35. The CBG will also forward within four weeks of the end of each month, data on government borrowing from the CBG as defined in the CBG Act 2005. The data shall indicate the limit on government borrowing from the CBG based on the government's tax revenues in the preceding year.

E. Treasury Bills

36. Weekly data on the amount offered, issued, net issuance, over/under subscription, and yields (interest rates) of the various instruments will be transmitted on a monthly basis within seven days of the end of the month. Data on treasury bills outstanding (including information on the distribution by bank and nonbank holders) will be transmitted on a monthly basis within six weeks of the end of each month. The monthly Liquidity Management Report, reflecting the data as of the last working day of the month, will be transmitted within seven days after the end of each month.

F. External Sector Data

37. The following standards will be adhered to in reporting data on exchange rates: (i) the interbank market exchange rates, defined as the simple average of the weekly weighted average buying and selling rates, will be transmitted on a weekly basis within five business days of the end of the week; and (ii) the CBG's published monthly average and end-month exchange rates, including those for all currencies in which foreign assets and liabilities are denominated, will be transmitted within two weeks of the end of the month.

38. The CBG will also forward monthly data on volume of transactions (purchases, sales, and total) in the foreign exchange market by each major group of participants (CBG, commercial banks, and foreign exchange bureaus) in dalasis within two weeks of the end of the month.

G. CBG Report on Monetary Program Data

39. The CBG shall forward a report prepared by the Internal Audit Department verifying the accuracy of monetary data submitted to the IMF. The report shall be submitted within one quarter after each test date. The first test date for which the report to be prepared is September 2008.

INTERNATIONAL MONETARY FUND

AND

INTERNATIONAL DEVELOPMENT ASSOCIATION

THE GAMBIA

Joint IMF/World Bank Debt Sustainability Analysis[1]

Prepared by the Staffs of the International Monetary Fund and
the International Development Association

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The Debt Sustainability Analysis (DSA) assesses the sustainability of The Gambia's external and public debt. The DSA, prepared by the staffs of the Fund and the World Bank, shows that The Gambia remains at high risk of debt distress even after Enhanced HIPC initiative and MDRI debt relief. In particular, the present value (PV) of external debt-to-exports ratio remains above The Gambia's policy-dependent threshold throughout the projection period. The DSA indicates that public debt is declining due to recent fiscal consolidation.

I. BACKGROUND

1. **This debt sustainability analysis (DSA) updates the DSA undertaken jointly by the staffs of the Fund and the Bank in December 2007 in the context of The Gambia's completion point under the enhanced HIPC initiative**. The DSA is based on debt and debt service data prepared for the completion point document, updated to reflect recent debt data and a revised macroeconomic framework following discussions for the fourth review under the Poverty Reduction and Growth Facility (PRGF). The last DSA concluded that The Gambia is at high risk of debt distress even after receiving HIPC and MDRI debt relief.

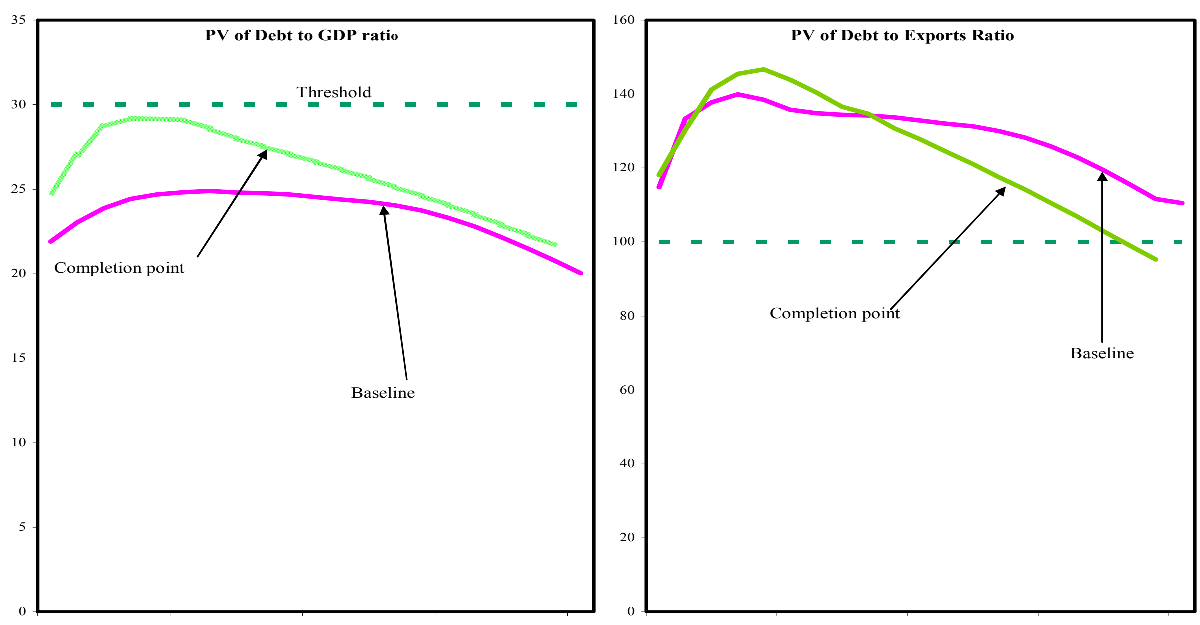
2. **The stock of external debt declined substantially at end-2007 following HIPC and MDRI debt relief.** At the end of 2006, prior to completion point, the stock of nominal external public debt was US$676.7 million (133.1 percent of GDP). Multilateral creditors accounted for 84 percent of this debt, with IDA as the largest creditor (39 percent of total outstanding debt). At end-2007, post-completion point, the stock of external public debt fell

