percent of total public spending	23.0	23.1	23.5	22.6	22.7	20.9
Enrollment rates						
Kindergarten	26.7	7.7	8.2	7.0	…	…
Basic education (gross, ages 7-15)	90.6	89.1	89.3	89.2	…	…
General secondary (gross, ages 15-18)	36.7	27.3	28.8	32.4	…	…
Vocational and technical (gross,ages 15-18)	12.2	8.2	6.9	6.6	…	…
Health						
Budget and MHIF spending on heath, as percent of GDP 1/	…	4.0	3.1	2.8	2.8	2.4
Public health expenditures (incl. fees), as percent of total public spending	…	12.3	13.2	11.7	11.9	12.8
Per capita total recorded expenditures, current US$	…	12.9	12.4	11.0	10.5	6.7
Percent change in real government health spending	…	-6.6	-3.6	-3.7	-6.7	-14.3
Percent change in real gover+ MHIF health spending	…	-3.5	0.3	2.5	-4.5	11.2
Selected items of budget health expenditures, percent total						
Salaries, social fund contribution, travel expenditures	…	56.3	51.6	52.3	51.0	52.2
Utilities	…	12.4	15.5	13.7	15.4	13.1
Tuberculosis (mortality / 100,000)	7.6	13.6	13.5	21.4	18.3	…
Incidence of syphilis per 100,000	2.0	73.1	155.5	153.0	146.0	…
Life expectancy	68.8	65.5	66.7	66.8	67.1	67.0
Children of up to 1 year vaccination rates	…	88.7	99.6	100.0	99.4	…
Poverty 2/						
Families under general poverty line	…	57.0	51.9	51.0	63.6	64.0
Families under food poverty line	…	…	20.0	14.8	23.0	23.3
Poverty gap (general poverty line)	…	…	19.1	18.0	24.7	…
Poverty gap (food poverty line)	…	…	6.0	4.0	6.0	…
Headcount index, $2.15 per day	…	…	…	…	49.1	…
Headcount index, $4.30 per day	…	…	…	…	84.1	…

1/ MHIF - Mandatory Health Insurance Fund.
2/ Kyrgyz Republic Review of Social Expenditures, Human Development Sector Unit, ECA.

Note: 1999 data are preliminary.

Table 21. Moldova: Summary of Debt Sustainability Analysis, Historical Performance, 1995-1999

	1995	1996	1997	1998	Prelim. 1999	Average 1995-99
Nominal GDP, in millions of U.S. dollars	1,678.2	1,917.3	2,188.3	1,930.0	1,304.0	1,803.6
Exchange rate, LCU/US$ (period average)	4.5	4.6	4.6	5.4	10.5	5.9
Real GDP growth, percent	-1.4	-7.8	1.3	-6.5	-4.4	-3.8
GDP deflator	37.0	25.0	11.8	9.6	38.3	24.3
Real effective exchange rate, percent change	3.5	13.1	5.9	-41.3	2.6	-3.2
Exports G volume growth, percent change	16.3	8.2	5.7	-28.8	-28.7	-5.5
Exports G value growth, percent change	19.5	11.3	8.1	-27.6	-27.1	-3.2
Imports G volume growth, percent change	21.9	31.7	12.4	-17.9	-43.3	1.0
Imports G value growth, percent change	25.3	35.5	15.0	-16.6	-42.1	3.4
Exports GS, in percent of GDP	51.5	48.9	46.8	39.5	46.4	46.6
Imports GS, in percent of GDP	60.5	65.4	65.0	63.4	58.0	62.5
Current account balance, incl.transfers, in percent of GDP	-6.8	-9.8	-12.5	-16.7	-2.6	-9.7
Non-interest current account, in percent of GDP 1/	-5.0	-8.0	-10.5	-13.7	0.4	-7.4
Net foreign direct investment, in percent of GDP	4.3	1.2	3.3	4.5	2.6	3.2
Primary balance, central government budget, in percent of GDP	-2.3	-4.3	-2.7	-5.6	2.3	-2.5
Overall balance, central government budget, in percent of GDP	-7.7	-11.2	-6.4	-10.6	-4.1	-8.0
Central government revenues, in percent of GDP 2/	23.7	22.2	23.7	23.1	18.8	22.3

1/ NICA excludes interest payments and includes income receipts.

2/ Central government revenue includes extrabudgetary funds and excludes grants.

Table 22. Moldova: Summary of Debt Sustainability Analysis, Macroeconomic Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Scenario One													
Nominal GDP, in millions of U.S. dollars	1,407.2	1,604.0	1,777.6	1,998.5	2,278.7	2,598.2	2,893.2	3,206.3	3,553.3	3,937.9	4,364.1	2,051.4	3,591.0
Exchange rate, LCU/US$ (period average)	12.5	12.8	13.5	14.1	14.7	15.3	16.1	16.9	17.8	18.7	19.7	14.1	17.8
Real GDP growth, percent	0.0	5.0	6.0	7.0	8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.8	6.0
GDP deflator	27.8	11.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.4	10.0
Real effective exchange rate, percent change	18.8	2.0	2.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.6	2.0
Exports G volume growth, percent change	2.8	12.2	11.8	13.4	13.0	12.9	10.6	10.1	11.0	11.0	11.0	12.6	10.8
Exports G value growth, percent change	5.4	15.0	14.6	16.2	15.8	15.7	13.4	12.8	13.8	13.8	13.8	15.5	13.5
Imports G volume growth, percent change	24.7	5.1	6.9	10.6	11.7	11.3	9.4	7.9	7.9	8.5	9.0	9.1	8.5
Imports G value growth, percent change	27.8	7.7	9.6	13.3	14.5	14.1	12.2	10.6	10.6	11.2	11.7	11.8	11.3
Exports GS, in percent of GDP	46.4	45.5	47.5	49.3	50.2	51.2	52.3	53.4	55.0	56.7	58.4	48.7	55.1
Imports GS, in percent of GDP	66.8	62.4	62.3	63.3	64.0	64.5	65.4	65.7	65.9	66.6	67.7	63.3	66.3
Current account balance, incl.transfers, in percent of GDP	-7.8	-6.9	-6.1	-5.8	-6.4	-6.5	-6.6	-6.1	-5.4	-4.9	-4.7	-6.3	-5.6
Non-interest current account, in percent of GDP 1/	-4.3	-3.6	-2.6	-2.7	-3.5	-3.9	-4.2	-4.0	-3.3	-2.9	-2.8	-3.2	-3.4
Net foreign direct investment , in percent of GDP	10.2	3.7	5.4	5.5	5.7	5.7	5.7	5.7	5.7	5.2	4.9	5.2	5.4
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	0.0	0.0	0.0	-0.7	-1.2	-1.2	0.0	0.0	0.0	0.0	-0.4	-0.2
Primary balance, central government budget, in percent of GDP	2.5	2.1	2.0	1.2	1.0	0.8	0.7	0.5	0.4	0.3	0.2	1.4	0.4
Overall balance, central government budget, in percent of GDP	-3.9	-3.9	-3.7	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.6	-3.4
Central government revenues, in percent of GDP 2/	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
Scenario Two													
Nominal GDP, in millions of U.S. dollars	1,407.2	1,426.6	1,498.8	1,574.7	1,654.4	1,738.2	1,826.2	1,918.6	2,015.8	2,117.8	2,225.0	1,578.6	2,020.7
Exchange rate, LCU/US$ (period average)	12.5	13.9	14.9	16.0	17.1	18.4	19.7	21.2	22.7	24.4	26.2	16.0	22.8
Real GDP growth, percent	0.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
GDP deflator	27.8	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Real effective exchange rate, percent change	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports G volume growth, percent change	2.8	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Exports G value growth, percent change	5.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Imports G volume growth, percent change	24.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Imports G value growth, percent change	27.8	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Exports GS, in percent of GDP	46.4	48.1	48.0	48.0	48.0	47.9	47.9	47.9	47.9	47.8	47.8	48.0	47.9
Imports GS, in percent of GDP	66.8	69.8	69.4	68.9	68.5	68.1	67.6	67.2	66.8	66.4	65.9	68.9	66.8
Current account balance, including transfers, in percent of GDP	-7.8	-9.5	-8.5	-7.9	-7.8	-7.5	-7.2	-7.2	-7.6	-8.2	-8.7	-8.2	-7.8
Non-interest current account, in percent of GDP 1/	-4.3	-4.7	-3.6	-3.4	-3.6	-3.5	-3.4	-3.4	-3.8	-4.1	-4.4	-3.8	-3.8
Net foreign direct investment , in percent of GDP	10.2	4.3	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.0
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.0	0.0	-4.6	-2.5	-3.7	-3.4	-1.6	-0.3	-1.5	-2.1	-3.0	-2.8	-1.7
Primary balance, central government budget, in percent of GDP	2.5	2.2	2.3	1.6	1.5	1.5	1.4	1.3	1.2	1.2	1.1	1.8	1.2
Overall balance, central government budget, in percent of GDP	-3.9	-3.9	-3.7	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.6	-3.4
Central government revenues, in percent of GDP 2/	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0

