

REPUBLIC OF MOZAMBIQUE: JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS

This analysis assesses the sustainability of Mozambique's external public debt.¹ The debt sustainability analysis (DSA) was conducted jointly by the staffs of the IMF and the World Bank using the joint Bank-Fund framework for external debt sustainability analysis for low-income countries. The bilateral external debt data underlying this DSA were provided by the Mozambican authorities. The multilateral debt data provided by the authorities were reconciled with information obtained from the creditors. On the basis of this DSA, the staffs conclude that the risk of external debt distress for Mozambique is low, rising only with a substantial increase in non-concessional external borrowing.

I. Background

1. **At end-2005, Mozambique's external public and publicly guaranteed (PPG) debt stock, including arrears,² stood at US\$4.7 billion in nominal terms.** Of this total amount, slightly more than half (54 percent) was owed to multilateral creditors, 42 percent was owed to bilateral creditors, and about 4 percent was owed to commercial creditors (Table 1). However, thanks to the Multilateral Debt Relief Initiative (MDRI) the debt stock will fall significantly by end-2006, by US\$1.6 billion in nominal terms, and from 25 to 12 percent of GDP in net present value (NPV) terms.

2. **In the past, Mozambique has benefited from HIPC assistance provided by multilateral and Paris Club bilateral creditors.** This assistance was provided both in the context of the Original HIPC Initiative (Completion Point in 1999) and the Enhanced HIPC Initiative (Completion Point in 2001).³ The total amount of assistance pledged since the first Decision Point amounts to US\$2,023 million in end-1998 NPV terms. Following the 2001 Completion Point, individual debt relief arrangements were reached with all multilateral creditors and most Paris Club creditors, except Portugal and Japan, which together accounted for about 20 percent of total Paris Club debt at end-2000 in NPV terms.⁴ Nevertheless, the

¹ A separate assessment of public debt that would include domestic debt was not made at this stage because domestic public debt is relatively low in Mozambique and is not expected to increase in the near future.

² Arrears to bilateral creditors amounted to approximately US\$1 billion, and include arrears under the Paris Club Moratorium for Portugal and Japan. Arrears to commercial creditors amount to almost the entire outstanding stock of US\$175 million.

³ See "Mozambique–HIPC Debt Initiative: President's Memorandum and Recommendation and Completion Point Document" (IDA/R99-139), and "Mozambique – Enhanced HIPC Debt Initiative: President's Memorandum and Recommendation and Completion Point Document" (IDA/R2001-0150).

⁴ In February 2005, Mozambique signed a technical memorandum with Portugal, in which Portugal confirmed that it would provide 100 percent debt service reduction. Subsequently, however, Portugal added a clause to this agreement which Mozambique has refused to accept, because it considers it to be not on comparable terms. The other remaining Paris Club creditor, Japan, has also repeatedly indicated intentions for 100 percent debt reduction, but an agreement has not yet been signed due to issues with the debt reconciliation and delays of an administrative nature.

Mozambican authorities are hopeful that bilateral agreements with Portugal and Japan for 100 percent debt reduction can be reached in 2006.

Table 1. Mozambique: External Nominal Debt Outstanding at End-2005

Creditor	In millions of U.S. dollars	In percent
Multilateral Creditors	2,559.0	54.5
IDA	1,622.0	34.6
IMF	162.3	3.5
African Development Bank	544.2	11.6
Other Multilaterals	230.5	4.9
Bilateral Creditors 1/	1,956.8	41.7
Paris Club	812.0	17.3
Non-Paris Club	1,144.8	24.4
Commercial Creditors 1/	175.4	3.7
Total	4,691.2	100.0

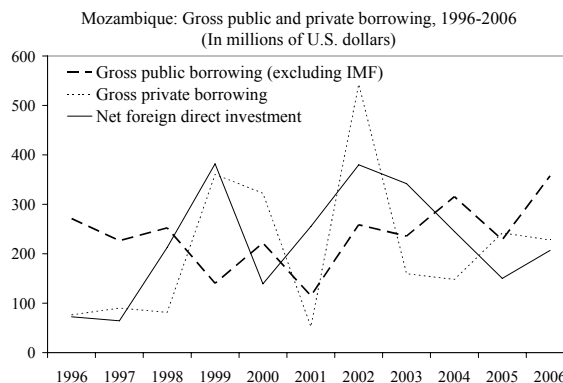
Sources: Mozambican authorities; and World Bank and IMF staff estimates.