[1] The last joint IMF/IDA DSA was presented to the Fund Executive Board on December 19, 2007 (IMF Country Report No. 08/109, Appendix I) and to the World Bank Executive Board on December 20, 2007 (Enhanced HIPC Completion Point Document and MDRI, Report No. 41413-GM).

to US$299.4 million (46.0 percent of GDP). In January 2008, Paris Club creditors agreed to cancel outstanding claims (US$13 million in PV terms at end-2006) on The Gambia. Bilateral agreements have been signed with Paris Club creditors and Kuwait. Agreements on the delivery of debt relief have also been reached with the EU/EC, Opec Fund for International Development (OFID), the Islamic Development Bank (IsDB), and the International Fund for Agricultural Development (IFAD) but are still pending with the Economic Community of West African States (ECOWAS), Saudi Arabia, Taiwan Province of China, Libya, China, and India.

3. **The current DSA concludes that The Gambia remains at a high risk of debt distress after HIPC and MDRI debt relief due to the high level of debt as well as the country's vulnerability to shocks.** Due to delays in contracting new loans, the level of external borrowing during 2007-08 was lower than projected in the HIPC completion point LIC-DSA. However, the level of debt remains high because of the reliance on external borrowing to finance the country's critical infrastructure projects. Over the 20 year projection horizon, the PV of debt-to-GDP ratio remains below the sustainable threshold while the PV of debt-to-export ratio remains above the debt distress threshold (Figure 1). Compared with the completion point LIC-DSA, the PV of debt-to-GDP ratio has fallen due to the lower level of projected external borrowing, particularly over the medium term. At the same time, the growth rate of exports has been marked down due to the impact of the global financial crisis. Thus, compared with the completion point LIC-DSA, the PV of debt-to-exports is lower over the medium-term (where the lower borrowing dominates) but higher over the long-term (where lower export growth dominates).

Figure 1: PV of Debt Ratios



Source: IMF and World Bank Staff estimates.

II. UNDERLYING ASSUMPTIONS

4. **The macroeconomic framework takes into account the impact of the global economic and financial crisis in 2008 and 2009 and is consistent with the PRGF-supported program** (Box 1). Recent developments in the global economy are expected to adversely affect economic activity in The Gambia in 2009 mainly through reduced tourist receipts and remittances. Economic activity is expected to return to trend over the medium term as the authorities pursue prudent fiscal and monetary policies and investments in agriculture, infrastructure and tourism increase.

Box 1: Baseline Macroeconomic Assumptions Underlying the DSA

Real GDP growth is expected to decline from 5.9 percent in 2008 to 4.6 percent in 2009 as a result of the global economic slowdown. From 2010 onward, GDP is projected to rebound to about 5 percent of real growth per year, which is still below the previous projections. The main contributors to growth will be tourism, construction, telecommunications, and banking.

Inflation is expected to remain in single digits. Higher commodity prices in 2008 are expected to be passed through to the domestic economy with a delay. Inflation is projected to increase from an annual average of 5 percent in 2008 to 7 percent in 2009 before declining to 4 percent in 2013, and remain at that level over the projection horizon as the authorities maintain tight monetary policy.

Growth of exports of goods and services is expected to slow in 2009 due to the downturn in global economic activity. Export growth is projected to decline by 4 percentage points in 2009 but then recover to 9 percent for 2010-2013, driven by a rebound in tourism. In the long term, export growth is expected to stabilize at about 7 percent per annum. Re-exports are expected to decline as a share of GDP, as tariff harmonization and improvements in neighboring countries erode The Gambia's competitive advantage in this activity. Imports of goods and services are projected to increase by about 5.5 percent on average over the period 2010-2028, mostly due to growing demand for investment imports from both the government and the private sector. Official transfers are projected to decrease gradually and gross borrowing is projected to stabilize at slightly above 3 percent of GDP.

The primary fiscal balance is projected to decline from a surplus of 2.5 percent of GDP in 2008 to an average surplus of 1.3 percent over the next five years and close to balance thereafter. The surplus is expected to drop overtime due to a recovery in capital expenditures. Over the long-term, revenues are projected to rise to about 21½ percent of GDP while poverty reducing expenditures are boosted in line with the fall in debt service payments. Donor support, including program and project assistance is expected to remain robust over the medium-term. Grant financing is expected to remain in the region of 4 percent of GDP over the medium-term before falling to an average of 2 percent over 2013-2028. The grant element of new external borrowing is projected to remain at 45 percent.

5. **The Gambia's program with the IMF includes limits on the amount and terms of new borrowing to prevent a build up of debt to levels that may be unsustainable over the medium term.** Under the PRGF program, the authorities have committed to a minimum grant element of 45 percent in all new external loans contracted or guaranteed by the government. The program also has indicative quarterly limits on the total amount of new borrowing. In addition to the PRGF limits, the risk that non-concessional loans may lead to a rapid re-accumulation of debt, and thus undermine The Gambia's sustainability prospects, is mitigated by IDA's Non-Concessional Borrowing Policy (NCBP), which applies to IDA-only, post-MDRI countries that are grant-eligible and complements the IMF's concessionality requirements.[2]

III. External Debt Sustainability

A. Baseline

6. **The trends in debt indicators under the baseline scenario remain similar to those estimated in the previous DSA**. The World Bank's Country Policy and Institutional Assessment (CPIA), classifies The Gambia as a "poor performer" based on an average of the ratings for the preceding three years and the text table presents the policy-dependent debt burden thresholds. New borrowing associated with increased investment raises the PV of debt-to-GDP through 2017 before it declines as investment levels off and growth is sustained. The PV of debt-to-revenue and the debt service ratios fall considerably below their respective thresholds. While they increase through 2012, they remain at comfortable levels throughout the projection period. Debt service payments remain manageable throughout the projection period, rising no higher than 10 percent of exports and revenue.