1/ NICA excludes interest payments and includes income receipts.

2/ Central government revenue includes extrabudgetary funds and excludes grants.

Table 23. Moldova: Summary of Debt SU.S.tainability Analysis, Financing and Rescheduling Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Pipeline financing, in millions of U.S. dollars 1/	111.2	35.0	47.0	22.8	7.1	0.5	0.0	0.0	0.0	0.0	0.0	22.5	0.0
New financing requirements, in millions of U.S. dollars, Scenario One	17.2	131.3	145.4	170.9	178.7	221.4	239.6	266.9	277.1	323.3	307.3	169.5	282.8
New financing requirements, in millions of U.S. dollars, Scenario Two	17.2	128.9	213.5	210.8	224.8	250.2	232.8	251.0	284.1	367.4	375.1	205.6	302.1
Residual external financing gap (-deficit/+surplU.S.), in percent of GDP, Scenario One	0.0	0.0	0.0	0.0	-0.7	-1.2	-1.2	0.0	0.0	0.0	0.0	-0.4	-0.2
Residual external financing gap (-deficit/+surplU.S.), in percent of GDP, Scenario Two	0.0	0.0	-4.6	-2.5	-3.7	-3.4	-1.6	-0.3	-1.5	-2.1	-3.0	-2.8	-1.7
Average grant element of new financing, Scenario One 2/	40.1	30.7	25.4	22.6	22.6	23.7	24.8	23.5	23.3	23.0	23.7		
Average grant element of new financing, Scenario Two 2/	40.1	31.3	32.1	29.7	29.8	29.8	29.4	28.1	28.3	27.9	29.0		
Terms of residual gapfill financing	10 years grace/ 40 years maturity/ 0.75 percent interest rate, implying a grant element of 63 percent.												
Debt rescheduling assumptions	No debt rescheduling												
Energy arrears rescheduling	\$90 and \$70 mil. of energy arrears to Gazprom are rescheduled into government debt in 2000 and 2001 respectively. Terms are 2/5/ 7.5 percent, implying a grant element of 7 percent.												
Debt rescheduling assumptions	No debt rescheduling operations												

1/ Disbursements on loans contracted prior to December 31, 1999.

2/ Grant element is calculated on a stock basis (by dividing the difference between nominal and present value of debt by its nominal value).

Table 24. Moldova: Summary of Debt Sustainability Analysis, Key Debt Sustainability Indicators, 1999-2010 1/

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NPV of debt as share of exports of goods and services												
Scenario One	130	158	171	141	120	102	86	74	68	61	54	50
Scenario Two	130	158	180	167	162	157	151	148	149	151	158	159
NPV of debt as share of central government revenue												
Scenario One	365	366	344	282	242	204	171	148	128	111	95	86
Scenario Two	365	366	379	352	338	323	306	289	275	271	264	258
Total debt service as share of central government revenue												
Scenario One	81	43	39	66	44	37	34	30	24	22	21	17
Scenario Two	81	43	42	78	55	52	52	47	41	33	36	37
Total debt service as share of exports of goods and services												
Scenario One	37	22	20	31	21	19	18	17	14	13	14	11
Scenario Two	37	22	23	37	29	28	29	26	25	23	27	29

1/ External sustainability ratios include both government and government-guaranteed and private non-guaranteed debt (PNG). Fiscal ratios exclude PNG.

