DEBT MANAGEMENT OFFICE
NIGERIA

REPORT OF THE ANNUAL NATIONAL DEBT SUSTAINABILITY ANALYSIS (DSA)

2011

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EXECUTIVE SUMMARY

The 2011 Debt Sustainability Analysis (DSA) workshop was carried out between 3rd and 13th of May, 2011. The DSA was conducted by the DMO in collaboration with representatives from the:

- Federal Ministry of Finance (FMF);
- Central Bank of Nigeria (CBN);
- National Planning Commission (NPC);
- Budget Office of the Federation (BOF); and
- National Bureau of Statistics (NBS).

The West African Institute for Financial and Economic Management (WAIFEM) provided technical support.

The exercise was conducted using the updated World Bank/IMF Debt Sustainability Framework (DSF) template for Low Income Countries (LICs)--DSF LIC Template - released in February, 2011. Under the World Bank Country Policy and Institutional Assessments (CPIA) index, Nigeria is classified as a Medium Performer, with a rating of 3.44 points.

A landmark achievement is the inclusion of States' debt data in the 2011 year's DSA[1] . Thus, total public debt in this report refers to both domestic and external debts of the Federal and State Governments of Nigeria except where it is indicated otherwise.

Annual historical and projected macroeconomic debt data were utilized in the conduct of this year's DSA as in the preceding years. The purpose of the DSA include, amongst others, to:

i) provide an update of the preceding year's DSA;
ii) identify government's new borrowing requirements and funding options;
iii) provide inputs into the 2012 - 2014 Medium Term Expenditure Framework (MTEF);
iv) make recommendations on how to improve public finance management; and
v) provide a training platform for debt managers.

Three Scenarios (Baseline, Optimistic and Pessimistic) were designed: The Baseline Scenario applied the approved key parameters of the 2011 Federal Budget; the Optimistic Scenario evaluated debt sustainability within the context of Vision 20:2020; while the Pessimistic Scenario assumed some extreme shocks on key macroeconomic indices of Nigeria's economy. The key macroeconomic assumptions for the different scenarios are stated hereunder:

The Baseline Scenario

I) Average GDP Growth Rate: This is projected to grow at a rate of 7% for 2011, and an average of 7.6% for 2012-2030. It will be driven mainly by the non-oil sector, with agriculture playing a leading role.

ii) Inflation Rate: A double digit rate of 11.5% is used for 2011, while a single digit rate of 9.54% applies to the remaining projection period of 2012-2030.

iii) Average Oil Price: Oil price is assumed to be US$65pb for 2011, and an average of US$70pb over 2012-2030.

[1] Twenty-two State Governments debt data were actual while the remaining (14 plus Abuja) were staff estimates

iv) Crude Oil Production: Estimated at 2.3mbpd for 2011, and an average of 2.4mbpd for 2012-2030. This is anchored on the continued effective implementation of the Federal Government's amnesty programme for the Niger Delta region, and the successful implementation of the Petroleum Industry Bill (PIB) when passed.

v) Budget Deficit for the Federal Government: Projected at 2.96% of GDP in 2011, average of 1.28% over 2012 -2020, and 0.26% for 2021-2030.

vi) Consolidated State Governments Deficit/GDP Ratio: Projected to rise by 0.5% in 2011, and to average 0.25% and 0.44% for 2012-2020 and 2021-2030, respectively.

Under the Baseline Scenario, the DSA shows that the present value (PV) of the debt-to-GDP, debt-to-exports and debt-to-revenue ratios of external debt did not violate the thresholds throughout the projection period. Similarly, the debt service-to-export and debt service-to-revenue ratios were maintained below the thresholds within the projection period (Box 4). In addition, the debt-burden indicators remain well below the thresholds for 2011 - 2030. Specifically, the PV of total (Federal and States external and domestic) debt-to-GDP ratio stood at 25.7% in 2011, and thereafter, fell over the rest of the projection period to just 2% up to 2030 (Box 6).

The Optimistic Scenario

i) Average GDP Growth Rate: Assumed a real GDP growth rate of 10.9% for 2011, and 13.4% over 2012-2030. Growth is to be driven mainly by the non-oil sector, particularly, manufacturing and the services Sectors.

ii) Inflation Rate: A single digit rate of 9% for 2011, and an average of 6.8% over 2012-2030 were used for the analysis.

iii) Oil Price: Projected to average US$86.67pb in 2011, and range between US$75- US$86.67pb over 2012-2030.

iv) Crude Oil Production: Assumed 2.3mbpd for 2011, and an average of 3.4mbpd over 2012-2030.

v) Budget Deficit of the Federal Government: Estimated at 3.62% of the GDP in 2011, an average of 1.11% over 2012-2020, and 0.16% for 2021-2030.

vi) Consolidated State Governments Deficit to GDP Ratio: Projected to rise by 5.3% in 2011, and to average 1.57% and 0.18% for 2012-2020 and 2021-2030, respectively.

The optimistic scenario, including the standardized stress tests shows relatively robust results. The total debt-to-GDP ratio dropped from 25.6% in 2012 to 6.8% for 2030. These are well below the 40% threshold. The PV of debt-to-revenue ratio also remained sustainable, except in 2012 when the ratio briefly exceeded the target of 250% by 400 basis points. The PV of debt to revenue ratio fluctuated in 2012 through 2023, (three years after the terminal date of Nigeria Vision 20:2020) after which it moved steadily downward. The relatively high debt-to-revenue ratio is attributed to the huge financial resources required to fund Nigeria's Vision 20:2020, the bulk of which is expected to be through debt.

The Pessimistic Scenario

i) Average GDP Growth Rate: Assumed a real growth rate of 4.5% in 2011, and 3.9% for 2012-2030. It is also assumed that the collapse of Government's amnesty programme for Niger Delta militants will renew hostilities in the region, and lead to drop in oil output.

ii) Inflation Rate: Projected at 15% for 2011; and an average of 18% over 2012-2030.

iii) Oil Price: A conservative price of US$42.5pb was used for the whole of 2011- 2030. This is based on the assumption that the crisis in the Middle-East would abate, and thereby, help the region to increase oil supply to the market to levels that more than compensate for shortfall(s) in output that may arise in the event that hostilities in the Niger Delta region of the country re-emerges. In addition, it is taken that global oil supply would exceed demand causing prices to fall, and that OPEC will not be able to regulate supply to the market effectively.

iv) Crude Oil Production: This is projected at 2.3mbpd for 2011, and an average of 1.7mbpd over 2012-2030 in the event that global economic growth relapses to 2007 and 2008 levels.

v) Budget Deficit for the Federal Government: Projected at 3.62% in 2011, average of 4.02% over 2012-2020 and 1.04% from 2021 through 2030.

vi) Consolidated State Governments Deficit to GDP Ratio: It is assumed to rise by 5% in 2011, and average 4.93% and 2% for 2012-2020 and 2021-2030, respectively.

The pessimistic scenario proceeds from the premise that the fiscal position of the government will be weak. In the absence of an appropriate fiscal policy response to a prolonged oil price shock, government spending is expected to deplete foreign reserves. As a result, the country's public debt-to-GDP ratio will be 21.7%, 17% and 9.9% in 2011, 2012 and 2013, respectively and thereafter, drop to 0.9% up to 2030. The total debt service-to-revenue ratio is projected to fluctuate substantially in the first half of the programme period to 32.9% by 2021, and then drop steadily by more than half to 14.5% up to 2030. The breaching of the 30% global benchmark in the early years of the projection period is due to the current account deficit occasioned by low oil prices on Federal revenue coupled with the delay in developing other sources of revenue. These, notwithstanding, the outcome of the pessimistic scenario showed that Nigeria's debt profile remained robust and are within global thresholds.