7. **The PV of debt-to-exports ratio breaches the debt-burden threshold for a protracted period** (Table 1 and Figure 2). This ratio peaks at about 147 percent in 2011 as new borrowing increases. The PV of debt-to-export ratio gradually declines towards the threshold over the medium term as sustained growth in the tourism, construction, and telecommunication sectors boosts exports.

[2] The minimum grant element required under the NCBP is 35 percent or higher, should a higher minimum level be required under an existing IMF arrangement. The policy is complementary to other policies and tools that the Bank and Fund have in place to help countries maintain debt sustainability, such as the LIC Debt Sustainability Framework, the Debt Management Performance Assessment (DeMPA) tool, and the toolkit for developing Medium-Term Debt Management Strategies (MTDS). See "IDA's Non-Concessional Borrowing Policy: Review and Update", Resource Mobilization Department, (FRM), The World Bank, June 2008.

Text table 1.: Policy Dependent Debt Burden Thresholds under the Debt Sustainability Framework Applying to External Debt

	Indicative Thresholds			The Gambia
	strong performer	moderate performer	weak performer	2008
NPV of External Debt				
In percent of GDP	50	40	30	22
In percent of exports	200	150	100	117
In percent of revenues	300	250	200	117
Debt Service				
In percent of exports	25	20	15	9
In percent of revenues	35	30	25	9

B. Alternative Scenarios and Stress Tests

8. **Alternative scenarios show that external debt indicators would deteriorate substantially under a range of shocks**. The scenarios producing the largest shock to the PV of debt-to-GDP and the PV of debt-to-revenue ratios consists of a combination of shocks or a one time 30 percent nominal depreciation (tests B5 and B6 in Table 2). For the PV of debt–to-exports ratio a shock to the external non debt financing flows in 2009 and 2010 would increase the PV of debt-to-exports by 66 percentage points in 2010. The scenario producing the most extreme shock for the debt service to exports and to revenue ratios is new public sector borrowing at less favorable terms (A2 in Table 2). All the debt indicators would worsen under the less favorable terms scenarios (Figure 2). Debt indicators would converge slowly back to the baseline in the combination scenario while indicators would not converge in the less favorable terms scenario.

9. **The Gambia's debt dynamics would deteriorate sharply if borrowing was less concessional.** The "less favorable terms" scenario (Figure 2 and Table 2), assumes that The Gambia contracts loans with an average grant element of 30 (rather than 45) percent between 2008-2028.[3] All debt indicators deteriorate substantially over the medium term under this scenario. The PV of debt-to-export ratio breaches the 100 percent threshold by a wide margin throughout the projection period. The PV of debt-to-GDP ratio would also breach its threshold of 30 percent from 2014, peaking at 33 percent and only returning to the policy threshold at the end of the projection period. This indicates that The Gambia will have to depend largely on grants and highly concessional borrowing to finance its development efforts. It also emphasizes the need for developing a prudent borrowing plan associated with a medium-term debt management strategy (MTDS).

[3] To be considered concessional in Fund arrangements, loans should have a grant element of at least 35 percent. Concessional financing for the Gambia is defined as loans with a grant element of 45 percent or higher.

10. **A one-time 30 percent depreciation of the exchange rate results in the PV of debt-to-GDP ratio breaching the 30 percent threshold for much of the projection period** (Table 2). Compared with other shocks this scenario results in the second highest ratio of the PV of debt-to-GDP in the medium term and the highest ratio of the PV of debt-to-revenues in 2028.

11. **A combination of adverse economic shocks would also result in a significant rise in debt ratios** (Table 2). A combination of shocks to the output base, exports and the non-debt creating flows in the balance of payments would yield a significant deterioration in the debt ratios. Under this scenario, the debt-to-export ratio would peak at 196 percent in 2011.

IV. Public Debt Sustainability

A. Baseline

12. **Domestic debt is expected to fall from 30.8 percent of GDP at the end of 2008 to 14.8 percent of GDP in 2013 and to 10.4 percent of GDP in 2028, reflecting sustained fiscal discipline.** Between 2005 and 2007, fiscal performance improved as reforms to tax administration boosted revenues by 2½ points of GDP. Unfortunately, a decline in taxes on international trade lowered revenues in 2008. Over the medium-term revenues are expected to rise gradually from 18½ to 21½ percent of GDP. Relatively restrained fiscal policy, as programmed for the medium term, should help lower domestic interest rates. Over the long term, the full delivery of external debt relief and lower domestic interest rates should provide fiscal space to increase basic primary expenditures[4] and offset a decline in externally-financed projects as a percent of GDP.

13. **The PV of total public debt is projected to decline from about 55 percent of GDP in 2008 to 43 percent in 2013 and to 31 percent in 2028** (Table 3 and Figure 2). The biggest factor in the near term decline is a fall in the domestic debt. As a ratio of domestic revenues and grants, the PV of public debt is projected to fall from about 281 percent in 2008 to 138 percent at the end of the projection period.

B. Alternative Scenarios and Stress Tests

14. **Stress tests indicate that public debt ratios are most sensitive to further increases in public debt in the near term and a shock to GDP growth over the long term, but not to most other adverse shocks** (Table 4 and Figure 2).

