

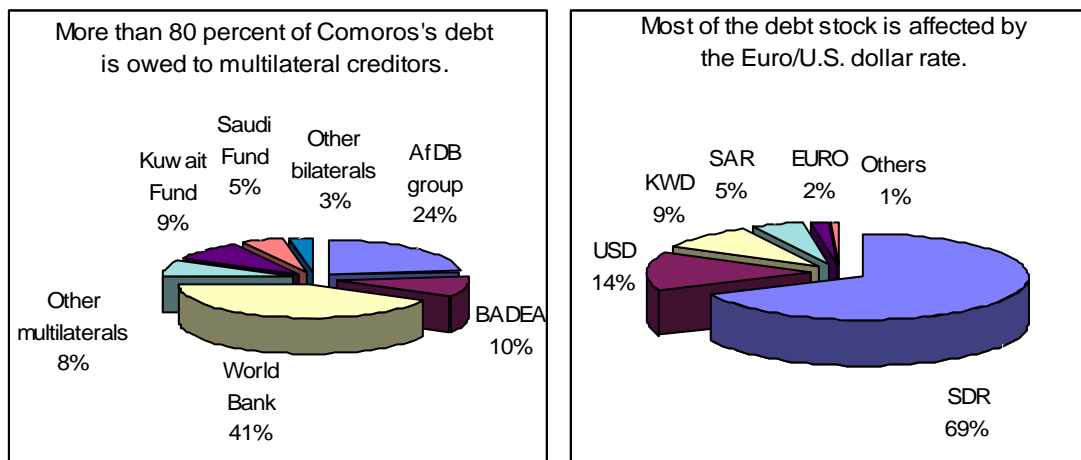
Union of the Comoros: Joint Bank-Fund Debt Sustainability Analysis

1. This assessment of Comoros's external public debt dynamics was prepared jointly with Bank staff based on the IMF-World Bank debt sustainability analysis (DSA) for low-income countries. It makes clear that in a baseline scenario of unchanged policies, Comoros would remain in debt distress even in the absence of shocks. In an adjustment scenario, which assumes improved economic performance and HIPC/MDRI debt relief at end-2009, debt would become sustainable even under a variety of stress tests. Comoros's external arrears are a major near-term hurdle for achieving debt sustainability, and the specifics of arrears clearance mechanisms will have important implications for near-term debt service.

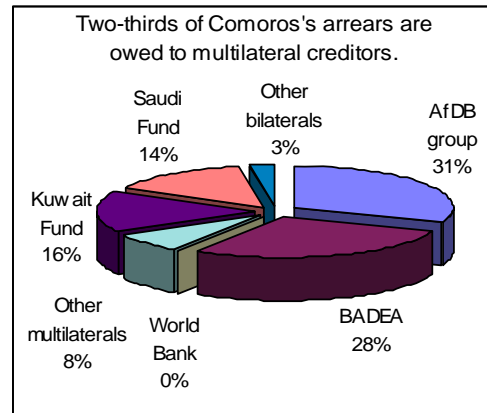
I. BACKGROUND

2. **External debt has been unsustainable for over two decades.** Large-scale borrowing from official creditors after independence led to rapid accumulation of external debt, which had reached 100 percent of GDP by the mid-1980s. The debt burden became quickly unsustainable and arrears as a proportion of total debt increased from 9 percent in 1984 to 35 percent in 2005. Though debt service to the World Bank has been paid in full, arrears to most other official creditors have accumulated.

3. **At end-2005, Comoros's public external debt was estimated to be \$265 million (72 percent of GDP).** Multilateral creditors accounted for 82 percent of this and the two largest creditors were the World Bank and the AfDB Group. Comoros has no loans from the IMF. With 69 percent of its total debt stock in SDRs, 14 percent in U.S. dollars, and 14 percent in currencies that are linked to the U.S. dollar, Comoros's external position is highly exposed to fluctuations of the euro (to which the Comorian franc is pegged) against the U.S. dollar. Since 2001, Comoros has benefited from the depreciation of the U.S. dollar against the euro, which has contributed to a gradual reduction in its debt-to-GDP ratio.



4. **Comoros has accumulated a large stock of arrears.** Arrears to official creditors amounted to \$93 million at the end of 2005 (160 percent of government revenues and 106 percent of gross international reserves), of which two-thirds was owed to multilateral creditors, mainly the AfDB Group and the Arab Bank for the Economic Development of Africa (BADEA). External debt service obligations amounted to \$7½ million in 2005 (13½ percent of revenues), of which Comoros serviced about half, including full payments to the World Bank and partial payments to the AfDB Group, the Islamic Development Bank, and OPEC in 2005. No debt service was paid to BADEA, the European Investment Bank (EIB), and bilateral creditors.