Key Recommendations

Nigeria is currently at a low risk of debt distress. In order to sustain this position, additional policy initiatives are recommended as follows:

i) Nigeria's Country-Specific debt-burden indicator threshold of 25% Debt to GDP ratio for total public debt set for 2010-2014, relative to the recommended international threshold of 40% for Medium Performers, should be sustained.

ii) Since the FGN alone cannot fund the infrastructural projects and programmes under the Vision 20:2020 given the huge size of capital outlay (N6.7 trillion 2010-2013)[2] required, there is need to expand the sources of funding in order to maintain debt sustainability. The DMO is fine-tuning a framework for the issuance of Sovereign Guarantee to private sector corporates to enable them undertake the development of commercially viable, national priority projects in the country, and relieve the government of the need to borrow to fund such projects.

iii) Government's contingent liabilities outstanding as at end 2010 was N2.59 trillion[3] or 8.86% of GDP. This is projected to rise to 9.16 % of GDP in 2011, and should be kept at not more than 15% of GDP over 2011-2020, so that the consolidated total public and publicly guaranteed debt-to-GDP ratio does not exceed the 40% international threshold.

iv) The N3.0 trillion FGN securities (AMCON Bonds) maturing in 2011 through 2013 have inherent

[2] NPC report at the July 16 2010 meeting with the Vice President on funding of infrastructure development programmes

[3] See Table 6.2 page 45 for the analysis of the component parts of total CL

refinancing risks. The DMO would have to employ the strategies of debt buy-back and Switching to help the refinancing risks.

v) In addition, the FGN would be encouraged to introduce Sinking Funds for new issuances of FGN Bonds to minimise future redemption and refinancing risks of maturing obligations.

vi) Under the Optimistic Scenario, Nigeria could borrow up to US$9.5 billion[4] in 2012. This was, however, considered to be too ambitious in view of the assumptions under which the simulations were undertaken vis-à-vis the prevailing local and global economic conditions. It was, therefore, deemed appropriate to estimate the borrowing limit for 2012 within the context of the Country-Specific Debt to GDP threshold of 25% prescribed for 2010-2014 and utilise part of the available borrowing space left at the end of 2011. It is expected that the debt to GDP ratio will reach 22.2% by end 2011, thereby leaving a borrowing space of 2.8% for the next three years.

The module of Country-Specific threshold versus available borrowing space gave rise to a more realistic borrowing estimate of US$2.25 billion for 2012. This is expected to be sourced in the proportion of 60:40, that is, $1.35 billion (N208.31bn) and US$0.90 billion from domestic and external sources, respectively. Furthermore, it was considered appropriate to discount the amount allocated to the domestic market in view of the refinancing cost of maturing domestic debt obligations, gloomy global economic outlook, and new debt management initiatives being put in place to encourage private sector corporates to undertake the development of commercially viable, critical national priority projects, in line with the transformation agenda of the present administration. In the final analysis, the borrowing limit for 2012 is estimated at N186.14 billion and $0.90 billion for domestic and external sources, respectively. This will add a marginal increase of 0.87% to debt to GDP ratio of 22.2% expected by end-2011, to attain a new debt/GDP ratio of 23.07% at the end of 2012 in order to remain within the Country-Specific threshold of 25% and also leave some borrowing space for 2013 and 2014.

[4] Total public debt in the optimistic scenario is programmed to increase from US$47.9 billion in 2011 to US$57.4 billion in 2012.

CHAPTER ONE

INTRODUCTION

The DMO, in accordance with its key mandate, conducted the nation's 2011 annual DSA in line with the WB/IMF DSF. The exercise was carried out between May 3 and 13, 2011, using the updated DSF LIC Template released by WB/IMF in February, 2011. Nigeria retained her classification as a Medium-Performer Country under the CPIA index with a score of 3.44, which has remained stable for three consecutive years. The 2011 DSA was a marked improvement over the previous years' exercises due to the availability of States' debt data that were combined with those of the Federal to present a broad-based analysis. The reduction in large errors and omissions in the balance of payment also helped to strengthen the integrity of the results reported in the analysis.

This year's exercise was conducted when Nigeria is expected to record an all-time high real GDP growth rate of about 7.8%, the highest in the last five years. Thus, the challenge is how to sustain the impressive performance going forward without undermining debt sustainability. Against this background, the 2011 DSA was designed with the following broad objectives:

(i) proffer policy advice for improving public finance management;
(ii) identify government's new borrowing requirements and funding options;
(iii) provide input into the 2012-2014 Medium Term Expenditure Framework (MTEF);
(iv) update the 2010 DSA by incorporating the main thrust of the 2011 budget; and
(v) provide a training platform for debt managers.

As in the preceding years, the DSA employs macroeconomic indicators and debt data to assess the country's debt sustainability in relation to global thresholds. The DSA assessed the current and future debt ratios with a view to finding measures that could be employed to minimise the debt burden. This year's DSA recommends the intensification of the Public Private Partnership (PPP) and a new financing option i.e. issuance of government guarantee to private sector corporates to enable them undertake key growth-inducing, commercially viable, capital-intensive national priority projects, and thereby relief the government of the need to borrow to fund such projects. To ensure a robust framework for debt sustainability, three scenarios were utilized to analyse the challenges and opportunities under different assumptions. These assumptions are the continuation of existing policies and programmes (Baseline), the worse case (Pessimistic) and the more ambitious (Optimistic) scenarios. The Baseline Scenario adopts the 2011 fiscal budget. The Pessimistic Scenario is based on perceived shocks in key macroeconomic variables, e.g. oil prices, exchange rates, and inflation rates. While the Optimistic Scenario is designed within the context of Nigeria's Vision 20: 2020 assumptions.

The scope of this year's DSA has been expanded to cover both the external and domestic debts of the Federal and State Governments following the availability of debt data of the sub-nationals[5] while, the large errors and omissions in the balance of payments in previous analysis have been reduced to improve the overall quality of the Report.

The remaining chapters of this Report is structured as follows: Chapter Two reviews the recent developments in the global economic environment and the Nigerian economy; Chapter Three analyses the debt portfolio of the country; Chapter Four outlines the scenario assumptions; Chapter Five reviews the results; Chapter Six is the risk analysis of the public debt portfolio; while Chapter Seven contains the conclusion and recommendations.

[5] NPC report at the July 16 2010 meeting with the Vice President on funding of infrastructure development programmes

RECENT MACROECONOMIC DEVELOPMENTS

The global economic environment was relatively stable in 2010 when compared with the recessionary shocks experienced in the preceding year. After the 0.6 per cent contraction in 2009, global real output grew by about 5.0 per cent in 2010, owing largely to a stronger than expected growth in many emerging economies in the second half of 2010. This followed improvement in domestic demand, trade, the unprecedented macroeconomic policy stimulus, and other financial stabilization measures put in place during the period.

Nigeria's GDP expanded further from the 7% recorded in 2009 to 7.86% in 2010, which is the highest in the last five years. In nominal terms, the GDP increased from N24.79 trillion in 2009 to N29.21 trillion in 2010, indicating a GDP per capita of N183,351.30, or US$1,219.90 in 2010, as against N160,637.0 or $1,073.80 in 2009. This translated into an improvement in Nigeria's ranking from the 44th position in 2009 to the 41st position in 2010 in the global GDP index published by IMF.

