July 2006

Rwanda: Joint Bank-Fund Debt Sustainability Analysis

1. In context of the recently finalized Multilateral Debt Relief Initiative (MDRI) an assessment was undertaken for Rwanda to ascertain the country's eligibility for the debt relief. Rwanda has qualified for MDRI debt relief because of its overall satisfactory recent macroeconomic performance, progress in poverty reduction, and improvements in public expenditure management. Economic growth in 2005 accelerated and inflation declined. Implementation of Rwanda's poverty reduction strategy has been particularly successful in the social sectors, for example, the primary school net enrolment ratio is now at 91 percent[1] and vaccine coverage varies between 80 and 95 percent in most provinces. In public expenditure management, an organic budget law was approved by parliament. Performance in these areas provided assurance that resources made available under the MDRI will be used effectively.

2. **This joint DSA concludes that, while the MDRI substantially improves Rwanda's debt indicators, the country will have to rely mostly on grants to maintain its debt at sustainable levels.** Rwanda's net present value (NPV) of debt-to exports ratio stood at 58.5 percent at end-2005 and, barring any exogenous shocks or policy reversals, debt-service payments remain manageable at below 8 per cent of exports over the projection period until 2026. However, the NPV of debt-exports ratio would breach the policy-dependent threshold of 150 percent by 2014, indicating that the country is at a high risk of debt distress beyond the projection period.

3. **This joint DSA was prepared using the Fund-World Bank debt sustainability framework for low-income countries (LICs)**. The debt data underlying this DSA were updated jointly by the IMF and the World Bank along with information provided by the Rwandese authorities.[2] The medium-term macroeconomic framework was broadly agreed with the authorities in the context of the new PRGF arrangement, which is being considered by the IMF Board at the same time as this DSA.[3]

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[1] The completion point trigger was set at 73 percent to be reached in 2001.

[2] Bilateral debt was adjusted to account for the effects of debt cancellation agreements signed with most Paris Club countries; bilateral agreements are in place with Austria, Japan, France, and the United States, and those with Canada and the Netherlands are expected to be signed shortly. Regarding non-Paris Club creditors, China has indicated willingness to cancel all its claims whereas Saudi Arabia and Kuwait stated they were not prepared to deliver further debt relief. Debt owed to Libya and the Abu Dhabi Fund continues to be passive. With respect to multilaterals, IDA, the IMF, the AfDF, IFAD and the EIB have provided updates.

[3] In the case of the Bank, this DSA update will be considered jointly with the Interim Strategy Note.

I. RWANDA'S EXTERNAL DEBT SINCE THE COMPLETION POINT[4] LIC DSA

4. **Rwanda's debt situation is now more favorable than estimated at the completion point.** The completion point LIC DSA (including debt relief provided at the decision point, and the topping up under the HIPC Initiative) projected that the NPV of debt-to-exports ratio would increase to 140.5 percent at end-2005.[5] The current DSA, however, estimates the NPV of debt-to-exports ratio at 58.5 percent in 2005, an improvement of over 80 percentage points.

5. **The improvement in the debt ratio after the topping up under the HIPC Initiative reflects the full implementation of the MDRI[6] and favorable export developments** (Text Table 1). The MDRI contributed 76 percentage points to the reduction, while higher exports led to a further improvement of 12 percentage points. On the latter, actual merchandise and services exports in 2005 exceeded completion point projections by 20 percent, largely due to strong export performance in coffee, tea and minerals. While the volume of new borrowing in 2004-05 was higher than anticipated, it had higher concessionality, so that its overall impact was neutral.

Table 1. Projected Versus Actual NPV of External Debt-to-Exports Ratio at End-2005
(In percent)

NPV of debt-to -exports in 2005 as projected at completion point (after topping up)	140.4
Actual NPV of debt-to exports in 2005 after MDRI relief	58.5
Factors contributing to changes:	
MDRI relief	76.3
New borrowing	0.3
Different concessionality 1/	7.6
Different volume	(7.3)
Exports (higher than anticipated)	12.0
Residual 2/	(6.7)

Source: Staff estimates.

