INTERNATIONAL MONETARY FUND

AND

INTERNATIONAL DEVELOPMENT ASSOCIATION

GUINEA-BISSAU

Joint IMF/IDA Debt Sustainability Analysis

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

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The 2010 debt sustainability analysis for low-income countries (LIC DSA) indicates that in the absence of HIPC and MDRI debt relief, Guinea-Bissau is expected to remain in debt distress, even though debt ratios would improve modestly in the medium-term. The latter reflects the government's medium-term macroeconomic program of reforms and fiscal adjustment. HIPC and MDRI debt relief, which would flow if the HIPC completion point were reached in 2010, together with additional debt relief by the Paris Club and other bilateral donors, could help significantly alleviate the debt burden. Under such circumstances, some debt indicators are expected to remain below policy dependent thresholds after the completion point. Over the longer run, stronger export growth associated with economic reforms and continued reliance on highly concessional financing is expected to lead to a gradual decline in debt ratios to levels below the indicative thresholds. The inclusion of domestic public debt in the analysis reinforces the conclusions of the external DSA. The government's economic program should focus on strengthening its fiscal stance; on avoiding nonconcessional debt, securing foreign aid on highly concessional terms; and on improving the political and business environment.

I. BACKGROUND

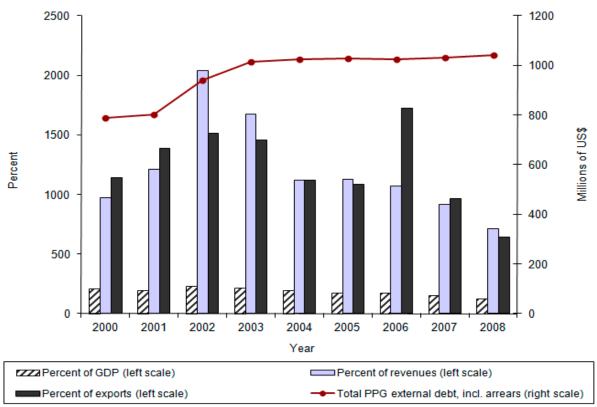
1. At end-2008, Guinea-Bissau's total public debt amounted to US\$1,361 million or 173 percent of GDP in nominal terms (144 percent of GDP in PV terms). Its largest component is still public and publicly guaranteed external debt (78 percent of total public debt) despite of public domestic debt having substantially risen over the last years (currently 22 percent of total public debt up from 19.7 percent in 2006 and 13.7 percent in 2000). Public domestic debt declined in late 2009, however, as the government paid arrears to commercial banks and the BCEAO using externally provided grants. Private external debt is negligible.

Box 1. Impact of Revisions to Guinea-Bissau's National Accounts

This DSA incorporates recently revised National Accounts data. The government will publish the revised national account data for 2003-08, based on the SNA93, in the second quarter of 2010. The new data has a broader coverage of all the sectors in the economy, including in particular the non-cashew agricultural sector which had been significantly underestimated in previous data. The result is an approximate doubling of the level of GDP. Accordingly, GDP ratios cannot be directly compared to those in previous DSA exercises. As an approximation, the isolated impact of the revision will be to reduce GDP ratios by approximately half. Export ratios are less affected, as the revisions to export data were much smaller than for domestic sectors of the economy.

2. The stock of public and publicly guaranteed (PPG) external debt amounts to

US\$1,061.8 million (135 percent of GDP), of which US\$388.6 million are in arrears (Figures 1 and 2). In terms of composition, multilateral debt accounts for 47.5 percent of total PPG external debt, whereof 27.6 percent is owed to IDA, 13.7 percent to AfDB/AfDF and 0.8 percent to IMF. Bilateral creditors account for 52.4 percent (whereof 38.4 percent of total PPG are Paris Club creditors).

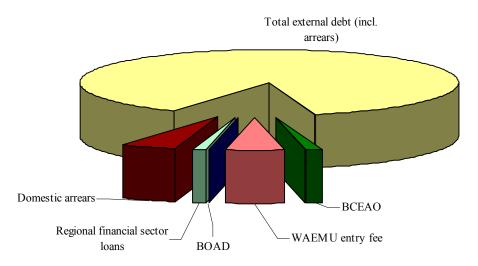




Source: IMF staff estimates.

3. Public domestic debt stood at CFAF 144.1 billion at end-2008 (or 38 percent of 2008 GDP) from CFAF 125.1 billion in 2006 (and CFAF 91.1 billion in 2000), mainly as a result of new domestic arrears and new regional borrowing. By end-2008, the PV of public sector debt had risen to 144 percent of GDP (up from 40 in 2006) and its ratio to revenue and grants to 842 percent (up from 251 in 2006). Almost half of the domestic debt stock represents a required capital contribution of CFAF 70 billion (21 percent of 2008 GDP) to join WAEMU in 1998,¹ which was agreed to be paid over 25 years starting in 2005 and of which CFAF 58.8 billion were left to be paid off. However, as the government has regularly only made around 10 percent of the annual payments using distributed dividends, it had accumulated CFAF 9.5 billion in obligations to the central bank (BCEAO). Another CFAF 6.2 billion in arrears was outstanding to the BCEAO because of unsettled budgetary payments. The second largest component of domestic debt is domestic arrears to the non-bank private sector, that by end-2009 amounted to CFAF 71.8 billion.² In addition, a commercial debt of CFAF 11.8 billion was outstanding to WAEMU banks, whereof CFAF 7.6 billion were Treasury bills (issued in August 2006 at a face value of CFAF 6.7 billion). The obligation to the regional development bank (BOAD) stood at CFAF 1.7 billion.

Figure 2. Composition of Public Debt (Debt Stock at end-2008; millions of CFAF)



Source: IMF staff estimates.

¹ Under the terms of its accession to the WAEMU in 1998, Guinea-Bissau agreed to contribute an equal share as all other members in the capital contribution of the central bank (BCEAO) and the regional development bank (BOAD).

² In gross terms, audited arrears account for CFAF 17 billion accumulated before 2000 and partially audited arrears accounted for CFAF 54.8 billion accumulated during 2000–07.

4. Although Guinea-Bissau already reached the decision point under the HIPC Initiative in 2000, it has failed to reach the completion point since. In 2000, the government engaged in a Poverty Reduction and Growth Facility (PRGF) program from the Fund that could have paved the way to the completion point.³ Failure to maintain macroeconomic stability caused the PRGF-supported program to go off track at a very early stage. In 2005, the government agreed to a new timeline to re-engage in programs supported by the IMF and the World Bank. Two Fund Staff-Monitored Programs (SMPs) followed in 2005 and 2006 as well as three disbursements under the IMF's Emergency Post-Conflict Assistance (EPCA) policy in 2008–09. Progress under both SMPs and the initial EPCAs was mixed, although performance in 2009 improved significantly, allowing staff to recommend IMF Executive Board approval of an arrangement under the IMF's Extended Credit Facility (ECF). Satisfactory performance under the ECF-supported program in the first half of 2010 would provide the necessary track record for reaching the HIPC completion point in the fourth quarter of 2010. A full Poverty Reduction Strategy Paper (PRSP) was finalized in 2006 after many delays owing to political instability and capacity constraints. An Annual Progress Report on PRS implementation was prepared in December 2009, and a new PRSP is under preparation.

5. With the completion point not having been reached since 2000, Guinea-Bissau has not benefited from most of the debt relief committed at decision point. At the decision point in 2000, creditors representing 80 percent of Guinea-Bissau's external debt pledged to provide HIPC relief amounting to US\$415 million in PV terms (currently estimated at about US\$579.9 million in nominal terms).⁴ But as Guinea-Bissau has failed to reach the completion point since then, it has had to service a large share of external debt in full since 2001. Many agreements signed with other multilateral and bilateral creditors have not been implemented because the country failed to remain current on debt service obligations.⁵ The Paris Club declared null and void any debt rescheduling agreements beyond end-2001 and the IMF suspended interim debt relief after the 2000 PRGF had gone off track. The African

³ A number of conditions must be met before a country can reach the completion point under the HIPC Initiative, including satisfactory performance under an ECF or SCF arrangement. In particular, this requires satisfying the Fund's nontoleration of arrears policy (i.e. agreement must be reached on a repayment schedule of all remaining arrears, among others the post-cut-off-date arrears with Paris Club creditors).

⁴ Additional US\$71 million in PV terms (currently estimated at about US\$133.3 million in nominal terms) should come from an agreement with other bilateral creditors.

⁵ See *Guinea-Bissau, Selected Issues and Statistical Appendix,* November 2004, (IMF Country Report No. 05/93) Box 10, for a comprehensive list of debt.