Table 25. Moldova: External Debt Service, 1999-2010
(In millions of U.S. dollars)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total debt service 1/	226.0	144.0	147.0	257.6	206.6	214.6	238.5	249.9	231.8	259.4	317.5	287.9
o/w government and government guaranteed	197.8	116.3	118.2	222.9	165.9	161.4	170.0	164.9	146.5	146.8	154.8	144.0
Principal	177.2	81.1	79.0	180.9	133.7	141.5	164.7	178.0	161.1	184.7	238.3	203.4
Of which: government and government guaranteed	153.0	63.9	59.9	160.7	109.9	108.2	120.2	118.9	103.6	106.0	115.5	105.7
Medium-and long-term existing debt	177.2	81.1	79.0	156.9	89.4	85.7	91.7	82.7	60.0	57.5	51.3	37.7
Multilateral (EU included)	79.9	48.1	43.9	55.0	58.4	55.2	52.5	50.3	44.6	42.1	36.9	23.3
Of which:												
IMF	65.5	24.8	14.9	18.3	21.2	19.7	19.8	22.0	21.2	17.0	9.8	0.0
World Bank	4.2	5.6	8.3	9.9	12.3	13.0	13.6	14.4	15.7	17.4	19.4	20.3
EBRD	10.2	12.6	11.7	14.9	12.7	10.3	8.8	7.7	4.6	4.6	4.6	3.0
EU	0.0	5.1	9.0	11.9	12.1	12.3	10.3	6.2	3.1	3.1	3.1	0.0
Official bilateral	26.5	5.3	6.5	5.9	8.2	8.2	17.8	14.4	14.4	14.4	14.4	14.4
Paris Club	22.4	3.3	4.5	4.9	5.2	5.2	14.4	14.4	14.4	14.4	14.4	14.4
Of which:												
Russia	19.7	0.0	0.0	0.0	0.0	0.0	9.2	9.2	9.2	9.2	9.2	9.2
USA	0.4	0.8	1.9	2.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Japan	2.3	2.5	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7
Non-Paris Club	4.1	2.0	2.0	1.0	3.0	3.0	3.4	0.0	0.0	0.0	0.0	0.0
Commercial	46.6	10.4	9.5	81.7	11.3	10.8	9.8	6.5	1.0	1.0	0.0	0.0
PNG	24.2	17.2	19.1	14.2	11.5	11.5	11.5	11.5	0.0	0.0	0.0	0.0
New debt	0.0	0.0	0.0	24.0	44.4	55.7	73.1	95.2	101.1	127.2	187.0	165.6
Of which:												
Multilateral	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	9.1	21.4	32.3	35.2
IMF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	8.6	19.4	28.8	30.1
WB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBRD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0	3.5	5.1
Bilateral	0.0	0.0	0.0	0.0	0.0	2.0	8.0	14.2	20.5	27.1	31.9	32.8
Energy arrears rescheduling	0.0	0.0	0.0	18.0	32.0	32.0	32.0	32.0	14.0	0.0	0.0	0.0
PNG	0.0	0.0	0.0	6.0	12.4	21.7	33.1	47.6	57.5	78.7	122.8	97.6
Unidentified gap fill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest	48.9	62.9	68.0	76.7	72.8	73.2	73.7	71.9	70.6	74.7	79.3	84.5
Of which: government and government guaranteed	44.7	52.4	58.3	62.2	56.0	53.2	49.8	46.0	42.9	40.7	39.3	38.2
Medium-and long-term existing debt	48.9	56.1	60.0	55.1	45.1	40.7	36.3	30.6	20.5	17.5	14.9	12.5
Multilateral (EU included)	24.6	27.9	29.6	29.9	26.1	22.6	19.5	16.3	13.5	11.4	9.8	8.2
Of which:												
IMF	7.8	7.9	7.7	6.6	5.3	3.9	2.8	1.7	0.8	0.1	0.0	0.0
World Bank	10.9	13.5	14.2	13.7	13.4	13.0	12.3	11.5	10.6	9.7	8.7	7.6
EBRD	3.7	4.5	4.7	6.5	4.5	3.6	2.8	2.1	1.5	1.2	0.9	0.6
EU	2.2	2.0	3.1	3.1	2.9	2.2	1.5	0.9	0.6	0.4	0.2	0.0
Official bilateral	7.1	6.7	9.8	9.7	9.5	9.3	8.6	7.7	6.8	6.0	5.1	4.3
Paris Club	7.1	6.7	9.8	9.7	9.5	9.3	8.6	7.7	6.8	6.0	5.1	4.3
Of which:												
Russia	4.2	3.8	6.4	6.4	6.4	6.4	5.8	5.1	4.5	3.9	3.2	2.6
USA	1.3	1.4	1.6	1.7	1.7	1.6	1.6	1.5	1.4	1.3	1.3	1.2
Japan	1.6	1.6	1.7	1.6	1.5	1.3	1.2	1.1	0.9	0.8	0.7	0.5
Non-Paris Club	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial	13.1	11.1	10.8	6.6	1.7	1.2	0.8	0.4	0.1	0.1	0.0	0.0
PNG	4.1	10.5	9.7	8.9	7.8	7.5	7.5	6.2	0.0	0.0	0.0	0.0
New debt	0.0	6.8	8.1	21.6	27.8	32.5	37.4	41.3	50.2	57.3	64.4	72.0
Of which:												
Multilateral	0.0	0.0	0.5	1.3	2.9	4.1	5.4	6.7	8.0	9.2	9.9	10.8
IMF	0.0	0.0	0.2	0.4	0.6	0.7	0.7	0.7	0.7	0.7	0.2	0.0
WB	0.0	0.0	0.3	0.5	0.8	0.9	1.1	1.2	1.4	1.5	1.7	1.9
EBRD	0.0	0.0	0.0	0.4	1.4	2.5	3.6	4.7	5.9	7.0	8.0	8.9
Bilateral	0.0	0.0	0.8	3.2	5.7	8.1	10.1	11.7	12.8	13.5	13.9	14.3
Energy arrears rescheduling	0.0	6.8	6.8	11.5	10.1	7.7	5.3	2.9	1.1	0.0	0.0	0.0
PNG	0.0	0.0	0.0	5.6	9.0	12.5	16.5	19.7	27.7	34.0	40.0	46.3
Unidentified gap fill	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.6	0.6	0.6

1/ On a scheduled basis, consistent with the standard balance of payments presentation. Includes debt service on rescheduling agreements already in place.

Table 26. Moldova: Social Development Performance Indicators

	1995	1996	1997	1998	1999
Education					
Budget spending on education, as percent of GDP	7.5	9.1	8.8	6.2	4.2
Budget spending on education, 1993 MDL mil.	248.2	329.9	349.3	234.8	181.4
Education, as percent of total public expenditures	10.4	11.7	9.7	7.8	5.2
Enrollment rates 1/					
Preschool enrollment	…	…	…	48.0	40.0
Primary (grades 1-4)	94.3	96.5	98.6	99.7	93.0
Lower Secondary (grades 5-9)	90.9	89.1	87.8	87.2	90.0
Basic (grades 1-9)	92.5	92.4	92.5	92.4	91.0
Upper Secondary (grades 10-12)	25.3	27.2	29.3	31.6	
Wages and Social Fund, as percent of public education spending 1/	…	…	43.6	55.2	55.0
School functioning (utilities), as percent of public education spending 1/	…	…	30.5	28.2	24.3
Health					
Budget spending on health, as percent of GDP	5.0	5.9	5.3	3.8	2.6
Budget spending on health, in 1993 MDL mil.	164.2	214.3	210.9	143.8	112.9
Health, as percent of total public expenditures	6.9	7.6	5.8	4.8	3.2
Mortality rate, infant (per 1,000 live births) 2/	21.0	20.0	20.0	18.0	…
Mortality rate, under-5 (per 1,000 live births) 2/	27.0	26.0	27.0	22.0	…
Access to safe water, urban	97.6	…	…	…	…
Access to safe water, rural	17.8	…	…	…	…
Calories/person/day intake of poor 3/	…	…	1,830.9	…	…
Calories/person/day intake total 3/	…	…	3,481.5	…	…
Social Protection and Poverty					
Budget spending on Social Protection, as percent of GDP	0.6	1.9	4.5	3.5	3.4
Budget spending on Social Protection, 1993 mil. MDL	18.6	68.6	178.7	132.3	147.3
Social Protection, as percent of total budget expenditures	0.8	2.4	5.0	4.4	4.2
Headcount under general poverty line 4/	…	…	37.0	46.1	…
Headcount under food poverty line 4/	…	…	24.2	25.3	…
Poverty gap (general poverty line) 4/	…	…	13.2	15.8	…
Poverty gap (food poverty line) 4/	…	…	7.7	7.8	…
Headcount index $2.15 per day 5/	…	…	…	…	55.4
Headcount index $4.30 per day 5/	…	…	…	…	84.6

1/ Educational System Database (UNESCO), July 18, 2000.
2/ LDB.
3/ Moldova: Poverty Assesment technical papers.
4/ Moldova Poverty Assesment.
5/ ECA poverty 2000 report.

Note: 1999 data are preliminary.