1/ Difference between projected and actual concessionality of new borrowing in 2004-05. The completion point document assumed a grant element of 53 percent of new borrowing while the actual grant element was higher at 61 percent.
2/ Including exchange rate changes, which amounted to 5.2 percentage points for multilateral debts.

[4] Rwanda reached the completion point in April 2005.

[5] Appendix II in EBS/05/52, March 25, 2005; and IDA/R 2005-0055, March 29, 2005.

[6] The baseline scenario includes MDRI relief from the IMF, IDA and AfDF. For the IMF, the cutoff and implementation dates are, respectively, end-2004 and January 5, 2006; for IDA, the cutoff and implementation dates are, respectively, end-2003 and July 1, 2006; for the AfDF, anticipated cutoff and implementation dates are end-2004 and January 1, 2006 (retroactively). The implementation modalities of MDRI relief for the AfDF are based on staffs' assumptions consistent with IDA terms.

II. EXTERNAL DEBT SUSTAINABILITY ANALYSIS[7]

6. **The medium-term macroeconomic framework is broadly in line with the one presented at the completion point** (Box 1). Most notably, it is based on prudent projections[8] for growth and external assistance to highlight Rwanda's vulnerability to exogenous shocks and reduce the risks of policy errors. However, the proportion of the fiscal financing gap funded through debt flows was revised upward to 33 percent (corresponding to the historical average) compared with 17 percent assumed at the completion point.

7. **Under the baseline scenario with full implementation of the MDRI, one critical debt burden indicator would exceed the policy-dependent thresholds** (Text Table 2). Rwanda's NPV of debt-to-exports ratio is projected to rise above 150 percent by 2014 and, remain above the policy-dependent threshold up to 2026. However, with the likely higher share of IDA loans the baseline would breach the thresholds even earlier. At the same time, however, the NPV of debt-to-GDP ratio remains well below the threshold throughout the forecast period, while debt service payments continue to be manageable at below 8 percent of exports. The impact of the HIPC and MDRI Initiatives is apparent with the debt service-to-exports ratio falling from 10.5 percent as at end-2004 to 2.6 percent by end-2006.

Table 2: Policy-Based External Debt Burden Indicators

	Thresholds 1/	Rwanda's ratios	
		2005	2006-26 2/
NPV of debt in percent of:			
Exports	150	59	153
GDP	40	6	18
Debt service in percent of			
Exports	20	6	4

1/ Policy indicative thresholds as used in the joint IMF-World Bank LIC DSA framework for a medium policy performance. The quality of policies and institutions are measures by the World Bank's CPIA index.
2/ Simple average.

[7] The LIC DSA methodology differs from the HIPC methodology in a number of aspects, notably (i) the current year exports are used as denominators for estimating the debt-to-exports ratio rather than the backward looking three-year moving average of exports; (ii) the use of the WEO exchange rate projections instead of exchange rates at the end of the base year; and (iii) a 5 percent discount rate instead of currency specific discount rates.

[8] Real GDP growth was on average 7 percent during the past nine years, reflecting mostly the catch up effect after the genocide. The medium-term growth rates assumed in this DSA reflect higher investment financed from aid inflows and are consistent with an average ICOR of 4. Greater efficiency reflected in an increase in total factor productivity (with a corresponding decrease in the ICOR) could lead to higher long-term growth rates.

Box 1. Macroeconomic Assumptions

The macroeconomic assumptions are as follows:

Real GDP growth is projected at 5.5 percent from 2011 onward (increasing gradually from 3 percent in 2006 [1/]) as growth-enhancing sectoral strategies take effect and investment in human capital (health and education sectors) starts to pay off. Specifically, growth is expected to be generated by boosting productivity in the agriculture and export sectors (mostly tea and coffee) by improving water management, controlling soil erosion, intensifying the use of fertilizer, integrating livestock development into land farming, and enhancing extension services. In addition, measures to facilitate trade and reduce transaction costs would contribute to export growth. Over the long term, investments in infrastructure and human capital are expected to boost growth in the services sector.

