INTERNATIONAL MONETARY FUND

AND

INTERNATIONAL DEVELOPMENT ASSOCIATION

THE GAMBIA

Joint IMF/IDA Debt Sustainability Analysis

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

Approved by Roger Nord and Dominique Desruelle (IMF) and
Sudhir Shetty and Carlos Alberto Braga (IDA)

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The results of this debt sustainability analysis (DSA) indicate that The Gambia remains at high risk of debt distress, reflecting weak export performance, significant new borrowing, and depreciation of the exchange rate. Projections indicate that the present value (PV) of external debt to export ratio exceeds its threshold for a protracted period while the standard stress tests show that The Gambia is vulnerable to adverse developments with the PV of debt to exports and debt to GDP breaching their thresholds under some stress tests. Staffs recommend that the authorities limit new borrowing, rely mainly on grants, seek highly concessional loans with a grant element of at least 45 percent, reduce their stock of domestic debt, and complete reforms that would improve the country's competitiveness.

I. Background

1. **This debt sustainability analysis (DSA) was prepared by the staffs of the Fund and the World Bank, in collaboration with the Gambian authorities.** This DSA is based on debt and debt service data obtained from the authorities as of November 30, 2009, and reflects a revised macroeconomic framework following discussions of the sixth review of the Extended Credit Facility (ECF) arrangement with the Fund. The last joint DSA[1] prepared by staffs of the IMF and the World Bank for the fourth review of the country's ECF arrangement concluded that The Gambia was at high risk of debt distress.

2. **The Gambia's stock of external debt declined substantially after full delivery of debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI).** HIPC and MDRI debt relief reduced The Gambia's stock of nominal external public debt from US$676.7 million (133.1 percent of

[1] IMF Country Report No 09/92.

GDP) to US$299.4 million (41.7 percent of GDP). In PV terms, the stock of debt decreased from US$439 million at end-2007 to US$347 million following HIPC debt relief and to US$165 million after MDRI debt relief. Jointly, these reduced the debt to exports ratio to about 113 percent at completion point. In January 2008, Paris Club creditors agreed to cancel outstanding claims totaling US$13 million in PV terms at end-2006. Although the country received bilateral debt relief from Kuwait, further agreements with other non-Paris club creditors on the delivery of debt are still pending with the Economic Community of West African States (ECOWAS), Saudi Arabia, Taiwan Province of China, Libya, and China.

3. **Despite receiving HIPC and MDRI debt relief, The Gambia's debt indicators remain elevated, reflecting a number of factors.** These factors include weaker-than-expected export performance, unanticipated depreciation of the real exchange rate during 2008, and reliance on expensive domestic borrowing. In particular, the high debt stock is attributable to significantly larger-than-previously projected new borrowing,[2] which at completion point in 2007 was about US$84 million above projections made at decision point in 1999, and an additional US$46.3 million in PV terms since completion point. The weak performance of exports is mainly due to the persisting difficulties with the country's re-export trade. A significant depreciation of the dalasi against the US dollar in 2008 also put significant pressure on the PV of debt to GDP. Given that the Gambia receives fewer grants (as a percentage of GDP) than comparable HIPC countries, the government has had to rely on expensive domestic borrowing. Although the debt risk classification in the DSA only considers external debt, the large domestic debt stock (27 percent of GDP) and high debt service payments on domestic debt (15¾ percent of government revenues) provide further evidence of the need for the authorities to develop and implement a prudent borrowing plan in line with the country's medium-term debt strategy (MTDS).

4. **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- and long-term**. Under the ECF program, the authorities have committed to a minimum grant element of 45 percent in new external loans contracted or guaranteed by the government. The program also has indicative quarterly limits on the total amount of new borrowings.[3]

[2] New borrowing was contracted on less concessional terms than anticipated at decision point. Since completion point, however, all external borrowing has been contracted in line with the 45 percent grant element agreed under the ECF arrangement.

[3] Although not binding in The Gambia's case, IDA also has a minimum grant element under the NCBP of 35 percent or higher. 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.

II. Macroeconomic Assumptions

5. **The macroeconomic framework takes into account the impact of the global economic and financial crisis in 2008 and 2009 and is consistent with the ECF-supported program** (Box 1). Recent developments in the global economy moderately affected 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 investment in agriculture and infrastructure, while the recovery in the global economy allow tourism receipts to increase.

Box 1: Baseline Macroeconomic Assumptions Underlying the DSA

Real GDP growth is projected to decline from 6.1 percent in 2008 to 4.6 percent in 2009, reflecting declines in foreign exchange earnings from tourism and re-exports, as well as lower remittances inflows. The effect of the global economic downturn was moderated however by favorable rains, which led to a recovery in agricultural output, with a rebounding of groundnut production and increases in the rice harvest. Looking forward, real GDP growth is projected to average about 5¼ percent annually, buoyed by the recovery in tourism and construction, and the sustained expansion in telecommunications and banking.

Inflation is projected to remain low. Year-on-year consumer price inflation fell to 2.3 percent in November 2009, down from its peak of 7 percent in January. This reduction in inflation has been driven by tight monetary policy and a decline in food price inflation.

The **external current account** deficit narrowed in 2009. There was a significant slowdown in imports of goods and services, reflecting substantial nominal depreciation in 2008, difficulties with the re-export trade, and the slowdown in the world economy associated with the global financial crisis. Although there was a fall in remittances and tourism receipts, reflecting the effects of the global financial crisis, it was offset by increased budget support from the World Bank and the African Development Bank. Over the medium term (2010–12), the EU plans to disburse about €25 million in budget support. In 2009, **exports of goods and services** are estimated to have fallen by nearly 6 percent compared to 2008 but over the medium- and long-term export growth is projected to rebound to about 7 percent per year reflecting projected recovery in the re-export trade and sustained increase in agricultural production. **Imports of goods and services** are projected to grow about 6¾ percent per year, in line with nominal GDP growth over the period. Official transfers are projected to increase from 3½ percent of GDP in 2009 to about 5 percent of GDP over the medium term while gross external borrowing is projected to decline from 4½ percent to about 3 percent of GDP. In view of the expected recovery of exports, increase in services (in line with the recovery of the tourism sector), and projected rebounds in remittances, the current account deficit is projected to narrow gradually over the medium to long term. **Net investment (FDI)** increased from 8½ percent in 2008 to 10¼ percent in 2009, mostly reflecting the influx of new commercial banks, especially from Nigeria. Over the medium term, net FDI will remain above 9 percent as these banks expand and consolidate their presence in The Gambia.