1/ Including arrears.

3. **Thus far, Mozambique has obtained very little HIPC debt relief from non-Paris Club bilateral creditors.** The only non-Paris Club bilateral creditor that has provided comparable treatment to date is Kuwait, which signed a rescheduling agreement with Mozambique in May 2002. While rescheduling agreements with India and China may also be within reach, negotiations with all other non-Paris Club creditors have reportedly stalled, despite good faith efforts from the Mozambican authorities. The two largest outstanding claims, of Algeria and Libya, amount to about half of all non-Paris Club debt (both in end-1998 NPV terms and in nominal terms at end-2005).

4. **On commercial debt, Mozambique is expected to benefit from a commercial debt buy-back operation in 2006.** This operation, which is expected to be completed by the third quarter of this year, would cover virtually all currently outstanding commercial debt in arrears, which is estimated at US\$175 million at end-2005, of which around US\$150 million is owed to one creditor alone.

5. **Total external debt in Mozambique has a significant private component, which is related to so-called “megaprojects”.** Private external debt averaged 23 percent of the country’s total external debt during the period 2001–05. This private debt is mostly the result of the fact that Mozambique has been able to attract substantial foreign private capital into so-called “megaprojects”. At present, by far the most important project involves aluminum production, currently accounting for about 60 percent of exported goods, while the other two megaprojects (hydroelectric power and natural gas) account for an additional 14 percent. All three projects are expected to expand their capacity in the near future. In addition, new projects involving titanium, gold, and oil production are in the pipeline. Most of the investment into megaprojects is estimated to have been debt creating, as evidenced by the correlation between FDI inflows and private borrowing (text chart).⁵



6. **Mozambique’s domestic public debt stock is relatively low by regional standards and not expected to increase significantly in the near future.** The stock of domestic public debt (treasury bills and bonds) was about 5 percent of GDP at end-2005, the majority of which is accounted for by bonds issued to recapitalize the central bank in 2005 (following losses incurred during 2004) and commercial banks related to their restructuring processes, which are now complete. Given the improved health of bank balance sheets and the medium-term fiscal framework, the level of domestic public debt should remain low and sustainable over the foreseeable future.⁶

⁵ Gross private borrowing includes gross private external borrowing by megaprojects and other private companies, including net borrowing by commercial banks from 2002, but is based on the limited information available and may not cover all private enterprises.

⁶ The evolution of domestic public debt will need to be monitored, however, as the government is in the process of developing a new domestic debt management strategy with the help of technical assistance from the Bank and Fund (IDA/R2005-0220/1, “Mozambique—Financial Sector Technical Assistance Project”).

II Methodology and Key Assumptions

7. **Following the guidelines of the new LIC DSA framework, staffs have analyzed the evolution of the external public debt stock and debt service indicators for Mozambique subject to a baseline scenario and a series of stress tests.**⁷ The stress tests are designed to assess a country's probability of facing debt distress in the future. In addition, staffs have considered one additional stress test, which involves a large increase in non-concessional external new borrowing by US\$1 billion in 2007.⁸ The motivation for this stress test is that the government is planning to enhance private sector participation in public enterprises, particularly infrastructure services (MEFP, paragraph 27), including for a number of hydroelectric projects. While the government is committed to seeking non-recourse financing for the transfer of majority ownership of the Cahora Bassa dam operating company (HCB), financing still needs to be obtained for other hydroelectric and infrastructure projects that may be implemented in the future, including possible non-concessional public borrowing.

8. **The analysis is guided by indicative, country-specific debt burden thresholds, which take into account the empirical finding that the debt levels that a low-income country can sustain increase with the quality of its policies and institutions.** The quality of policies and institutions is measured by the World Bank's 2004 Country Policy and Institutional Assessment (CPIA), according to which Mozambique ranks as a "medium performer." The indicative external debt burden thresholds for countries in this category are an NPV of debt-to-exports ratio of 150 percent, NPV of debt-to-revenue ratio of 250 percent, a NPV of debt-to-GDP ratio of 40 percent, and debt-service-to-exports and revenues ratios of 20 and 30 percent, respectively.⁹