- With a 10 percent of GDP increase in public debt above the baseline in 2009, the PV of debt-to-GDP ratio would rise from 55 percent in 2008 to 63 percent in 2010 and the PV of debt-to-revenue ratio would gradually fall from its 2008 level of 281

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[4] Defined as expenditures excluding interest payments and externally-financed projects.

percent compared with a sharp fall to 221 in 2010 under the baseline. However, the effects would be mitigated over time and an increase in other debt-creating flows is not significantly worse than other shocks by 2028.

- Under a permanently lower output growth rate (4.3 percent instead of 5 percent), the PV of total debt-to-GDP ratio would increase from 55 percent in 2008 to 61 percent in 2028, as opposed to declining to 31 percent under the baseline scenario. Similarly, the PV of debt-to-revenues would be 272 percent in 2028 compared to 138 under the baseline and the debt service-to-revenue ratio would almost triple from 13 to 37 percent.

- A combination of shocks to growth and the primary balance or a one-time 30 percent real depreciation result in a moderate worsening of debt ratios compared to the baseline. Under the former, the PV of debt-to-GDP ratio would be 40 percent in 2028 while under the latter it would be 42 percent. Under the baseline, this ratio would be 31 percent.

- Because the primary balance was in surplus in 2008, the alternative scenario based on the primary balance being unchanged would result in a rapid decline in The Gambia's public debt ratios with all debt eliminated by 2026. For similar reasons, the historical scenario would result in a more rapid decline in debt ratios than the baseline (Figure 3).

V. Conclusion

15. **The Gambia is at high risk of debt distress based on external debt burden indicators.** While The Gambia's level of borrowing during 2007-08 was lower than projected in the HIPC completion point DSA, primarily due to an improvement in the overall fiscal balance and a decline in new borrowing, the PV of external debt-to-exports ratio breaches the policy dependent threshold throughout the projection period. Total public debt is projected to fall by 30 percentage points of GDP over the projection period, driven in large part by a reduction in domestic debt. Given continuing risks, the authorities are urged to prepare a medium-term debt management strategy (to include the debt of public enterprises and contingent liabilities) at the earliest opportunity. Staffs also recommend that the authorities continue to rely on a combination of grants and highly concessional borrowing in external financing and exercise restraint in contracting new loans. The major risks to The Gambia's debt sustainability include lower than expected economic and/or export growth, higher than expected new borrowing, and a deterioration in fiscal performance. In light of these risks, staffs underline the importance of sustained policy reform.