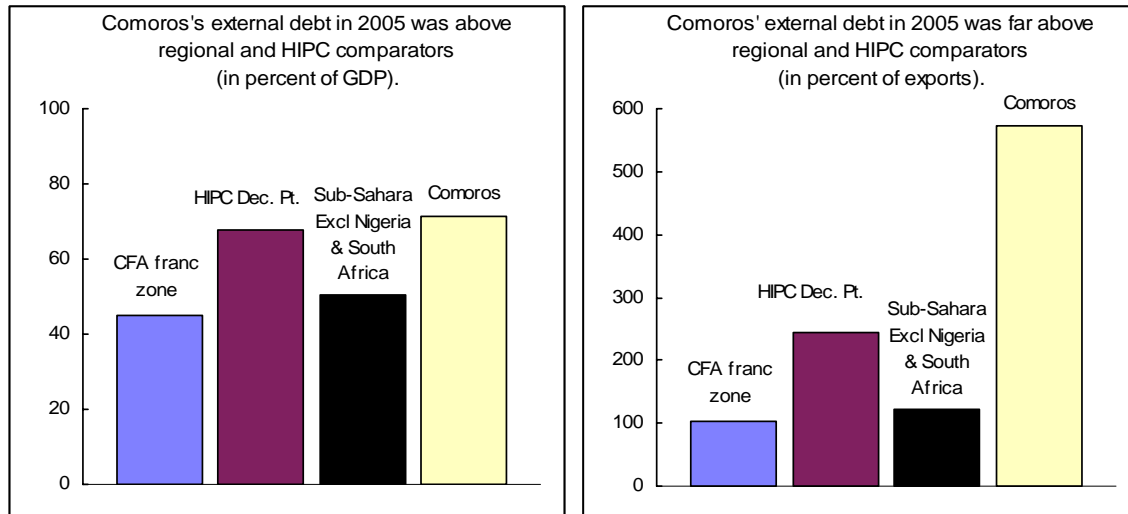


5. **Debt indicators for Comoros are well above Low-Income DSA thresholds.** The Bank-Fund low-income DSA framework classifies Comoros as a “poor performer,” reflecting the low quality of its policies and institutions.¹ At the end of 2005, the NPV of external debt was well above all policy-dependent thresholds, in particular in relation to exports of goods and services, with debt more than four times above the threshold. Debt service due slightly exceeds the DSA threshold for exports but is below the threshold for revenues.

	Policy-Dependent External Debt Burden Indicators and Thresholds		
	Comoros end-2005	Thresholds	
		Low income DSA (poor performers)	HIPC
NPV of debt in percent of:			
Exports	419.4	100.0	150.0
GDP	52.3	30.0	...
Revenues	334.2	200.0	250.0
Debt service in percent of			
Exports	16.1	15.0	...
Revenues	12.9	25.0	...

6. **Comoros's external debt is well above regional averages.** In relation to GDP, debt was on a par with African HIPC countries but its debt-to-exports ratio was far higher than most. Debt service due is somewhat below regional averages, but its near-term liquidity problems are more severe than in most other countries, given the amount of its arrears.

¹ See Interim Guidance on the Preparation of Joint Fund-World Bank Debt Sustainability Assessments for Low-Income Countries (2005).



Source: *World Economic Outlook*, March 2006.

II. DIAGNOSIS, ARREARS CLEARANCE, AND HIPC AND MDRI ASSISTANCE

7. **Comoros is to be grandfathered under the Enhanced HIPC initiative.** According to the IMF and World Bank Board meetings on September 6 and 7, 2006, Comoros is one of the countries to be grandfathered under the HIPC initiative based on meeting the income and indebtedness criteria at end-2004. Comoros has therefore more time to start an IMF-supported program than envisaged under the previous HIPC sunset clause.

8. **Comoros needs to clear a large stock of arrears before it can benefit from future debt relief.** Before a PRGF arrangement with the IMF, Comoros would need to reach understandings with its creditors on clearing arrears. Clearance might take four forms: (i) a payment by Comoros, using its international reserves, (ii) an arrears rescheduling agreement with the creditor, (iii) debt relief from the creditor, or (iv) third-party donor assistance to help with arrears clearance. While Comoros has a relatively comfortable level of international reserves of about 8 months of imports of goods and services, it can use only a minimal amount of them given the franc zone ceiling on government borrowing from the central bank.