Per capita GDP is projected to increase gradually from 3.2 percent in 2005 to reach 2.7 percent by 2021 as the population is expected to grow by 2.7 percent on average between 2004–26.

Inflation is projected to fall to 5 percent in 2006 and stay at that level from then onward.

Exports of goods and services would grow at a nominal rate of about 9 percent until 2013 in U.S. dollar terms as the export promotion strategy takes effect and stabilize thereafter at about 8 percent. **Imports** of goods and services would increase by 6 percent on average over the period 2005-26, mostly due to growing demand for capital good imports from the private sector.

The **primary fiscal deficit** would range from 2 to 4 percent of GDP. **Central government tax revenue** would increase from 14.1 percent of GDP in 2005 (excluding one-off revenue) to 18.4 percent of GDP by 2026, mostly on account of a widening of the tax net to the non-monetized sector. **Non-interest expenditure** would remain relatively stable at about 26 percent of GDP throughout the projection period.

The **current account deficit** (including grants) is projected to gradually tighten from about 11 percent of GDP in 2006 to 3 percent of GDP in 2026. Excluding grants, it is projected to gradually improve from 21 percent of GDP in 2006 to about 6 percent of GDP in 2026.

Gross borrowing and official grants are projected to decrease gradually with gross borrowing on average slightly below 4 percent of GDP and official grants on average above 7 percent of GDP. Thus, *in line with the historical average*, two -thirds of external financing will be in the form of grants.

[1/] The growth rate in 2006 reflects poor rains, which are expected to depress agricultural production.

8. **Shocks to the small export base[9] would substantially worsen Rwanda's NPV of debt-to-exports ratio.** If exports were to grow by less than one standard deviation in 2007, Rwanda's NPV of debt-to-exports ratio would increase to above 200 percent in 2008 peaking at over 300 percent in 2018, while staying above the threshold throughout the projection period. Given the substantial fluctuations[10] in Rwanda's export prices in the last few years, this scenario is comparable to recent history. This is also reflected in the "historical" scenario.[11] If the key macroeconomic variables remained at historical values, Rwanda would experience a sharp increase in the risk of debt distress with projected external debt-to-export

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[9] Exports of goods and services were about 11 percent of GDP in 2005.

[10] In the last ten years, export prices fell sharply in some years (for instance, by more than 20 percent in 1998 and 2001) and increased strongly in others (for instance, by more than 20 percent in 1997 and 2000). The overall export prices index fell by about 30 percent since 1995.

[11] The "historical" scenario is calculated on the basis of performance during 1997 to 2004.

ratios following an explosive upward path (Chart 1) as the average historical export growth was only 3½ percent.[12]

9. **Rwanda's debt dynamics would also deteriorate considerably if external financing is delivered on less favorable terms.** A 2 percentage point increase in interest rates on all new borrowing (reflecting borrowing at less concessional terms) starting in 2006 would increase Rwanda's NPV of debt to export ratio steadily, breaching the threshold by 2010 and remaining above 250 percent from 2017 onward.[13] This indicates that Rwanda will have to depend to a large extent on grants to finance its development efforts.

III. Public Debt Sustainability Analysis

10. A public debt sustainability analysis was not undertaken since it would not provide any significant additional insights, given that the consolidated domestic debt of the treasury and the National Bank of Rwanda (NBR) is minor (less than 5 percent of GDP at end-2005). Preventing an increase in domestic debt and thus a crowding out of private investment is a key objective of the new PRGF arrangement. To this end, there is an agreement that any pressures for a real appreciation of the exchange rate from a scaling up of external aid will be accommodated through a nominal exchange rate appreciation. This will maintain low inflation while raising absorption and thus avoid an increase in domestic debt.[14]

IV. Conclusion

11. **Although the MDRI lowers Rwanda's immediate risk of debt distress, Rwanda's debt situation could quickly become unsustainable without a high and sustained level of grant financing and strong export growth.** As shown in the DSA, even with a substantial share of grants in gross government financing Rwanda's external debt situation becomes unsustainable in the medium term. Given Rwanda's relatively small export base, a terms of trade shock or the failure to increase exports could result in an unsustainable deterioration in the debt indicators. Thus overall Rwanda is considered to be at a high risk of debt distress.