A detailed breakdown of the growth recorded in 2010 reveals that the oil and non-oil sectors grew by 5% and 8.5%, respectively, compared with 0.5% and 8.3% in 2009. The performance in the non-oil sector was driven by improved agricultural production, which grew by 5.7% owing to favourable weather conditions, improved supply of inputs, as well as, the impact of various tiers of government intervention programmes and policies. Other drivers of growth were sustained increase in investment in infrastructure, increased building and construction activities across the country and continued expansion in the telecommunications sub-sector, amongst others. The recovery in the oil sector was attributable mainly to the successful implementation of the Federal Government's amnesty programme for militants in the Niger Delta region of the country.

Average headline inflation rate rose to 13.5% in 2010, from 12.6% recorded in 2009; while the year-on-year rate dropped from 13.9% in December 2009 to 11.8% in December 2010. The decline was due partly to increased agricultural output, which helped to increase food supply during the year.

The primary deficit of the Federal Government as a percentage of GDP was 2.4% in 2010, which was marginally higher than the 2.3% for 2009. The overall fiscal operations of the Government also ended in a bigger deficit of 3.8% of GDP in 2010, compared with 3.3% for 2009. The fiscal out-turn, however, remained within the 4% target of the West African Monetary Zone (WAMZ). The deficit was financed mainly through issuance of debt securities in the domestic and international capital markets.

In broad terms, Federal Government's fiscal operations in 2010 were anchored on an oil price-fiscal rule and the Fiscal Responsibilities Acts, 2007. In addition, Government in 2010 commenced the process of putting in place a robust institutional framework for a more sustainable fiscal policy management, which led to the passage of the Nigerian Sovereign Investment Authority Act, 2011. The Act seeks to effectively utilize the fund accruing from sale of crude oil above the Budget benchmark by channelling it into a Future Generations Fund, Nigeria Infrastructure Fund, and a Stabilisation Fund.

The overall balance of payments showed a deficit of N1,491.5 billion or 5.2% of GDP, despite the rise in crude oil prices in the international market. This was attributed to the increase in imports coupled with the relative drop in remittances from Nigerians in Diaspora. The stock of external reserves amounted to US$32.33 billion end December, 2010, which could finance 7.8 months of imports as against the stipulated international benchmark of 3 months. On the average, the Naira depreciated both at the Wholesale Dutch Auction System (WDAS) and the inter-bank market, but appreciated at the Bureaux de Change (BDC) market. Consequently, the premium between WDAS/inter-bank and WDAS/BDC rates narrowed from 1% and 8.6% in 2009 to 0.5% and 1.8% in 2010, respectively.

Broad money supply, represented by M2 grew by 6.7% in 2010, much lower than the 29.3% benchmark growth rate for the fiscal year, and the 17.5% growth recorded in 2009. The slow-down in money supply was largely driven by the decline in foreign assets net of the banking system.

The Central Bank of Nigeria (CBN) in 2010, sustained the reforms in the Nigerian banking sector. The reforms include the categorization of banks into International, National and Regional Banks to offer commercial, merchant and specialized banking services. The Asset Management Corporation of Nigeria (AMCON) was also set up to manage the non-performing loans in the banking system. Reforms in the Nigerian capital market also got a boost as efforts to enhance efficiency and investor confidence were stepped up through the strengthening of the arbitration Committee of the Nigerian Stock Exchange (NSE), reconstitution of the Board and Management of the NSE, and the enforcement of rules and regulations on financial reporting by quoted companies listed on the NSE by the Securities and Exchange Commission (SEC).

CHAPTER THREE

PUBLIC DEBT PORTFOLIO REVIEW

3.1 TOTAL PUBLIC DEBT OUTSTANDING

The total public debt stock (external and domestic debt of the Federal and State Governments) of Nigeria stood at US$40,100.00 million at the end of December 2010 compared with US$25,817.42 million (Federal only) in 2009 (Table 3.1). Out of the total stock for 2010, the domestic debt stock of the Federal Government's was US$30.51 billion or 76.10%, while the Sub-nationals had US$5.00 billion or 12.48%. The balance of US$4.58 billion or 11.42% represents the external debt of the Federation as at that date. This meant that domestic debt was $35.52 billion or 88.58% of the total debt stock, while the external debt component was $4.58 billion or 11.42% (Table 3.1).

TABLE 3.1: TOTAL PUBLIC DEBT OUTSTANDING, 2006-2010 (US$ MILLION)

Debt Category	2006	2007	2008	2009	2010
External Debt (% of share total)	3,544.49 (20.43)	3,654.21 (16.44)	3,720.36 (17.39)	3,947.30 (15.29)	4,578.77 (11.42)
Federal Domestic Debt Service (% of share total)	13,805.20 (79.57)	18,575.67 (83.56)	17,678.55 (82.61)	21,870.12 (84.71)	30,514.33 (76.10)
States Domestic Debt Service (% of share total)	NA -	NA -	NA -	NA -	5,006.90 (12.48)
TOTAL	**17,349.69**	**22,229.88**	**21,398.91**	**25,817.42**	**40,100.00**

Nigeria's total public debt increased from US$25,817.42 million or 15.50% of GDP in 2009 to US$40,100.00 million or 20.64% of GDP in 2010. The increase was due to the rise in the domestic debt component of the Federal Government, and the inclusion of the State Governments' domestic debt in the overall debt portfolio.

3.2 TOTAL PUBLIC DEBT SERVICE PAYMENTS

Total public debt service payments (external and domestic debt service of the Federal Government) amounted to US$2,728.40 million[6] in 2010 as against US$2,335.49 million in 2009, an increase of US$392.91 million or 16.82%. With the inclusion of domestic debt service payments of State Governments, the total public debt service payments (external and domestic debt service of the Federal and State Governments) for the year 2010 amounted to US$4,153.34 million (Table 3.2). Of the total debt service payments, 91.47% was used for domestic debt service payments while the balance of 8.53% went to external debt service payments.

TABLE 3.2: TOTAL PUBLIC DEBT SERVICE PAYMENTS, 2006-2010 (US$ MILLION)

Type	2006	2007	2008	2009	2010
External Debt (% of share total)	6,729.20 (83.67)	1,022.04 (32.09)	464.63 (11.46)	428.04 (18.33)	354.42 (8.53)
Federal Domestic Debt Service (% of share total)	1,313.70 (16.33)	2,162.91 (67.91)	3,590.67 (88.54)	1,907.45 (81.67)	2,373.98 (57.16)
States Domestic Debt Service (% of share total)	NA -	NA -	NA -	NA -	1,424.94 (34.31)
TOTAL	**8,042.90** (100)	**3,184.95** (100)	**4,055.30** (100)	**2,335.49** (100)	**4,153.34** (100)

[6] Official CBN Exchange Rate of N149.17/US$1 for 2010 as at 31/12/10. Domestic Debt Service for 22 States were based on actual figures, while for 14 States, they were derived based on historical trend and indexation to the annual growth rates.

3.3 EXTERNAL DEBT STOCK

External debt outstanding rose from US$3,947.30 million in 2009 to US$4,578.77 million at the end of 2010, with multilateral debts constituting 92.12% of the sum, as against 88.78% in 2009 (Table 3.3). The increase of US$631.47 million or 16.00% in 2010 was due to the additional disbursement on existing loans and the exchange rate variations over the period. States' external debt component was 43.70% of the total outstanding at the end of 2010. The bulk of the existing external debts were in fixed interest rates instruments.