9. **The DSA is subject to a number of important assumptions.** First, the analysis is based on a number of underlying macroeconomic assumptions, summarized in Box 1. Second, the external debt numbers underlying the analysis assume the full delivery of HIPC debt relief by all creditors in 2006, including additional bilateral debt relief (up to a 100 percent debt reduction) provided by some Paris-club creditors. This analysis also includes the completion of the commercial debt buyback operation in 2006, as described above. Third, the DSA evaluates debt dynamics before and after the delivery of additional debt relief under the recent Multilateral Debt Relief Initiative (MDRI).¹⁰ Finally, new borrowing is assumed to be sourced predominantly from

⁷ See SM/05/109 and IDA/R2004-0253 ("Operational Framework for Debt Sustainability Assessments in Low-Income Countries—Further Considerations"). The new framework introduces some methodological changes in the calculation of the NPV of debt compared to the HIPC methodology by using (a) a fixed 5 percent discount rate instead of currency specific discount rates (under HIPC), (b) WEO exchange rate projections instead of fixed exchange rates as of the end of the base year and (c) annual exports instead of a three-year average of exports as the denominator in the NPV of debt-to-exports ratio.

⁸ The assumed terms of this loan are a grace period of 2 years, total maturity of 10 years, and an interest rate of 8 percent.

⁹ The NPV of external debt-to-revenue ratio excludes all grants.

¹⁰ The three creditors participating in the MDRI are the IMF, the International Development Association (IDA) of the World Bank, and the African Development Fund (AfDF). MDRI debt relief from the IMF became effective on January 5, 2006, providing stock relief on debt disbursed before end-2004 and still outstanding at end-2005. IDA

(continued)

the International Development Association (IDA) and the African Development Fund (AfDF), resulting in an average grant element of 51 percent. This assumption is based on the medium-term projections of the authorities, which were informed by consultations with donors.¹¹ The assumptions on grants, loans, and fiscal revenues are further described in Box 1. The share of program and project grants (excluding HIPC and MDRI assistance) is assumed to fall over time as the economy becomes less aid dependent: grants fall from almost 8 percent of GDP in 2005 to around 2 percent of GDP by 2026.

III External Debt Sustainability

10. **Under the baseline scenario, with and without debt relief under the MDRI, the debt indicators all remain below their respective thresholds.** Under the baseline scenario after MDRI relief, which is presented in Table 2, the NPV of PPG external debt in percent of GDP is projected to rise from 12 percent in 2006 to 16½ percent by 2013, after which it slowly falls back to 12 percent by 2026. It thus remains well below the country-specific threshold of 40 percent. The NPV of PPG debt-to-exports ratio increases from 32 percent in 2006 to 50 percent by 2016—also far below the threshold of 150 percent—before falling back to about 40 percent again by 2026. The NPV of PPG debt-to-revenue ratio increases somewhat initially, to a peak of almost 100 percent in 2008, which is still very low compared to the threshold of 250 percent. It then declines rapidly to 54 percent by 2026, driven in part by the assumed increase in revenue collection.

11. **The debt service indicators also remain far below their thresholds under the baseline.** As a result of the MDRI and the assumed full delivery of remaining HIPC debt relief in 2006, PPG debt service falls rapidly in 2006. The PPG debt service-to-exports ratio, which has a threshold at 20 percent, falls from 4½ percent in 2005 to 1½ percent in 2006, and rises only very slowly after that, not exceeding 3 percent by the end of the projection period. The ratio of PPG debt service to fiscal revenues falls from just above 10 percent in 2005 to 4 percent in 2006, and declines a bit further to reach an average of 3.5 percent over the next 20 years (Table 2).

and the AfDF are expected to start providing debt relief in July 2006, provided sufficient financing commitments have been received from donors. The eligible debt covers IDA credits disbursed before end-2003 and AfDF credits disbursed before end-2004 that are still outstanding at the time of qualification.

¹¹ Staffs have undertaken additional analysis that shows that the results of the DSA are not sensitive to a lowering of the grant element. Stress Test A2 underscores this finding.

Box 1. Macroeconomic Assumptions 2006-2026

The medium-term assumptions in the baseline scenario for 2006-2010 are consistent with the authorities' medium-term macroeconomic framework described in the government's Plano de Acção para Redução da Pobreza Absoluta II (PARPA II). The long-term assumptions are described in more detail below and are consistent with the World Bank's latest Country Economic Memorandum (CEM) for Mozambique (Report No. 32615-MZ, September 2005).