12. **The analysis suggests that structural reforms should focus on better protecting Rwanda against shocks.** The government is using the recently completed Diagnostic Trade Integration Study (DTIS) along with an export promotion action plan to design reforms and measures to improve trade facilitation. Specifically, there will be an increased focus on nontraditional and high value exports such as horticulture and washed coffee. The Agriculture Sector Strategy has also identified areas of investment to support improved production and extension for farmers. Moreover, with support from both the EU and the

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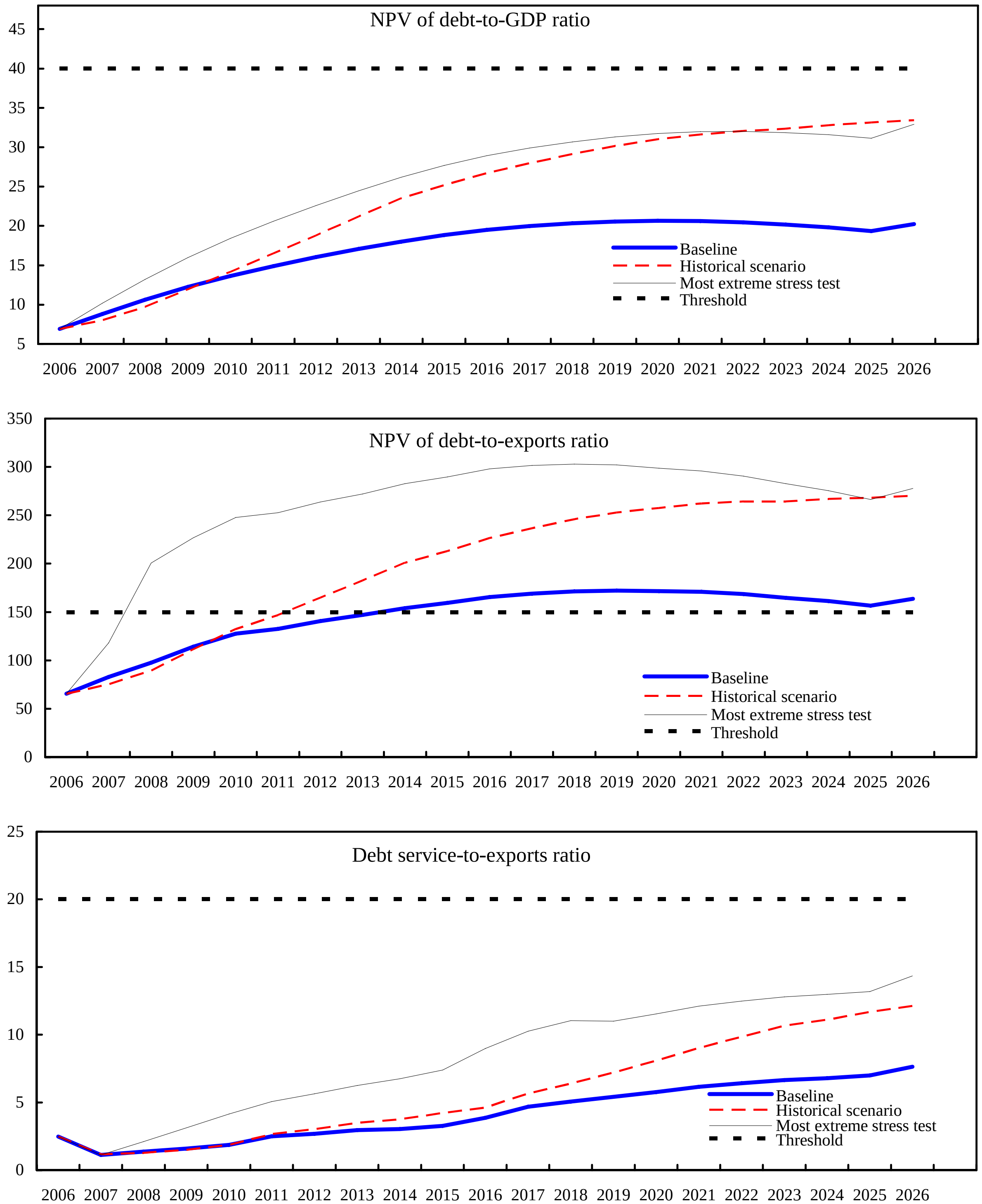
[12] Historical real growth rates were actually higher than the projected growth rates owing to the catch up effect after the genocide.