The **primary fiscal surplus** is projected to average 1½ percent of GDP for 2009–2014 before returning to balance as interest savings allow an increase in capital expenditures. Revenues are projected to increase marginally from 20½ percent of GDP in 2009 to about 22 percent of GDP over the medium-term in line with expected implementation of tax reforms. Donor support, including program and project grants, is projected to remain at 4½ percent of GDP over the medium term and will help reduce domestic borrowing.

III. External Debt Sustainability

A. Baseline

6. **The trends in debt indicators under the baseline scenario are broadly similar to those estimated in the previous DSA**. The Gambia remains in the "poor performer" category according to the three-year (2006–08) average rating of the World Bank's Country Policy and Institutional Assessment (CPIA).[4] The associated policy-dependent debt burden thresholds and debt indicators for 2009 and the medium- to long-term indicators are presented in Text Table 1. Most debt indicators decline over the medium and long term, reflecting assumptions of sustained growth following the current global crisis. New public borrowing is assumed to increase moderately in the medium-term in line with the authority's planned investments but will stabilize over the long-term as growth is sustained.

Text Table 1: Baseline External Debt Indicators and Debt Burden Thresholds

	Threshold 1/	2009	Medium-term (2009-14)	Long-term (2015-29)
PV of External Debt				
In percent of GDP	30	28	26	19
In percent of exports	100	144	139	108
In percent of revenues	200	137	122	86
Debt Service				
In percent of exports	15	12	13	11
In percent of revenues	25	12	11	9

1/ Based on The Gambia's ranking as a "poor performer" with an average (2006--08) CPIA rating of 3.18.

7. **While most debt burden indicators are below their indicative policy-related thresholds, the PV of debt-to-exports ratio breaches its threshold for a protracted period** (Table 1 and Figure 3). Estimated at about 144 percent of exports in 2009, the PV of debt to exports ratio breaches its threshold by a substantial margin and for a protracted period. This ratio peaks at 145 percent in 2011, as new borrowing continues in the context of relatively weak export performance, but declines only slightly below the threshold in 2027. The PV of debt to GDP ratio is slightly below its threshold in 2009 and declines only marginally in the medium-term as economic growth picks up in the aftermath of the global crisis. With expected strong GDP growth over the long-term,[5] the debt-to-GDP ratio declines to about 15 percent at the end of the projection period, down from 28 percent in 2009. The

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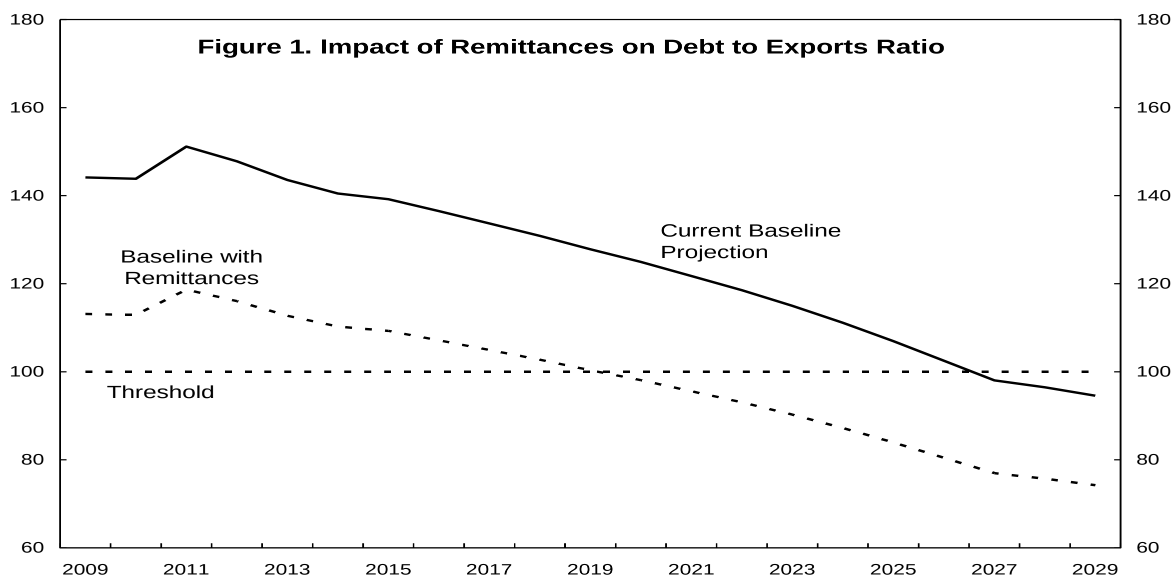
[4] The World Bank's CPIA is an assessment of a country's policy and institutional framework, and consists of a set of 16 criteria grouped into four equally weighted clusters: (i) economic management; (ii) structural policies; (iii) policies for social inclusion and equity; and (iv) public sector management and institutions. The CPIA rating for 2009 is expected to be announced by the end of the first quarter of 2010.

[5] This reflects projected growth in agriculture, tourism, services, and construction.

debt service ratios are below their respective thresholds. In particular, the debt service-to-revenues ratio is well below the threshold and continues to decline gradually over the medium and long-term reflecting the decline in the PV of debt-to-GDP. However, the debt service to exports ratio is only slightly below its threshold and stabilizes close to its current value even in the long-run.

8. **With only one debt burden indicator exceeding its threshold, this DSA also considers the role of remittances**.[6] Remittances are equivalent to other "measures of repayment capacity" (like exports or GDP) because they increase the foreign exchange earnings available to a country. Although there is usually under-reporting of remittances inflows, raising concerns about the quality and the coverage of data, in the case of The Gambia the World Bank's World Development Indicators (2009) shows that on average (2002—08), remittances account for 27½ percent of exports and 11 percent of GDP. As expected, incorporating[7] remittances in our analysis reduces the debt-to-exports ratio by a substantial margin (Figure 1).[8] Nevertheless, this ratio still breaches the threshold until about 2019 with a peak of about 119 percent in 2011.