9. **An informal meeting between the authorities and key creditors and donors was held at the IMF during the Spring Meetings in 2006.** Most creditors have since proposed a multiyear rescheduling of arrears, which would keep open the possibility of including part of the arrears in future debt relief. A special case is the AfDB group, where any assistance with arrears clearance is constrained unless the AfDB classifies Comoros as eligible for its postconflict-country facility.²

² In the AfDB's arrears clearance mechanism, for countries classified as postconflict, one-third of the debt is paid by the country, one-third is paid by a donor, and one-third is cancelled by the AfDB.

10. **The staff performed a debt sustainability analysis for both the baseline and the adjustment scenarios.** The baseline scenario assumes that economic growth stays in line with historical averages (2 percent), economic reform is limited, and inflows of aid are minimal. Fiscal revenues and wages would remain broadly unchanged, preventing a pick-up in public investment and social spending. The current account deficit is supposed to remain moderate with imports financed mainly through remittances. Comoros would continue to service IDA while arrears with other external creditors build. (Box 1, panel A).

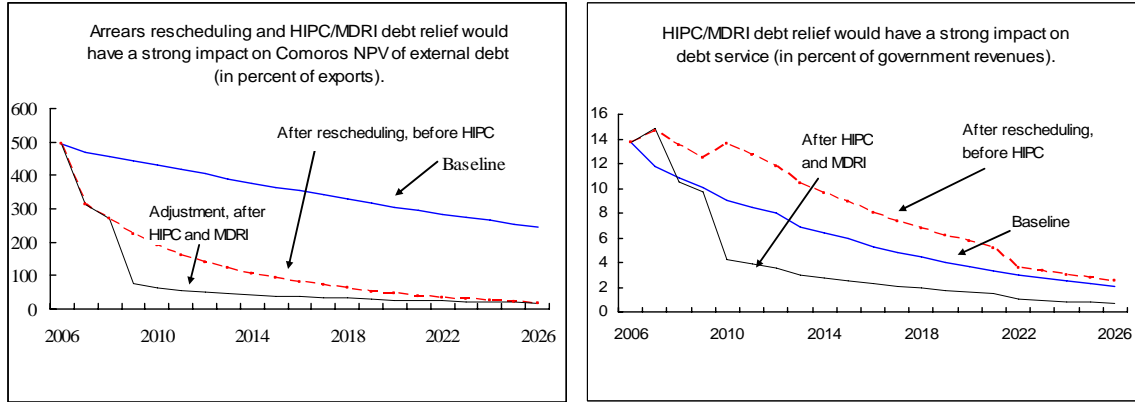
11. **The adjustment scenario assumes higher growth, consistent with the authorities' medium-term economic reform program, it allows for higher social spending and public investment while minimizing new debt and reducing arrears.** Real GDP growth would increase to 4.5 percent in 2008-2010 and stabilize to 4 percent on average, supported by a pick-up in public and private investment. As in the I-PRSP, growth sectors are assumed to include tourism, agriculture, fishing, finance, infrastructure, and communication. A rebound in exports would limit the increase in the trade deficit caused by higher aid-related imports. A primary surplus of about 1 percent of GDP would be targeted each year to allow for a modest amount of debt service and a gradual reduction in domestic arrears. Comoros is supposed to clear arrears with its external creditors in 2007, at the time of the expected decision point under the HIPC Initiative and to receive additional relief under the MDRI debt relief in 2009 at the HIPC completion point (Table 1a). In the adjustment scenario, it is assumed that there will be no new nonconcessional debt, while concessional borrowing will be relatively low, with most assistance coming in the form of grants. (Box 1, panel B).

12. **The specifics of arrears rescheduling can have an important impact on liquidity.** A relatively short arrears rescheduling without a grace period would imply relatively high near-term debt service. For the DSA in the adjustment scenario, it is assumed that arrears are rescheduled over fifteen years for all bilateral and multilateral creditors except the AfDB, where arrears are assumed to be cleared through a combination of own payments, donor support, and creditor support.³

	Debt Service Due Under Alternative Arrears Clearance			
	Average (2007-2009)		Average (2010-2016)	
	Baseline	Adjustment	Baseline	Adjustment
External debt service due				
Scenario I				
In percent of exports	18.1	13.3	5.8	3.8
In percent of revenues	13.8	9.8	4.6	3.1
Scenario II				
In percent of exports	38.5	34.0	3.9	2.6
In percent of revenues	29.5	24.9	3.1	2.1

³ In line with standard practice, all arrears clearance agreements would be explicitly linked to the HIPC initiative to ensure that Comoros's contribution to arrears clearance does not reduce future debt relief and that creditors providing debt relief before the decision point are credited under the initiative.