[13] This 2 percent increase in interest rates would be equivalent to lowering the grant element to below 35 percent from 2009 onward (which is below the grant element of 50 percent required under the new PRGF).

[14] The 2006 program envisages a reduction in consolidated domestic debt.

World Bank, investments in road construction should help reduce the costs of transport as should regional projects through the Nile Basin Initiative, and a recently approved regional Bank project on transport. In addition, Rwanda recently joined COMESA, and is expected to join the Eastern Africa Community later this year. These investments and reforms are expected to assist in increasing real growth, while strengthening and diversifying the export base. The implementation of prudent debt management and the efficient allocation of donor funds will also play a critical role in ensuring that debt remains sustainable in the long term.

Figure 1. Country: Indicators of Public and Publicly Guaranteed External Debt
Under Alternative Scenarios, 2006–26
(In percent)



Source: IMF Staff projections and simulations.

Table 3a. Country: External Debt Sustainability Framework, Baseline Scenario, 2006–26 1/
(In percent of GDP, unless otherwise indicated)

	Actual		**Projections**													
	2004	2005	2006	2007	2008	2009	2010	2011	2015	2020	2021	2022	2023	2024	2025	2026
External debt (nominal) 1/	**93.2**	**72.9**	**15.0**	**18.7**	**22.1**	**25.0**	**27.5**	**29.7**	**36.0**	**38.1**	**37.8**	**37.2**	**36.5**	**35.6**	**34.6**	**36.0**
o/w public and publicly guaranteed (PPG)	93.2	72.9	15.0	18.7	22.1	25.0	27.5	29.7	36.0	38.1	37.8	37.2	36.5	35.6	34.6	36.0
Change in external debt	-0.2	-20.3	-57.9	3.7	3.3	2.9	2.5	2.2	1.2	-0.1	-0.3	-0.5	-0.7	-1.0	-1.0	1.4
Identified net debt-creating flows	-6.9	-13.7	0.8	3.8	1.8	0.2	-0.3	-1.1	-0.9	-0.9	-0.8	-0.8	-0.8	-1.4	-1.5	0.3
Non-interest current account deficit	**4.1**	**4.7**	**11.6**	**8.9**	**8.0**	**7.1**	**6.9**	**6.4**	**5.9**	**5.4**	**5.3**	**5.1**	**4.7**	**3.6**	**3.3**	**3.3**
Deficit in balance of goods and services	18.2	20.5	22.8	20.4	19.5	18.1	18.1	17.3	16.3	13.8	13.2	12.5	11.8	11.2	10.7	10.7
Exports	10.3	10.7	10.5	10.7	10.9	10.7	10.7	11.2	11.8	12.0	12.1	12.1	12.2	12.3	12.4	12.4
Imports	28.6	31.2	33.4	31.1	30.3	28.8	28.8	28.5	28.1	25.8	25.2	24.7	24.1	23.4	23.1	23.1
Net current transfers (negative = inflow)	-15.6	-16.9	-12.3	-12.9	-12.7	-12.1	-11.3	-11.0	-9.3	-7.2	-6.9	-6.5	-6.3	-6.8	-6.5	-6.5
Other current account flows (negative = net inflow)	1.4	1.1	1.1	1.4	1.2	1.1	0.2	0.1	-1.1	-1.1	-1.0	-0.9	-0.8	-0.8	-0.9	-0.9
Net FDI (negative = inflow)	**-3.8**	**-5.5**	**-9.0**	**-4.6**	**-5.5**	**-5.9**	**-6.2**	**-6.2**	**-5.2**	**-4.7**	**-4.5**	**-4.3**	**-3.9**	**-3.4**	**-3.2**	**-3.2**