Development Bank (AfDB)⁶ and IDA⁷ have committed to provide interim relief up to early 2011. Since 2000, only China and Cuba have cancelled all outstanding claims.

6. After the decision point in 2000, Guinea-Bissau could not service its external debt and accumulated arrears to most of its external creditors. Since 2001, the country has not repaid any creditor that did not provide interim relief, with the exception of the IMF. The stock of external arrears has increased from US\$141.7 million before decision point in December 2000 to US\$382.8 million at end-2008.

II. UNDERLYING ASSUMPTIONS

7. The macroeconomic framework underlying the DSA is based on the implementation of sound macroeconomic and structural policies, and external financing (mainly through grants and highly concessional loans). Box 2 summarizes the corresponding key macroeconomic assumptions. Growth projections average about 4.5 percent over 2009 to 2029. This reflects a stabilization of the political environment and the government's intention to raise the growth potential of the economy, mainly through investments in agriculture, infrastructure and energy provision as well as efforts to improve the business environment and to attract FDI related to investments in the mining sector. Over the medium and long term, these efforts are expected to lead to fiscal consolidation and to stimulate significant export growth that also outpaces any FDI-related import growth. Besides inflation, grants and loans from donors as a percentage of GDP are projected to remain at historical levels.

8. The DSA assumptions underlying the baseline scenario differ slightly from the previous DSA undertaken in June 2009. They stem from updating key macroeconomic variables in the short and medium term based on recent evidence, a newer global economic outlook, stronger donor support, and indications of the authorities' policy intentions in the context of a prospective medium-term IMF program. The improvement in the fiscal balance projected in the previous DSA for the medium-term is now expected to begin sooner, reflecting the success of recent efforts to raise revenues and contain spending. The most noteworthy medium-term difference is a more positive outlook for the external sector, with

⁶ The statutory ceiling for the delivery of interim relief was reached by AfDB in January 2007, so that only a fraction of the scheduled debt service payments was covered through January 2007, and stopped thereafter. In July 2008, the AfDB extended 100 percent debt service relief to January 2011 after having raised the interim relief ceiling from 40 percent to 50 percent.

⁷ Interim relief from IDA amounted to 100 percent of debt service falling due between December 2000 and October 2003 on debt disbursed before end-1999 (October 2003 was the originally assumed completion point date). From November 2003, annual nominal reduction on debt service to IDA was 90 percent. In order to further assist the country in reaching its completion point, IDA increased its limit on interim relief from 1/3 to 1/2 of the PV of debt relief to be provided. This interim limit of 50 percent of the PV of debt relief is expected to be reached by March 2011.

the current account balance significantly stronger over the medium-term than was previously assumed. In particular, long-term growth assumptions for the period beyond 2015 assume a somewhat stronger growth rate of the dominant export–cashews.

9. The simulations also assume that Guinea-Bissau receives financial assistance in the form of a medium-term IMF arrangement. Assistance provided under the arrangement is expected to equal 157.5 percent of quota (SDR 22.4 million) of which 37.5 percent of quota is used to immediately repay previous credit provided under the Fund's Emergency Post-Conflict Assistance Program. Disbursements under the arrangement are approximately equally phased over the period from early 2010 to early 2013.

Box 2. Macroeconomic Assumptions Underlying the DSA Baseline Scenario

The macroeconomic assumptions over the period 2008 to 2029 are as follows:

Real GDP growth is expected to first drop from 3.5 percent in 2008 to about 3.0 percent in 2009 and then to gradually recover until it reaches 4.5 percent over the long term. This exceeds the historical average by roughly one percentage point, reflecting a past marked by great political instability and inappropriate macroeconomic policies which are expected to improve in the period ahead. Growth is also expected to be supported by average growth over the 2015–2029 period of about 4.5 percent in cashew production.

Inflation, as measured by the GDP deflator, is assumed to grow at a rate slightly below CPI inflation, reflecting a continuous worsening in the terms of trade. Over the long term, both GDP deflator and CPI are projected to return to their historical level of 2¹/₂ percent.

The noninterest **current account surplus** (including grants) is expected to decline gradually from about 1½ percent in 2009 to about ½ percent in 2015—an improvement relative to the deficit of 2 percent of GDP observed over the 2000-2008 period. Over the longer term to 2030, real export volumes are projected to grow at around 6 percent per year, contributing to a widening of the surplus to about 4 percent of GDP before the end of the projection period in 2030.

The **domestic primary fiscal deficit** (i.e. revenue, excluding grants, minus interest expenditure, excluding foreign-financed investment projects) is assumed to gradually decrease from 3 percent of GDP in 2009 to about 2.5 percent from 2019 on, due to stronger revenues as a percentage of GDP and improved public expenditure management.

Net aid flows (grants and concessional loans) are expected to moderate from the high levels seen in 2009. Budget support grants are projected to decline from the 7 percent of GDP received in 2009 to about 4 percent over the medium term. Nonconcessional borrowing is expected to remain negligible on the grounds that the country will not have continued access to commercial debt. Fiscal financing gaps will thus have to be filled through grants or highly concessional loans, especially since running further domestic arrears over the medium and long term is an unsustainable alternative. The grant element in new disbursements is assumed to remain above 50 percent. Concessional loans are assumed to be on standard terms. It is assumed that most of the current arrears to the regional central bank and to domestic commercial banks will be repaid using externally-provided grants in the course of 2010.

Assumptions governing the use of Guinea-Bissau's SDR allocation (SDR illion or 4.3 percent of GDP) in the DSA reflect institutional arrangement

12.4 million or 4.3 percent of GDP) in the DSA reflect institutional arrangements prevailing in the WAEMU area. In September 2009, pursuant to a decision by the WAEMU Council of Ministers, it was agreed that the regional central bank would lend an amount in domestic currency equivalent to the general portion of their SDR allocation to WAEMU members to be used to clear domestic arrears. While such financing is loosely associated with the SDR allocation—domestic financing by the BCEAO is linked to the CFA franc counterpart of members' SDR allocations—BCEAO loans to member countries do not automatically trigger a drawdown of their holdings held at the SDR Department. The SDR allocation held by the BCEAO has thus not been drawn down. The BCEAO domestic financing has a grace period of 3 years, an interest rate of 3 percent and a repayment period of 10 years. Accordingly, the DSA treats the funds provided by the BCEAO as domestic borrowing, on the terms specified above. As the BCEAO continues to hold the SDRs provided as part of the August and September 2009 general and special allocation, the DSA does not assume any change in external debt service obligations resulting from the allocation.

A. Baseline: Interim Relief

11. Under the baseline scenario, all PPG external debt indicator ratios fall relative to their historical levels, but remain well above the policy-dependent debt burden thresholds (Tables 1a, 1b and Figure 1a).⁸ The baseline presumes full delivery of traditional debt relief as well as interim HIPC assistance, but that real GDP growth averages almost 5 percent per annum in the long term.⁹¹⁰ Despite the concessional nature of most of the external debt, the debt burden indicators far exceed the relevant policy dependent debt thresholds (Text Table 1).¹¹ In terms of PV, external debt stands at US\$855.5 million or 103 percent of GDP and 528 percent of exports. The downward trend in debt ratios through the projection period is mainly driven by the assumption that Guinea-Bissau only takes out highly concessional loans to finance fiscal gaps.¹²

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⁸ Compared to the previous DSA, completed in June 2009, key debt ratios have improved significantly, owing to the upward revision in GDP. That ratios still remain above policy-dependent thresholds based on the revised data is testament to the level of debt vulnerabilities.

⁹ Traditional debt relief is assumed to take the form of a Naples flow rescheduling over the 2010–2012 period.

¹⁰ The underlying growth rates are approximately 2 percent higher than the historical average, with the historical average calculated to exclude the sharp drop in GDP associated with the 1999 internal conflict. The reason is that the past was marked by great political instability and inappropriate macroeconomic policies which are expected to improve in the period ahead.

¹¹ According to the World Bank Country Policy and Institutional Assessment (CPIA), Guinea-Bissau is classified as a country with poor quality of policies and institutions. Its average CPIA rating for 2003–08 is 2.58 on a scale from 1 to 6 and below the operational cutoff of 3.25 for poor performers.

¹² The grant element of new external borrowing is projected to decline in 2010–14, owing to the lower concessionality of the proposed borrowing under the IMF's ECF.

| Text Table 1. | Summary of Baselin | ne External Do | ebt Sustainabili | ty Indicators 1 | / |
|-------------------------|----------------------------|----------------|------------------|-----------------|---------|
| | Indicative Threshold 2/ | 2009 | 2019 | 2029 | Average |
| PV of debt-to-GDP | 30 | 103 | 56 | 19 | 61 |
| PV of debt-to-exports | 100 | 528 | 281 | 93 | 308 |
| PV of debt-to-revenues | 200 | 1155 | 530 | 175 | 601 |
| Debt service-to-exports | 15 | 14 | 14 | 6 | 12 |
| Debt service-to-revenue | 25 | 31 | 27 | 11 | 22 |

Source: IMF staff estimates.