TABLE 3.3: TOTAL PUBLIC EXTERNAL DEBT OUTSTANDING, 2006-2010 (US$ MILLION)

CREDITOR CATEGORY	2006	2007	2008	2009	2010
A. Official:					
1. Bilateral					
Non-Paris Club	326.08	184.90	182.42	181.60	163.20
2. Multilateral	2,608.30	3,080.91	3,172.87	3,504.51	4,217.76
Sub-Total	**3,035.48**	**3,265.81**	**3,355.29**	**3,686.11**	**4,380.96**
B. Private:					
1. Promissory Notes	509.01	0.00	0.00	0.00	0.00
2. Other Commercial	101.10	388.40	365.07	261.19	197.81
Sub-Total	**509.01**	**388.40**	**365.07**	**261.19**	**197.81**
Grand Total	**3,544.49**	**3,654.21**	**3,720.36**	**3,947.30**	**4,578.77**
PERCENTAGE SHARE					
A. Official:					
1. Bilateral					
Non-Paris Club	9.20	5.06	4.90	4.60	3.56
2. Multilateral	73.59	84.31	85.28	88.78	92.12
Sub-Total	**85.64**	**89.37**	**90.19**	**93.38**	**95.68**
B. Private:					
1. Promissory Notes	14.36	0.00	0.00	0.00	0.00
2. Other Commercials	2.85	10.63	9.81	6.62	4.32
Sub-Total	**14.36**	**10.63**	**9.81**	**6.62**	**4.32**
Grand Total	**100.00**	**100.00**	**100.00**	**10.00**	100.00

3.4 TOTAL PUBLIC EXTERNAL DEBT SERVICE PAYMENTS

External debt service payments in 2010 amounted to US$354.42million. Of this amount, the share of the State Governments was 42.17%, while the balance of 57.83% was the external debt service payments of the Federal government for the year.

Table 3.4: TOTAL PUBLIC EXTERNAL DEBT SERVICE PAYMENTS, 2006 - 2010 (US$ MILLION)

CREDITOR CATEGORY	2006	2007	2008	2009	2010
A. Official:					
1. Bilateral:					
Paris Club	4,519.87	0.00	0.00	0.00	0.00
Non-Paris Club	25.56	27.48	6.63	12.66	24.18
2. Multilateral	426.62	392.77	380.63	260.52	212.61
Sub-Total	4,972.05	420.25	387.26	273.18	236.79
B. Private:					
1. London Club (Oil Warrants)[1]	1,584.58	102.59	41.72	41.72	41.72
2. Promissory Notes	170.84	476.6	0	0	0
3. Others (including Non-Paris Commercial)	1.60	22.60	35.65	113.13	75.90
Sub-Total	1,757.14	601.79	77.37	154.85	117.62
Grand Total	6,729.20	1,022.04	464.63	428.04	354.41

[1]Payments made from 2008 to 2010 were in respect of Oil Warrants only, as London Club debt was exited in 2006/2007.

3.5 FEDERAL GOVERNMENT'S DOMESTIC DEBT STOCK

Federal Government's securitized total domestic debt outstanding as at end December 2010 amounted to N4, 551.82 billion (Table 3.5). A further breakdown showed that FGN bonds increased from N1,974.93 billion in 2009 to N2,901.60 billion in 2010, while NTBs increased from N797.48 billion in 2009 to N1,277.10 billion in 2010, as a result of the issuance of new NTBs to correct observed structural liquidity pressure in the secondary bond market. The stock of Treasury Bonds fell from N392.07 billion in 2009 to N372.90 billion in 2010, while Development Stocks dropped from N0.52 billion in 2009 to N0.22billion in 2010 (Table 3.5).

TABLE 3.5: OUTSTANDING FGN'S DOMESTIC DEBT BY INSTRUMENTS (₦Bn)

INSTRUMENT	2006	2007	2008	2009	2010
FGN BONDS	643.94	1,186.16	1,445.60	1,974.93	2,901.60
NIGERIAN TREASURY BILLS	695.00	574.92	471.93	797.48	1,277.10
TREASURY BONDS	413.60	407.93	402.26	392.07	372.90
DEVELOPMENT STOCK	0.72	0.62	0.52	0.52	0.22
PROMISSORY NOTE	-	-	-	63.03	-
TOTAL	**1,753.26**	**2,169.63**	**2,320.31**	**3,228.03**	**4,551.82**

3.6 FEDERAL GOVERNMENT'S Domestic Debt Service PAYMENTS

Total Federal domestic debt service payment in 2010 amounted to N354,127.00 million compared with N281,540.13 million in 2009, reflecting an increase of 25.78% (Table 3.6). Service payments for FGN bonds constituted the bulk (65.27%) of the domestic debt service payments in 2010, while the NTBs, the Treasury Bonds and the Development Stock debt service payments took 18.38%, 16.27% and 0.10%, respectively (Table 3.6). The sum of N19,170 million and N300 million was paid as principal on account of Treasury Bonds and Development Stocks, respectively.

TABLE 3.6: TOTAL DOMESTIC DEBT SERVICE PAYMENTS

INSTRUMENTS	2009	2010
FGN BONDS		
Interest	193,787.57	231,112.92
Principal	0.00	0.00
NTBs		
Interest	38,788.79	65,070.20
Principal	0.00	0.00
TREASURY BONDS		
Interest	38,711.12	38,427.63
Principal	10,187.65	19,170.00
DEVELOPMENT STOCKS		
Interest	65.00	46.25
Principal	0.00	300.00
TOTAL	**281,540.13**	**354,127.00**

3.7 COMPOSITION OF STATES' DOMESTIC DEBT BY MATURITY STRUCTURE

The total domestic debt stock of the 36 States of the Federation was N796.19 million in 2010. It comprised 86% of short-term instruments most of which were commercial bank loans and contractors'/pension arrears and 14% of medium and long-termed bonds.

Table 3.7: STATES' DOMESTIC DEBT BY MATURITY STRUCTURE

	2010 (ACTUAL)	2011 (PROJECTED)
SHORT-TERM	684,685,106,586.66	688,389,561,073.58
MEDIUM/LONG-TERM	111,500,000,000.00	239,614,465,179.84
TOTAL	**796,185,106,586.66**	**928,004,026,253.42**
% SHORT-TERM	86%	74%
% MEDIUM/LONG-TERM	14%	26%

Total domestic debt stock of the sub-nationals is projected to rise by 17% to N928.00 million at end-2011, with the share of the short-term debts dropping from 86% in 2010 to 74% in 2011 while the share of the medium and long-termed debts will increase from 14% in 2010 to 26% in 2011. The portfolio mix is projected to alter in 2011 on the assumption that more State Governments would access the domestic bonds market in the year, thereby depending less on short-term bank facilities.

CHAPTER FOUR

UNDERLYING ASSUMPTIONS

This chapter simulates three different scenarios - Baseline, Optimistic and Pessimistic - under which the sustainability of the debt profile in the programme period will be analysed and assessed.

4.1 BASELINE SCENARIO ASSUMPTIONS

The underlying macroeconomic assumptions of the Baseline scenario are anchored on the efficient implementation of the 2011 Federal Government Budget. The assumptions are, in line with the Federal Government's fiscal and monetary policies, which aim at stimulating growth and development. The macroeconomic assumptions are summarized in Box 1.

Box 1: Macroeconomic Assumptions in the Baseline Scenario

Average GDP Growth Rate: Assumed a GDP growth rate of 7% for 2011, and an average of 7.6% for 2012-2030. The growth would be driven mainly by the non-oil sector, with agriculture playing a leading role.

Inflation Rate: Used a double digit rate of 11.5% for 2011, and a single digit rate of 9.54%, thereafter, for the remaining projection period of 2012-2030. This is in accordance with the West African Monetary Zone (WAMZ) performance criteria.

Oil Price: Projected at US$65pb for 2011, and to average US$70pb over 2012-2030.

Crude Oil Production: Projected at 2.3mbpd for 2011, and to average 2.4mbpd over 2012-2030. A relatively uninterrupted oil production is anchored on the assumption of a stable global economic environment.