Table 27. Moldova: Estimated Social Expenditure per Capita

	1998	1999	2000	2005	2010
Scenario One					
Social Expenditure per capita (U.S. dollars)					
Current					
Education	32.5	14.8	15.8	18.9	22.1
Energy	22.8	10.3	11.1	7.6	6.6
Non-energy	9.8	4.4	4.7	11.3	15.4
Health	20.0	8.7	9.3	11.1	13.0
Energy	14.0	6.1	6.5	4.4	3.9
Non-energy	6.0	2.6	2.8	6.7	9.1
Other	15.6	11.1	7.0	8.4	9.8
Capital					
Education	…	…	0.11	0.69	1.16
Health	…	…	0.11	0.69	1.16

Table 28. Tajikistan: Summary of Debt Sustainability Analysis, Historical Performance, 1995-1999

	1995	1996	1997	1998	Prelim. 1999	Average 1995-99
Nominal GDP, in millions of U.S. dollars	611.3	1,034.2	1,944.9	1,307.2	1,034.5	1,186.4
Exchange rate, LCU/US$ (period average)	140.2	292.7	324.9	776.3	1,253.9	557.6
Real GDP growth, percent	-12.5	-4.4	1.7	5.3	3.7	-1.2
GDP deflator	346.0	430.6	65.2	54.0	26.5	184.5
Real effective exchange rate, percent change	-13.3	124.2	-5.4	15.0	-23.6	19.4
Exports GS volume growth, percent change 1/	-5.8	9.6	1.5	-6.3	7.1	1.2
Exports GS value growth, percent change 1/	39.4	-1.0	0.6	-19.7	11.2	6.1
Imports GS volume growth, percent change 1/	-2.4	-7.4	9.2	-0.6	-11.3	-2.5
Imports GS value growth, percent change 1/	20.5	-5.7	3.6	-11.5	-4.2	0.5
Exports GS, in percent of GDP	132.1	77.3	41.3	49.4	69.4	73.9
Imports GS, in percent of GDP	144.9	80.8	44.5	58.6	70.9	79.9
Current account balance, including transfers, in percent of GDP	-16.2	-7.3	-3.2	-9.3	-3.5	-7.9
Non-interest current account, in percent of GDP 2/	-9.2	-0.9	-1.3	-5.4	1.1	-3.1
Net foreign direct investment, in percent of GDP	1.6	1.7	1.8	1.9	2.0	1.8
Primary balance, central government budget, in percent of GDP	-5.9	-4.6	-2.6	-3.1	-2.5	-3.7
Overall balance, central government budget, in percent of GDP	-7.8	-5.8	-4.1	-3.8	-3.1	-4.9
Central government revenues, in percent of GDP 3/	13.3	11.3	14.5	10.0	10.8	12.0

1/ Exports and imports include alumina and electricity.

2/ NICA excludes interest payments and includes income receipts.

3/ Central government revenue includes extrabudgetary funds and excludes grants.

Table 29. Tajikistan: Summary of Debt Sustainability Analysis, Macroeconomic Assumptions, 2000-2010

	Prelim. 2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Scenario One													
Nominal GDP, in millions of U.S. dollars	943.0	1,042.2	1,141.4	1,282.3	1,440.7	1,618.7	1,818.6	2,043.2	2,295.5	2,579.0	2,897.5	1,305.1	2,326.7
Exchange rate, LCU/US$ (period average)	1,822.9	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0	2,400.0
Real GDP growth, percent	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
GDP deflator	20.0	32.4	10.7	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.8	7.0
Real effective exchange rate, percent change	-19.4	-1.9	8.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	3.9	4.4
Exports GS volume growth, percent change 1/	7.1	6.9	4.6	4.1	4.3	4.7	4.7	5.0	5.0	5.1	5.1	4.9	5.0
Exports GS value growth, percent change 1/	11.0	10.5	8.3	8.0	7.9	8.7	8.9	9.2	9.2	9.4	9.4	8.7	9.2
Imports GS volume growth, percent change 1/	18.5	2.1	5.2	5.7	3.9	4.0	4.0	4.0	4.1	4.1	4.1	4.2	4.1
Imports GS value growth, percent change 1/	15.8	9.7	6.9	8.3	7.5	8.1	8.0	8.3	8.3	8.3	8.4	8.1	8.2
Exports GS, in percent of GDP	84.5	84.5	83.5	80.3	77.1	74.6	72.4	70.3	68.4	66.6	64.8	80.0	68.5
Imports GS, in percent of GDP	90.1	89.4	87.3	84.2	80.5	77.5	74.5	71.8	69.2	66.6	64.3	83.8	69.3
Current account balance, incl.transfers, in percent of GDP	-5.8	-6.8	-6.1	-5.9	-5.2	-4.9	-4.0	-3.3	-2.8	-2.0	-1.3	-5.8	-2.7
Non-interest current account, in percent of GDP 2/	-0.5	-2.0	-2.0	-2.3	-2.0	-2.1	-1.5	-1.1	-0.8	-0.2	0.3	-2.1	-0.7
Net foreign direct investment, in percent of GDP	3.2	2.6	2.3	2.3	2.3	2.3	2.4	2.6	2.7	2.7	2.7	2.4	2.6
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.6	-1.3	0.0	0.0	0.6	-0.9	-1.0	-0.9	-0.6	-0.4	-0.3	-0.3	-0.6
Primary balance, central government budget, in percent of GDP	0.0	0.8	1.3	1.4	2.3	2.1	2.0	1.9	1.9	1.8	1.8	1.6	1.9
Overall balance, central government budget, in percent of GDP	-1.2	-0.6	0.1	0.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	0.5	1.4
Central government revenues, in percent of GDP 3/	11.2	11.6	12.0	12.4	12.8	13.2	13.6	14.0	14.4	14.6	14.6	12.4	14.2
Scenario Two													
Nominal GDP, in millions of U.S. dollars	943.0	795.6	835.8	878.2	922.6	969.3	1,018.4	1,070.0	1,124.1	1,181.0	1,240.8	880.3	1,126.9
Exchange rate, LCU/US$ (period average)	1,822.9	2,111.5	2,452.7	2,560.4	2,672.8	2,790.1	2,912.7	3,040.5	3,174.0	3,313.4	3,458.8	2,517.5	3,179.9
Real GDP growth, percent	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
GDP deflator	20.0	9.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.6	7.0
Real effective exchange rate, percent change	-19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports GS volume growth, percent change 1/	7.1	2.8	3.4	0.9	1.3	0.6	0.9	1.1	0.9	0.8	0.7	1.8	0.9
Exports GS value growth, percent change 1/	11.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Imports GS volume growth, percent change 1/	18.5	-3.9	2.8	2.0	1.1	0.5	0.6	0.4	0.5	0.5	0.4	0.5	0.5
Imports GS value growth, percent change 1/	15.8	3.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.5
Exports GS, in percent of GDP	84.5	105.2	105.2	105.1	105.0	104.9	104.9	104.8	104.7	104.7	104.6	105.1	104.7
Imports GS, in percent of GDP	90.1	110.3	109.6	109.1	108.4	107.9	107.4	106.8	106.3	105.7	105.2	109.1	106.3
Current account balance, including transfers, in percent of GDP	-5.8	-7.4	-7.5	-6.8	-6.0	-6.0	-5.5	-5.0	-5.0	-4.4	-3.8	-6.7	-4.7
Non-interest current account, in percent of GDP 2/	-0.5	-1.2	-1.8	-1.4	-0.9	-1.2	-0.9	-0.7	-0.8	-0.3	0.2	-1.3	-0.5
Net foreign direct investment, in percent of GDP	3.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Residual external financing gap, in percent of GDP (-deficit/+surplus)	0.6	-4.3	-0.3	-0.3	-0.3	-1.2	-2.5	-3.7	-4.2	-5.0	-6.0	-1.3	-4.3
Primary balance, central government budget, in percent of GDP	0.0	1.1	1.6	1.7	2.6	2.7						2.0	
Overall balance, central government budget, in percent of GDP	-1.2	-0.6	0.1	0.3	1.2	1.4						0.5	
Central government revenues, in percent of GDP 3/	11.2	12.0	12.0	12.0	12.0	12.0	13.3	13.3	13.3	13.3	13.3	12.0	13.3