1/ Debt indicators refer to Guinea-Bissau's public and publicly guaranteed external debt.

2/ Threshold over which countries considered as poor performers according to their CPIA would have at least a 25 percent chance of having a prolonged debt distress episode in the coming year. Guinea-Bissau lies within the bottom quintile of countries ranked by CPIA.

B. Alternative Scenarios and Stress Tests

12. Assuming that Guinea-Bissau reaches the HIPC completion point in 2010 helps to significantly alleviate the debt burden, but some debt burden indicators remain at or above thresholds consistent with a high risk of debt distress. (Table 1b, Scenario A3). This alternative scenario assumes full delivery of HIPC, MDRI, and Paris Club "beyond HIPC" assistance after the completion point. Over the longer run, stronger export growth associated with economic reforms and continued reliance on highly concessional financing is expected to lead to a gradual decline in debt ratios to below sustainability thresholds by the end of the projection.

13. **Standard stress tests to the baseline scenario confirm the external debt position's vulnerability to unexpected shocks.**¹³ Given current debt levels, the first stress test exhibits the enormous impact of a one-time 30 percent devaluation in the nominal exchange rate in 2010 (Table 1b, Scenario B6): the PV of debt would increase by 39 percentage points of GDP in that year. That makes the devaluation by far the most extreme shock in terms of PV/GDP, debt/revenue, and debt service/revenue (Figure 1a). The prospect that such an adverse shock would be realized, however, is limited by Guinea-Bissau's membership in the CFA franc zone, whose currency is pegged to the euro. The stability of the CFA franc versus the euro is buttressed by high levels of reserves. At the same time, movements in the euro versus other currencies in which Guinea-Bissau's debt may be denominated (such as the US dollar) could have a significant impact on debt burdens.

¹³ The 10-year historical averages used in the stress tests exclude the steep drop in GDP and disruptions to other economic variables associated with the 1999 internal conflict.

III. PUBLIC DSA

A. Baseline: Interim Relief

14. The baseline scenario, adapted from the same assumptions and consistent with the external DSA, shows domestic debt indicators remaining elevated (Table 2a, 2b and Figure 2a). Total public debt (domestic and external) as a percent of GDP declines steadily through the projection period. The PV of total public debt to GDP ratio exhibits a similar pattern. The debt service to revenue ratio rises in the second half of the next decade, reflecting in part the repayment of the domestic credit provided by the regional central bank in connection with the SDR allocation.

B. Alternative Scenarios and Stress Tests

15. Under the assumption of the HIPC/MDRI completion point being attained in 2010 and the corresponding external debt relief being fully delivered (including MDRI), debt vulnerabilities significantly decline (Table 2b, Scenario A4)¹⁴. The PV of debt would fall to 50 percent of GDP in 2010, which amounts to a debt reduction of 77 percentage points of GDP in PV terms with respect to the baseline scenario. Despite this reduction, the PV of public debt to GDP would still remain high.

16. Assuming that GDP growth and the primary balance move to their historical averages (Table 2b, Scenario A1) has a modest adverse impact on debt ratios. By the end of the projection period, the PV of debt to GDP ratio is elevated by about 43 percent of GDP.

17. **Standard stress tests to the baseline scenario confirm that also the public debt position remains vulnerable to economic shocks.** As with the scenario assuming only interim relief, the largest impact results from imposing a one-time 30 percent depreciation in the exchange rate (Table 2b, Scenario B4), which severely impacts all debt burden indicators. Perhaps the largest impact is with respect to the debt-to-revenues ratio, which rises by 42 percentage points (relative to the baseline) in the first year of the shock.

IV. CONCLUSION

18. In sum, based on staffs' analysis, in the absence of HIPC and MDRI debt relief, Guinea-Bissau is expected to remain in debt distress, even though debt ratios would improve modestly in the medium-term reflecting the government medium-term macroeconomic program of reforms and fiscal adjustment. HIPC and MDRI debt relief, which would flow if the HIPC completion point were reached in 2010, and comprehensive

¹⁴ The assumptions for debt relief from multilateral and bilateral creditors are the same as those described in paragraph 12 above.

debt relief by the Paris Club and other bilateral donors, would help significantly alleviate the debt burden, with most debt indicators below policy dependent thresholds after the completion point. Over the longer run, stronger export growth associated with economic reforms and continued reliance on highly concessional financing is expected to lead to a gradual decline in debt ratios to below indicative thresholds by the end of the projection period. The inclusion of domestic public debt in the analysis reinforces the conclusions of the external DSA.

19. **Prudent macro policies are highly crucial for reining in debt ratios and for performing under a potential new ECF, which is necessary to reach the HIPC/MDRI completion point.** The government's economic program, for which it is requesting Bank and Fund support, should focus on strengthening its fiscal stance; on avoiding nonconcessional debt, securing foreign aid on highly concessional terms; and on improving the political and business environment. The latter would not only be conducive for additional investment, but also for a more stable inflow of external aid than in the past. Containing the wage bill and avoiding off-budget expenditures will be key to reduce the current fiscal imbalance in a sustainable fashion.

Table 1. Guinea-Bissau: External Debt Outstanding, 2000–08¹

(In millions of U.S. dollars, including arrears)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|-------|-------|-------|-------|---------|---------------|---------|---------|---------|
| Total external debt outstanding (end of year; including arrears) | 717.2 | 728.3 | 851.0 | 908.2 | 1,043.1 | 1,049.2 | 1,046.4 | 1,053.7 | 1,061.8 |
| Multilateral | 435.3 | 440.5 | 447.8 | 488.8 | 514.9 | 513. 7 | 507.4 | 505.8 | 504.0 |
| African Development Bank Group | 121.9 | 123.4 | 128.3 | 143.2 | 141.4 | 140.7 | 142.2 | 143.6 | 145.3 |
| Arab Bank for Economic Development in Africa (BADEA) | 8.7 | 8.8 | 9.7 | 12.8 | 9.2 | 9.5 | 9.9 | 9.7 | 9.7 |
| Economic Community of West African States (ECOWAS) | 3.1 | 3.1 | 3.8 | 5.1 | 3.9 | 3.9 | 4.0 | 4.0 | 4.(|
| European Investment Bank (EIB) | 7.6 | 7.6 | 11.2 | 12.7 | 9.4 | 9.4 | 9.4 | 9.4 | 9.4 |
| International Fund for Agricultural Development (FIDA) | 9.2 | 9.3 | 11.4 | 12.5 | 11.1 | 11.2 | 11.3 | 11.0 | 11.0 |
| International Development Agency (IDA) | 238.0 | 243.2 | 231.1 | 257.5 | 301.3 | 303.4 | 298.9 | 299.8 | 292.1 |
| Islamic Development Bank (IsDB) | 13.7 | 13.5 | 15.3 | 17.6 | 15.6 | 15.6 | 15.6 | 15.6 | 15.0 |
| OPEC Fund | 8.0 | 8.0 | 14.8 | 8.2 | 8.1 | 8.1 | 8.2 | 8.2 | 8.2 |
| International Monetary Fund (IMF) | 25.0 | 23.5 | 22.3 | 19.3 | 15.1 | 11.9 | 8.0 | 4.6 | 8.1 |
| Bilateral creditors | 281.3 | 287.2 | 402.6 | 418.7 | 527.4 | 534.7 | 538.1 | 547.0 | 556.9 |
| Paris Club (cutoff date: December 1986) | 169.3 | 173.8 | 255.0 | 270.3 | 386.1 | 391.3 | 394.7 | 400.7 | 407.5 |
| Pre-cutoff date (rescheduled Paris Club III-1995) | 120.3 | 123.7 | 174.5 | 185.9 | 304.6 | 309.5 | 312.9 | 318.7 | 325.4 |
| Belgium | 7.8 | 8.1 | 9.1 | 11.2 | 15.5 | 15.8 | 15.9 | 16.1 | 18.4 |
| Brazil | 23.1 | 24.0 | 26.3 | 28.7 | 17.4 | 18.0 | 18.4 | 18.7 | 18.9 |
| France | 8.9 | 9.3 | 14.4 | 15.4 | 14.4 | 14.5 | 15.4 | 16.7 | 17.4 |
| Germany | 4.3 | 4.4 | 1.1 | 1.3 | 1.3 | 1.4 | 1.4 | 1.6 | 1.3 |
| Italy | 76.2 | 78.0 | 123.5 | 129.2 | 128.7 | 129.0 | 129.2 | 129.5 | 129.9 |
| Portugal | | | | | 107.0 | 109.3 | 109.3 | 111.7 | 114.4 |
| Russia | | | | | 20.3 | 21.5 | 23.1 | 24.3 | 24.3 |
| Post-cutoff date | 49.0 | 50.1 | 80.5 | 84.5 | 81.5 | 81.8 | 81.8 | 82.0 | 82.1 |
| Italy | 41.6 | 42.5 | 67.4 | 70.5 | 70.2 | 70.4 | 70.4 | 70.4 | 70.4 |
| Spain | 7.5 | 7.6 | 13.2 | 14.0 | 11.3 | 11.4 | 11.4 | 11.6 | 11.3 |
| Other bilateral creditors | 112.0 | 113.4 | 147.6 | 148.4 | 141.3 | 143.4 | 143.4 | 146.3 | 149.4 |
| Abu Dhabi Fund for Arab Economic Development | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| Algeria | 6.5 | 6.6 | 10.9 | 11.5 | 9.5 | 9.6 | 9.6 | 9.7 | 9.8 |
| Angola | 18.8 | 18.8 | 18.8 | 18.8 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 |
| Kuwait | 27.8 | 27.9 | 45.0 | 40.0 | 49.5 | 50.1 | 50.1 | 51.2 | 52.4 |
| Libya | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| Pakistan | 2.6 | 2.6 | 3.8 | 4.0 | 2.6 | 2.6 | 2.6 | 2.6 | 2.0 |
| Saudi Arabia | 15.1 | 15.2 | 22.1 | 22.9 | 15.5 | 15.7 | 15.7 | 16.0 | 16.4 |
| Taiwan Province of China | 36.9 | 38.0 | 42.8 | 46.8 | 43.0 | 44.1 | 44.1 | 45.5 | 46.9 |
| Commercial | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | | | 0.8 | |
| Banque Franco-Portugaise | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |

Sources: Guinea-Bissau authorities; IMF and staff estimates and projections.

1/ Estimates are based on incomplete and unreconciled data provided by the Guinea-Bissau authorities and on IMF and WB staff estimates and projections. Debt estimates for particular creditor countries may be subject to significant revisions in the light of information to be gained in the future from the authorities and through the Paris Club.

Table 2. Guinea-Bissau: External Arrears Outstanding, 2000–08¹

(In millions of U.S. dollars)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|-------------|-------|-------|-------|-------|---------------|-------|-------|-------|
| Total stock of arrears outstanding (end of year) | 132.6 | 126.4 | 182.1 | 206.0 | 298.4 | 326.7 | 336.8 | 360.1 | 388.6 |
| Multilateral | 29.3 | 17.5 | 22.1 | 28.3 | 31.6 | 34.2 | 36.8 | 37.8 | 39.4 |
| African Development Bank Group | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Arab Bank for Economic Development in Africa (BADEA) | 5.5 | 5.6 | 4.6 | 8.3 | 8.1 | 8.8 | 9.7 | 9.6 | 9.6 |
| Economic Community of West African States (ECOWAS) | 1.9 | 2.0 | 2.0 | 3.1 | 3.3 | 3.4 | 3.5 | 3.5 | 3.6 |
| European Investment Bank (EIB) | 0.9 | 1.0 | 4.6 | 4.8 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| International Fund for Agricultural Development (FIDA) | 0.9 | 1.0 | 2.0 | 2.2 | 3.1 | 3.4 | 3.8 | 3.7 | 4.1 |
| International Development Agency (IDA) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Islamic Development Bank (IsDB) | 12.5 | 0.3 | 0.8 | 1.7 | 2.6 | 4.0 | 5.1 | 6.3 | 7.5 |
| OPEC Fund | 7.6 | 7.6 | 8.2 | 8.2 | 8.1 | 8.1 | 8.2 | 8.2 | 8.2 |
| International Monetary Fund (IMF) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bilateral | 102.9 | 108.5 | 159.4 | 176.9 | 266.0 | 291. 7 | 299.2 | 321.4 | 348.3 |
| Paris Club | 49.7 | 54.1 | 103.4 | 113.3 | 197.8 | 216.9 | 224.4 | 237.0 | 254.3 |
| Pre-cutoff date 1986 (rescheduled Paris Club III-1995) | 22.9 | 24.5 | 57.3 | 59.2 | 105.9 | 115.2 | 122.7 | 134.2 | 150.4 |
| Belgium | 1.8 | 2.1 | 0.6 | 1.0 | 3.6 | 4.3 | 4.8 | 5.1 | 9.1 |
| Brazil | 8.9 | 9.8 | 11.1 | 13.6 | 7.7 | 10.2 | 12.9 | 15.8 | 18.9 |
| France | 2.5 | 2.9 | 6.4 | 6.9 | 8.8 | 9.3 | 10.8 | 13.0 | 16.7 |
| Germany | 2.6 | 2.6 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 0.8 | 0.9 |
| Italy | 7.1 | 7.1 | 39.0 | 37.5 | 64.5 | 65.7 | 66.8 | 68.0 | 69.2 |
| Portugal | | / | | | 16.2 | 19.1 | 19.1 | 22.4 | 26.2 |
| Russia | | | | | 4.7 | 6.1 | 7.7 | 9.1 | 9.4 |
| Post-cutoff date | 26.8 | 29.6 | 46.0 | 54.1 | 91.9 | 101.7 | 101.7 | 102.8 | 103.9 |
| Italy | 23.8 | 26.5 | 44.6 | 51.8 | 88.1 | 96.5 | 96.5 | 96.5 | 96.5 |
| Spain | 3.0 | 3.1 | 1.5 | 2.3 | 3.9 | 5.2 | 5.2 | 6.3 | 7.4 |
| Non-Paris Club | 53.2 | 54.4 | 56.0 | 63.5 | 68.2 | 74.8 | 74.8 | 84.5 | 94.1 |
| Abu Dhabi Fund for Arab Economic Development | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| Algeria | 1.5 | 1.5 | 5.9 | 6.5 | 5.9 | 6.5 | 6.5 | 7.1 | 7.7 |
| Angola | 18.8 | 18.8 | 18.8 | 18.8 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 |
| Kuwait | 17.9 | 17.9 | 1.6 | 3.4 | 7.3 | 8.5 | 8.5 | 10.9 | 13.1 |
| Libya | 0.7 | 0.7 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| Pakistan | 1.3 | 1.3 | 1.6 | 1.8 | 2.0 | 2.2 | 2.2 | 2.2 | 2.2 |
| Saudi Arabia | 4.7 | 4.8 | 9.9 | 10.7 | 9.7 | 10.2 | 10.2 | 11.4 | 12.6 |
| Taiwan Province of China | 8.1 | 9.2 | 13.9 | 18.0 | 22.0 | 26.0 | 26.0 | 31.5 | 37.1 |
| Commercial | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Banque Franco-Portugaise | 0.4 | 0.4 | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Darque Lance I oragano | V .T | 0.1 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Sources: Guinea-Bissau authorities; and IMF staff estimates and projections

1/ Estimates are based on incomplete and unreconciled data provided by the Guinea-Bissau authorities and on IMF and WB staff estimates and projections. Debt estimates for particular creditor countries may be subject to significant revisions in the light of information to be gained in the future from the authorities and through the Paris Club.