Table 1: External Debt Sustainability Framework, Baseline Scenario, 2005-2028 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average	Standard Deviation	Projections								
	2005	2006	2007			2008	2009	2010	2011	2012	2013	2008-2013 Average	2028	2014-2028 Average
External debt (nominal) 1/	134.6	133.1	46.0			40.1	41.9	43.4	44.5	45.0	45.2		30.0	
o/w public and publicly guaranteed (PPG)	134.6	133.1	46.0			40.1	41.9	43.4	44.5	45.0	45.2		30.0	
Change in external debt	-11.9	-1.5	-87.2			-5.9	1.8	1.5	1.1	0.5	0.3		-1.7	
Identified net debt-creating flows	-17.4	-15.5	-29.2			3.2	4.2	1.1	-0.2	-1.0	-0.4		-1.5	
Non-interest current account deficit	13.2	9.8	10.9	5.4	4.6	15.2	12.5	11.0	10.5	9.8	9.7		5.4	7.6
Deficit in balance of goods and services	22.7	17.2	16.2			18.8	18.8	18.5	18.3	17.7	17.7		10.0	
Exports	28.4	30.5	23.4			18.8	16.9	17.0	17.2	17.5	17.9		17.7	
Imports	51.1	47.7	39.6			37.6	35.7	35.4	35.4	35.2	35.6		27.6	
Net current transfers (negative = inflow)	-17.1	-15.2	-11.0	-12.3	5.0	-8.5	-10.6	-11.3	-11.1	-10.7	-10.6		-5.5	-7.5
o/w official	-5.1	-3.2	-1.2			-1.1	-4.0	-4.5	-4.2	-4.0	-4.1		-0.8	
Other current account flows (negative = net inflow)	7.6	7.8	5.8			4.9	4.3	3.8	3.3	2.8	2.7		1.0	
Net FDI (negative = inflow)	-13.3	-14.6	-12.4	-7.0	5.8	-10.6	-7.4	-8.7	-9.5	-9.4	-8.8		-6.1	-7.5
Endogenous debt dynamics 2/	-17.4	-10.8	-27.7			-1.4	-1.0	-1.2	-1.3	-1.4	-1.4		-0.9	
Contribution from nominal interest rate	1.8	1.6	1.4			0.8	0.8	0.8	0.8	0.9	0.9		0.6	
Contribution from real GDP growth	-6.5	-8.0	-6.6			-2.2	-1.7	-2.0	-2.1	-2.2	-2.3		-1.5	
Contribution from price and exchange rate changes	-12.7	-4.4	-22.6			…	…	…	…	...	…		…	
Residual (3-4) 3/	5.5	14.0	-57.9			-9.1	-2.3	0.4	1.3	1.5	0.6		0.0	
o/w exceptional financing	0.0	0.0	0.0			-0.8	-0.7	-0.6	-0.5	0.0	0.0		0.0	
PV of external debt 4/	...	...	25.7			21.9	23.3	24.4	25.2	25.7	26.1		20.4	
In percent of exports	...	...	109.6			116.5	137.7	143.8	147.0	147.0	145.5		115.2	
PV of PPG external debt	...	...	25.7			21.9	23.3	24.4	25.2	25.7	26.1		20.4	
In percent of exports	...	...	109.6			116.5	137.7	143.8	147.0	147.0	145.5		115.2	
In percent of government revenues	...	...	119.9			117.8	120.7	123.2	124.4	123.2	121.1		94.7	
Debt service-to-exports ratio (in percent)	17.4	16.3	17.4			9.1	8.9	9.5	10.0	10.3	10.3		6.9	
PPG debt service-to-exports ratio (in percent)	17.4	16.3	17.4			9.1	8.9	9.5	10.0	10.3	10.3		6.9	
PPG debt service-to-revenue ratio (in percent)	25.0	23.4	19.0			9.2	7.8	8.1	8.4	8.6	8.6		5.7	
Total gross financing need (millions of U.S. dollars)	22.7	1.1	16.8			49.9	56.6	35.0	27.0	22.8	31.9		17.8	
Non-interest current account deficit that stabilizes debt ratio	25.1	11.3	98.1			21.1	10.7	9.4	9.5	9.3	9.5		7.1	
Key macroeconomic assumptions														
Real GDP growth (in percent)	5.1	6.5	6.3	5.3	3.1	5.9	4.6	5.0	5.3	5.4	5.4	5.3	5.0	5.0
GDP deflator in US dollar terms (change in percent)	9.5	3.4	20.5	-0.1	9.2	15.5	2.1	1.7	1.9	2.1	2.0	4.2	2.0	2.0
Effective interest rate (percent) 5/	1.4	1.3	1.4	1.2	0.2	2.2	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.0
Growth of exports of G&S (US dollar terms, in percent)	2.9	18.5	-1.6	3.6	8.9	-1.8	-4.0	7.1	8.4	9.7	10.1	4.9	4.1	7.0
Growth of imports of G&S (US dollar terms, in percent)	11.6	2.9	6.2	8.0	18.0	16.0	1.4	6.0	7.3	6.8	8.8	7.7	3.7	5.3
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	48.1	43.3	45.2	46.2	46.1	46.2	45.9	45.1	45.3
Government revenues (excluding grants, in percent of GDP)	19.7	21.2	21.4			18.6	19.3	19.8	20.3	20.9	21.5		21.5	21.5
Aid flows (in millions of US dollars) 7/	47.5	50.3	31.4			23.6	75.9	84.4	89.2	92.3	95.8		75.6	
o/w Grants	7.7	6.4	7.8			8.7	34.4	41.2	41.0	42.3	45.8		25.6	
o/w Concessional loans	39.8	43.9	23.6			14.9	41.5	43.2	48.2	50.0	50.0		50.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			2.4	6.5	7.0	6.6	6.2	6.1		1.5	3.2
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			63.3	67.2	70.2	70.1	70.8	71.9		63.7	67.8
Memorandum items:														
Nominal GDP (millions of US dollars)	461.6	508.3	650.9			795.7	849.9	907.4	972.8	1046.9	1126.1		3132.8	
Nominal dollar GDP growth	15.1	10.1	28.1			22.2	6.8	6.8	7.2	7.6	7.6	9.7	7.1	7.1
PV of PPG external debt (in millions of US dollars)			167.1			174.6	198.0	221.4	245.4	269.2	293.4		638.4	
(PVt-PVt-1)/GDPt-1 (in percent)						1.1	2.9	2.8	2.6	2.4	2.3	2.4	0.5	1.4

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 PV 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.
7/ Defined as grants, concessional loans, and debt relief.
8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

Table 2. The Gambia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2008-28 including HIPC and MDRI
(In percent)

	Projections											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	**2018**	2028
PV of debt-to GDP ratio												
Baseline	22	23	24	25	26	26	26	26	27	27	**27**	20
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-2028 1/	22	20	19	18	18	17	17	16	15	14	**13**	8
A2. New public sector loans on less favorable terms in 2008-2028 2	22	24	26	28	29	30	31	31	32	32	**33**	28
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2009-2010	22	24	26	26	27	27	28	28	28	28	**28**	21
B2. Export value growth at historical average minus one standard deviation in 2009-2010 3/	22	23	26	26	27	27	27	27	28	28	**28**	21
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-2010	22	26	31	32	32	33	33	33	33	34	**34**	26
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-2010 4/	22	28	36	36	36	36	36	36	36	36	**36**	23
B5. Combination of B1-B4 using one-half standard deviation shocks	22	28	37	38	38	38	38	38	38	38	**38**	26
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	22	33	35	36	36	37	37	37	38	38	**38**	29
PV of debt-to-exports ratio												
Baseline	117	138	144	147	147	146	146	146	147	147	**147**	115
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-2028 1/	117	116	111	107	104	97	93	88	84	78	**73**	47
A2. New public sector loans on less favorable terms in 2008-2028 2	117	142	153	162	166	168	171	174	177	180	**181**	159
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2009-2010	117	138	144	147	147	145	145	146	147	147	**147**	115
B2. Export value growth at historical average minus one standard deviation in 2009-2010 3/	117	140	173	177	176	174	174	174	175	175	**175**	134
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-2010	117	138	144	147	147	145	145	146	147	147	**147**	115
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-2010 4/	117	168	210	211	207	203	201	200	199	198	**197**	130
B5. Combination of B1-B4 using one-half standard deviation shocks	117	147	194	196	194	190	189	189	189	188	**187**	131
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	117	138	144	147	147	145	145	146	147	147	**147**	115
PV of debt-to-revenue ratio												
Baseline	118	121	123	124	123	121	122	123	123	124	**124**	95
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-2028 1/	118	102	95	91	87	81	78	74	70	66	**62**	39
A2. New public sector loans on less favorable terms in 2008-2028 2	118	124	131	137	139	140	143	146	149	151	**152**	131
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2009-2010	118	123	129	131	129	127	128	129	130	130	**130**	99
B2. Export value growth at historical average minus one standard deviation in 2009-2010 3/	118	121	130	130	129	126	127	128	128	128	**128**	96
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-2010	118	136	155	157	155	153	154	155	156	156	**156**	119
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-2010 4/	118	147	180	178	174	169	169	168	167	167	**165**	107
B5. Combination of B1-B4 using one-half standard deviation shocks	118	144	186	185	181	177	177	177	177	176	**175**	120
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	118	171	174	176	174	171	173	174	174	175	**175**	134