13. **Since two-thirds of Comoros’s external debt is owed to the AfDB group and the World Bank, the country could benefit substantially from the MDRI.** Under the MDRI, it is assumed for 2009 that almost all debt to IDA is cancelled, as is debt to the African Development Fund, which is about 71 percent of all debt to the AfDB group.



III. DEBT SUSTAINABILITY ANALYSIS

14. **In the baseline scenario, Comoros’s external debt situation remains unsustainable.** With continuous accumulation of arrears and low economic growth, 20 years from now the NPV would still be more than 200 percent of exports—more than twice the policy-dependent low-income DSA threshold and still well above the HIPC threshold. Comoros would effectively remain in default, given its large stock of arrears. Any stress test would worsen the situation further. In the most extreme stress test, defined as a shock to exports in 2007–08, the NPV of external debt would reach almost 800 percent of exports of goods and services (Figure 1).

15. **In the adjustment scenario, with HIPC and MDRI debt relief in 2009, external debt indicators would improve substantially** (Table 1a). Arrears clearance in 2007 would sharply reduce the NPV-to-exports ratio, to 311 percent. At the completion point, the NPV of external debt would fall further, to 74 percent of exports, well below the HIPC threshold and also below the policy-dependent low-income DSA threshold. Interim assistance would help decrease the debt service-to-exports ratio to 14 percent in 2008. In 2010, the debt service ratio would become 5 percent of exports.

16. **The debt dynamics in the adjustment scenario would be sustainable in a variety of stress tests** (Table 1b). To see whether HIPC and MDRI debt relief can bring debt to sustainable levels, shocks are applied to the post-debt relief period of 2010 and 2011. Given Comoros’s low level of exports, the NPV-to-export ratio is the indicator that is most vulnerable to shocks. For instance, a cumulative decline in exports of 40 percent over the two years, would raise the NPV of debt to 163 percent of exports in 2011 (from 57 percent in the adjustment scenario), and it would take 8 years to reduce the NPV to the policy-dependent

threshold of 100 percent of exports (Figure 2). By contrast, the NPV-to-GDP ratio and debt service-to-export ratio would remain below policy-dependent thresholds.

IV. CONCLUSION

17. **Comoros would remain in debt distress under unchanged policies, but could achieve sustainable debt indicators in an adjustment scenario with higher growth and arrears clearance and HIPC and MDRI debt relief.** The analysis shows that after the completion point debt would be sustainable even under a variety of shocks. A near-term challenge will be to agree on arrears clearance schemes that do not jeopardize the country's liquidity position yet open the way for a PRGF-supported arrangement and HIPC and MDRI debt relief.

Box 1. Main Assumptions in the Debt Sustainability Analysis

A. Baseline scenario

Real GDP growth averages 2.0 percent over 2006–26, in line with the trend of the past 10 years.

Inflation (GDP Deflator) is projected to remain stable at 2.5 percent, consistent with the exchange rate peg.

Fiscal policy would remain prudent, with domestic primary deficit contained at 1 percent of GDP and project expenditure limited to foreign grant financing.

Gross official external financing would remain at 5 percent of GDP, entirely in the form of grants.

Current account. Export receipts are limited to 11 percent of GDP, mainly from vanilla exports and tourism. Imports of goods and services would average 37 percent of GDP and would be financed mainly through remittances. The current account balance is projected to be about 5 percent of GDP.

B. Adjustment scenario

Real GDP growth averages 4.5 percent over 2008–10 and remain at 4 percent till the end of the projection period. This growth rate is consistent with the authorities' reform program contained in the I-PRSP, which assumes higher social spending and public investment.