1/ Exports and imports include alumina and electricity.

2/ NICA excludes interest payments and includes income receipts.

3/ Central government revenue includes extrabudgetary funds and excludes grants.

Table 30. Tajikistan: Summary of Debt Sustainability Analysis, Financing and Rescheduling Assumptions, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Average 2001-05	Average 2006-10
Pipeline financing, in millions of U.S. dollars													
Identified new financing, in millions of U.S. dollars	89.1	115.3	119.3	134.4	126.3	84.0	84.0	84.0	84.0	84.0	84.0	115.9	84.0
New financing requirements, in millions of U.S. dollars, Scenario One	89.1	128.8	119.3	134.4	126.3	98.1	102.0	103.1	97.7	93.3	91.9	121.4	97.6
New financing requirements, in millions of U.S. dollars, Scenario Two	89.1	149.6	122.0	137.5	129.0	95.5	110.0	123.6	131.0	143.4	159.0	126.7	133.4
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario One	0.6	-1.3	0.0	0.0	0.6	-0.9	-1.0	-0.9	-0.6	-0.4	-0.3	-0.3	-0.6
Residual external financing gap (-deficit/+surplus), in percent of GDP, Scenario Two	0.6	-4.3	-0.3	-0.3	-0.3	-1.2	-2.5	-3.7	-4.2	-5.0	-6.0	-1.3	-4.3
Average grant element of total new financing, Scenario One													
Average grant element of total new financing, Scenario Two													
Terms of residual gapfill financing	5 years grace / 15 years maturity / 2.8 percent interest, implying a grant element of 30 percent.												
Debt rescheduling assumptions	It is assumed that in 2001 Russia will write off US$ 126 million of Tajik debt and that the debt owed to EU will be rescheduled over a 7 year period at zero interest rate.												
Energy arrears rescheduling	No energy arrears rescheduling												

Note: Rescheduled debt service has been included in the grant element calculation.

Table 31. Tajikistan: Summary of Debt Sustainability Analysis, Key Debt Sustainability Indicators, 1999-2010 1/

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
NPV of debt as share of exports of goods and services 2/												
Scenario One	128	127	125	117	113	107	101	93	85	77	69	61
Scenario Two	128	127	131	130	132	131	128	124	121	118	117	116
NPV of debt as share of central government revenue												
Scenario One	504	511	472	434	396	352	315	276	239	206	180	157
Scenario Two	504	511	615	611	618	614	604	530	516	506	500	498
Total debt service as share of central government revenue												
Scenario One	20	56	61	53	43	41	31	35	30	28	25	24
Scenario Two	20	56	77	73	66	68	58	64	62	64	63	63
Total debt service as share of exports of goods and services 2/												
Scenario One	5	14	16	14	12	12	10	12	11	11	10	9
Scenario Two	5	14	16	16	14	15	12	15	15	15	15	15

1/ External sustainability ratios include both government and government-guaranteed, and private non-guaranteed debt (PNG). Fiscal ratios exclude PNG.
2/ Exports exclude alumina and electricity barter.

Table 32. Tajikistan: External Debt Service, 1998-2010 1/
(In millions of U.S. dollars)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total debt service 1/	35.5	22.8	58.7	73.6	72.9	68.8	74.7	66.1	85.8	87.5	94.1	95.6	102.0
Principal	22.8	15.8	43.8	56.9	57.1	53.9	60.3	52.3	72.0	73.5	80.0	81.4	88.0
Medium-and long-term existing debt	22.8	15.8	43.8	56.9	57.1	53.9	60.1	51.3	69.2	68.8	72.4	72.0	73.5
Multilateral	0.0	5.1	25.5	24.7	22.3	17.3	23.5	14.7	32.6	32.2	36.0	35.7	37.2
Of which:													
IMF	0.0	5.1	10.1	12.7	10.2	5.0	11.1	9.3	26.1	28.1	32.5	30.6	32.1
World Bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.8	3.0	4.2	4.2
Other major multilateral	0.0	0.0	15.4	12.0	12.1	12.2	12.4	5.4	5.4	2.3	0.5	0.9	0.9
Official bilateral	22.8	10.7	18.3	32.2	34.8	36.6	36.6	36.6	36.6	36.6	36.3	36.3	36.3
Paris Club	2.8	0.0	1.2	19.4	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
Of which:													
United States	0.0	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pakistan	2.2	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
India	0.6	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Turkey	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Russia	0.0	0.0	0.0	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
Non-Paris Club	20.0	10.7	17.1	12.8	12.8	14.6	14.6	14.6	14.6	14.6	14.3	14.3	14.3
Of which:													
Uzbekistan	20.0	10.7	16.8	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Kazakhstan	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Kyrgyz Republic	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0
Commercial	…	…	…	…	…	…	…	…	…	…	…	…	…
Short term (if any)	…	…	…	…	…	…	…	…	…	…	…	…	…
New debt	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.0	2.3	4.3	6.8	9.4	13.1
Of which:													
Multilateral	…	…	0.0	0.0	0.0	0.0	0.2	1.0	2.3	3.3	4.3	5.4	7.6
Bilateral	…	…	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.5	4.0	5.5
Unidentified gap fill	…	…	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.8	0.0	1.4
Interest	12.7	7.0	14.9	16.7	15.8	14.9	14.4	13.8	13.8	14.0	14.1	14.2	14.0
Medium-and long-term existing debt	12.7	7.0	14.9	16.2	14.2	12.2	10.5	8.9	7.5	6.1	4.8	3.6	2.4
Multilateral	2.2	2.5	2.8	5.7	4.6	3.6	2.9	2.4	2.0	1.7	1.4	1.2	1.1
Multi	0.5	0.6	0.9	4.0	3.3	2.6	1.9	1.4	1.0	0.8	0.7	0.7	0.7
Of which:													
IMF	1.7	1.9	1.9	1.7	1.3	1.0	1.1	1.1	1.0	0.9	0.7	0.5	0.4
World Bank	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Other major multilateral	0.0	0.1	0.3	3.4	2.7	2.0	1.3	0.8	0.5	0.3	0.2	0.1	0.1
Official bilateral	10.5	4.5	12.1	10.5	9.6	8.6	7.6	6.5	5.5	4.4	3.4	2.4	1.4
Paris Club	9.8	2.7	10.4	6.6	6.0	5.4	4.8	4.2	3.5	2.9	2.3	1.7	1.0
Of which:													
United States	0.6	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
China	0.8	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pakistan	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0
India	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.0
Turkey	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.2	0.1
Russia	7.1	0.0	8.1	4.5	4.1	3.6	3.2	2.7	2.3	1.8	1.4	0.9	0.5
Non-Paris Club	0.7	1.8	1.7	3.9	3.5	3.2	2.8	2.4	2.0	1.5	1.1	0.7	0.3
Of which:													
Uzbekistan	0.0	1.2	1.1	3.3	3.0	2.6	2.3	1.9	1.6	1.2	0.9	0.5	0.2
Kazakhstan	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2
Kyrgyz Republic	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial	…	…	…	…	…	…	…	…	…	…	…	…	…
Short term (if any)	…	…	…	…	…	…	…	…	…	…	…	…	…
New debt			0.0	0.6	1.4	2.5	3.7	4.9	5.9	6.9	7.9	8.8	9.6
Of which:													
Multilateral	…	…	0.0	0.6	1.4	2.2	3.0	3.8	4.4	5.0	5.5	6.1	6.5
Bilateral	…	…	0.0	0.0	0.0	0.3	0.7	1.1	1.5	2.0	2.4	2.7	3.0
Unidentified gap fill	…	…	0.0	0.0	0.2	0.2	0.2	0.0	0.4	0.9	1.4	1.8	2.0