Budget Deficit for the Federal Government: This is projected at 2.96% of the GDP in 2011, an average of 1.28% and 0.26% over 2012-2020 and 2021-2030, respectively

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Federal Government Capital Expenditure: This is projected to grow at an average of 8.8% from 2012-2020 and 5.5% for 2021-2030

State Governments Internally Generated Revenue (IGR): IGR is projected at the growth rate of real GDP.

Consolidated State Governments' Deficit/GDP Ratio: Projected at 0.5% of GDP for 2011, and to average of 0.25% and 0.44% for 2012-2020 and 2021-2030, respectively.

Export Growth Rate: Projected at an average of 4.4% for 2011-2015, 3.8% over 2016-2020 and 4% for 2021-2030.

Import Growth Rate: Projected to grow by 7% in 2011, and an average of 7.6% for 2012-2030, in tandem with real GDP growth rate. This is due to high import content of the infrastructure rehabilitation programme, required to stimulate economic growth

Current Account Position: Projected to record lower surplus in 2011 and 2012, before dropping to a deficit in 2013 through 2030 owing to the high import content required for the growth of the Nigerian economy in the medium term.

External Reserves: External reserve is projected to grow in tandem with the growth rate of oil exports. The stock of external reserves is largely influenced by foreign exchange receipts from crude oil and gas exports. Nominal Exchange Rate of the Naira: Projected at N150/US$ for 2011, and an average of N153.1/US$ for 2012-2030.

4.2 OPTIMISTIC SCENARIO ASSUMPTIONS

The macroeconomic assumptions of the Alternative (Optimistic) Scenario are based on the aspirations of the Federal Government articulated in Vision 20:2020 programme. These assumptions are summarized in Box 2.

Box 2: Macroeconomic Assumptions in the Alternative (Optimistic) Scenario

Average GDP Growth Rate: Assumed a growth rate of 10.9% for 2011, and an average of 13.4% over 2012-2030. The growth would be driven mainly by the non-oil sector, particularly, manufacturing and services sectors.

Inflation Rate: Average single digit inflation rate of 7.2% was used for the entire period of 2011-2030.

Oil Price: Projected to average US$86.67pb in 2011, and range between US$75- US$86.67pb over 2012-2030.

Crude Oil Production: Projected at 2.3mbpd for 2011, and to average 3.4mbpd over 2012-2030.

Budget Deficit for the Federal Government: Estimated at 3.62% of the GDP in 2011, and an average of 1.11% and 0.16% over 2012-2020 and 2021-2030, respectively.

Consolidated State Governments Deficit/GDP Ratio: Projected at 5.3% for 2011, and an average of 1.57% and 0.18% for 2012-2020 and 2021-2030, respectively.

Export Growth Rate: Anticipated to be 3.7% of the GDP for 2011, and 4.8% for 2012-2015. The rate of 5.7% and 6% was taken for 2016-2020 and 2021-2030, respectively. Non-oil export is expected to grow in line with the growth rate of real GDP.

Import Growth Rate: This is projected at 9% of GDP in 2011, and to average 11.2%, 10.6%, and 7.3% for 2012-2015, 2016-2020 and 2021-2030, respectively, to meet the expected acceleration in the overall growth of the economy.

Current Account Position: Projected to remain in surplus up till 2016. Thereafter, it will turn to deficit owing to faster growth rate of imports compared to exports.

External Reserves: Government would build external reserves in line with the new Sovereign Investment Authority Act and thereby reverse the trend in the depletion of Reserves observed in 2010.

Nominal Exchange Rate of the Naira: Naira to appreciate to a projected annual average of N146.4 to US$1.00 over 2011-2030.

4.3 PESSIMISTIC SCENARIO ASSUMPTIONS

The macroeconomic assumption of the Pessimistic Scenario is based on the postulation that crude oil prices will decline leading to a sharp fall in revenue due to non-viability of other alternative sources as the non-oil sector remain weak. It also assessed Nigeria's preparedness to effectively cope with the unexpected shocks. The assumptions are summarized in Box 3.

Box 3: Macroeconomic Assumptions in the Alternative (Pessimistic) Scenario

Average GDP Growth Rate: This is estimated to rise by 4.5% in 2011, and 3.9% over 2012-2030 due to the likelihood of flood in some parts of Northern Nigeria and drop in the contribution of oil sector to GDP because of anticipated failure of the amnesty programme for Niger Delta militants.

Inflation Rate: A double-digit rate of 15% is assumed for 2011, and this is expected to reach 18% for 2012-2030.

Oil Price: Projected at US$75pb for 2011, and an average of US$42.5pb for 2012-2030. This is based on the assumptions of a stable environment in other oil producing regions of the world, particularly in the Middle-East and an increase in the number of non-OPEC oil producing nations. These are expected to lead to excess supply of crude oil to the market, which OPEC will not be able to handle.

Crude Oil Production: Projected at 2.3 mbpd for 2011 but to average 1.7 mbpd for 2012-2030 owing to failure of the amnesty programme.

Budget Deficit for the Federal Government: Projected at 3.62% of GDP for 2011, and an average of 4.02% and 1.04% over 2012-2020 and 2021-2030, respectively.

Consolidated State Governments Deficit/GDP Ratio: Estimated at 5% for 2011, and averages of 4.9% and 2% for 2012-2020 and 2021-2030, respectively.

Export Growth Rate: This is estimated to grow at a lower rate than the other two scenarios as a result of possible occurrence of natural disaster(s). The contribution of the oil sector to GDP will also drop due to the expected failure of the amnesty programme. Thus, the expected rates of growth of export are 2% in 2011, 2.3% for 2012 - 2015, 1.8% for 2016 - 2020 and 0.7% for 2021 -2030.

Import Growth Rate: Projected at 3.5% of GDP in 2011, and to grow at an average ate of 4.3%, 3.8% and 3.7% for 20122015, 20162010 and 2021 - 2030, respectively.

Current Account Balance (CAB): This account is expected to record an increasing level of deficit over 2011-2030 due to collapse of oil prices in the international commodity market, which will affect crude-oil related cash inflows. External Reserves: Programmed to decline in line with trends in CAB due to slow rate of growth in the non-oil sectors of the economy, and which failed to cushion the shortfall in revenue from the oil sector. This decline will be accentuated by continued high preference for imported goods.

Nominal Exchange Rate of the Naira: Projected at N154/US$ for 2011, and an annual average of N168.5/US$ over 2012-2030.

Table 4.1: Summary of Selected Actual & Projected Macroeconomic Variables

S/N	Macroeconomic Variables	2008		2009		2010				
		Projected	Actual	Projected	Actual	Projected	Actual	2011[7]	2015[8/]	2020[8/]
1.	Real GDP Growth Rate (%)	6.0	6.0	6.9	7.0	8.2	7.9	7.0	7.3	7.6
2.	Inflation Rate (%)	11.6	15.0	12.4	11.9	9.5	11.5	11.5	10.82	10.61
3.	Oil Price (US$pb)	40.0	101.2	45.0	62.1	60.0	-	65.0	70.0	70.0
4.	Crude Oil Production (mbpd)	1.8	-	2.3	-	2.2	-	2.3	2.55	3.0
5.	Nominal Exchange Rate of the Naira $ = N	-	132.5	-	149.5	-	150.6	150	151.8	153
6.	Ratio of FGN's Budget Deficit/GDP (%)	-0.9	-3.2	-3.3	-6.4	-6.7	-6.6	-4.16	-2.0	-0.9
7.	Ratio of FGN's Capital Expenditure/GDP (%)	3.2	3.8	4.1	4.6	6.0	3.0	3.0	2.7	2.3
8.	Current Account Position ($bn)	-	28.26	-	13.3	-	2.5	1.5	-4.7	-27.9
9.	Foreign Capital Inflows ($bn)	-	9.7	-	11.58	-	9.64	11.34	14.79	20.83
10.	External Reserves ($bn)	-	53.0	-	42.4	-	32.3	26.0	-	-

[7] Projected

CHAPTER FIVE

RESULTS ANALYSIS

5.1 BASELINE SCENARIO

5.1.1 External (Federal and States) - Baseline

The results of the simulations under the DSA, using the macroeconomic variables and underlying assumptions indicate that Nigeria remains at a low risk of external debt distress in 2011 same as in 2010. Nigeria is classified as a Medium Performer for the third consecutive year on a score of 3.44 points (on a possible scale of 6 points) on the WB Country Policy and Institutional Assessment (CPIA) index and is assigned the following thresholds or benchmarks as debt-burden indicators:

(i) Present Value (PV) of Debt/GDP of 40 percent;
(ii) PV of Debt/Exports of goods and services of 150 percent;
(iii) PV of Debt/Revenue of 250 percent;
(iv) Debt Service/Export of 20 percent; and
(v) Debt Service/Revenue of 30 percent.