Real GDP growth is projected to remain strong at 6.5 percent per year during 2011- 2025, which is consistent with the 5-8 percent range projected in the CEM. Growth is thus expected to decelerate from its recent annual average of 9 percent during 2001-5, partly because of a weakening of the “catch-up” effect from the post-conflict period.

Consumer price inflation is projected to fall rapidly to 5 percent in the medium term, as oil prices and the exchange rate stabilize, and is expected to fall further to 3 percent after 2020, as it approaches trade partner inflation. The **real effective exchange rate** is expected to remain broadly unchanged, in line with the relative stability observed over the past decade.

After averaging 19 percent in the last ten years, **export growth** is projected to decelerate slowly from 10 percent in the medium term to 6.5 percent in the long term. This is driven to a large extent by megaproject exports, which are expected to remain strong at around 7.5 percent until 2015, and then to decline somewhat to 6.5 percent. Traditional (non-megaproject) exports are assumed to grow at the rate of Mozambique's trade partner import demand growth, which is projected to decelerate from at around 7 percent during 2011-2026. **Import growth** associated with megaprojects is assumed to equal the rate of megaproject export growth, assuming that the import content of megaprojects remains roughly constant on average. All other imports are assumed to grow at the rate of real GDP growth.

The current account deficit before grants is projected to narrow substantially from 15 percent of GDP during 2006-10 to 4½ percent by 2026, supported by strong export growth. The current account deficit after grants is projected to fall from 6½ percent in the medium term to 2½ percent in the long term. Consistent with this, net international reserves are projected to grow from around 4 months of imports of goods and services in the medium term to 7½ months of imports by 2018, after which they remain roughly constant at this level.

Fiscal revenues are expected to rise by around 0.5 percent of GDP per year, on account of improved tax administration and augmentation of the revenue base. Once the revenue-to-GDP ratio reaches 22 percent of GDP, which happens by 2018, it is expected to remain constant at this level, consistent with the findings from a recent mission from the IMF's Fiscal Affairs Department (FAD), which estimated potential revenue collection for Mozambique at around 22 percent of GDP. This is higher than that of most of Mozambique's neighbors, similar to Kenya, but still much lower than that of South Africa and Swaziland.

External grants to the government are projected to remain high at an average of 8 percent of GDP during the medium term, which will help finance the “second wave of reforms” needed to sustain broad-based growth and achieve the Millennium Development Goals (MDGs) by 2015. Consistent with the rise in fiscal revenues and the ensuing reduction in the financing need, grants fall gradually to 2 percent of GDP, while loans fall from 5 to 1 percent of GDP. Consistent with the historical pattern, total grants are assumed to average 66 percent of total financing during the projection period. No grant financing is assumed to come from IDA.

12. **Mozambique's debt situation proves resilient to a number of stress tests, although the risk of debt distress would rise in case of a large increase in non-concessional external commercial borrowing.** As Table 3 shows, none of the stress tests drives the debt burden indicators above the thresholds or even close to them. However, stress test B7 shows that the debt situation is potentially vulnerable to the scenario of a one-time contraction of a significant amount of non-concessional commercial debt in 2007. While still remaining below the thresholds, the debt burden indicators exhibit a sharp spike, and more than double compared to the baseline (Table 3 and Figure 1).

13. **As a robustness check, debt indicators were also calculated excluding megaproject exports.** While megaproject exports represent a significant share of total exports (72 percent in 2005), their net impact on the balance of payments is relatively small, because most transactions take place off-shore and most profits and dividends are repatriated. Since total exports may, therefore, not be a good measure of the government's capacity to repay its external debt obligations, Figure 2 assesses the NPV of debt and debt service also in terms of non-megaproject exports. Under the baseline scenario, the NPV of debt to non-megaproject exports still remains below the indicative threshold of 150 percent. It breaches the threshold only under the increased commercial debt stress test, rising temporarily to almost 200 percent, and under the most extreme stress test, which involves the contraction of new borrowing on less favorable terms. The ratio of debt service to non-megaproject exports still remains below the 20-percent threshold in all cases, but comes close to this threshold under the increased commercial debt stress test.

IV. Conclusions

14. **In staffs' view, Mozambique faces a low risk of debt distress.** Mozambique's external debt levels are expected to remain well below their indicative thresholds for debt distress both under the baseline and under various stress tests. Even under the standard bound tests and a low growth scenario, Mozambique's debt indicators remain comfortably below the indicative thresholds.