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

| | | | | | | | Actual | | | | | Historical (| Standard | | | Projecti | ons | | | | | |
|--|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------------|----------|--------|-------|----------|--------|--------|--------|----------------------|--------|--------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Average (| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2009-2014 Average | 2019 | 2029 |
| | 1770 | 1000 | | | | | | | | | | | | | | | | | | . iverage | | |
| External debt (nominal) 1/ | | | 192.8 | 177.7 | 189.3 | 175.5 | 180.5 | 186.4 | 166.4 | 143.0 | 134.8 | | | 126.4 | 119.9 | 114.3 | 109.1 | 103.2 | 97.2 | | 66.1 | 18.0 |
| o/w public and publicly guaranteed (PPG) | | | 192.8 | 177.7 | 189.3 | 175.5 | 180.5 | 186.4 | 166.4 | 143.0 | 134.8 | | | 126.4 | 119.9 | 114.3 | 109.1 | 103.2 | 97.2 | | 66.1 | 18.0 |
| Change in external debt | | | | -15.2 | 11.6 | -13.8 | 5.0 | 5.9 | -19.9 | -23.4 | -8.2 | | | -8.3 | -6.5 | -5.6 | -5.2 | -6.0 | -5.9 | | -5.8 | -4.2 |
| dentified net debt-creating flows | | | | -6.7 | -0.2 | -21.8 | -25.0 | -18.3 | 0.6 | -31.0 | -30.3 | | | -6.9 | -6.1 | -6.4 | -6.7 | -6.9 | -6.9 | | -5.9 | -4.1 |
| Non-interest current account deficit | 4.4 | -4.2 | -5.8 | 3.8 | 0.2 | 0.3 | -5.5 | -1.9 | 3.9 | -7.6 | -4.4 | -1.9 | 4.2 | -1.6 | -0.1 | -1.0 | -1.2 | -1.8 | -2.0 | | -2.3 | -2.1 |
| Deficit in balance of goods and services | 8.1 | 8.1 | 8.6 | 12.8 | 8.0 | 8.6 | 6.0 | 7.1 | 14.9 | 9.1 | 6.8 | | | 8.7 | 8.3 | 8.6 | 8.0 | 7.7 | 7.6 | | 6.7 | 5.0 |
| Exports | 5.4 | 14.1 | 18.0 | 14.1 | 14.9 | 14.6 | 17.1 | 16.0 | 9.9 | 15.4 | 19.0 | | | 19.6 | 19.5 | 19.8 | 20.4 | 20.3 | 20.2 | | 19.8 | 19.8 |
| Imports | 13.5 | 22.2 | 26.6 | 26.8 | 22.9 | 23.2 | 23.1 | 23.1 | 24.8 | 24.6 | 25.8 | | | 28.2 | 27.7 | 28.4 | 28.4 | 28.0 | 27.8 | | 26.5 | 24.9 |
| Net current transfers (negative = inflow) | -6.2 | -15.9 | -14.0 | -9.8 | -7.4 | -8.3 | -11.5 | -8.9 | -10.3 | -15.9 | -10.7 | -11.3 | 3.0 | -11.5 | -10.6 | -9.3 | -8.9 | -8.9 | -9.0 | | -8.7 | -7.0 |
| o/w official | -2.5 | -10.8 | -9.3 | -6.3 | -3.0 | -3.4 | -5.9 | -3.9 | -6.9 | -10.3 | -6.4 | | | -8.0 | -7.1 | -5.9 | -5.6 | -5.6 | -5.6 | | -5.4 | -4.5 |
| Other current account flows (negative = net inflow) | 2.6 | 3.6 | -0.4 | 0.8 | -0.4 | -0.1 | 0.0 | -0.1 | -0.6 | -0.9 | -0.4 | | | 1.2 | 2.2 | -0.3 | -0.3 | -0.6 | -0.6 | | -0.4 | -0.1 |
| Net FDI (negative = inflow) | 0.0 | 0.0 | -0.2 | -0.4 | -0.5 | -0.7 | -1.8 | -1.3 | -3.0 | -2.6 | -1.2 | -1.2 | 1.0 | -1.1 | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 | | -1.0 | -1.1 |
| Endogenous debt dynamics 2/ | 0.0 | 0.0 | | -10.1 | 0.1 | -21.3 | -17.8 | -15.1 | -0.2 | -20.8 | -24.7 | | 1.0 | -4.3 | -5.0 | -4.4 | -4.5 | -4.1 | -3.9 | | -2.5 | -0.8 |
| Contribution from nominal interest rate | | | | 3.2 | 2.5 | -21.3 | 1.8 | -15.1 | 1.6 | 2.1 | 1.9 | | | -0.1 | -1.0 | 0.5 | 0.4 | 0.8 | 0.7 | | 0.5 | 0.1 |
| Contribution from real GDP growth | | | | -6.6 | -3.1 | 5.9 | -4.8 | -8.2 | -4.1 | -0.5 | -4.1 | | | -4.2 | -4.0 | -4.9 | -4.9 | -4.9 | -4.6 | | -3.0 | -0.9 |
| 0 | | | | | | | | | | | | | | -4.2 | -4.0 | -4.9 | -4.9 | -4.9 | -4.0 | | -5.0 | -0.9 |
| Contribution from price and exchange rate changes | | | | -6.7 | 0.7 | -29.4 | -14.8 | -8.7 | 2.3 | -22.4 | -22.6 | | | | | | | | | | | |
| Residual (3-4) 3/ | | | | -8.4 | 11.8 | 8.0 | 30.0 | 24.2 | -20.6 | 7.5 | 22.0 | | | -1.4 | -0.4 | 0.8 | 1.4 | 0.9 | 0.9 | | 0.1 | -0.2 |
| o/w exceptional financing | | | | -1.9 | -5.1 | -7.2 | -5.5 | -6.2 | -3.2 | -4.7 | -3.0 | | | -1.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| V of external debt 4/ | | | | | | | | | | | 97.7 | | | 103.4 | 98.1 | 94.0 | 90.2 | 85.5 | 80.9 | | 55.6 | 18.5 |
| In percent of exports | | | | | | | | | | | 515.0 | | | 528.2 | 504.0 | 474.7 | 441.7 | 420.1 | 400.2 | | 281.0 | 93.1 |
| PV of PPG external debt | | | | | | | | | | | 97.7 | | | 103.4 | 98.1 | 94.0 | 90.2 | 85.5 | 80.9 | | 55.6 | 18.5 |
| In percent of exports | | | | | | | | | | | 515.0 | | | 528.2 | 504.0 | 474.7 | 441.7 | 420.1 | 400.2 | | 281.0 | 93.1 |
| In percent of government revenues | | | | | | | | | | | 1072.0 | | | 1154.9 | 955.4 | 951.0 | 912.7 | 844.5 | 792.0 | | 530.1 | 175.0 |
| Debt service-to-exports ratio (in percent) | 0.0 | 0.0 | 59.4 | 68.6 | 47.5 | 57.7 | 38.9 | 45.1 | 48.2 | 40.7 | 29.9 | | | 14.0 | 8.7 | 10.6 | 10.1 | 13.2 | 12.9 | | 14.3 | 5.8 |
| PPG debt service-to-exports ratio (in percent) | 0.0 | 0.0 | 59.4 | 68.6 | 47.5 | 57.7 | 38.9 | 45.1 | 48.2 | 40.7 | 29.9 | | | 14.0 | 8.7 | 10.6 | 10.1 | 13.2 | 12.9 | | 14.3 | 5.8 |
| PG debt service-to-revenue ratio (in percent) | | | 102.2 | 112.1 | 94.4 | 111.7 | 79.2 | 80.8 | 48.6 | 78.1 | 62.3 | | | 30.6 | 16.5 | 21.2 | 20.8 | 26.6 | 25.5 | | 26.9 | 10.8 |
| Fotal gross financing need (Millions of U.S. dollars) | | | 102.2 | 112.1 | 28.4 | 37.9 | -3.2 | 23.5 | 33.8 | -27.1 | 1.1 | | | 0.6 | 5.4 | 9.5 | 7.3 | 7.3 | 4.0 | | 0.2 | -52.2 |
| | | | | 10.0 | | 14.0 | -10.5 | -7.8 | 23.8 | 15.8 | 3.9 | | | 6.8 | 6.4 | 4.6 | | 4.2 | 3.9 | | 3.4 | -52.2 |
| Non-interest current account deficit that stabilizes debt ratio | | | | 18.9 | -11.3 | 14.0 | -10.5 | -7.8 | 25.8 | 15.8 | 5.9 | | | 0.8 | 0.4 | 4.0 | 4.0 | 4.2 | 5.9 | | 5.4 | 2.1 |
| Key macroeconomic assumptions | | | | | | | | | | | | | | | | | | | | | | |
| teal GDP growth (in percent) | 4.4 | -28.0 | 7.2 | 3.7 | 1.8 | -3.5 | 3.1 | 5.0 | 2.2 | 0.3 | 3.5 | 2.6 | 3.0 | 3.0 | 3.5 | 4.3 | 4.5 | 4.7 | 4.7 | 4.1 | 4.5 | 4.5 |
| OP deflator in US dollar terms (change in percent) | 11.3 | -0.8 | -9.4 | 3.6 | -0.4 | 18.4 | 9.2 | 5.1 | -1.2 | 15.6 | 18.7 | 6.6 | 9.4 | -5.6 | 5.1 | 1.6 | 1.2 | 1.1 | 0.8 | 0.7 | 2.0 | 2.0 |
| Effective interest rate (percent) 5/ | | | | 1.8 | 1.4 | 1.3 | 1.2 | 1.2 | 0.9 | 1.5 | 1.6 | 1.4 | 0.3 | -0.1 | -0.9 | 0.4 | 0.4 | 0.8 | 0.8 | 0.2 | 0.7 | 0.4 |
| Frowth of exports of G&S (US dollar terms, in percent) | -47.2 | 87.0 | 23.6 | -16.0 | 7.4 | 11.8 | 31.8 | 3.3 | -37.3 | 80.0 | 51.2 | 17.3 | 34.9 | 0.3 | 8.0 | 7.9 | 9.2 | 5.4 | 4.9 | 6.0 | 6.5 | 6.8 |
| Growth of imports of G&S (US dollar terms, in percent) | -31.0 | 17.8 | 16.2 | 8.4 | -13.5 | 15.6 | 12.4 | 10.2 | 8.4 | 14.9 | 28.9 | 11.3 | 11.2 | 6.5 | 6.8 | 8.6 | 5.8 | 4.6 | 4.6 | 6.1 | 5.8 | 6.0 |
| Grant element of new public sector borrowing (in percent) | | | | | | | | | | | | | | 46.9 | 44.4 | 42.8 | 43.0 | 45.7 | 50.9 | 45.6 | 50.9 | 50.9 |
| Bovernment revenues (excluding grants, in percent of GDP) | 1.8 | 9.4 | 10.5 | 8.6 | 7.5 | 7.5 | 8.4 | 8.9 | 9.8 | 8.0 | 9.1 | | | 9.0 | 10.3 | 9.9 | 9,9 | 10.1 | 10.2 | | 10.5 | 10.6 |
| Aid flows (in Millions of US dollars) 7/ | 13.3 | 12.2 | 44.2 | 34.8 | 21.9 | 34.5 | 58.3 | 50.2 | 53.4 | 81.1 | 94.4 | | | 137.3 | 125.6 | 126.5 | 130.8 | 134.3 | 135.5 | | 167.5 | 283.9 |
| o/w Grants | 6.7 | 9.8 | 41.1 | 30.8 | 14.8 | 24.6 | 46.5 | 38.4 | 36.7 | 56.8 | 68.9 | | | 126.7 | 115.5 | 115.7 | 119.4 | 122.2 | 122.8 | | 150.0 | 283.9 |
| o/w Concessional loans | 6.7 | 2.4 | 3.2 | 4.0 | 7.1 | 24.0 | 11.8 | 11.8 | 16.8 | 24.3 | 25.5 | | | 120.7 | 10.2 | 10.8 | 113.4 | 122.2 | 122.8 | | 17.6 | 285.9 |
| | 0./ | 2.4 | 5.2 | 4.0 | 7.1 | 9.9 | 11.8 | 11.6 | 10.5 | 24.5 | 25.5 | | | | | | | | | | | |
| Grant-equivalent financing (in percent of GDP) 8/ | | | | | | | | | | | | | | 16.4 | 14.1 | 13.3 | 13.0 | 12.3 | 11.6 | | 10.2 | 8.8 |
| Grant-equivalent financing (in percent of external financing) 8/ | | | | | | | | | | | | | | 93.1 | 89.8 | 89.6 | 89.7 | 92.4 | 94.5 | | 95.3 | 111.1 |
| Iemorandum items: | | | | | | | | | | | | | | | | | | | | | | |
| Nominal GDP (Millions of US dollars) | 551.9 | 394.3 | 383.0 | 411.4 | 417.1 | 476.1 | 535.9 | 591.5 | 597.4 | 692.7 | 851.1 | | | 827.2 | 899.4 | 953.6 | 1009.0 | 1068.1 | 1127.5 | | 1553.3 | 2940.6 |
| Nominal dollar GDP growth | | -28.6 | -2.9 | 7.4 | 1.4 | 14.2 | 12.5 | 10.4 | 1.0 | 15.9 | 22.9 | | | -2.8 | 8.7 | 6.0 | 5.8 | 5.9 | 5.6 | 4.9 | 6.6 | 6.6 |
| eV of PPG external debt (in Millions of US dollars) | | | | | | | | | | | 831.9 | | | 855.5 | 882.1 | 896.3 | 910.5 | 913.1 | 912.2 | | 864.3 | 543.5 |
| | | | | | | | | | | | | | | 2.8 | 3.2 | 1.6 | 1.5 | 0.3 | -0.1 | 1.5 | -1.1 | -1.9 |