Table 2. The Gambia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2008-28 including HIPC and MDRI (continued)
(In percent)

Debt service-to-exports ratio

Baseline	9	9	9	10	10	10	10	10	10	9	**9**	7
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-2028 1/	9	9	9	9	8	8	8	8	7	7	**7**	4
A2. New public sector loans on less favorable terms in 2008-2028 2	9	8	9	10	11	11	11	11	11	11	**11**	9
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2009-2010	9	8	9	9	8	8	8	8	7	7	**7**	8
B2. Export value growth at historical average minus one standard deviation in 2009-2010 3/	9	8	10	10	10	9	10	10	9	8	**8**	10
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-2010	9	8	9	9	8	8	8	8	7	7	**7**	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-2010 4/	9	8	9	10	9	9	9	9	8	8	**7**	11
B5. Combination of B1-B4 using one-half standard deviation shocks	9	8	9	10	9	9	9	9	8	8	**8**	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	9	8	9	9	8	8	8	8	7	7	**7**	8

Debt service-to-revenue ratio

Baseline	9	8	8	8	9	9	8	8	8	8	**8**	6
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2008-2028 1/	9	7	7	7	7	7	7	7	6	6	**6**	3
A2. New public sector loans on less favorable terms in 2008-2028 2	9	7	8	9	9	9	10	10	9	9	**9**	8
B. Bound Tests												
B1. Real GDP growth at historical average minus one standard deviation in 2009-2010	9	8	8	8	7	7	7	7	6	6	**6**	7
B2. Export value growth at historical average minus one standard deviation in 2009-2010 3/	9	7	7	8	7	7	7	7	6	6	**6**	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-2010	9	8	9	9	9	8	9	9	8	7	**7**	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-2010 4/	9	7	8	8	8	7	8	8	7	6	**6**	9
B5. Combination of B1-B4 using one-half standard deviation shocks	9	8	9	9	9	8	9	9	8	7	**7**	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	9	10	11	10	10	9	10	10	9	8	**8**	9
Memorandum item:												
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	45	45	45	45	45	45	45	45	45	45	**45**	45

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.

Table 3. The Gambia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2002-2028

(In percent of GDP, unless otherwise indicated)