1/ On a scheduled basis, consistent with the standard balance of payments presentation. Includes debt service on reschduling agreements already in place.

Table 33. Tajikistan: Total Expenditure for Health, Education and Debt Service

	1995	1998	1999
	(In millions of U.S. dollars)		
Total social sector spending	18.7	51.3	60.9
Health	1.5	15.0	10.8
Education	6.4	28.2	22.5
Debt service	9.0	9.3	7.5
Net official aid flows 1/	25.0	58.7	35.7
Of which: grants	…	0.0	2.9
	(In percent of GDP)		
Total social sector spending	6.0	4.8	5.6
Health	2.1	1.4	1.0
Education	3.3	2.6	2.1
Debt service	1.5	0.7	0.7
Net official aid flows 1/	4.1	4.6	3.5
Of which : grants	0.0	0.0	0.3

1/ Comprises net official transfers plus net official disbursements.
2/ Average for the May-December period only.

Was the Rapid Growth of External Debt Foreseen?

Armenia

1. Armenia's external debt increased from less than $400 million in 1995 to more than $900 million in 1999. External debt in Armenia has been used to (i) finance investments; (ii) build up gross international reserves; and (iii) lessen the social costs of the transition from a centrally-planned to a market-driven economy. At the end of 1999 it is estimated that the external debt had been allocated in equal amounts to these three main uses.[1]

2. While the increase in the external debt in the latter half of the 1990s was rapid, it was not unexpected; indeed, in early 1996 when the ESAF arrangement was approved, the IMF staff expected the external debt in absolute terms to be slightly higher at end-1999 than what actually transpired. In the mid-1990s the significant build-up of external debt projected for the latter half of the decade was not viewed as a cause for concern because of what were considered the good prospects for the Armenian economy. These in turn were predicated on the continuation of market-oriented domestic policies, the maintenance of regional stability, and the normalization of trade relations with neighboring countries. In the event, the economy's competitive and productive capacity did not expand as expected and the external debt relative to the economy's capacity to carry this debt increased sharply. Relative to exports and GDP, external debt in 1999 was substantially higher than what had been expected in early 1996 (254 percent of exports as compared with a projected level of 203 percent and 49 percent of GDP as compared with a projected level of 38 percent) relative to fiscal revenue, however, the external debt ratio amounted to 231 percent as anticipated (in nominal terms since in 1996 NPV projections were not available).

3. While four-year macroeconomic projections are subject to a great deal of uncertainty, several key economic targets in the ESAF-supported program were missed by unusually large margins. For example, in 1999 nominal dollar GDP and exports were only 73 and 69 percent of the levels projected in 1996, while government revenues (6 percent less) and imports (3 percent higher) were closer to the levels projected. There are four possible reasons for why the macroeconomic results fell well short of what had been expected in early 1996.

4. First, the 1996 projections explicitly assumed that the economy would experience a positive shock—the normalization of regional trade relations. In the event, trade relations were not normalized, and that—together with the negative shocks of the Russian crisis in August 1998 and domestic political unrest toward the end of 1999—helped render the original program targets for 1999 unattainable.

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[1] Expenditures aimed to reduce the social cost of transition are estimated as the difference between the stock of debt and the sum of earmarked disbursements for capital investments and the stock of gross international reserves.

5. Second, even though Armenia's external debt build-up was within programmed levels, investment-related disbursements were lower and borrowing for consumption were higher than expected. World Bank disbursements are illustrative in that respect. While total debt to the World Bank at the end of 1999 of $363 million was in line with what had been expected in early 1996, investment-related credits were about $90 million lower and SAC-related credits about $85 million higher than programmed. While the resulting higher current public sector consumption might have further cushioned socially vulnerable groups from the pain of ongoing economic transformation, the lower public sector capital formation might have adversely affected prospects for economic growth.

6. Third, the buoyant government revenue performance under the ESAF-supported program may have contributed to crowding out of private savings and investments. Although revenues grew less than had been expected in 1996 (in dollar terms, revenues grew at an average annual rate of 17 percent from 1995 to 1999 as compared with a projected average increase of 19 percent), government revenue as a share of GDP rose sharply (to 21 percent of GDP) instead of remaining constant at around 16 percent as had been anticipated. The higher-than-expected government revenues relative to GDP were not used to achieve a lower fiscal deficit but mainly financed current expenditures. Therefore, to the extent that the private sector offset the higher tax burden by lowering its savings, private sector capital formation would have been negatively affected with direct effects on economic growth and export performance.

7. Finally, deeper governance problems (exacerbated by the political impasse toward the end of 1999) and timid structural reforms, especially at the enterprise level, have deterred investors, and undermined export performance and economic growth.

Georgia

8. From independence to end-1994, Georgia accumulated almost $1 billion in external debt. About 45 percent of these debts were incurred as a result of unpaid gas imports from Turkmenistan during 1993–94, while close to 20 percent arose from the conversion of correspondent accounts with other CIS countries, mainly Russia. Debt-service obligations became quickly unsustainable, given nearly exhausted official reserves and a collapse in fiscal revenues. In the context of the first Fund-supported program, the Fund organized meetings of donors and creditors in June 1995, urging the authorities and bilateral creditors to normalize financial relations and reschedule Georgia's bilateral debts. Between 1995 and 1998, Georgia negotiated several rescheduling agreements with its bilateral creditors, on the basis of a 4 percent interest rate and grace periods ranging from two to five years.