Under the Baseline Scenario, external DSA shows that the thresholds on the present values of debt-to-GDP, debt-to-exports and debt-to-revenue ratios were not violated throughout the projection period, while the external debt-burden indicators remain well below the thresholds during 2011 - 2030. Specifically, the PV of external debt/GDP ratio is 3.1% for 2011, and 4.6% for both 2012 and 2016. Thereafter, the ratios trend downward over the rest of the projection period to 0.7% up to 2030, compared with the indicative threshold of 40 per cent.

Box 4: External Debt Sustainability Indicators under the Baseline Scenario (Federal and States, in per cent)

	Threshold	DSA Result				
		2011	2012	2016	2021	2030
PV of Debt/GDP	40	3.1	4.6	4.6	3.1	0.7
PV of Debt/Exports	150	8.4	13.3	18.5	19.1	9.4
PV of Debt/Revenue	250	30.9	48.1	69.1	69.1	27.9
Debt Service/Exports	20	0.5	0.6	0.9	1.4	0.7
Debt Service/Revenue	30	2.0	2.1	3.2	5.1	2.0

5.1.1.1 Standard Stress Test Result

The result of the standard stress tests using (B1) real GDP growth at historical growth projections, (B2) primary balance at historical projections minus one standard deviation, (B3) combination of (B1) and (B2) and (B4) one time 30 percent real Naira deprecation in 2012 all indicate non violation of the threshold.

5.1.2 Fiscal Sustainability

5.1.2.1 Public Debt Sustainability (Federal Only)

(i) Solvency Indicators

Solvency Indicators in the Baseline Scenario for Federal domestic debt showed that total public debt would remain within the sustainability thresholds throughout the projection period (Box 5 and Annex 1). In 2011, the Present Value (PV) of total debt to GDP will stand at 22.2%, and this will fall to 5.9% in 2021 and 5.9% in 2030. All the ratios remain well below the indicative threshold of 40 per cent throughout the projection period. This result is explained by the assumption that GDP will grow at a faster rate than the rate of debt accumulation as the authorities continue to strengthen the growth initiatives for the non-oil sector and thereby help to insulate the economy from negative oil revenue shocks during the period. Key growth initiatives for the non-oil sector include increasing the investments in infrastructure to boost the manufacturing and service sectors of the economy. The rate of debt accumulation is expected to slow down as from 2016 because the FGN would continue to encourage the use of sovereign guarantees, indemnities and Public Private Partnership (PPP) in funding critical infrastructure projects. These are treated as off-balance sheet items, although at the risk of large contingent liabilities (CL). Meanwhile, to ensure that the contingent liabilities risks do not crystallise, the funding options and projects, thus funded, shall be effectively monitored during the period. Annual limits for guarantees and other funding options shall be set each fiscal year in order to ensure sustainability.

The PV of the total public debt as a percentage of total revenue was projected to average 161.6% and 98.4% for 2011-2020 and 2021-2030, respectively, with a peak of 222.5% in 2011. These are below the 250% trigger point.

Box 5: Total Debt Sustainability Indicators under the Baseline Scenario: (Federal Domestic Debt, in per cent)

	Threshold	DSA Result				
		2011	2012	2016	2021	2030
PV of Debt/GDP	40	22.2	19.8	10.5	5.9	5.9
PV of Debt/Revenue	250	222.5	206.9	159.0	132.4	130.4
Debt Service/Revenue	20	22.8	28.4	23.7	30.5	31.0

(ii) Liquidity Indicators (Federal Only)

Liquidity indicators in the baseline scenario displayed a very sustainable trend with a total debt service-to-revenue ratio of 22.8% in 2011.

5.1.2.2 Public Debt Sustainability (Consolidated Federal and States' External and Domestic Debts)

Unlike earlier years, the 2011 DSA includes the State Governments' domestic debt in the Baseline Scenario. As expected, the combined total debt of the Federal and State governments was higher, nevertheless, the PV of debt-to-GDP ratio remained sustainable. Specifically, the solvency indicators which combined the total external and domestic debts of the two-ties of government showed that PV of debt-to-GDP was 25.7% in 2011. Thereafter, it trended downward subsequently over the projection period, averaging 13.3% for 2012-2020 and 4.26% over 2020-2030 (Annex 5). These are well below the 40% threshold. Similarly, the PV of debt/revenue ratio averaged 96.6% for 2011-2020 and 59.52% over 2021-2030. These ratios are sustainable even when measured against only the external debt threshold of 250%. Conversely, the PV of debt-to-revenue and debt service-to-revenue ratios were lower in the combined total public debt than the scenario that excluded State Governments' domestic debt. This is attributable to the assumption that the internally generated revenue (IGR) would grow faster than the rate of debt accumulation of the sub-nationals in order to meet developmental projects as well as keep debt at sustainable levels during the assessment period. Growing the IGR is expected to be the obvious option owing to the supply constraints in assessing credit facilities in sizable quantum.

Box 6: Consolidated Total Debt Sustainability Indicators under Baseline Scenario (Federal and States' External & Domestic Debts, in per cent)

	Threshold	DSA Result				
		2011	2012	2016	2021	2030
PV of Debt/GDP	40	25.7	22.9	12.2	7.1	2.0
PV of Debt/Revenue	250	137.5	125.2	93.5	78.8	38.3
Debt Service/Revenue	30	16.7	19.2	15.2	18.6	10.0

(i) Liquidity Indicators (Federal and States)

Liquidity indicators in the Baseline Scenario for the consolidated domestic debt of the Federal and State Governments demonstrated similar trends as shown above, with total debt service ratios remaining at sustainable levels throughout the projection period. The debt service/revenue was 16.7% in 2011, and averaged 21.8% for 2012 - 2020 and 13.61% over 2021-2030 (Annex 5).

5.2 OPTIMISTIC SCENARIO

5.2.1 Total Debt Sustainability

(i) Solvency Indicators

As with the Baseline Scenario, the Optimistic Scenario and the standardized stress tests showed relatively robust results, though the trend for total public debt indicators showed mixed outcomes. The simulation of the total debt-to-GDP ratio show a downward trend from 25.6% in 2012 to 6.8% up to 2030, which is below the 40% threshold set for external debt. The PV of debt-to-revenue ratios were high but remained below the threshold of 250% applicable to external debt, except in 2012 when the ratio exceeded the 250% target by 400 basis points. It is important to note that the PV of debt-to-revenue ratios fluctuated beginning 2012 through 2023, (three years after the terminal date of Nigeria Vision 20:2020) after which it maintained a steady downward trend. The high ratios were attributed to the massive resources required to drive the Vision 20:2020, the bulk of which are expected to be by debt accumulation. A key policy options is for government to strengthen the capacity of the capital market and explore other funding alternatives or borrowing windows in order to help meet the envisaged resource requirements.