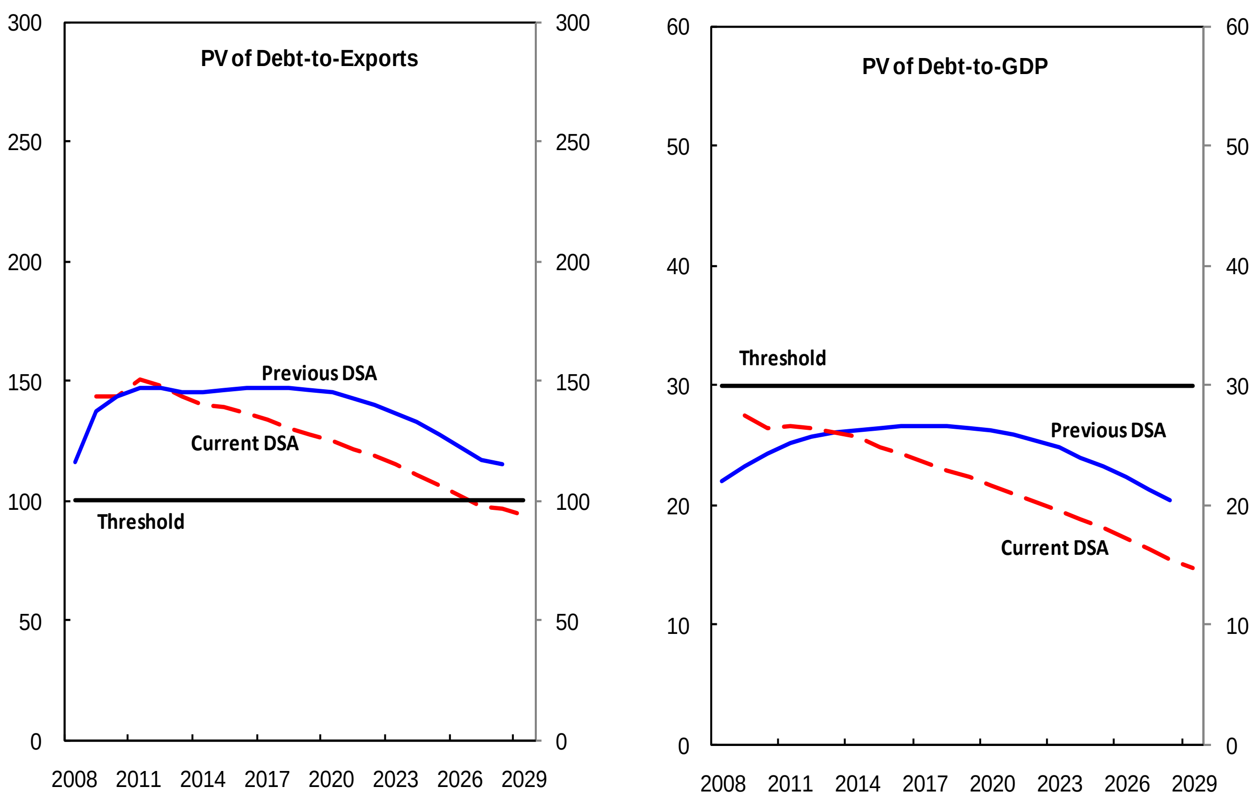
[6] This is in line with suggestions in a recent policy paper titled "A Review of Some Aspects of the Low-Income Country Debt Sustainability Framework", which calls for a more explicit recognition of remittances in DSAs.

[7] There is no consensus yet on how best to incorporate remittances into debt sustainability analysis. However, staffs adopted the approach in the paper referenced in Footnote 6, and added remittances to total exports.

[8] Staffs expect remittances to have the same effect on both the debt to GDP and debt service to exports ratios, namely, a reduction in the ratios over the projection horizon. However, staffs have not carried out this exercise because both ratios are currently below their respective thresholds throughout the projection horizon.

9. **A numbers of factors explain the difference between the debt indicators in this DSA compared to the previous one (Figure 2).** As against the previous DSA, the worsening in debt indicators at end-2009 was mainly due to significant depreciation of the exchange rate against the US dollar, and decline in export growth reflecting difficulties with the re-export trade. In addition, GDP growth was adversely affected by the global crisis through a fall in tourism and remittance inflows. Over the medium and long term, an improvement in the debt indicators (as compared to the previous DSA) is attributable to downward revisions in projected debt disbursements, and the recovery in GDP and exports growth.

Figure 2. The Gambia: Post mortem of Past Assumptions, 2008--29



Source: Gambian Authorities and IMF staff estimates and projections.

B. ALTERNATIVE SCENARIOS AND STRESS TESTS

10. **The Gambia's debt sustainability outlook is highly susceptible to changes in the policy framework assumed in the baseline scenario (Table 2).** Most alternative scenarios show that external debt indicators would deteriorate substantially under a range of shocks.

Alternative Scenarios:

- Under the historical scenario, which is associated with key variables (GDP growth, current account balance, and non-debt creating flows) being at their historical levels,[9] all three debt burden indicators (which reflect capacity repayment measures) worsen significantly. Compared to the baseline, the debt to GDP ratio is higher by 8 percentage points in 2019, while the debt to exports and debt to revenue ratios exceed the baseline by 44 percentage points and 35 percentage points, respectively. Under this scenario, debt service indicators decline relative to the baseline but only marginally (Table 2b).

- In the scenario where new borrowing occurs on less favorable terms,[10] all the debt indicators worsen substantially with the debt service ratios mostly affected under this scenario. In particular, the debt service to exports ratio breaches its threshold until 2019 with a peak of about 7 percentage points increase in 2011. The debt service to revenue ratio also increases with a peak of about 8 percentage points in 2011 but remains under its threshold throughout the projection horizon. These results underscore the need for the authorities to seek highly concessional financing for new borrowing.[11]

Bound Tests:

- Most bound tests show significant deterioration in debt indicators. Of the six bound tests, four involve "shocks" to some key variables in the second and third years of the projection period;[12] another is a combination of these four shocks while the sixth

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[9] Historically, The Gambia has had low real GDP growth, persistent current account deficits, and low foreign direct investment. The country also receives fewer grants (as a percentage of GDP) than other HIPC countries.

[10] Such less favorable terms may include higher interest rates, a reduction in grant elements, or borrowing at non-concessional or less concessional terms. In the context of this DSA, however, this scenario assumes that the interest rate on new borrowing is 2 percentage points higher than in the baseline. Grace and maturity periods are same as in the baseline.

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

[12] The variables are "shocked" by setting them one standard deviation below their historical averages.

assumes a one-time 30 percent depreciation in the nominal exchange rate. The results (Table 2) are interpreted such that the most extreme shock is the one yielding the highest ratio in 2019. Except for the debt service to exports ratio where the worst shock is a one-time 30 percent depreciation, the most extreme shocks are generally associated with a combination of the first four shocks with most of the debt indicators breaching their respective thresholds. These results highlight the need for the authorities to adhere to a prudent borrowing plan associated with the approved medium-term debt management strategy (MTDS).