15. **However, this positive assessment presumes a prudent new borrowing policy.** Given that the Mozambican government is currently planning to enhance private sector participation in public enterprises, which could possibly involve non-concessional public borrowing, staffs considered an alternative scenario under which non-concessional external commercial borrowing would increase more rapidly for illustrative purposes. Under this scenario, the debt burden indicators more than double compared to the baseline. While they still remain below their thresholds when all exports are taken into account, the ratio of the NPV of debt to exports would temporarily exceed the threshold of 200 percent if megaproject exports were to be excluded from the denominator. This shows that external debt policy has to continue to remain prudent and rely as much as possible on concessional borrowing and grants. Any future non-concessional financing of new projects will need to be considered on a case-by-case basis based on their economic return and their impact on debt sustainability.

Table 2. Mozambique: External Debt Sustainability Framework, Baseline Scenario, 2003-2026 1/
(In percent of GDP and after MDRI, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections								
	2003	2004	2005			2006	2007	2008	2009	2010	2011	2006-11 Average	2016	2026	2012-26 Average
Total external debt (nominal) 1/														
Before MDRI	112.2	95.9	91.3			64.3	65.9	63.1	60.0	56.3	53.3		42.9	28.1
After MDRI	112.2	95.9	91.3			41.3	43.8	43.6	42.9	41.2	40.0		35.8	26.4
o/w public and publicly guaranteed (PPG)	83.0	73.8	70.7			22.2	25.2	27.0	28.2	28.9	29.3		28.3	19.8
Change in external debt	-9.6	-16.3	-4.6			-50.0	2.5	-0.2	-0.7	-1.7	-1.2		-0.6	-1.0
Identified net debt-creating flows	-15.7	-20.3	-3.8			-4.0	1.6	1.3	0.3	-2.1	-2.6		-2.1	-0.8
Non-interest current account deficit	6.1	2.7	6.8	6.6	2.7	3.5	5.8	4.8	3.7	1.0	1.0		1.2	2.2
Deficit in balance of goods and services	16.8	9.4	10.6			7.4	7.9	8.2	7.6	4.5	4.1		2.8	1.8
Exports	28.2	30.9	32.6			37.3	38.9	36.0	35.3	36.8	36.1		32.5	29.1
Imports	45.1	40.3	43.2			44.7	46.8	44.2	42.9	41.3	40.2		35.3	30.9
Net current transfers (negative = inflow)	-4.9	-5.5	-5.4	-5.7	1.7	-6.3	-6.2	-5.9	-5.5	-5.1	-4.7		-3.3	-1.5
Other current account flows (negative = net inflow)	-5.8	-1.2	1.6			2.4	4.2	2.5	1.6	1.5	1.6		1.7	1.9
Net FDI (negative = inflow)	-7.1	-4.1	-2.3	-5.2	2.8	-3.0	-4.4	-3.9	-3.5	-3.0	-2.9		-2.5	-2.2
Endogenous debt dynamics 2/	-14.6	-18.8	-8.3			-4.6	0.2	0.3	0.1	-0.2	-0.7		-0.9	-0.8
Contribution from nominal interest rate	3.0	2.5	2.1			2.3	2.9	3.1	2.9	2.6	1.8		1.3	0.8
Contribution from real GDP growth	-8.2	-6.8	-6.6			-6.9	-2.8	-2.8	-2.8	-2.7	-2.4		-2.2	-1.7
Contribution from price and exchange rate changes	-9.5	-14.5	-3.9			...	...	...	...	...	...		...	...
Residual (3-4) 3/	6.0	4.0	-0.8			-46.0	0.9	-1.4	-1.0	0.4	1.3		1.5	-0.2
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
NPV of total external debt 4/	...	...	30.7			31.1	32.6	31.5	30.3	28.3	26.9		23.6	18.4
In percent of exports	...	...	94.2			83.4	83.9	87.5	85.6	76.8	74.7		72.7	63.1
NPV of PPG external debt	...	...	10.1			12.1	14.0	14.9	15.5	16.0	16.2		16.1	11.8
In percent of exports	...	...	31.1			32.3	35.9	41.4	44.0	43.4	45.0		49.6	40.4
In percent of revenues	...	...	72.5			83.8	93.9	96.9	97.4	95.9	94.5		79.7	53.5
Total debt service-to-exports ratio (in percent)	26.3	23.9	18.3			17.2	18.5	20.7	20.4	18.9	17.8		13.0	10.9
PPG debt service														
In percent of exports	6.9	3.8	4.4			1.6	1.5	1.6	1.5	1.5	1.6		2.1	2.5
In percent of revenues	15.2	9.3	10.3			4.0	3.9	3.6	3.4	3.3	3.4		3.4	3.3
Total gross financing need (billions of U.S. dollars)	0.3	0.4	0.7			0.5	0.6	0.7	0.7	0.5	0.5		0.5	1.2
Non-interest current account deficit that stabilizes debt ratio	15.8	19.0	11.4			53.5	3.3	5.0	4.4	2.7	2.2		1.9	3.2
Key macroeconomic assumptions														
Real GDP growth (in percent)	7.9	7.5	7.7	8.0	3.1	7.9	7.0	7.0	7.0	7.0	6.5	7.1	6.5	6.5
GDP deflator in US dollar terms (change in percent)	8.4	14.8	4.2	3.3	10.1	-2.6	-1.9	3.0	3.0	3.0	2.9	1.2	2.0	1.0
Effective interest rate (percent) 5/	2.9	2.7	2.5	2.9	0.5	2.7	7.4	7.9	7.3	6.6	4.7	6.1	3.9	3.3
Growth of exports of G&S (US dollar terms, in percent)	13.8	35.1	18.4	18.6	10.7	20.3	9.3	2.0	8.2	14.7	7.5	10.3	6.9	6.7
Growth of imports of G&S (US dollar terms, in percent)	17.0	10.4	20.4	11.8	11.2	8.8	9.8	4.1	7.0	6.2	6.7	7.1	6.6	6.5
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	51.6	51.7	52.0	52.1	52.1	52.2	52.0	52.2	52.2
<i>Memorandum item:</i>														
Nominal GDP (billions of US dollars)	4.8	5.9	6.6			7.0	7.3	8.1	8.9	9.8	10.7		16.8	36.2