(ii) Liquidity Indicators

Total debt service as percentage of revenue was generally considered to be high throughout the projection period. The ratio was an average of 40.2% for 2011-2020 and 34.3% for 2021 - 2030, well above the 30% threshold applicable to external debt. This was due to higher than expected debt service payments in the projection period as a result of the huge debt accumulation, and the additional use of non-concessional borrowings to achieve Vision 20:2020.

5.2.2 External Debt Sustainability (Federal & States)

(i) Solvency Indicators

In the optimistic scenario, the solvency indicators showed that external debt remained sustainable as all the ratios were below the threshold of 40%. The average projected ratios are 8.1% and 7.7% for 2011 - 2020 and 2021-2030, respectively (see Box 7).

Similarly, PV of external debt-to-revenue ratio remained sustainable, but showed a steady rise in the first twelve years of the programme and peaked at 167.3% in 2022, although below the 250% threshold. The ratio, thereafter, declined steadily to 124.9% up to 2030. The fall in the ratio beginning from two years after the terminal date of Nigeria's Vision 20: 2020 is partly due to expected decline in debt accumulation, higher oil production, and improved tax revenues during the later years of the projection period.

Box 7: External Debt Sustainability Indicators under the Optimistic Scenario (Federal and States External Debt, in per cent)

	Threshold	DSA Result				
		2011	2012	2016	2021	2030
NPV of Debt/GDP	40	3.2	6.7	10.3	9.8	5.4
NPV of Debt/Revenue	250	30.8	66.3	135.0	165.8	124.9
NPV of Debt/Exports	150	8.6	19.5	39.8	52.2	53.9
Debt Service/Export	20	0.6	0.7	1.7	3.0	3.0
Debt Service/Revenue	30	2.0	2.4	5.7	9.4	6.9

5.3 PESSIMISTIC SCENARIO

5.3.1 Total Debt Sustainability

(i) Solvency Indicators

The Country-Specific Pessimistic Scenario assumed a weak fiscal position, and an absence of an appropriate fiscal policy response under a prolonged oil price shock. It is expected that government will deplete the foreign reserves under the Scenario. Nigeria's public debt/GDP ratio would be 21.7% in 2011, while it is expected to trend downward from 17% in 2012 to 9.9% in 2013, and thereafter, hit a low of 0.9% due to lower levels of deficits in the later years up to 2030. The total debt service/revenue ratio is projected to fluctuate substantially in the first half of the programme period to 32.9% up to 2021, and then drop steadily by more than half to 14.5% in 2030. Similarly, the PV of total debt/revenue would also remain sustainable with all ratios falling well below the external debt threshold of 250%, due to lower level of projected deficit in the later years.

(ii) Liquidity Indicators

The PV of total debt service-to-revenue is mostly unsustainable in the short to medium term but became sustainable thereafter. The total debt service-to-revenue is projected to fluctuate substantially in the first half of the programme period to 32.9% up to 2021 and then drop steadily by more than half to 14.5% in 2030. The breaching of the global benchmark in the early years of the projection period is due to large current account deficit caused by low oil price, and drop in oil production as well as lack of other viable alternative sources of revenue apart from crude oil.

5.3.2 External Debt Sustainability (Federal and States)

(i) Solvency Indicators

In the Pessimistic Scenario, the solvency indicators show mixed result. The PV of external debt/GDP is 3%, 2.2% and 0.6% for 2011, 2021 and 2030, respectively. The PV of external debt/revenue also remained sustainable with the ratios ranging between 30.8% for 2011 to 82.3% in 2019, which are below the 250% threshold (see Box 8). This is predicated on the assumption that Nigeria will sustain the strategy of depending less on external sources of funds during the programmed years.

Box 8: External Debt Sustainability Indicators under the Pessimistic Scenario (Federal and States External Debt, in per cent)

	Threshold	DSA Result				
		2011	2012	2016	2021	2030
NPV of Debt/GDP	40	3.0	3.9	2.7	2.1	0.6
NPV of Debt/Revenue	250	30.8	43.7	56.5	78	38
NPV of Debt/Exports	150	8.4	12.1	14.2	17.5	7.6
Debt Service/Export	20	0.5	0.5	0.6	1.2	0.5
Debt Service/Revenue	30	2	1.9	2.5	5.5	2.6

(ii) Liquidity Indicators

All the liquidity indicators appeared sustainable as indicated in Box 8. The results showed that within the interval, external debt service peaked at 0.9% of export revenue in 2019 and 2020. Also external debt service to revenue peaked at 5.5% in 2021, while other ratios were below the indicative thresholds of 20% and 30%, respectively.

5.4 New Borrowing Limit for 2012

Under the Optimistic Scenario, designed within the framework and aspirations of Nigeria's Vision 20:2020, Nigeria could borrow up to US$9.5 billion in 2012 and still remain within sustainable limits. This would increase the total debt stock by the end of 2012 to $57.4 billion, that is, 20% of projected nominal GDP ($277bn) as at that date. This is 5% below the Country-Specific debt/GDP threshold of 25% set for 2010-2014, even though the global threshold is 40%. However, this outcome should be applied with caution due to the ambitious assumptions used in the simulation, such as: high and steady oil prices; robust GDP growth rate; single digit inflation rate; low budget deficit; amongst others.

In consideration of these, and in the light of emerging trends, the assumptions were altered with the introduction of a shock in oil prices into the Scenario. The resulting outcome was deterioration in the debt-burden indicators relative to the Baseline results, even though most of them remained within the global limits in the long term (Fig.5.1). It is important to observe that the PV of debt/revenue surpassed the 250% mark in 2012 through 2020 before dropping to stay within limits up to 2030. This indicates some measure of risks for the country and a threat to the attainment of the goals of Vision 20:2020.

Against this background, the borrowing estimate for 2012 has been reconsidered using the module of Country-Specific prudential ceiling versus available borrowing space. The Country-Specific threshold of debt/GDP ratio is set at 25% for 2010-2014, which is projected to reach 22.2% by end-2011, thereby leaving only 2.8% borrowing space for the rest of the period. If this is applied, the borrowing limit for 2012 would be $2.25 billion. This is to be sourced in the proportion of 60:40, i.e., $1.35 billion (N208.13bn) and $0.90bn from domestic and external markets, respectively. The consolidated figure of $2.25[8] billion will be about 0.93% of nominal GDP, thereby raising the debt/GDP ratio to 23.13% by end-2012 from the projected rate of 22.2% at the end of 2011. Meanwhile, when the refinancing cost[9] of N22.17 billion for maturing domestic debt obligations in 2012 is factored into the borrowing limit, the amount will reduce to N186.14 billion for the domestic market.

This analysis could further be appreciated when placed against actual and emerging local and global economic trends. Locally, we have a protracted banking crisis, weak equities' market, rising interest rates and very tight monetary policy regime aimed at curtailing inflation and fluctuations in exchange rates. At the global level, the world economy is still being weighed down by the impact of the global financial crisis of 2008. There is sovereign debt crisis across Europe (particularly, Greece, Ireland, Italy and Spain) and the United States, which are now forcing most countries to cut down on new borrowings to mitigate refinancing risks. Civil unrest in the Middle East and other regions remain a source of grave concern over world economic outlook. If these persist, local and global economic aggregates may drop and further hurt the projections used in the analysis. In particular, the depression in global economy activities which these developments could trigger would further have negative impact on Nigeria's oil export revenue. Ceteris paribus, therefore, the analysis suggests the borrowing limit for 2012, thus:

- Domestic borrowing N186.14 billion; and,
- External borrowing - $0.90 billion

More importantly, even the limited amount borrowed by government should be applied to specific high priority projects which can create jobs and generate sufficient stream of incomes to service the borrowed funds.