- The Gambia's debt dynamics would also deteriorate sharply with a shock to non-debt creating flows. Under this stress test, the debt to GDP ratio breaches its threshold by about 10 percentage points in 2010 and remains above its threshold until 2021. Debt service indicators (which reflect liquidity constraints) also increase under this scenario, with the debt service to exports ratio breaching its threshold until 2014. In the light of the fact that non-debt creating flows (including official and private transfers, and FDI) have been historically low in The Gambia, achieving external debt sustainability will require that the authorities pursue policies resulting in higher non-debt creating flows.

IV. PUBLIC DEBT SUSTAINABILITY

A. BASELINE

11. **Over the medium to long term, domestic debt is expected to fall from 27 percent of GDP at the end of 2009 to 14 percent of GDP in 2013, and to stabilize at around 10½ percent of GDP thereafter, reflecting sustained fiscal discipline.** Despite the global crisis, a 20 percent nominal depreciation of the dalasi against the US dollar in 2008 helped with partial recovery of international trade and the resulting increase in trade taxes and revenues. The government also received more grants in 2009 (about 2 percentage points of GDP) than anticipated. Over the medium-term, revenues will rise gradually from 20 to 21 percent of GDP as general economic activity stabilizes. As programmed for the medium term, fiscal discipline should help lower domestic interest rates and provide fiscal space to increase basic primary expenditures. [13]

12. **Under the baseline scenario, the PV of total public debt is projected to decline from about 55 percent of GDP in 2009 to 35 percent in 2014 and to 22½ percent in 2029** (Table 3 and Figure 3). The largest factor in this near term decline in the PV of total public debt is a projected fall in the domestic debt. As a ratio of domestic revenues and grants, the PV of public debt is projected to fall from about 223 percent in 2009 to 84½ percent by the end of the projection period.

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

B. ALTERNATIVE SCENARIOS AND STRESS TESTS

13. **Under alternative scenarios and stress tests, the public debt ratios would deteriorate significantly.** In particular, public debt ratios are mostly sensitive to lower GDP growth over the long run, persistent primary fiscal deficits, and one-time depreciation of the nominal exchange rate (Table 4 and Figure 4). Of the three alternative scenarios, public debt ratios are mostly affected by a persistent fiscal deficit, suggesting that a status quo in fiscal policy results in an explosive debt path, while the most extreme stress test is temporary deceleration in real GDP growth.

Alternative Scenarios:

- Under a scenario where the primary balance for 2009 (a deficit of about 1½ percent of GDP) is unchanged over the projection period, the PV of debt to GDP ratio would increase from 55 percent in 2009 to 81 percent in 2029, as compared to a decline under the baseline to 22 percent in 2029. Similarly, the PV of debt to revenue will increase from 223 percent in 2009 to 306 percent in 2029 as against a decline under the baseline to 85 percent in 2029.

- The present values of all public debt indicators decline over time under the scenario with reduced real GDP growth, while the primary balance at historical averages[14] shows a similar downward trend as in the baseline; this decline is not as pronounced as under the baseline scenario, however. The PV of debt to GDP ratio declines from 55 percent in 2009 to 49 percent in 2029 (as compared to 22 percent in the baseline), while the PV of debt to revenue ratio declines from 223 percent to 185 percent (as against 85 percent in the baseline).

Bound Tests:

- The most extreme bound test consists of real GDP growth being at one standard deviation less than its historical average. Under this circumstance, the PV of debt to GDP ratio would worsen to 42 percent in 2029 as compared to 22 percent under the baseline scenario while the PV of debt to revenue ratio would worsen to 155 percent as against 85 percent under the baseline.

- A combination of shocks (to growth and the primary balance) and a one-time 30 percent depreciation also results in a moderate worsening of debt ratios compared to the baseline. Under the former, the PV of debt-to-GDP ratio would rise to 34 percent in 2029 while under the latter it would rise to 32 percent. In comparison, under the baseline, this ratio would reach 22 percent.

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[14] At historical averages, real GDP growth is 5¼ percent while the primary deficit is 0.7 percent of GDP.

V. Debt Distress Classification[15] and Conclusions

14. **In staff's view, The Gambia remains at high risk of debt distress based on external debt burden indicators and the results of the stress tests.[16]** This assessment reflects the significant and protracted breach of the policy-dependent indicative threshold by the PV of debt to exports ratio, as well as the vulnerability of other debt indicators to alternative scenarios. In particular, the debt indicators could deteriorate significantly either if new borrowing were contracted on less favorable terms, or if the exchange rate depreciates significantly. While an assessment of domestic debt does not affect a country's classification of debt distress, The Gambia's large domestic debt stock (27 percent of GDP) and high debt service payments on domestic debt (15¾ percent of government revenues) provide further evidence that the country's overall debt vulnerabilities are high. At the time of the preparation of this DSA, the evidence indicates that there is considerable risk that a lack of fiscal discipline may lead to further accumulation of domestic debt.

15. **A number of policy recommendations emanate from this assessment and attendant risks.** The authorities are urged to pursue a medium-term debt management strategy (to include the debt of public enterprises and contingent liabilities) anchored on a combination of grants and highly concessional borrowing in external financing and maintaining a borrowing policy consistent with debt sustainability. The authorities may also consider efforts to raise the country's export potential through policies aimed at diversifying the economy and increasing competition. In view of The Gambia's debt vulnerability, as well as to prevent a build-up of unsustainable debt, while allowing for adequate external financing, staff recommends that the minimum grant element on external borrowing be maintained at 45 percent. The major risks to The Gambia's debt sustainability include lower than expected economic and/or export growth, higher than expected new borrowing, and further slippages in fiscal performance.