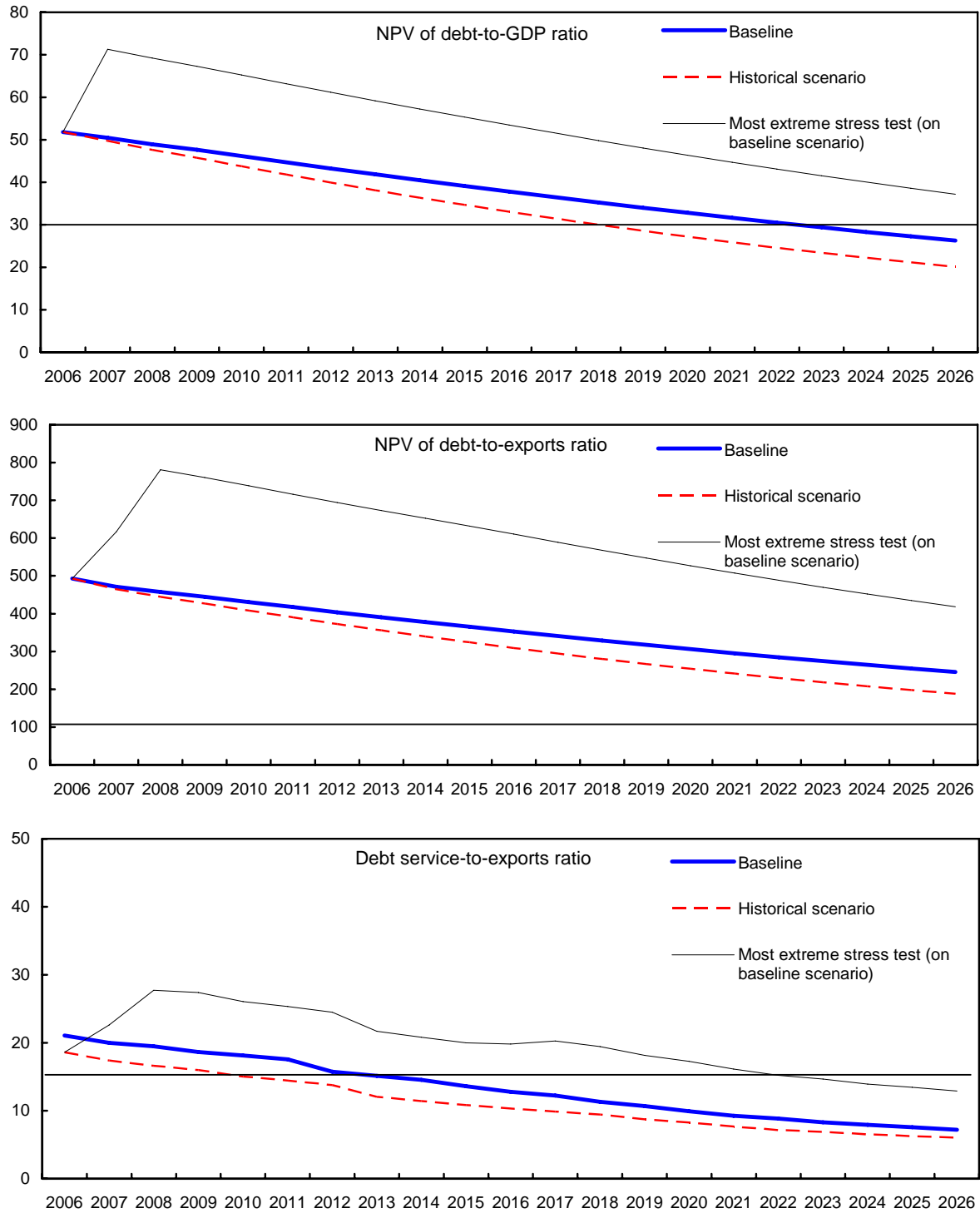
Inflation (GDP Deflator) is projected to reach 3 percent, implying as contained real appreciation.

Fiscal policy would target domestic primary surplus of 1 percent of GDP, thanks to improved revenue collection and contained recurrent expenditure. Development expenditure is projected to double at 10 percent of GDP, financed entirely with grants and concessional loans.

Gross official external financing is assumed to double respect to the baseline scenario to 11 percent of GDP. Assistance is expected to be highly concessional and mainly in the form of grants. **Net Official financing.** Amortization of external debt is projected to be largely offset by HIPC debt relief from 2007 and by concessional clearance of arrears over a 15-year period. Net resource transfer would average at about 10 percent of GDP over the projection period.