9. At the same time, the stock of external debt continued to rise, reaching $1.7 billion by the end of 1999 (this increase was somewhat smaller than anticipated by the staff in 1996). The continued build-up of external debts in the second half of the 1990s reflected in large part the active role played by multilateral financial institutions, including the IMF and World Bank, in supporting Georgia's efforts to promote stabilization and structural reforms. With only few bilateral loans forthcoming, this changed the composition of Georgia's external

debt: the share of bilateral debt in total external debt shrank from over 80 percent at the end of 1994 to less than 50 percent by the end of 1999, while the share of debt owed to multilaterals increased correspondingly.

10. The large stock of external debt has remained a serious concern as Georgia has not been able to remain current on debt-service obligations. This partly reflects bilateral debt rescheduling agreements that were not sufficiently concessional. However, it also reflects insufficient progress in economic and structural reform under Fund- and Bank-supported programs. Fund assistance to Georgia was first provided at end-1994 under the STF and SBA, with the objective of helping the country achieve economic stability and sustained growth through the pursuit of a market-oriented economic reform program. The SBA was followed in 1996 by a three-year arrangement under the ESAF.

11. Much progress was made in achieving macroeconomic stabilization in 1995, while performance in the first two years of the ESAF arrangement (1996–97), exceeded program expectations, placing Georgia among the better performing CIS countries. Toward the end of 1997, however, the momentum of the reform program flagged, growth slowed, and little headway was made in addressing deep-seated fiscal problems. During 1998, severe drought and spillover effects of the Russia crisis dampened growth, to about 3 percent compared to a projection of 10 percent.

12. A key feature of Georgia's performance under the ESAF-supported program was the lack of significant strengthening of public finances. Based on extremely low revenue collections in the year preceding the ESAF program, the program was predicated on a substantial improvement in revenue performance. This, however, did not materialize, and in tandem with poor expenditure management, allowed the fiscal situation to deteriorate. Lack of confidence in the authorities' reform program did not allow the private sector to play a sufficient role in economic activity, resulting, thereby, in sluggish economic growth and a vulnerable balance of payments position.[2] The situation was rendered worse following the Russian crisis, when economic growth slumped and precious international reserves were lost in trying to defend the exchange rate.

13. In addition to weak progress under the Fund- and Bank-supported economic programs, Georgia's external debt problems have also arisen because of the strategy it pursued in rescheduling its debt to bilateral creditors. Between 1995 and 1997, Georgia concluded bilateral debt rescheduling agreements with creditors, on different terms and conditions, without any realistic alternative that would allow the country to be mindful of the bunching of debt-service obligations in the near term, and its ability to service these obligations. Indeed, since1998 Georgia has continued to accumulate arrears on principal payment to bilateral creditors.

[2] Throughout the ESAF period, investment and savings remained at very low levels.

14. In the event, poor economic performance (relative to what was envisioned), particularly in the fiscal area, policy slippages, inadequate bilateral debt rescheduling, adverse external shocks, and the willingness of the international community to continue to provide financial support to Georgia despite these difficulties, have led to the accumulation of its external debt over the years.

The Kyrgyz Republic

15. Total external debt in the Kyrgyz Republic increased almost three times from less than \$600 million in 1995 to nearly \$1,700 million in 1999. The increase in the external debt was dramatic in the second half of the 1990s, but not completely unexpected in dollar terms. When the third annual arrangement of the first ESAF (now PRGF) was approved in early 1997, the forecast for government and government-guaranteed debt in 1999 was \$1,292 million, only 6 percent lower than the actual figure of \$1,382 million. Such rapid build-up was justified by the need for extensive investment. The overall scenario was characterized by continuous structural adjustment efforts, economic stability and sustained growth for the whole area. In such a context, a very ambitious program of foreign-assisted investments, the PIP, was considered the best option to build up an efficient capital stock triggering a virtuous cycle of FDI and domestic investment. However, relative to export and GDP, debt projections turned out to be highly off the mark (297 percent of export as compared with a projected level of 152 percent, and 111 percent of GDP, for debt, compared with a projected level of 67 percent).

16. Perhaps surprisingly, the projected real GDP annual growth of 4–5 percent was on the mark for the 1996–99 period. The targets which were largely missed were the nominal dollar GDP and exports. The actual figures were only 63 and 54 percent of the forecast levels respectively. It is easy to point at the 1998 Russian crisis and at the subsequent depreciation of the som as the main cause of such a large deviation (the average som per dollar exchange rate in 1996 was 12.9, the comparable figure for 1999 was 39.2). However, it is also significant to observe that the virtuous cycle which the PIP should have triggered, did not materialize. According to the medium-term outlook expressed at the time of the third annual ESAF arrangement, investment in the economy should have accounted for an average of about 20 percent of GDP in the 1997–99 with a peak of 21 percent in 1999. About half, or 9 percent, of this figure should have been financed by private savings. In the event, total investment accounted only for 10 percent of GDP in 1999, with the bulk coming from the foreign-financed PIP and with private savings contributing less than 1 percent.

17. The Kyrgyz economy was hit hard by the 1998 Russian shock, resulting in a substantial depreciation (noted above) which worsened the dollar-denominated external debt and dramatically increased debt service in domestic currency terms. It also led to a decline in imports from neighboring countries which was more than offset by a decline in exports due to trade tension between the Kyrgyz Republic and Kazakhstan and Uzbekistan. Finally, the efforts toward structural adjustment, which could have helped offset some of this impact, were hampered by the authorities' efforts to reduce the social cost of transition, and by slow policy reactions.

Moldova

18. Moldova's external government and government-guaranteed debt has grown at a rapid pace, from almost zero in the early 1990s to an estimated face value of $936 million at end-1999, equivalent to 71.8 percent of GDP.

19. In early 1997, at the time of the second review under the EFF, the external debt stock (public and publicly guaranteed) projected for end-1999 was $1,179 million, which was assumed to be 43 percent of GDP and 109 percent of exports of goods. The debt stock at end-1996 was $824 million. Real GDP was projected to grow by about 5 percent per year.

20. As noted above, the debt stock at end-1999 was $936 million ($243 million lower than projected in 1997)[3] due to slower disbursements, partly because the Moldovan adjustment program went off track. Yet, this stock of debt at end-1999, is much higher in relation to GDP and exports, (72 percent of GDP and 200 percent of exports of goods). The 1998 Russian crisis (combined with slow progress in structural reforms, caused the sharp decline in output and exports (exports of goods in 1999 were about half of their level in 1997) as well as the very sharp depreciation of the exchange rate. Output has been falling after one year of modest growth in 1997, instead of the projected growth. These developments were not foreseen in early 1997.

Tajikistan

21. Following independence, Tajikistan accumulated a large stock of external debt, as foreign credits substituted for significant budgetary transfers that Tajikistan had received in Soviet times. This external financing was largely used to support consumption at what proved to be unsustainable levels. By 1994 total external debt—including commercial credits, most of which were government-guaranteed—was close to 100 percent of GDP. Total external debt of Tajikistan reached $1,213 million in 1999, compared with $869 million in 1995. The debt-to-GDP ratio, however, declined over the same period from 142 percent in 1995 to 118 percent in 1999.

22. The increase in external debt had been anticipated by the staff. Indeed, staff's medium-term projections of the nominal stock of external debt at end-1999 under the Request for the First Credit Tranche SBA (EBS/96/65) exceeded the actuals reported in the 2000 staff report (EBS/00/206). However, the pace of change in the debt-to-GDP and debt-to-exports ratios proved to be slower than projected in EBS/96/65, owing mainly to the negative effect of the Russian crisis on both exports and GDP growth.