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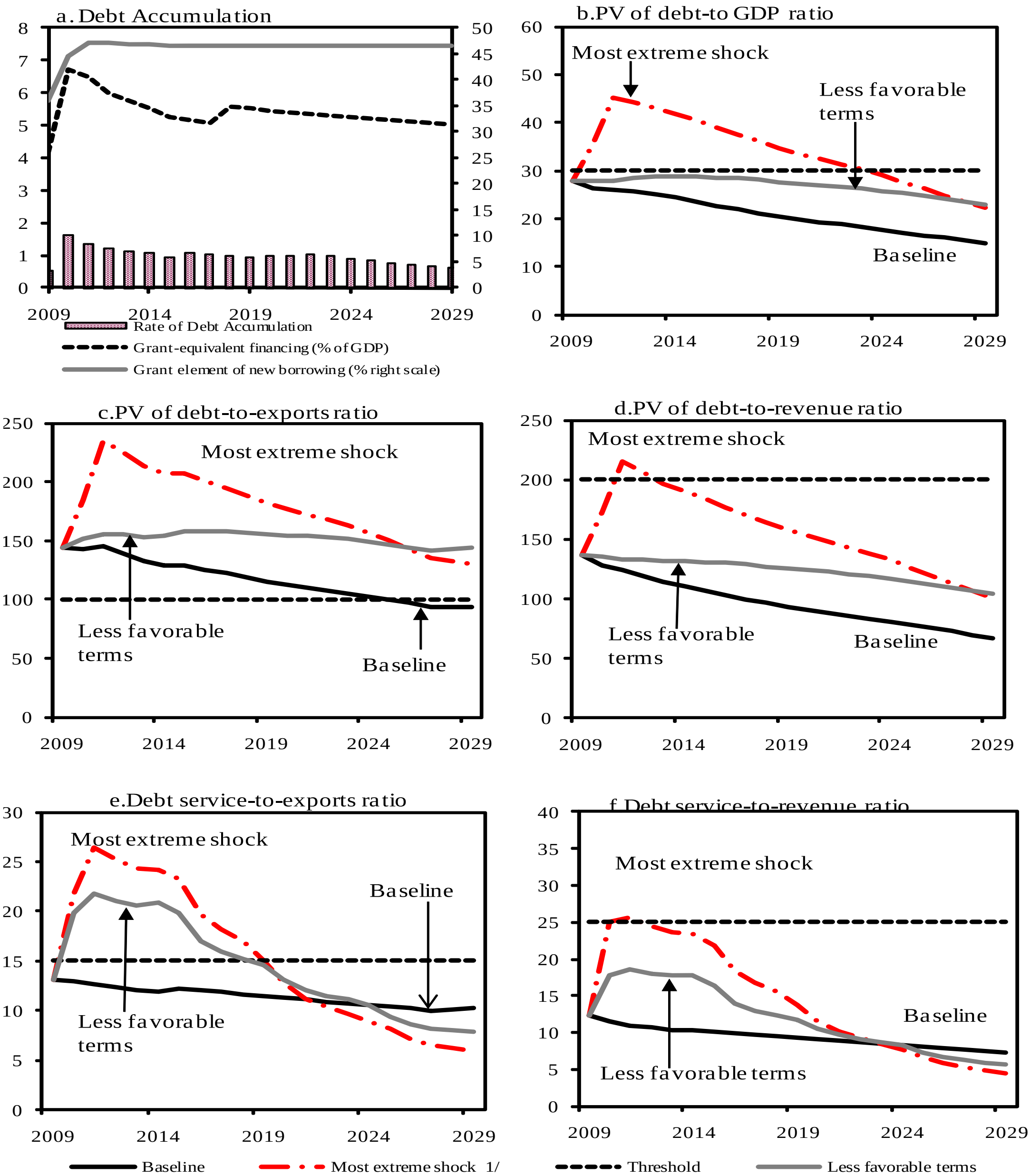
[15] This classification plays an important role in determining the mix of grants and loans under IDA assistance and in Fund program design. Countries assessed to be at high risk of debt distress or in debt distress receive 100 percent grant financing from IDA, while countries at moderate risk receive an equal mix of grants and credits on standard IDA terms, and countries at low risk continue to receive 100 percent credit financing on standard IDA terms.

[16] Based on IMF and World Bank policy, a country is said to be at high risk of debt distress when the baseline scenario indicates a protracted breach by one or more debt indicators, and exacerbated by stress tests, but the country does not currently face payment difficulties.

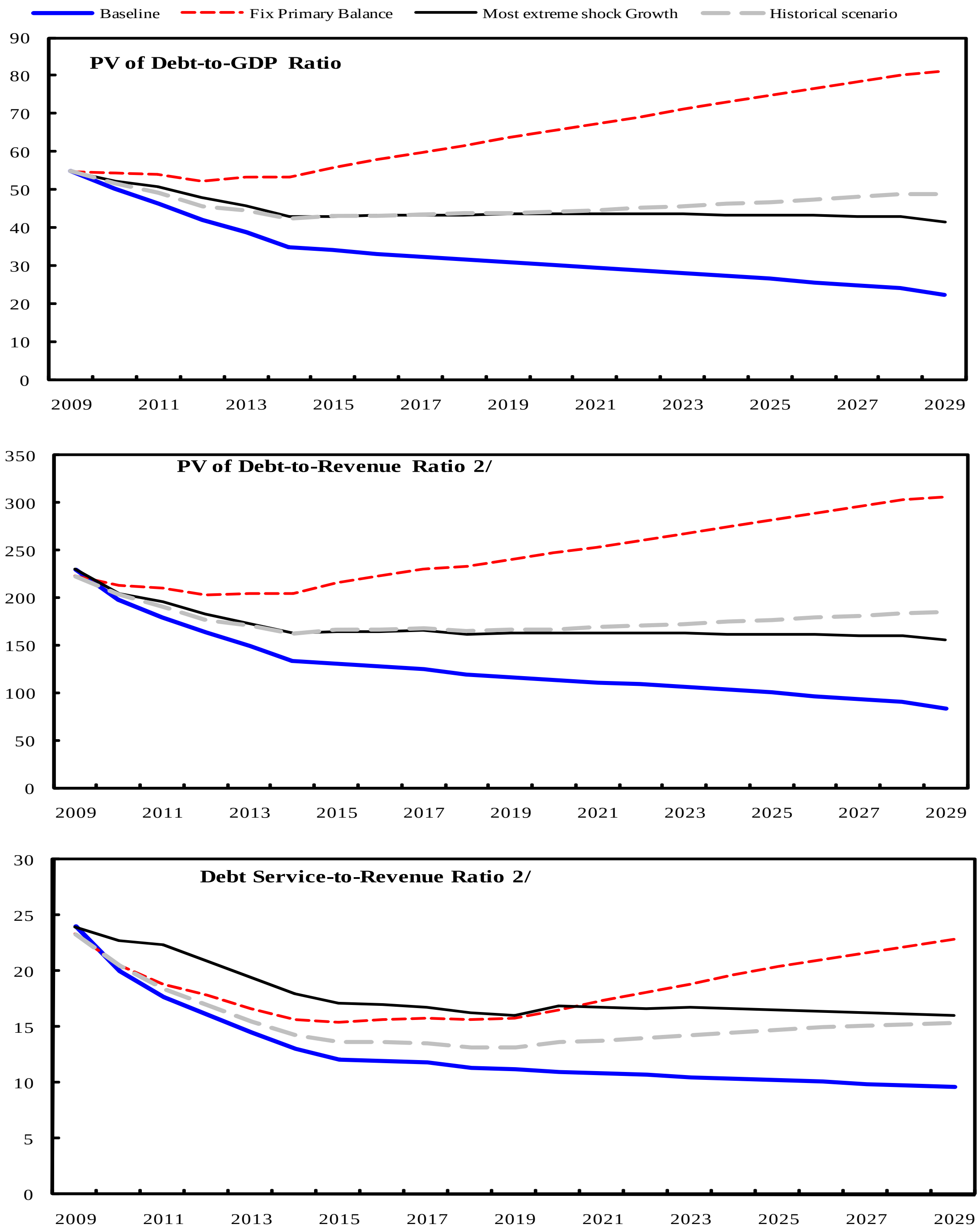
Figure 3. The Gambia: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2009-2029/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2019. In figure b. it corresponds to a Combination shock; in c. to a Combination shock; in d. to a Combination shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

Figure 4. The Gambia: Indicators of Public Debt Under Alternative Scenario, 2009-2029



Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2019.
2/ Revenues are defined inclusive of grants.