Source: Staffs' projections and simulations.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - \rho(1+g)] / (1+g+\rho+g)$ 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 divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 3. Mozambique: Sensitivity Analyses for Key Indicators (after MDRI) of Public and Publicly Guaranteed External Debt, 2006-26
(In percent)

	Projections							2026
	2006	2007	2008	2009	2010	2011	2016	
NPV of debt-to-GDP ratio								
Baseline								
Before MDRI	25	26	26	25	25	24	21	13
After MDRI	12	14	15	16	16	16	16	12
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2007-26 1/	12	13	14	15	17	19	23	18
A2. New public sector loans on less favorable terms in 2007-26 2/	12	15	17	19	20	21	23	20
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	12	14	15	16	17	17	17	12
B2. Export value growth at historical average minus one standard deviation in 2007-08 3/	12	14	14	15	15	16	16	12
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	12	15	17	18	19	19	19	14
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 4/	12	16	18	19	19	19	18	13
B5. Combination of B1-B4 using one-half standard deviation shocks	12	14	14	14	15	15	16	12
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 5/	12	20	21	22	23	23	23	17
B7. Contraction of commercial debt	12	30	29	26	24	23	16	12
NPV of debt-to-exports ratio								
Baseline								
Before MDRI	66	67	72	72	68	67	64	45
After MDRI	32	36	41	44	43	45	50	40
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2007-26 1/	32	34	40	44	47	52	71	63
A2. New public sector loans on less favorable terms in 2007-26 2/	32	39	48	54	55	58	71	67
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	32	36	41	44	43	45	50	40
B2. Export value growth at historical average minus one standard deviation in 2007-08 3/	32	37	38	41	40	42	47	38
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	32	36	41	44	43	45	50	40
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 4/	32	41	51	54	52	53	57	43
B5. Combination of B1-B4 using one-half standard deviation shocks	32	35	31	34	34	35	40	34
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 5/	32	36	41	44	43	45	50	40
B7. Contraction of commercial debt	32	76	80	75	66	62	50	40
Debt service ratio								
Baseline								
Before MDRI	3	3	3	3	3	3	3	3
After MDRI	2	1	2	2	1	2	2	2
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2007-26 1/	2	1	1	1	1	2	2	3
A2. New public sector loans on less favorable terms in 2007-26 2/	2	1	2	2	2	2	3	4
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2007-08	2	1	2	2	1	2	2	2
B2. Export value growth at historical average minus one standard deviation in 2007-08 3/	2	1	2	1	1	2	2	2
B3. US dollar GDP deflator at historical average minus one standard deviation in 2007-08	2	1	2	2	1	2	2	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2007-08 4/	2	1	2	2	2	2	2	3
B5. Combination of B1-B4 using one-half standard deviation shocks	2	1	1	1	1	1	2	2
B6. One-time 30 percent nominal depreciation relative to the baseline in 2007 5/	2	1	2	2	1	2	2	2
B7. Contraction of commercial debt	2	1	4	8	7	6	5	2
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	51	51	51	51	51	51	51	51

Source: Staffs' 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).