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 1b.Guinea-Bissau: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2009-2029

(In percent)

| | 2009 | 2010 | 2011 | 2012 | ions 2013 | 2014 | 2019 | 2029 |
|--|--------------|--------------|---------------|--------------|--------------|-------------|------------|------------|
| | | | | | | | | |
| PV of debt-to GD | | | | | | | | |
| Baseline | 103 | 98 | 94 | 90 | 85 | 81 | 56 | 18 |
| A. Alternative Scenarios A1. Key variables at their historical averages in 2009-2029 1/ | 103 | 96 | 89 | 82 | 75 | 68 | 40 | 7 |
| A1. New validos sector loans on less favorable terms in 2009-2029 2 A3. HIPC completion point attained in 2010 | 103 103 | 99 22 | 95 21 | 92 20 | 88 18 | 84 17 | 60 8 | 20 -5 |
| B. Bound Tests | | | | | | | | |
| B1. Real GDP growth at historical average minus one standard deviation in 2010-2011 B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/ | 103 103 | 102 100 | 102 101 | 98 97 | 93 92 | 88 87 | 61 61 | 20 21 |
| B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011 | 103 | 106 | 107 | 103 | 97 | 92 | 63 | 21 |
| B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/ B5. Combination of B1-B4 using one-half standard deviation shocks | 103 103 | 100 106 | 97 106 | 93 102 | 88 97 | 83 92 | 58 64 | 19 22 |
| B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/ | 103 | 137 | 132 | 126 | 120 | 113 | 78 | 26 |
| PV of debt-to-expo | rts ratio | | | | | | | |
| Baseline | 528 | 504 | 475 | 442 | 420 | 400 | 281 | 93 |
| A. Alternative Scenarios | | 105 | | | | | •••• | |
| A1. Key variables at their historical averages in 2009-2029 1/ A2. New public sector loans on less favorable terms in 2009-2029 2 | 528 528 | 495 508 | 449 482 | 402 452 | 368 433 | 337 415 | 204 303 | 33 100 |
| A3. HIPC completion point attained in 2010 | 528 | 111 | 105 | 96 | 89 | 83 | 40 | -26 |
| B. Bound Tests | | | | | | | | |
| B1. Real GDP growth at historical average minus one standard deviation in 2010-2011 B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/ | 528 528 | 504 677 | 475 873 | 442 813 | 420 775 | 400 740 | 281 528 | 93 180 |
| B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011 B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/ | 528 528 | 504 513 | 475 488 | 442 454 | 420 433 | 400 412 | 281 292 | 93 98 |
| B4. Ever non-dept creating nows at instortical average minds one standard deviation in 2010-2011 4/ B5. Combination of B1-B4 using one-half standard deviation shocks | 528 | 555 | 577 | 537 | 511 | 488 | 346 | 117 |
| B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/ $$ | 528 | 504 | 475 | 442 | 420 | 400 | 281 | 93 |
| PV of debt-to-rever | ue ratio | | | | | | | |
| Baseline | 1155 | 955 | 951 | 913 | 845 | 792 | 530 | 175 |
| A. Alternative Scenarios | | | | | | | | |
| A1. Key variables at their historical averages in 2009-2029 1/ | 1155 | 939 | 900 | 830 | 740 | 668 | 385 | 62 |
| A2. New public sector loans on less favorable terms in 2009-2029 2 A3. HIPC completion point attained in 2010 | 1155 1155 | 963 211 | 966 210 | 934 198 | 870 179 | 821 165 | 573 76 | 187 -49 |
| B. Bound Tests | | | | | | | | |
| B1. Real GDP growth at historical average minus one standard deviation in 2010-2011 | 1155 | 993 | 1036 | 994 | 920 | 862 | 577 | 190 |
| B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/ B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011 | 1155 1155 | 979 1036 | 1018 1081 | 979 1037 | 907 960 | 853 900 | 581 602 | 198 199 |
| B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/ | 1155 | 972 | 978 | 939 | 870 | 816 | 550 | 184 |
| B5. Combination of B1-B4 using one-half standard deviation shocks B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/ | 1155 1155 | 1028 1337 | 1077 1331 | 1034 1277 | 958 1182 | 900 1108 | 608 742 | 204 245 |
| Table 15 Colore Discour Considering Analysis for Your Is discourse of Dables | a Dublishe C | | 1.5-1 | 1.D.14.2 | 000 2020 | | - D | |
| Table 1b.Guinea-Bissau: Sensitivity Analysis for Key Indicators of Public a (In percent) | | Juarantee | d Externa | al Debt, 2 | 2009-2025 | (continu | ied) | |
| Debt service-to-exp | orts ratio | | | | | | | |
| Baseline | 14 | 9 | 11 | 10 | 13 | 13 | 14 | 6 |
| A. Alternative Scenarios A1. Key variables at their historical averages in 2009-2029 1/ | 14 | 9 | 10 | 9 | 12 | 11 | 11 | 3 |
| A2. New public sector loans on less favorable terms in 2009-2029 2 | 14 16 | 9 16 | 11 2 | 11 | 14 | 14 | 14 | 6 |
| A3. HIPC completion point attained in 2010 B. Bound Tests | 10 | 10 | 2 | 2 | 2 | 2 | 3 | , v |
| B1. Real GDP growth at historical average minus one standard deviation in 2010-2011 | 14 | 0 | 11 | 10 | 13 | 13 | 14 | 6 |
| B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/ | 14 | 11 | 18 | 18 | 23 | 23 | 25 | 11 |
| B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011 B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/ | 14 14 | 9 9 | 11 | 10 10 | 13 13 | 13 13 | 14 14 | 6 6 |
| B5. Combination of B1-B4 using one-half standard deviation shocks B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/ | 14 14 | 9 9 | 12 11 | 12 10 | 16 13 | 15 13 | 17 14 | 7 6 |
| | | | | | | | | |
| Debt service-to-reve | anue ratio | 17 | 21 | 21 | 27 | 25 | 27 | |
| Baseline A. Alternative Scenarios | 51 | 17 | 21 | 21 | 21 | 25 | 21 | 11 |
| A Anternative Scenarios | 31 | 16 | 20 | 19 | 24 | 22 | 20 | 5 |
| A2. New public sector loans on less favorable terms in 2009-2029 2 A3. HIPC completion point attained in 2010 | 31 36 | 17 31 | 20 22 5 | 22 5 | 28 5 | 27 4 | 27 5 | 12 0 |
| B. Bound Tests | | | | | | | | |
| B1. Real GDP growth at historical average minus one standard deviation in 2010-2011 B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/ | 31 31 | 17 17 | 23 22 | 23 22 | 29 27 | 28 26 | 29 28 | 12 12 |
| B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011 | 31 | 18 | 24 | 24 | 30 | 29 | 31 | 12 |
| B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/ B5. Combination of B1-B4 using one-half standard deviation shocks | 31 31 | 17 17 | 21 23 | 21 23 | 27 30 | 26 28 | 27 30 | 11 13 |
| B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/ | 31 | 23 | 30 | 29 | 37 | 36 | 38 | 15 |
| Memorcandum item: Grant element assumed on residual financing (i.e., financing required above baseline) 6/ | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |
| 0 (, | - | | | | | | | |