	Actual										Estimate				Projections			
	1997	1998	2002	2003	2004	2005	2006	2007	Average	Standard Deviation	2008	2009	2010	2011	2012	2013	2008-13 Average	201
Public sector debt 1/	125.2	128.1	181.4	183.7	176.2	164.6	167.6	76.3			70.9	70.1	69.1	67.1	64.3	60.0		5
o/w foreign-currency denominated	101.7	102.5	141.6	150.4	146.5	134.6	133.1	46.0			40.1	41.9	43.4	44.5	45.0	45.2		4
Change in public sector debt	...	2.9	22.6	2.3	-7.5	-11.7	3.0	-91.3			-5.4	-0.8	-1.0	-1.9	-2.8	-4.4		-
Identified debt-creating flows		-2.5	11.5	-5.5	-13.3	-13.9	-7.6	-37.9			-11.5	-5.3	-4.8	-4.7	-5.2	-5.6		-
Primary deficit	1.3	-2.9	-0.6	-1.3	-1.5	0.1	0.6	-5.2	-0.8	4.1	-2.5	-0.8	-0.5	-0.7	-1.3	-1.9	-1.3	
Revenue and grants	20.4	20.5	20.8	18.2	25.5	21.4	22.5	22.6			19.7	23.3	24.3	24.5	24.9	25.6		2
of which: grants	1.3	2.0	4.4	2.5	4.5	1.7	1.3	1.2			1.1	4.0	4.5	4.2	4.0	4.1		
Primary (noninterest) expenditure	21.7	17.7	20.1	16.8	23.9	21.5	23.1	17.4			17.2	22.5	23.8	23.8	23.6	23.7		2
Automatic debt dynamics		1.1	14.6	-2.9	-10.3	-13.2	-8.2	-28.2			-6.4	-1.9	-2.0	-2.2	-2.3	-2.2		-
Contribution from interest rate/growth differential	...	-3.6	2.2	-16.5	-12.2	-5.4	-7.9	-9.8			-2.1	-1.7	-1.9	-2.0	-2.1	-2.1		-
of which: contribution from average real interest rate	...	4.0	-3.1	-4.9	-0.1	3.2	2.2	0.1			2.1	1.5	1.4	1.5	1.4	1.2		
of which: contribution from real GDP growth	...	-7.6	5.3	-11.7	-12.1	-8.6	-10.1	-9.9			-4.2	-3.1	-3.3	-3.4	-3.5	-3.3		-
Contribution from real exchange rate depreciation		4.7	12.4	13.7	1.9	-7.8	-0.2	-18.4			-4.3	-0.2	-0.1	-0.2	-0.2	0.0		
Other identified debt-creating flows		-0.7	-2.5	-1.3	-1.5	-0.8	0.0	-4.5			-2.6	-2.6	-2.3	-1.8	-1.7	-1.5		-
Privatization receipts (negative)		0.0	0.0	0.0	0.0	-0.4	0.0	-3.9			0.0	-0.2	0.0	0.0	0.0	0.0		
Recognition of implicit or contingent liabilities		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		
Debt relief (HIPC and other)		0.0	-2.0	-1.1	-1.3	-0.1	0.0	-0.6			-2.6	-2.4	-2.3	-1.8	-1.7	-1.5		-
Other (specify, e.g. bank recapitalization)		-0.7	-0.4	-0.2	-0.2	-0.2	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		
Residual, including asset changes		5.4	11.1	7.8	5.8	2.3	10.6	-53.4			6.1	4.4	3.8	2.7	2.5	1.2		
Other Sustainability Indicators																		
PV of public sector debt			39.9	33.3	29.7	29.9	34.5	55.3			55.3	54.8	53.9	51.4	48.0	43.1		3
o/w foreign-currency denominated			0.0	0.0	0.0	0.0	0.0	25.0			24.5	26.7	28.3	28.8	28.6	28.4		2
o/w external		...	...	...	...	...	...	25.0			24.5	26.7	28.3	28.8	28.6	28.4		2
PV of contingent liabilities (not included in public sector debt)		...	...	...	...	...	...	...			...	...	...	...	...	...		
Gross financing need 2/	10.3	5.7	10.4	6.5	9.3	11.7	10.4	2.5			3.2	4.7	4.6	4.3	3.5	2.6		
PV of public sector debt-to-revenue and grants ratio (in percent)	0.0	0.0	192.0	183.5	116.8	139.8	153.6	244.7			280.6	234.9	221.3	209.9	192.7	168.5		15
PV of public sector debt-to-revenue ratio (in percent)	0.0	0.0	244.2	212.2	142.1	151.6	162.7	258.4			297.1	284.2	272.0	253.5	229.9	200.3		17
o/w external 3/		…	…	…	…	…	…	116.8			131.6	138.3	142.6	142.1	137.2	132.0		11
Debt service-to-revenue and grants ratio (in percent) 4/		41.6	53.0	43.0	42.4	54.6	43.6	33.9			28.8	23.7	21.1	20.5	19.3	17.7		1
Debt service-to-revenue ratio (in percent) 4/		46.0	67.4	49.7	51.6	59.2	46.2	35.8			30.5	28.7	25.9	24.7	23.0	21.0		1
Primary deficit that stabilizes the debt-to-GDP ratio						11.7	-2.4	86.1			2.9	0.0	0.5	1.2	1.5	2.5		
Key macroeconomic and fiscal assumptions																		
Real GDP growth (in percent)	1.4	6.5	-3.2	6.9	7.0	5.1	6.5	6.3	5.3	3.1	5.9	4.6	5.0	5.3	5.4	5.4	5.3	
Average nominal interest rate on forex debt (in percent)		1.3	0.9	1.1	1.4	1.4	1.3	1.4	1.2	0.2	2.2	2.0	2.0	2.1	2.1	2.2	2.1	
Average real interest rate on domestic debt (in percent)		17.7	-4.8	-9.6	6.0	19.9	15.7	4.8	7.1	10.0	6.4	4.8	5.1	5.6	5.8	5.8	5.6	
Real exchange rate depreciation (in percent, + indicates depreciation)		4.9	10.3	10.4	1.4	-5.7	-0.2	-14.9	2.6	9.3	-9.9	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	...	0.6	16.1	27.4	12.2	4.2	1.6	6.8	9.1	8.5	4.8	6.8	5.4	4.7	4.3	4.0	5.0	
Growth of real primary spending (deflated by GDP deflator, in percent)		-0.1	-0.3	-0.1	0.5	-0.1	0.1	-0.2	0.1	0.3	0.0	0.4	0.1	0.1	0.0	0.1	0.1	
Grant element of new external borrowing (in percent)		...	...	...	...	...	...	...	…	…	48.1	43.3	45.2	46.2	46.1	46.2	45.9	4

Sources: Country authorities; and Fund staff estimates and projections.

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

3/ Revenues excluding grants.

4/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.