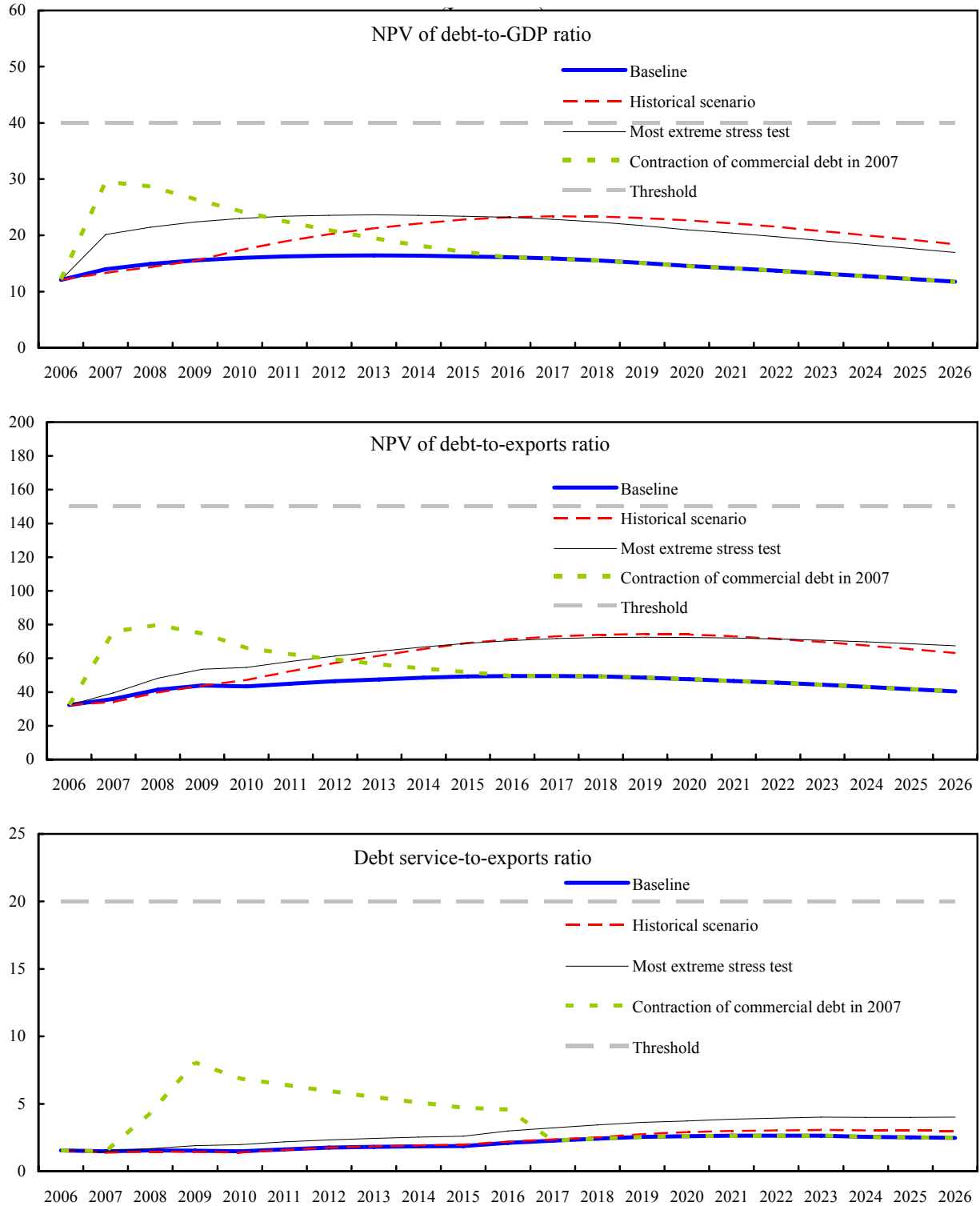
4/ Includes official and private transfers and FDI.