23. Moreover, the short-term maturity structure of Tajikistan's external debt allowed IMF staff to foresee potential problems in debt service. In anticipation of those problems staff initiated a donors and creditors meeting in Washington in October 1995 to discuss the

[3] Ex-post, the estimate for the end-1996 stock of debt was revised downward to $874 million.

prospects of debt rescheduling. This meeting was followed by a series of creditors meetings under Fund staff auspices held on the margins of the 1996 and 1997 IMF-World Bank Annual Meetings. The purpose of these meetings was to encourage bilateral creditors to reschedule Tajikistan's debts which were either overdue or fell due in 1996 and 1997. The terms for this rescheduling—a 15-year maturity, including a five-year grace period, and 2.8 percent interest, were judged to be the maximum terms consistent with Tajikistan's capacity to pay.

Decomposing the Growth of External Debt[1]

1. This section presents a simple analytical framework of the sources of growth in external indebtedness. This framework is used to analyze past changes in debt-to-GDP ratios in the five countries under consideration during 1993–98, and to evaluate projections of external debt for 1999–2005. The following identities are used:[2]

Net Increase in Debt = Current Account Deficit - Non-debt-generating Inflows (1a)

Current Account Deficit = Primary Current Account Deficit + Interest Payments (1b)

Non-debt-generating Inflows = Foreign Direct Investment + Other flows (1c)

Equations (1a-c) can be combined to yield:

Net Increase in Debt = Interest Payments + Primary Current Account Deficit
- FDI - Other Flows (2)

2. Equation (2) provides the basis for the following decomposition of the cumulative changes in the external debt-to-GDP ratio between any two given years.

Net Increase in Debt Ratio = Increase due to Compounding of Initial Debt[3]
+ Increase due to Primary Current Account Deficits
-Reduction due to Foreign Direct Investment
-Reduction due to Other Flows (3)

Debt accumulation during 1993–98

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[1] Prepared on the basis of work done by Javier Hamann and Alexandros Mourmouras (IMF).

[2] See E. Cardoso and R. Dornbusch, "Brazilian Debt Crises: Past and Present," in B. Eichengreen and P. Lindert, eds., *The International Debt Crisis in Historical Perspective,* Cambridge: MIT Press (1989).

[3] This term reflects the interaction of three variables: (i) the initial stock of debt; (ii) the evolution of the interest rate on the external debt; and (iii) the path of growth rates in the dollar value of GDP, which reflects not only the real rate of growth of GDP in domestic currency but also the real appreciation of the exchange rate.

3. Primary current account deficits (PCAD) contributed significantly to debt accumulation in all five countries in 1993–98 (Table A1). The increase in debt-to-GDP ratios explained by PCAD exceeds the actual accumulation in debt during 1993–98 in four of the five countries. In Moldova, about ⅔ of actual debt accumulation is explained by the cumulative effect of PCAD.

4. Two factors limited the impact of PCAD on actual debt accumulation. First, interest rates on external debt were lower than growth in dollar GDP, due mainly to large real appreciations and to relatively concessional lending. These appreciations, which explain the large observed differences in growth rates of dollar GDP and domestic currency real GDP, made it easier for these countries to accumulate debt and helped dilute initial debt ratios in nearly all cases (Table A2).[4] Second, FDI also played an important role in limiting the rise in debt ratios in 1993–98, particularly in Armenia, Georgia and the Kyrgyz Republic. With the exception of Armenia, other flows, such as buildup of reserves and large (negative) errors and omissions that reflect capital flight, have also contributed to debt buildup in BRO countries.

Projections of sources of growth in external debt, 1999–2005

5. The framework described above was also used to analyze sources of growth in debt ratios forecast under Scenario One for 1999–2005 (Table A3). According to these projections, debt ratios are generally expected to stabilize over this period. Armenia is projected to register a small increase in debt as a ratio of GDP, while Georgia's debt would stay constant, and that of the others would decline.

6. Primary current account deficits will continue to be the main source of growth in external indebtedness in most cases in 1999–2005. Favorable growth in dollar GDP in relation to borrowing costs will help to mitigate this effect in Armenia, Georgia and Tajikistan. The debt induced by primary current account deficits is also expected to be offset in part by FDI flows, with the exception of Moldova, where other flows are important.

7. The interaction between growth and interest rates is expected to affect debt dynamics of these countries in different ways during the period 1999–2005. Table A2 suggests that the relationship between dollar growth and interest rates will continue to be favorable, but much less so than in the period to 1998.

[4] The real appreciations during 1993–98 may have reflected the initial undervaluation of the new currencies introduced in the BRO region after the dissolution of the Soviet Union and other factors.

Table A1. Selected CIS Countries: Growth in External Debt, 1993-98
(In percentage points of GDP)

	Change in ratio of Debt-to-GDP (A)	Due to Interaction of Initial Debt, Interest and Growth Rates (B)	Due to Cumulative Effect of PCA (C)	Due to Cumulative Effect of FDI (D)	Due to Cumulative Effect of Other Flows (E)=(A)-(B)-(C)-(D)
Armenia	26.9	-7.3	55.2	-16.4	-4.5
Georgia	0.9	-28.3	10.6	-15.3	34.0
Kyrgyz Republic	51.4	-23.3	67.3	-24.4	31.8
Moldova	56.3	-4.0	37.6	-1.5	24.2
Tajikistan	17.7	-30.0	30.0	-7.9	25.6
Mean	30.7	-18.6	40.1	-13.1	22.2
Median	26.9	-23.3	37.6	-15.3	25.6

Source: International Monetary Fund, data provided by country desks.

Table A2. Selected CIS Countries: Interest Rates on External Debt and Growth in Dollar GDP
(Annual averages)

	Interest rates on external debt		Growth rate of US$ GDP	
	1993-98	1999-2005	1993-98	1999-2005
Armenia	2.1	1.7	19.7	6.3
Georgia	2.5	2.0	22.2	4.7
Kyrgyz Republic	2.6	2.7	18.7	3.4
Moldova	3.0	4.5	7.4	5.8
Tajikistan	2.6	1.1	20.1	3.9

Source: International Monetary Fund, data provided by country desks.

Table A3 . Selected CIS Countries: Growth in External Debt, 1999-2005
(In percentage points of GDP)

	Change in ratio of Debt-to-GDP (A)	Due to Interaction of Initial Debt, Interest and Growth Rates (B)	Due to Cumulative Effect of PCA (C)	Due to Cumulative Effect of FDI (D)	Due to Cumulative Effect of Other Flows (E)=(A)-(B)-(C)-(D)
Armenia	5.6	-11.0	59.1	-39.0	-3.6
Georgia	0.0	-6.0	27.1	-30.7	9.7
Kyrgyz Republic	-5.2	0.7	48.8	-52.8	-1.9
Moldova	-15.6	0.6	15.4	8.8	-40.5
Tajikistan	-5.6	-11.8	39.6	-22.2	-11.2
Mean	-4.2	-5.5	38.0	-27.2	-9.5
Median	-5.2	-6.0	39.6	-30.7	-3.6

Source: International Monetary Fund, data provided by country desks.