Table 1: External Debt Sustainability Framework, Baseline Scenario, 2006-2029 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 0	Standard Deviation 0	Projections								
	2006	2007	2008			2009	2010	2011	2012	2013	2014	2009-2014 Average	2029	2015-2029 Average
External debt (nominal) 1/	**133.0**	**41.7**	**48.2**			**45.0**	**42.6**	**41.1**	**40.5**	**39.6**	**38.6**		**22.6**	
o/w public and publicly guaranteed (PPG)	133.0	41.7	48.2			45.0	42.6	41.1	40.5	39.6	38.6		22.6	
Change in external debt	0.4	-91.4	6.5			-3.2	-2.4	-1.5	-0.6	-0.9	-1.0		-1.1	
Identified net debt-creating flows	-13.4	-29.2	-1.3			2.1	0.6	0.3	0.0	-0.1	-0.4		-1.0	
Non-interest current account deficit	**11.8**	**10.9**	**15.1**	**10.0**	**3.5**	**13.7**	**11.0**	**11.0**	**10.5**	**10.2**	**9.8**		**5.6**	7.4
Deficit in balance of goods and services	17.2	16.2	19.3			19.3	18.6	18.8	18.5	18.1	17.8		14.3	
Exports	30.5	23.4	18.4			19.4	18.5	17.9	18.3	18.8	18.8		15.8	
Imports	47.7	39.6	37.7			38.7	37.1	36.7	36.8	36.8	36.6		30.1	
Net current transfers (negative = inflow)	-13.3	-11.0	-8.9	-9.8	4.7	-10.6	-11.9	-11.6	-11.3	-11.1	-11.1		-9.8	-10.4
o/w official	-1.3	-1.2	-1.3			-3.4	-4.9	-4.8	-4.4	-4.2	-4.2		-4.5	
Other current account flows (negative = net inflow)	7.8	5.8	4.8			5.0	4.3	3.8	3.3	3.3	3.1		1.1	
Net FDI (negative = inflow)	**-14.6**	**-12.4**	**-8.5**	**-7.6**	**5.6**	**-10.2**	**-9.2**	**-9.5**	**-9.3**	**-9.2**	**-9.1**		**-5.8**	-7.2
Endogenous debt dynamics 2/	**-10.6**	**-27.7**	**-7.8**			**-1.4**	**-1.2**	**-1.2**	**-1.2**	**-1.2**	**-1.1**		**-0.8**	
Contribution from nominal interest rate	1.6	1.4	0.8			1.1	0.8	0.8	0.8	0.7	0.7		0.3	
Contribution from real GDP growth	-7.9	-6.6	-2.0			-2.5	-2.0	-1.9	-1.9	-1.9	-1.9		-1.1	
Contribution from price and exchange rate changes	-4.3	-22.6	-6.6			...	...	...	...	...	...		...	
Residual (3-4) 3/	**13.8**	**-62.2**	**7.8**			**-5.2**	**-3.0**	**-1.8**	**-0.6**	**-0.8**	**-0.6**		**-0.1**	
o/w exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		...	
PV of external debt 4/	...	...	29.1			27.9	26.3	26.0	25.5	24.9	24.3		14.8	
In percent of exports	...	...	158.2			143.9	142.6	145.2	139.3	133.0	129.4		93.4	
PV of PPG external debt	**...**	**25.7**	**29.1**			**27.9**	**26.3**	**26.0**	**25.5**	**24.9**	**24.3**	**25.8**	**14.8**	**18.9**
In percent of exports	**...**	**109.6**	**158.2**			**143.9**	**142.6**	**145.2**	**139.3**	**133.0**	**129.4**	**138.9**	**93.4**	**108.3**
In percent of government revenues	**...**	**119.9**	**151.7**			**136.5**	**128.2**	**124.0**	**119.1**	**114.0**	**110.6**	**122.1**	**67.1**	**85.7**
Debt service-to-exports ratio (in percent)	**16.3**	**17.4**	**13.8**			**13.1**	**12.9**	**12.7**	**12.4**	**12.1**	**11.9**		**10.2**	
PPG debt service-to-exports ratio (in percent)	**16.3**	**17.4**	**13.8**			**13.1**	**12.9**	**12.7**	**12.4**	**12.1**	**11.9**	**12.5**	**10.2**	**11.0**
PPG debt service-to-revenue ratio (in percent)	**23.5**	**19.0**	**13.2**			**12.4**	**11.6**	**10.8**	**10.6**	**10.3**	**10.2**	**11.0**	**7.4**	**8.7**
Total gross financing need (Billions of U.S. dollars)	11.0	16.8	74.9			43.8	33.5	33.4	32.4	32.9	32.1		49.6	
Non-interest current account deficit that stabilizes debt ratio	11.4	102.3	8.6			16.8	13.4	12.5	11.1	11.1	10.8		6.7	
Key macroeconomic assumptions														
Real GDP growth (in percent)	6.5	6.3	6.1	5.2	3.0	4.6	4.8	5.0	5.0	5.0	5.0	4.9	5.2	5.2
GDP deflator in US dollar terms (change in percent)	3.4	20.5	18.8	2.1	10.8	-14.5	4.9	4.1	1.5	1.7	1.8	-0.1	2.8	2.8
Effective interest rate (percent) 5/	1.3	1.4	2.3	1.3	0.4	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.5	1.8
Growth of exports of G&S (US dollar terms, in percent)	18.5	-1.6	-1.0	4.7	9.4	-1.5	4.7	6.0	9.0	9.3	7.2	5.8	4.4	6.9
Growth of imports of G&S (US dollar terms, in percent)	2.9	6.2	20.0	10.2	7.5	-8.3	5.3	8.2	6.9	6.9	6.1	4.2	5.4	6.7
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	36.1	44.7	47.2	47.0	46.9	46.8	44.8	46.4	46.5
Government revenues (excluding grants, in percent of GDP)	21.2	21.4	19.2			20.4	20.5	21.0	21.4	21.9	22.0		22.0	22.0
Aid flows (in Billions of US dollars) 7/	50.3	31.4	26.3			52.9	74.8	76.9	76.4	77.5	79.5		218.8	
o/w Grants	6.4	7.8	11.0			25.2	39.8	41.9	41.4	42.5	44.5		155.8	
o/w Concessional loans	43.9	23.6	15.3			27.7	35.0	35.0	35.0	35.0	35.0		63.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			4.1	6.7	6.5	6.0	5.7	5.6		5.0	5.3
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			77.1	75.4	77.2	76.9	77.2	77.7		89.1	84.2
Memorandum items:														
Nominal GDP (Billions of US dollars)	508.3	650.9	820.4			733.1	805.7	880.8	938.4	1001.8	1070.6		3461.7	
Nominal dollar GDP growth	10.1	28.1	26.0			-10.6	9.9	9.3	6.5	6.8	6.9	4.8	8.2	8.1
PV of PPG external debt (in Billions of US dollars)			198.2			202.4	214.4	225.1	235.7	246.3	256.8		506.0	
(PVt-PVt-1)/GDPt-1 (in percent)						0.5	1.6	1.3	1.2	1.1	1.1	1.1	0.6	0.9