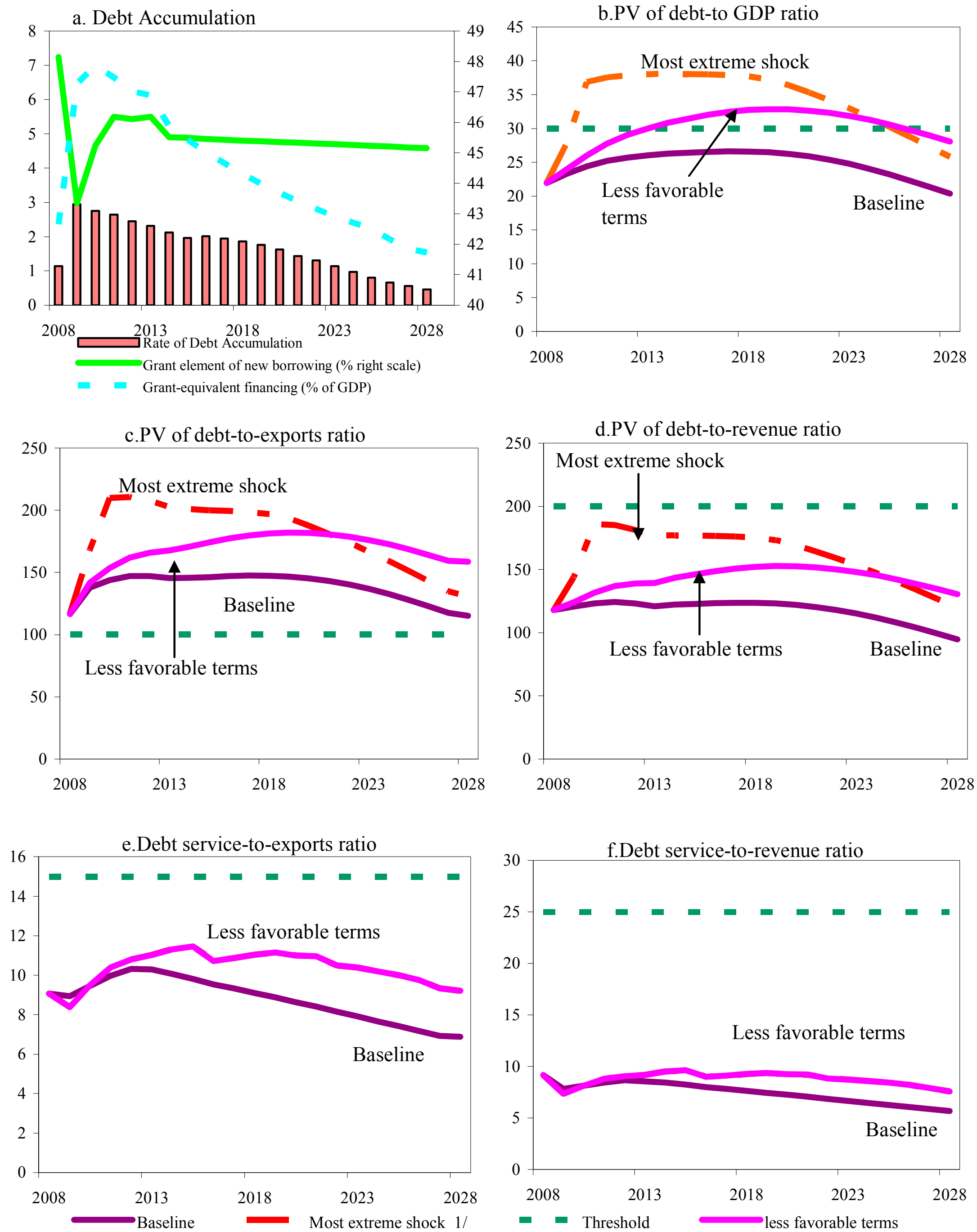
5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 4. The Gambia: Sensitivity Analysis for Key Indicators of Public Debt 2008-2028

	Projections							
	2008	2009	2010	2011	2012	2013	2018	2028
PV of Debt-to-GDP Ratio								
Baseline	55	55	54	51	48	43	37	31
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	55	54	53	51	48	44	32	21
A2. Primary balance is unchanged from 2008	55	53	50	46	42	37	19	-3
A3. Permanently lower GDP growth 1/	55	55	55	53	50	46	47	61
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	55	57	58	56	54	50	48	49
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	55	59	61	59	55	50	44	36
B3. Combination of B1-B2 using one half standard deviation shocks	55	57	59	56	53	49	44	40
B4. One-time 30 percent real depreciation in 2009	55	65	64	60	56	51	44	42
B5. 10 percent of GDP increase in other debt-creating flows in 2009	55	64	63	61	57	52	45	37
PV of Debt-to-Revenue Ratio 2/								
Baseline	281	235	221	210	193	168	157	138
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	281	234	218	207	191	172	135	96
A2. Primary balance is unchanged from 2008	281	228	207	189	168	143	78	-15
A3. Permanently lower GDP growth 1/	281	237	225	216	202	180	195	272
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	281	241	236	228	214	192	200	219
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	281	252	252	240	221	196	182	160
B3. Combination of B1-B2 using one half standard deviation shocks	281	245	240	229	213	189	185	179
B4. One-time 30 percent real depreciation in 2009	281	281	262	246	225	198	183	188
B5. 10 percent of GDP increase in other debt-creating flows in 2009	281	276	260	247	228	202	189	166
Debt Service-to-Revenue Ratio 2/								
Baseline	29	24	21	20	19	18	15	13
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	29	24	21	20	18	17	10	7
A2. Primary balance is unchanged from 2008	29	24	21	16	14	11	-1	-14
A3. Permanently lower GDP growth 1/	29	24	21	21	20	19	22	37
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	29	24	22	23	23	22	23	28
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	29	24	22	31	29	24	19	18
B3. Combination of B1-B2 using one half standard deviation shocks	29	24	22	26	24	22	20	21
B4. One-time 30 percent real depreciation in 2009	29	26	26	27	27	26	28	30
B5. 10 percent of GDP increase in other debt-creating flows in 2009	29	24	24	43	23	31	19	19

Sources: Country authorities; and Fund staff estimates and projections.
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the length of the projection period.
2/ Revenues are defined inclusive of grants.

Figure 2. The Gambia: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2008-2028/



Source: Staff projections and simulations.

1/ The most extreme stress test is the test that yields the highest ratio in 2018. In figure b. it corresponds to a Combination shock; in c. to a Non-debt flows shock; in d. to a Combination shock; in e. to a Terms shock and in picture f. to a Terms shock