Endogenous debt dynamics 2/	**-7.3**	**-12.9**	**-1.9**	**-0.6**	**-0.7**	**-0.9**	**-1.1**	**-1.2**	**-1.5**	**-1.7**	**-1.7**	**-1.6**	**-1.6**	**-1.6**	**-1.5**	**0.3**
Contribution from nominal interest rate	0.4	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Contribution from real GDP growth	-3.4	-4.8	-2.0	-0.6	-0.8	-1.0	-1.2	-1.4	-1.8	-2.0	-1.9	-1.9	-1.9	-1.9	-1.8	0.0
Contribution from price and exchange rate changes	-4.3	-8.4	…	…	…	…	…	…	…	…	…	…	…	…	…	…
Residual (3-4) 3/	**6.7**	**-6.5**	**-58.7**	**0.0**	**1.6**	**2.7**	**2.8**	**3.2**	**2.1**	**0.8**	**0.5**	**0.3**	**0.1**	**0.4**	**0.5**	**1.1**
o/w exceptional financing	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	0.0	0.0	0.0
NPV of external debt 4/	...	6.2	6.9	8.8	10.6	12.2	13.7	14.9	18.8	20.7	20.6	20.5	20.2	19.8	19.4	20.2
In percent of exports	...	58.5	65.6	82.9	97.7	114.2	127.8	132.6	159.4	171.6	170.9	168.6	164.8	161.2	156.5	163.7
NPV of PPG external debt	**...**	**6.2**	**6.9**	**8.8**	**10.6**	**12.2**	**13.7**	**14.9**	**18.8**	**20.7**	**20.6**	**20.5**	**20.2**	**19.8**	**19.4**	**20.2**
In percent of exports	...	58.5	65.6	82.9	97.7	114.2	127.8	132.6	159.4	171.6	170.9	168.6	164.8	161.2	156.5	163.7
Debt service-to-exports ratio (in percent)	10.5	6.3	2.5	1.1	1.4	1.6	1.9	2.5	3.3	5.8	6.2	6.4	6.7	6.8	7.0	7.6
PPG debt service-to-exports ratio (in percent)	10.5	6.3	2.5	1.1	1.4	1.6	1.9	2.5	3.3	5.8	6.2	6.4	6.7	6.8	7.0	7.6
Total gross financing need (billions of U.S. dollars)	26.0	-2.3	69.6	113.1	71.6	37.2	28.8	14.8	47.7	93.1	112.9	120.7	128.0	88.3	85.5	92.1
Non-interest current account deficit that stabilizes debt ratio	4.3	25.0	69.5	5.2	4.7	4.1	4.5	4.2	4.7	5.5	5.7	5.6	5.4	4.5	4.3	1.9
Key macroeconomic assumptions																
Real GDP growth (in percent)	4.0	6.0	3.0	4.3	4.5	4.9	5.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	0.0
GDP deflator in US dollar terms (change in percent)	4.8	9.9	7.1	3.8	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.0
Effective interest rate (percent) 5/	0.5	0.3	0.1	0.3	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Growth of exports of G&S (US dollar terms, in percent)	36.0	20.2	8.9	9.5	8.8	5.5	6.9	12.9	8.8	8.5	7.8	8.2	8.6	8.0	8.2	0.0
Growth of imports of G&S (US dollar terms, in percent)	13.0	27.1	18.1	0.9	4.0	1.5	7.1	6.7	8.0	5.4	5.1	5.2	4.8	4.8	5.7	0.0
Grant element of new public sector borrowing (in percent)	...	...	54.9	56.2	56.1	56.5	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
Memorandym item:																
Nominal GDP (billions of US dollars)	1834.7	2136.8	2357.1	2553.2	2720.4	2908.5	3120.3	3355.8	4489.7	6460.2	6947.8	7472.3	8036.3	8642.9	9295.3	9295.3

Source: Staff simulations.