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - \rho(1+g)]/(1+g+\rho+g\rho)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Assumes that 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 2a. The Gambia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2009-29 including HIPC and MDRI
(In percent)

	Projections							
	2009	2010	2011	2012	2013	2014	**2019**	2029
PV of debt-to GDP ratio								
Baseline	28	26	26	26	25	24	**20**	15
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-2029 1/	28	28	27	27	27	27	**28**	32
A2. New public sector loans on less favorable terms in 2009-2029 2	28	28	28	28	29	29	**28**	23
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	28	27	27	26	26	25	**21**	15
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	28	28	28	28	27	26	**22**	15
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	28	31	33	33	32	31	**26**	19
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	28	34	40	39	38	37	**31**	19
B5. Combination of B1-B4 using one-half standard deviation shocks	28	36	45	44	43	42	**35**	22
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	28	37	36	35	34	34	**28**	20
PV of debt-to-exports ratio								
Baseline	144	143	145	139	133	129	**115**	93
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-2029 1/	144	149	153	149	145	145	**159**	199
A2. New public sector loans on less favorable terms in 2009-2029 2	144	151	156	155	153	154	**156**	144
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	144	144	143	137	131	127	**114**	92
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	144	164	192	184	176	171	**152**	119
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	144	144	143	137	131	127	**114**	92
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	144	185	224	214	204	198	**174**	122
B5. Combination of B1-B4 using one-half standard deviation shocks	144	184	234	224	213	207	**182**	130
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	144	144	143	137	131	127	**114**	92
PV of debt-to-revenue ratio								
Baseline	137	128	124	119	114	111	**93**	67
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-2029 1/	137	134	130	127	124	124	**128**	143
A2. New public sector loans on less favorable terms in 2009-2029 2	137	136	133	133	131	131	**125**	104
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	137	133	128	124	118	115	**97**	70
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	137	134	134	129	123	120	**100**	70
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	137	149	160	154	147	143	**120**	87
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	137	166	192	183	175	169	**140**	88
B5. Combination of B1-B4 using one-half standard deviation shocks	137	173	215	206	197	190	**158**	101
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	137	181	171	164	157	153	**128**	93

Table 2b. The Gambia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt (Continued)
(In percent)

Debt service-to-exports ratio	2009	2010	2011	2012	2013	2014	**2019**	2029
Baseline	13	13	13	12	12	12	**11**	10
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-2029 1/	13	20	22	21	20	20	**13**	7
A2. New public sector loans on less favorable terms in 2009-2029 2	13	20	22	21	21	21	**15**	8
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	13	20	22	20	20	20	**12**	4
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	13	22	26	25	24	24	**15**	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	13	20	22	20	20	20	**12**	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	13	20	22	22	21	21	**13**	7
B5. Combination of B1-B4 using one-half standard deviation shocks	13	21	24	24	23	23	**14**	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	13	20	22	20	20	20	**12**	4
Debt service-to-revenue ratio								
Baseline	12	12	11	11	10	10	**9**	7
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-2029 1/	12	18	19	18	17	17	**11**	5
A2. New public sector loans on less favorable terms in 2009-2029 2	12	18	19	18	18	18	**12**	6
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	12	18	19	18	18	18	**10**	3
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	12	18	18	18	17	17	**10**	3
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	12	21	24	23	22	22	**13**	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	12	18	19	18	18	18	**10**	5
B5. Combination of B1-B4 using one-half standard deviation shocks	12	20	22	22	21	21	**12**	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	12	25	26	24	24	23	**14**	4
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	46	46	46	46	46	46	**46**	46

Sources: Country authorities; and staff estimates and projections.

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 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, 2006-2029
(In percent of GDP, unless otherwise indicated)