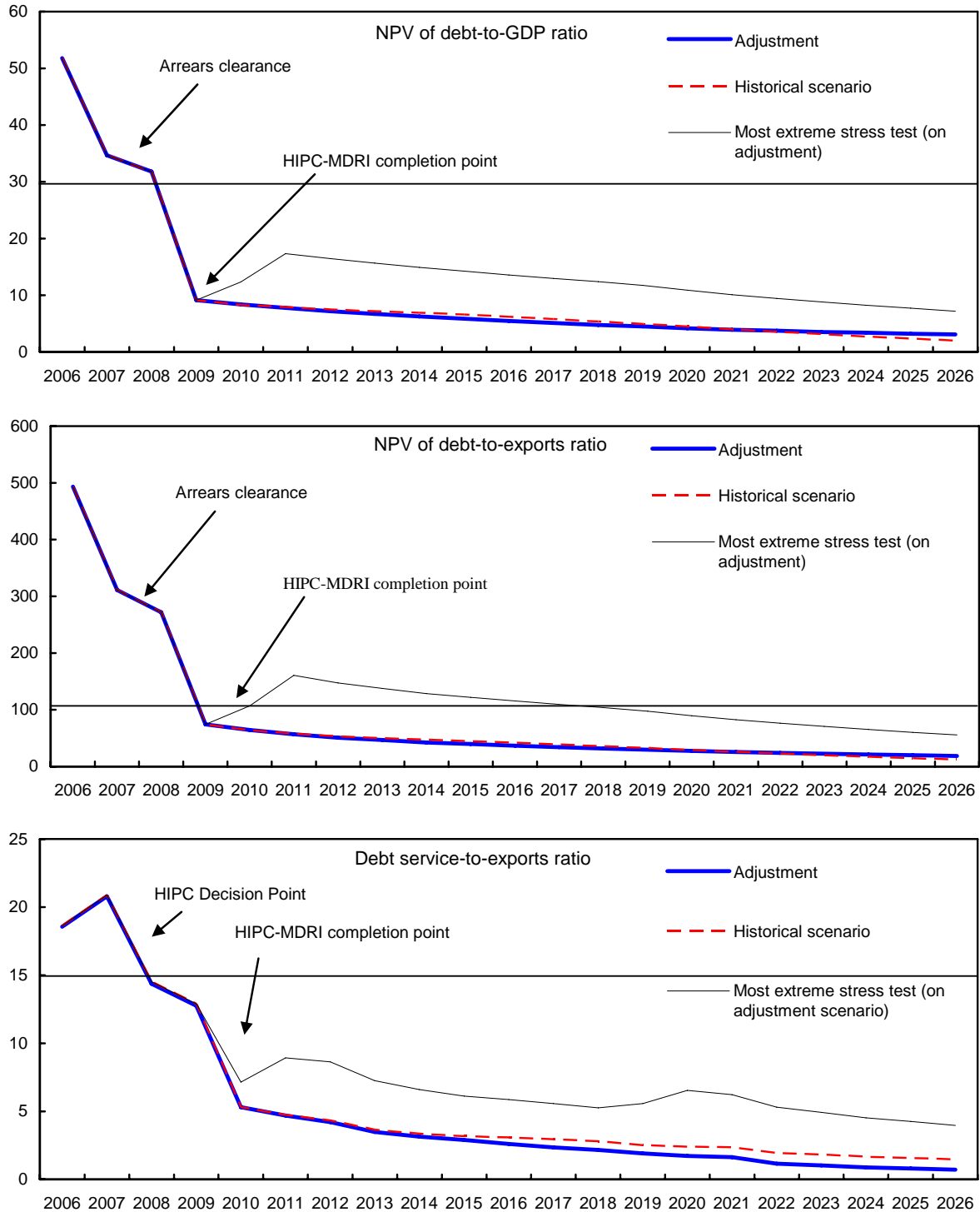
Current account. Export receipts are expected to progressively increase to 15 percent of GDP by 2026. Aid-related imports would increase total imports of goods and services by 1 percent of GDP compared to the baseline, but the current account deficits would remain at 5 percent of GDP, thanks to increased grant financing and higher exports.

Figure 1. Comoros: Indicators of Public and Publicly Guaranteed External Debt
Under the Baseline and Alternative Scenarios, 2006-2026
(In percent)



Source: Staff projections and simulations.

Figure 2. Comoros: Indicators of Public and Publicly Guaranteed External Debt Under the Adjustment and Alternative Scenarios, 2006-2026
(In percent)



Source: Staff projections and simulations.