Source: Staff projections and simulations.

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 FDL. 5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent. 6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

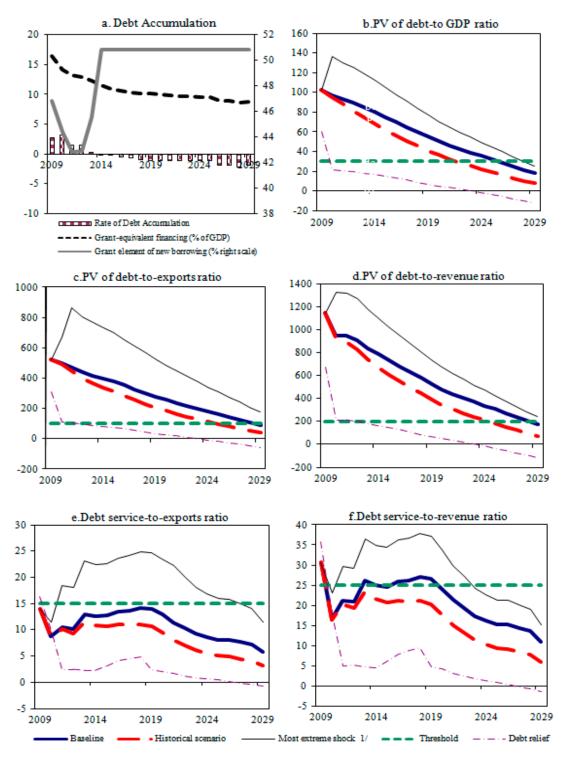


Figure 1a. Guinea-Bissau: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2009-2029 1/

Source: Staff projections and simulations.

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

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.
 Revenues excluding grants.
 Debt service is defined as the sum of interest and amortization of medium and long-term debt.
 Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

| -15.6 -15.6 3.1 16.0 6.1 6.1 8.1 -18.1 -8.3 | | 0.FC1 | | | | | | 1.001 | | | | | | |
|---|-------|-------------|------|------------|------------|------------------|-----------|-----------|-----------|------------|----------|------------------|-------|------|
| -15.6 -16.4 3.1 16.0 15.0 6.1 19.0 -18.1 -18.1 -18.1 -2.5 2.5 2.5 2.5 | 0 00 | | | | | | | | | 716 | | 1.00 | 10.01 | |
| -16.4 3.1 16.0 6.1 6.1 19.0 -18.1 -18.1 -18.1 -2.5 -2.5 -2.5 | K.C7- | <u>6.6-</u> | | | -11.8 | -12.0 | | ÷. | | 7.8 | | -5.1 | -3.9 | |
| l grants 3.1 (grants 16.0 routs 6.1 interest) expenditure 6.1 t dynamics -18.1 from interest rate growth differential -8.3 construction for an environment of 5.5 construction for an environment of 5.5 | -22.9 | -11.6 | | | -14.8 | -10.9 | | | | 5.4 | | -3.7 | -11 | |
| 16.0 6.1 6.1 19.0 18.1 strate/growth differential -8.3 strate/growth differential -8.3 | 3.4 | 1.6 | 2.8 | 1 5 | -1.8 | 1.8 | | | | 0.5 | 0.4 | 1.2 | 1.6 | 1 |
| 6.1 benditure 19.0 -18.1 st rate/growth differential -8.3 st rate/growth differential -8.3 | 16.2 | 17.2 | | | 24.3 | 23.1 | | | | = | | 20.2 | 20.2 | |
| benditure 19.0 -18.1 -18.1 -8.3 foom moments and interesting 2.5 | 8.2 | 8.1 | | | 153 | 12.8 | | | | 6.0 | | 9.7 | 9.7 | |
| -18.1 -18.1 -8.3 -6.000000000000000000000000000000000000 | 19.6 | 18.8 | | | 22.5 | 24.9 | | | | 1.6 | | 21.4 | 21.8 | |
| -8.3 2.5 | -24.6 | -11.9 | | | -11.6 | 9.6- | | | | 5.9 | | -5.0 | -2.6 | |
| anto 2.5 | -5.0 | -10.4 | | | -7.5 | 0.6- | | | | 7.0 | | -5.0 | -2.6 | |
| C.C- and | 4.4 | 42 | | | -2.5 | -3.6 | | | | 1.4 | | 6 .0- | -0.6 | |
| -4.8 | -0.7 | -6.2 | | | -5.0 | -5.4 | -6.2 | -6.1 | -6.0 | -5.5 | | -4.0 | -2.1 | |
| T.9- | -19.6 | -1.6 | | | 4.0 | -0.6 | | | | = | | 1 | 1 | |
| | -1.7 | -13 | | | -15 | -3.1 | | | | 0.0 | | 0.0 | 0.0 | |
| 0.5 | -0.1 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 | 0.0 | |
| igent liabilities 0.0 | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 | 0.0 | |
| | -1.6 | -13 | | | <u>-15</u> | -3.1 | | | | 0.0 | | 0.0 | 0.0 | |
| | 0.0 | 0.0 | | | 0.0 | 0.0 | | | | 0.0 | | 0.0 | 0.0 | |
| 0.7 | -1.0 | 1.7 | | | 3.0 | ų. | | | | 25 | | -13 | -2.8 | |
| Other Sustainability Indicators | | | | | | | | | | | | | | |
| 40.1 | 39.6 | 143.6 | | | 135.1 | | | | | 0.1 | | 78.5 | 44.5 | |
| denominated 0.0 | 00 | 105.6 | | | 100.6 | 883 | 643 | 906 | 859 8 | 813 | | 55.9 | 18.6 | |
| A | | 105.6 | | | 100.6 | | | | | | | 55.0 | 18.6 | |
| I | : | | | | | | | | | 3 | | | | |
| mues (not included in public sector debt) | 1 | 1 | | | | | | | | : : | | | | |
| 19.8 | 117 | 24.4 | | | | | | | | ÷. | | 18.1 | 20.8 | |
| in percent) 250.9 | 244.4 | 834.0 | | | | | | | | 2 | | \$9.5 | 220.3 | |
| r debt-to-revenue ratio (in percent) 407.4 | 494.0 | 1574.9 | | | 1508.7 | 1239.9 1 | 1223.0 11 | 1162.1 10 | 1049.4 97 | 976.2 | | 747.8 | 421.8 | |
| | : | 1158.2 | | | | | | | | 6.1 | ` | 32.8 | 175.9 | |
| percent) 4/ 15.8 | 33.7 | 25.2 | | | | | | | | 4.1 | | 16.7 | 7.6 | |
| | 68.1 | 47.5 | | | | | | | _ | 9.2 | | 32.1 | 14.6 | |
| | 27.2 | 11.5 | | | | | | | _ | 8.4 | | 6.3 | 5.5 | |
| Key macroeconomic and fiscal assumptions | | | | | | | | | | | | | | |
| | 0.3 | 3.5 | 2.6 | 3.0 | 3.0 | 3.5 | 43 | | | 4.7 | 4.1 | 4.5 | 4.5 | 4.5 |
| Average nominal interest rate on forex debt (in percent) 0.9 | 15 | 1.6 | 1.4 | 0.3 | -0.1 | 0 .0- | 0.4 | | 0.8 | 0.8 | 0.2 | 0.7 | 0.4 | 0.7 |
| | -5.3 | -9.2 | -1.6 | 5.3 | T. | -2.2 | -1.8 | | | <u>1</u> 5 | -1.6 | -0.3 | 6.0- | -0.7 |
| | -12.0 | -12 | 4.5 | 7.8 | -3.1 | 1 | ł | | | 1 | ł | ł | ł | ł |
| | 5.9 | 10.6 | 2.8 | 4.9 | Π | 2.4 | 2.1 | | | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 |
| | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Grant element of new external borrowing (in percent) | : | - | | | 46.9 | 44.4 | 42.8 | | | 6.0 | 45.6 | 50.9 | 50.9 | ł |