	Actual			Average	Standard Deviation	Estimate	Projections								
	2006	2007	2008			2009	2010	2011	2012	2013	2014	2009-14 Average	2019	2029	2015-29 Average
Public sector debt 1/	167.5	72.0	79.5			72.7	67.3	63.2	58.9	55.4	51.2		44.3	30.2	
o/w foreign-currency denominated	133.0	41.7	48.2			45.7	43.2	42.9	42.2	41.4	40.5		33.7	22.6	
Change in public sector debt	5.0	-95.5	7.5			-6.8	-5.4	-4.1	-4.3	-3.6	-4.2		-1.3	-2.3	
Identified debt-creating flows	-5.6	-47.7	-1.3			-2.4	-8.8	-6.2	-5.0	-6.8	-6.2		-5.3	-5.0	
Primary deficit	0.6	-5.2	-1.8	-0.7	4.0	1.5	-2.2	-2.2	-1.0	-2.7	-2.7	-1.6	-2.1	-3.1	-2.5
Revenue and grants	22.5	22.6	20.5			24.6	25.5	25.7	25.8	26.1	26.2		26.5	26.5	
of which: grants	1.3	1.2	1.3			3.4	4.9	4.8	4.4	4.2	4.2		4.5	4.5	
Primary (noninterest) expenditure	23.1	17.4	18.8			26.1	23.3	23.5	24.8	23.4	23.4		24.4	23.4	
Automatic debt dynamics	-6.3	-38.1	3.0			-0.9	-3.9	-1.7	-1.9	-2.2	-2.0		-2.1	-1.5	
Contribution from interest rate/growth differential	-7.9	-10.2	-2.7			-0.8	-1.6	-1.8	-2.0	-2.2	-2.0		-1.8	-1.3	
of which: contribution from average real interest rate	2.1	-0.3	1.5			2.7	1.7	1.4	1.1	0.8	0.6		0.5	0.3	
of which: contribution from real GDP growth	-10.0	-9.9	-4.1			-3.5	-3.3	-3.2	-3.0	-3.0	-2.6		-2.3	-1.6	
Contribution from real exchange rate depreciation	1.7	-27.8	5.6			-0.1	-2.2	0.1	0.1	0.1	0.1		...	...	
Other identified debt-creating flows	0.0	-4.5	-2.5			-2.9	-2.8	-2.2	-2.1	-1.9	-1.5		-1.1	-0.4	
Privatization receipts (negative)	0.0	-3.9	0.0			0.0	0.0	0.0	0.0	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	
Debt relief (HIPC and other)	0.0	-0.6	-2.5			-2.9	-2.8	-2.2	-2.1	-1.9	-1.7		-1.1	-0.4	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.2		0.0	0.0	
Residual, including asset changes	10.6	-47.8	8.8			-4.4	3.4	2.1	0.8	3.2	2.0		4.0	2.7	
Other Sustainability Indicators															
PV of public sector debt	34.5	30.3	60.5			54.9	50.4	46.3	42.2	38.9	35.0		31.0	22.4	
o/w foreign-currency denominated	0.0	0.0	29.1			27.9	26.3	26.0	25.5	24.9	24.3		20.4	14.8	
o/w external	...	...	29.1			27.9	26.3	26.0	25.5	24.9	24.3		20.4	14.8	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	10.4	2.5	3.9			3.5	2.9	2.3	1.7	1.1	0.7		0.9	-0.5	
PV of public sector debt-to-revenue and grants ratio (in percent)	153.6	134.1	294.5			223.3	197.9	180.1	163.3	148.8	133.8		117.0	84.5	
PV of public sector debt-to-revenue ratio (in percent)	162.7	141.6	315.1			259.6	245.5	220.9	197.0	177.6	159.1		141.0	101.8	
o/w external 3/	…	…	151.7			131.9	128.2	124.0	119.1	114.0	110.6		92.8	67.1	
Debt service-to-revenue and grants ratio (in percent) 4/	43.7	33.9	27.3			24.0	20.0	17.6	16.1	14.5	13.0		11.2	9.6	
Debt service-to-revenue ratio (in percent) 4/	46.3	35.8	29.2			28.0	24.9	21.6	19.5	17.3	15.4		13.5	11.6	
Primary deficit that stabilizes the debt-to-GDP ratio	-4.4	90.3	-9.3			8.3	3.2	1.9	3.3	0.8	1.4		-0.8	-0.8	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	6.5	6.3	6.1	5.2	3.0	4.6	4.8	5.0	5.0	5.4	5.0	5.0	5.2	5.2	5.2
Average nominal interest rate on forex debt (in percent)	1.3	1.4	2.3	1.3	0.4	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.5	1.8
Average real interest rate on domestic debt (in percent)	15.7	4.8	4.9	5.8	9.2	8.3	5.9	5.2	5.1	4.9	4.7	5.7	4.5	4.5	4.5
Real exchange rate depreciation (in percent, + indicates depreciation)	1.4	-22.6	14.4	3.3	14.9	-0.3	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	1.6	6.8	6.2	9.6	8.1	2.4	4.9	4.9	4.9	4.9	4.9	4.5	4.9	4.9	4.9
Growth of real primary spending (deflated by GDP deflator, in percent)	0.1	-0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.1
Grant element of new external borrowing (in percent)	...	...	...	…	…	36.1	44.7	47.2	47.0	46.9	46.8	44.8	46.6	46.4	...

Sources: Country authorities; and 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 2009-2029

	Projections							
	2009	2010	2011	2012	2013	2014	2019	2029
PV of Debt-to-GDP Ratio								
Baseline	55	50	46	42	39	35	**31**	22
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	55	52	49	45	44	43	**44**	49
A2. Primary balance is unchanged from 2009	55	54	54	52	53	53	**64**	81
A3. Permanently lower GDP growth 1/	55	51	48	44	42	39	**42**	52
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011	55	52	51	48	46	43	**43**	42
B2. Primary balance is at historical average minus one standard deviations in 2010-2011	55	56	58	53	50	46	**40**	29
B3. Combination of B1-B2 using one half standard deviation shocks	55	55	55	51	48	45	**42**	34
B4. One-time 30 percent real depreciation in 2010	55	61	57	52	49	45	**40**	32
B5. 10 percent of GDP increase in other debt-creating flows in 2010	55	61	57	52	49	45	**40**	29
PV of Debt-to-Revenue Ratio 2/								
Baseline	230	198	180	163	149	134	**117**	85
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	223	203	192	176	171	163	**166**	185
A2. Primary balance is unchanged from 2009	223	213	210	203	204	205	**240**	306
A3. Permanently lower GDP growth 1/	230	200	185	172	161	149	**155**	193
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011	230	205	196	184	174	163	**163**	155
B2. Primary balance is at historical average minus one standard deviations in 2010-2011	223	220	224	207	192	176	**152**	110
B3. Combination of B1-B2 using one half standard deviation shocks	223	214	212	197	184	170	**156**	129
B4. One-time 30 percent real depreciation in 2010	230	240	221	203	188	172	**152**	122
B5. 10 percent of GDP increase in other debt-creating flows in 2010	230	238	220	203	188	172	**150**	109
Debt Service-to-Revenue Ratio 2/								
Baseline	24	20	18	16	14	13	**11**	10
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	23	21	18	17	16	14	**13**	15
A2. Primary balance is unchanged from 2009	23	21	19	18	17	16	**16**	23
A3. Permanently lower GDP growth 1/	24	21	19	17	16	14	**13**	16
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011	24	21	19	18	16	15	**13**	15
B2. Primary balance is at historical average minus one standard deviations in 2010-2011	23	21	19	18	17	15	**13**	13
B3. Combination of B1-B2 using one half standard deviation shocks	23	21	19	18	17	15	**13**	13
B4. One-time 30 percent real depreciation in 2010	24	23	22	21	19	18	**16**	16
B5. 10 percent of GDP increase in other debt-creating flows in 2010	24	21	20	18	17	15	**13**	12

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