Table 1a. Comoros: External Debt Sustainability Framework, Adjustment Scenario, 2006-2026 1/
(In percent of GDP, unless otherwise indicated)

	Actual	Historical Average 6/	Standard Deviation 6/	Projections							2006-11 Average	2016	2026	2012-26 Average
	2005			2006	2007	2008	2009	2010	2011					
External debt (nominal) 1/	72.0	91.2	11.2	71.1	58.6	52.6	16.4	15.5	13.9	38.0	8.1	2.6	6.4	
o/w public and publicly guaranteed (PPG)	72.0	91.2	11.2	71.1	58.6	52.6	16.4	15.5	13.9	38.0	8.1	2.6	6.4	
Change in external debt	-6.6	...	...	-0.9	-12.6	-5.9	-36.2	-0.9	-1.6	-9.7	-0.9	-0.3	-0.8
Identified net debt-creating flows	1.5	...	...	3.2	3.3	2.7	2.7	3.9	3.2	3.2	3.8	4.5	4.1
Non-interest current account deficit	2.6	3.6	6.5	3.9	5.5	5.5	5.3	5.3	4.4	5.0	4.9	5.3	5.1	
Deficit in balance of goods and services	22.2	19.7	3.8	26.8	27.3	26.7	25.9	24.9	23.5	25.8	21.9	18.7	21.0	
Exports	12.5	14.9	2.5	10.5	11.1	11.7	12.3	13.0	13.7	12.1	14.9	16.4	15.3	
Imports	34.7	34.6	4.3	37.3	38.4	38.4	38.2	38.0	37.2	37.9	36.8	35.1	36.3	
Net current transfers (negative = inflow)	-19.5	-14.5	4.3	-22.9	-21.8	-21.1	-20.4	-19.5	-18.9	-20.8	-17.0	-13.4	-15.9	
Other current account flows (negative = net inflow)	-0.1	-0.8	0.4	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	0.0	-0.1	
Net FDI (negative = inflow)	-0.5	-0.4	0.2	-0.5	-0.7	-0.7	-0.7	-0.8	-0.8	-0.7	-0.8	-0.8	-0.8	
Endogenous debt dynamics 2/	-0.6	...	...	-0.2	-1.6	-2.1	-1.9	-0.6	-0.5	-1.1	-0.3	-0.1	-0.2
Contribution from nominal interest rate	0.7	...	...	0.6	0.4	0.3	0.3	0.1	0.1	0.3	0.0	0.0	0.0
Contribution from real GDP growth	-3.3	...	...	-0.9	-2.0	-2.4	-2.2	-0.7	-0.6	-1.5	-0.3	-0.1	-0.3
Contribution from price and exchange rate changes	2.0	...	...	...	...	...	...	...	...	...	...	...	...
Residual (3-4) 3/	-8.1	...	...	-4.0	-15.8	-8.6	-38.9	-4.9	-4.7	-12.8	-4.8	-4.8	-4.8
o/w exceptional financing	0.0	...	...	0.0	-21.3	0.0	-32.5	0.0	0.0	-9.0	0.0	0.0	0.0
NPV of external debt 4/	52.3	...	...	51.8	34.7	31.8	9.1	8.4	7.8	23.9	5.5	3.1	4.7
In percent of exports	419.4	...	...	493.2	310.9	271.8	74.0	64.5	56.7	211.9	36.8	18.7	31.4
NPV of PPG external debt	52.3	...	...	51.8	34.7	31.8	9.1	8.4	7.8	...	5.5	3.1	4.7
In percent of exports	419.4	...	...	493.2	310.9	271.8	74.0	64.5	56.7	211.9	36.8	18.7	31.4
Debt service-to-exports ratio (in percent)	16.8	26.5	12.7	18.6	20.8	14.4	12.8	5.3	4.7	12.7	2.6	0.7	2.0	
PPG debt service-to-exports ratio (in percent)	16.8	...	...	18.6	20.8	14.4	12.8	5.3	4.7	12.7	2.6	0.7	2.0
Total gross financing need (billions of U.S. dollars)	0.0	...	...	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Non-interest current account deficit that stabilizes debt ratio	9.2	...	...	4.8	18.1	11.5	41.5	6.2	6.0	14.7	5.8	5.6	5.8
Key macroeconomic assumptions														
Real GDP growth (in percent)	4.2	2.5	1.6	1.2	3.0	4.5	4.5	4.5	4.0	3.6	4.0	4.0	4.0	
GDP deflator in US dollar terms (change in percent)	-2.5	3.4	11.6	3.4	3.0	3.0	3.0	3.0	3.0	3.1	3.0	3.0	3.0	
Effective interest rate (percent) 5/	0.9	1.0	0.2	0.9	0.7	0.6	0.6	0.7	0.6	0.7	0.5	0.3	0.4	
Growth of exports of G&S (US dollar terms, in percent)	0.2	2.9	19.8	-11.9	12.6	13.0	13.4	13.6	12.6	8.9	7.8	8.5	8.4	
Growth of imports of G&S (US dollar terms, in percent)	8.4	4.4	15.5	12.5	9.3	7.4	7.1	7.0	5.0	8.0	6.5	6.7	6.7	
Grant element of new public sector borrowing (in percent)	...	...	...	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
<i>Memorandum item:</i>														
Nominal GDP (billions of US dollars)	0.4	...	...	0.4	0.4	0.4	0.5	0.5	0.5	...	0.8	1.5	...