1/ Includes both public and private sector external debt.
2/ Derived as $[r - g - \rho(1+g)]/(1+g+\rho+g\rho)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.
3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
4/ Assumes that NPV of private sector debt is equivalent to its face value.
5/ Current-year interest payments devided by previous period debt stock.
6/ Historical averages and standard deviations are generally derived over the past 10 years

Table 3b. Country: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2006–26
(In percent)

	Projections												
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020	2025	2026
NPV of debt-to-GDP ratio													
Baseline	7	9	11	12	14	15	16	17	18	19	21	19	20
A. Alternative Scenarios													
A1. Key variables at their historical averages in 2007-26 1/	7	8	10	12	14	16	19	21	23	25	31	33	33
A2. New public sector loans on less favorable terms in 2007-26 2/	7	10	13	16	18	21	23	24	26	28	32	31	33
B. Bound Tests													
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	7	9	11	12	14	15	16	17	18	19	21	20	20
B2. Export value growth at historical average minus one standard deviation in 2007-08 3/	7	10	13	15	16	18	19	20	20	21	22	20	21
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	7	10	14	17	18	20	22	23	24	26	28	26	27
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 4/	7	11	15	17	18	19	20	21	22	23	23	21	22
B5. Combination of B1-B4 using one-half standard deviation shocks	7	12	18	20	21	23	24	25	26	27	27	25	26
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 5/	7	12	15	17	19	21	23	24	25	27	29	27	28
NPV of debt-to-exports ratio													
Baseline	66	83	98	114	128	133	141	147	154	159	172	157	164
A. Alternative Scenarios													
A1. Key variables at their historical averages in 2007-26 1/	66	75	89	111	132	147	165	182	201	213	258	268	270
A2. New public sector loans on less favorable terms in 2007-26 2/	66	96	121	149	172	183	198	211	224	234	264	252	266
B. Bound Tests													
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	66	83	98	114	128	133	141	147	154	159	172	157	164
B2. Export value growth at historical average minus one standard deviation in 2007-08 3/	66	118	201	227	248	253	264	272	283	290	299	266	278
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	66	83	98	114	128	133	141	147	154	159	172	157	164
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 4/	66	104	141	157	169	171	177	182	188	191	193	169	176
B5. Combination of B1-B4 using one-half standard deviation shocks	66	110	163	182	197	199	207	212	219	224	226	200	208
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 5/	66	83	98	114	128	133	141	147	154	159	172	157	164
Debt service ratio													
Baseline	2	1	1	2	2	2	3	3	3	3	6	7	8
A. Alternative Scenarios													
A1. Key variables at their historical averages in 2007-26 1/	2	1	1	1	2	3	3	4	4	4	8	12	12
A2. New public sector loans on less favorable terms in 2007-26 2/	2	1	2	3	4	5	6	6	7	7	12	13	14
B. Bound Tests													
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	2	1	1	2	2	2	3	3	3	3	6	7	8
B2. Export value growth at historical average minus one standard deviation in 2007-08 3/	2	1	2	3	4	5	5	5	5	6	11	12	13
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	2	1	1	2	2	2	3	3	3	3	6	7	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 4/	2	1	2	2	3	3	3	3	3	4	7	8	9
B5. Combination of B1-B4 using one-half standard deviation shocks	2	1	2	3	3	4	4	4	4	4	8	9	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 5/	2	1	1	2	2	2	3	3	3	3	6	7	8
Memorandum item:													
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	56	56	56	56	56	56	56	56	56	56	56	56	56

Source: Staff projections and simulations.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.