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.

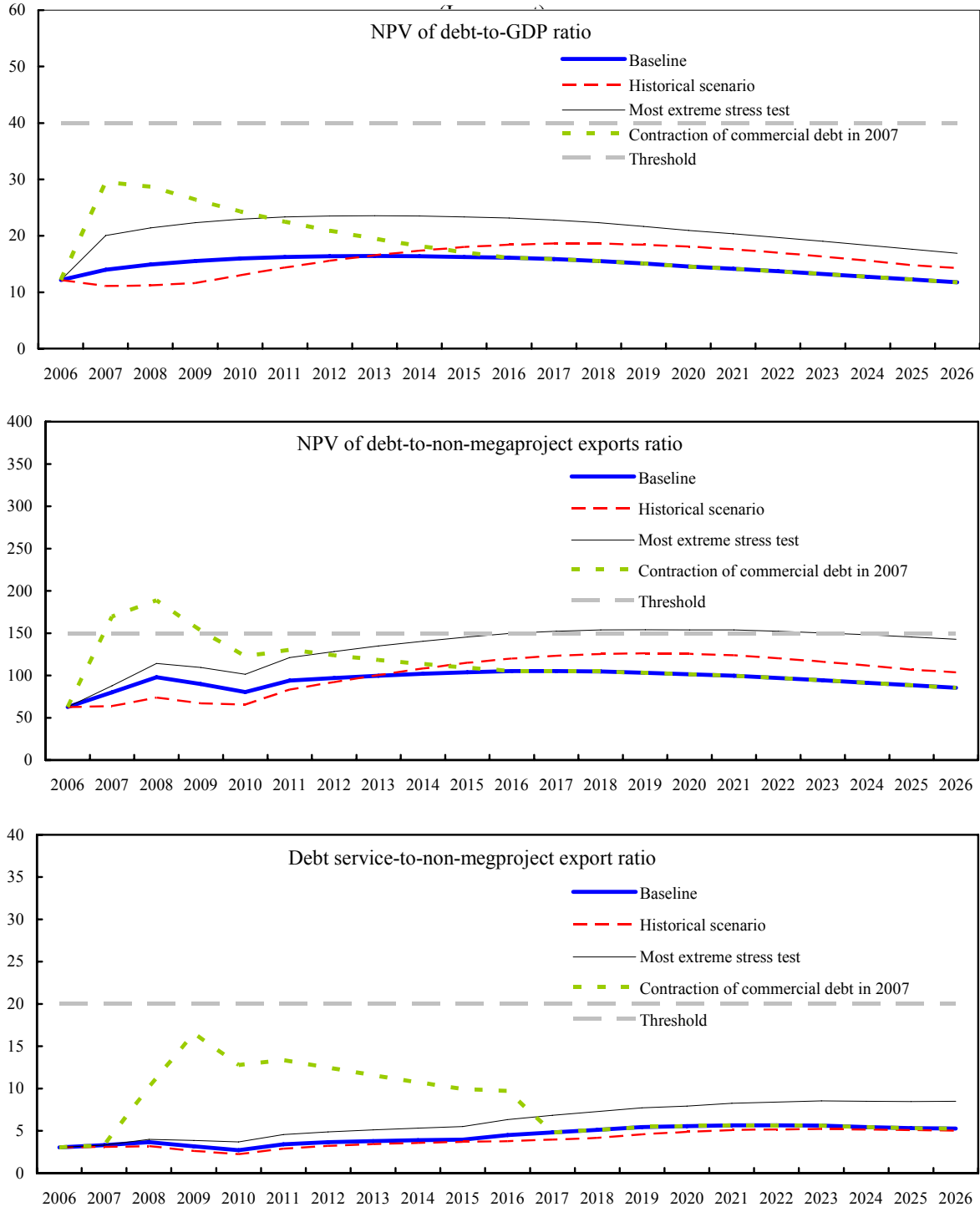
Figure 1. Mozambique: Indicators of Public and Publicly Guaranteed External Debt (After MDRI)

Under Baseline and Alternative Scenarios, 2006-2026



Source: Staffs' projections and simulations.

Figure 2. Mozambique: Indicators of Public and Publicly Guaranteed External Debt
(After MDRI and excluding megaproject exports)
Under Baseline and Alternative Scenarios, 2006-2026



Source: Staffs' projections and simulations.