Source: Staff simulations.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - r(1+g)] / (1+g+r+gr)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = 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 1b. Comoros: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2006-26
(Adjustment scenario)

	Projections								
	2006	2007	2008	2009	2010	2011	2012	2016	2026
NPV of debt-to-GDP ratio (in percent)									
Adjustment	52	35	32	9	8	8	7	5	3
A. Alternative Scenarios									
A1. Key variables at their historical averages in 2007-26 1/	52	35	32	9	8	8	8	6	2
A2. New public sector loans on less favorable terms in 2007-26 2/	52	35	32	10	9	8	8	7	5
B. Bound Tests									
B1. Real GDP growth at historical average minus one st. deviation in 2010-11	52	35	32	9	9	8	8	6	3
B2. Export value growth at historical average minus one st. deviation in 2010-11 3/	52	35	32	9	10	12	11	9	5
B3. US dollar GDP deflator at historical average minus one st. deviation in 2010-11	52	35	32	9	9	10	9	7	4
B4. Net non-debt creating flows at historical average minus one st. deviation in 2010-11 4/	52	35	32	9	10	12	11	9	5
B5. Combination of B1-B4 using one-half st. deviation shocks	52	35	32	9	12	17	16	14	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	52	35	32	9	12	11	10	8	4
NPV of debt-to-exports ratio (in percent)									
Adjustment	493	311	272	74	64	57	51	37	19
A. Alternative Scenarios									
A1. Key variables at their historical averages in 2007-26 1/	493	311	272	74	64	58	53	42	12
A2. New public sector loans on less favorable terms in 2007-26 2/	493	313	275	78	69	62	56	44	28
B. Bound Tests									
B1. Real GDP growth at historical average minus one st. deviation in 2010-11	493	311	272	74	64	57	51	37	19
B2. Export value growth at historical average minus one st. deviation in 2010-11 3/	493	311	272	74	104	163	149	115	56
B3. US dollar GDP deflator at historical average minus one st. deviation in 2010-11	493	311	272	74	64	57	51	37	19
B4. Net non-debt creating flows at historical average minus one st. deviation in 2010-11 4/	493	311	272	74	81	85	78	60	29
B5. Combination of B1-B4 using one-half st. deviation shocks	493	311	272	74	107	160	147	115	56
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	493	311	272	74	64	57	51	37	19
Debt service ratio (in percent)									
Adjustment	19	21	14	13	5	5	4	3	1
A. Alternative Scenarios									
A1. Key variables at their historical averages in 2007-26 1/	19	21	15	13	5	5	4	3	1
A2. New public sector loans on less favorable terms in 2007-26 2/	19	21	15	13	5	5	4	3	2
B. Bound Tests									
B1. Real GDP growth at historical average minus one st. deviation in 2010-11	19	21	15	13	5	5	4	3	1
B2. Export value growth at historical average minus one st. deviation in 2010-11 3/	19	21	15	13	7	9	9	6	4
B3. US dollar GDP deflator at historical average minus one st. deviation in 2010-11	19	21	15	13	5	5	4	3	1
B4. Net non-debt creating flows at historical average minus one st. deviation in 2010-11 4/	19	21	15	13	5	5	5	3	2
B5. Combination of B1-B4 using one-half st. deviation shocks	19	21	15	13	6	7	7	5	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	19	21	15	13	5	5	4	3	1
<i>Memorandum item:</i>									
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	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 US\$ 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 adjustment., 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.