2015-29 Average

2029

Projections 2009-14 2014 Average 2019

2013

2012

2011

2010

2009

Standard Deviation

Average

2008

2006

Actual 2007

Table 2a. Guinea-Bissau: Public Sector Debt Sustainability Framework, Baseline Scenario, 2006-2029

(In percent of GDP, unless otherwise indicated)

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Table 2b.Guinea-Bissau: Sensitivity Analysis for Key Indicators of Public Debt 2009-2029

| | | | | Proje | ections | | | |
|---|------------|------------|------------|------------|------------|------------|-----------|------|
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2019 | 2029 |
| PV of Debt-to-GDP Ratio | | | | | | | | |
| Baseline | 135 | 127 | 121 | 115 | 106 | 100 | 78 | 4 |
| A. Alternative scenarios | | | | | | | | |
| A1. Real GDP growth and primary balance are at historical averages | 135 | 129 | 127 | 125 | 120 | 118 | 109 | 8 |
| A2. Primary balance is unchanged from 2009 | 135 | 124 | 115 | 107 | 97 | 88 | 55 | |
| A3. Permanently lower GDP growth 1/ | 135 | 128 | 123 | 117 | 110 | 104 | 87 | 6 |
| A4. HIPC completion point attained in 2010 | 135 | 50 | 46 | 43 | 38 | 35 | 19 | |
| B. Bound tests | | | | | | | | |
| B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011 | 135 | 133 | 133 | 127 | 118 | 112 | 93 | (|
| B2. Primary balance is at historical average minus one standard deviations in 2010-2011 | 135 | 130 | 126 | 120 | 112 | 105 | 83 | 4 |
| B3. Combination of B1-B2 using one half standard deviation shocks | 135 | 132 | 132 | 126 | 117 | 111 | 90 | |
| B4. One-time 30 percent real depreciation in 2010 | 135 | 169 | 160 | 153 | 142 | 135 | 106 | (|
| B5. 10 percent of GDP increase in other debt-creating flows in 2010 | 135 | 137 | 130 | 124 | 115 | 108 | 86 | 1 |
| PV of Debt-to-Revenue Ratio | o 2/ | | | | | | | |
| Baseline | 557 | 551 | 549 | 529 | 493 | 473 | 390 | 2 |
| A. Alternative scenarios | | | | | | | | |
| A1. Real GDP growth and primary balance are at historical averages | 557 | 557 | 567 | 560 | 539 | 533 | 495 | 3 |
| A2. Primary balance is unchanged from 2009 | 557 | 537 | 523 | 492 | 448 | 417 | 271 | |
| A3. Permanently lower GDP growth 1/ A4. HIPC completion point attained in 2010 | 557 576 | 553 215 | 553 211 | 535 198 | 501 175 | 484 164 | 418 92 | 2 |
| B. Bound tests | | | | | | | | |
| B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011 | 557 | 562 | 575 | 558 | 525 | 508 | 442 | 2 |
| B2. Primary balance is at historical average minus one standard deviations in 2010-2011 | 557 | 561 | 574 | 554 | 517 | 497 | 413 | 2 |
| B3. Combination of B1-B2 using one half standard deviation shocks | 557 | 563 | 581 | 562 | 528 | 510 | 437 | 28 |
| B4. One-time 30 percent real depreciation in 2010 | 557 | 731 | 729 | 703 | 661 | 638 | 527 | 3. |
| B5. 10 percent of GDP increase in other debt-creating flows in 2010 | 557 | 591 | 591 | 570 | 534 | 514 | 429 | 2: |
| Debt Service-to-Revenue Rat | io 2/ | | | | | | | |
| Baseline | 15 | 17 | 11 | 11 | 18 | 14 | 17 | |
| A. Alternative scenarios | | | | | | | | |
| A1. Real GDP growth and primary balance are at historical averages | 15 | 17 | 12 | 13 | 22 | 19 | 24 | |
| A2. Primary balance is unchanged from 2009 | 15 | 17 | 11 | 6 | 13 | 7 | 5 | - |
| A3. Permanently lower GDP growth 1/ | 15 | 17 | 11 | 11 | 19 | 15 | 19 | |
| A4. HIPC completion point attained in 2010 | 15 | 15 | 4 | 4 | 4 | 4 | 4 | |
| B. Bound tests | | | | | | | | |
| 81. Real GDP growth is at historical average minus one standard deviations in 2010-2011 | 15 | 17 | 12 | 12 | 20 | 17 | 21 | |
| B2. Primary balance is at historical average minus one standard deviations in 2010-2011 | 15 | 17 | 12 | 15 | 24 | 16 | | |
| B3. Combination of B1-B2 using one half standard deviation shocks | 15 | 17 | | 14 | 23 | 17 | | |
| B4. One-time 30 percent real depreciation in 2010 | 15 | 18 | | 16 | 25 | 21 | 27 | |
| B5. 10 percent of GDP increase in other debt-creating flows in 2010 | 15 | 17 | 13 | 25 | 21 | 20 | 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 square root of the length of the projection period.

2/ Revenues are defined inclusive of grants.

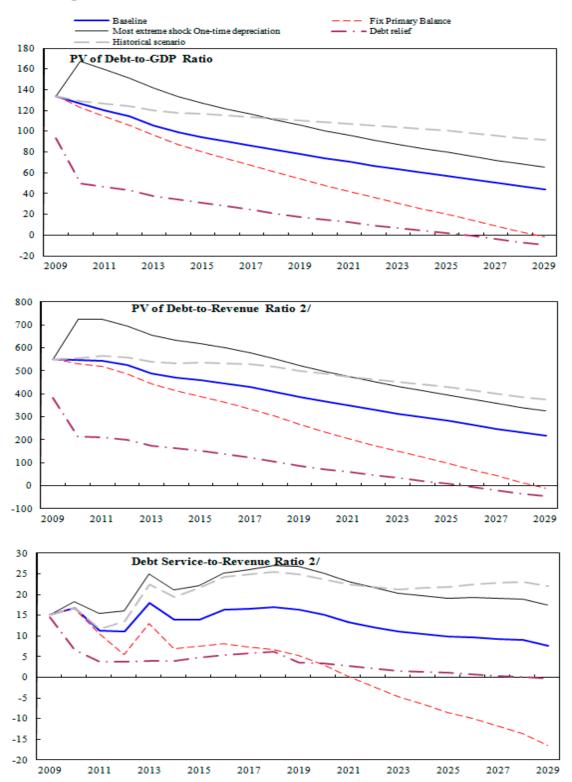


Figure 2a. Indicators of Public Debt Under Alternative Scenarios, 2009-2029 1/

Sources: Country authorities; and Fund 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.