[8] This is derived thus: Prudential limit of 25% of debt/GDP (for 2010-2014) less 22.2% outstanding at the end of 2011 i.e. 2.8% multiplied by projected nominal GDP of $242.1bn in 2012 to get $6.77bn. This was divided by three (i.e. number of years left for the limit). Then, use the proportion of 60:40 for domestic and external debt components to multiply the results (i.e. 0.6x$6.77/3 = $1.35bn will be domestic borrowing, while the balance of $0.90 will be from external sources). Exchange rate used is N154.3/$1.

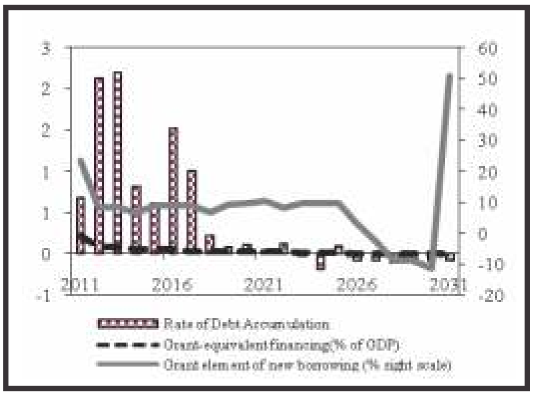
[9] The cost items include the provision for discounts on re-opened bonds, indirect cost of floatation and commission to PDMMs.

5.5 CONCLUSIONS

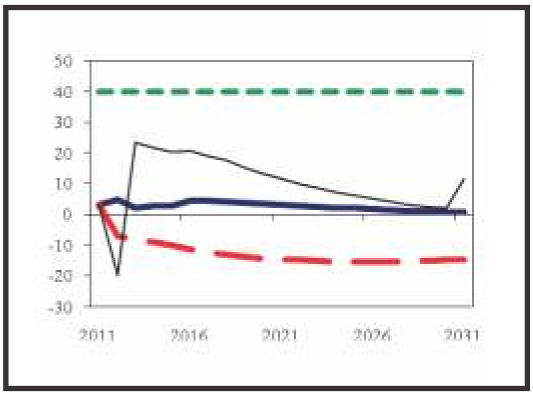
The 2011 DSA Report submits that Nigeria is at a low risk of debt distress as shown by the Baseline, Optimistic and Pessimistic Scenarios. Similarly, the case of the standardized stress tests indicated that Nigeria's debt outlook remains relatively robust throughout the projection period but submits that this should be applied with caution in view of underlying assumptions and prevailing local and global economic trends.

Fig. 5.1: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2011

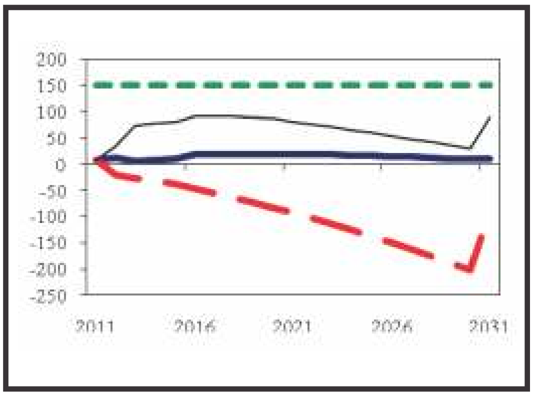
Debt Accumulation



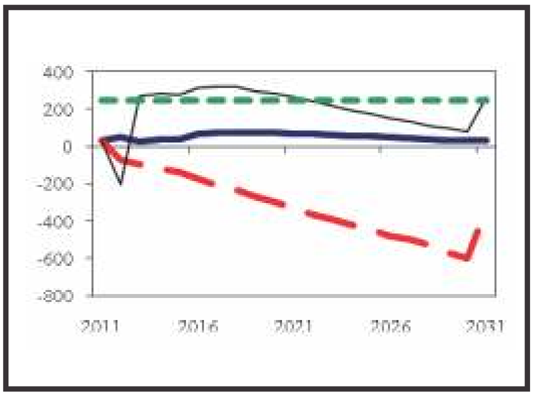
PV Debt/GDP



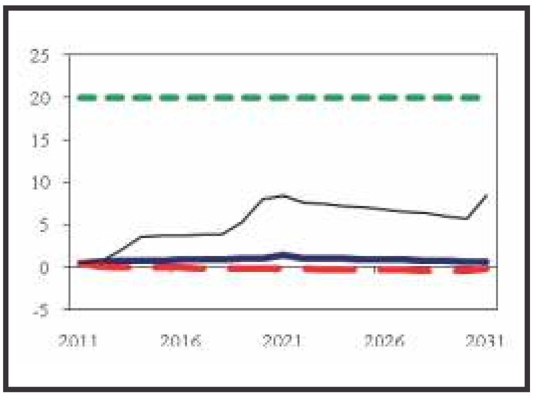
PV Debt/Export



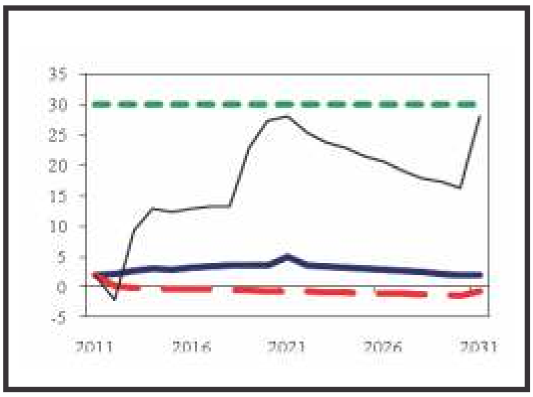
PV Debt/Revenue



Debt Service/Export



Debt Service/Revenue



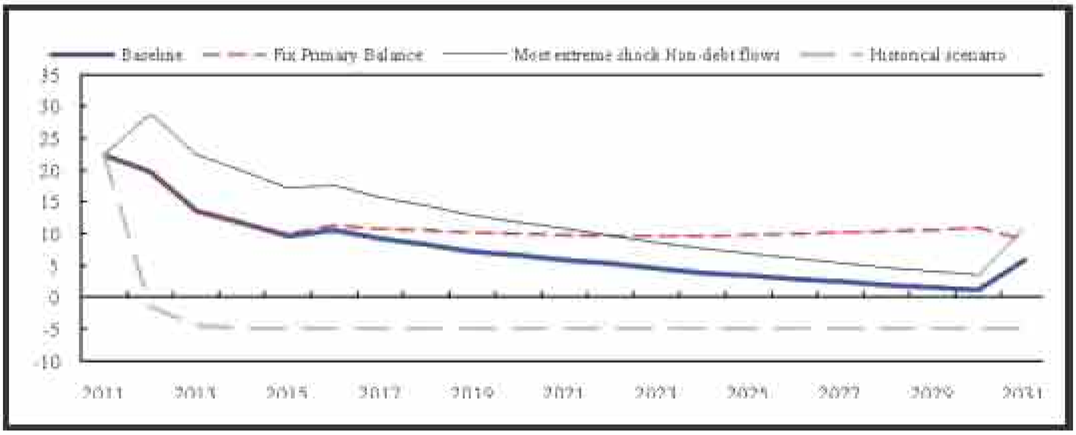
baseline — historical scenario — Threshold — Most extreme shock

Sources: Country authorities; and staff estimates and projections.

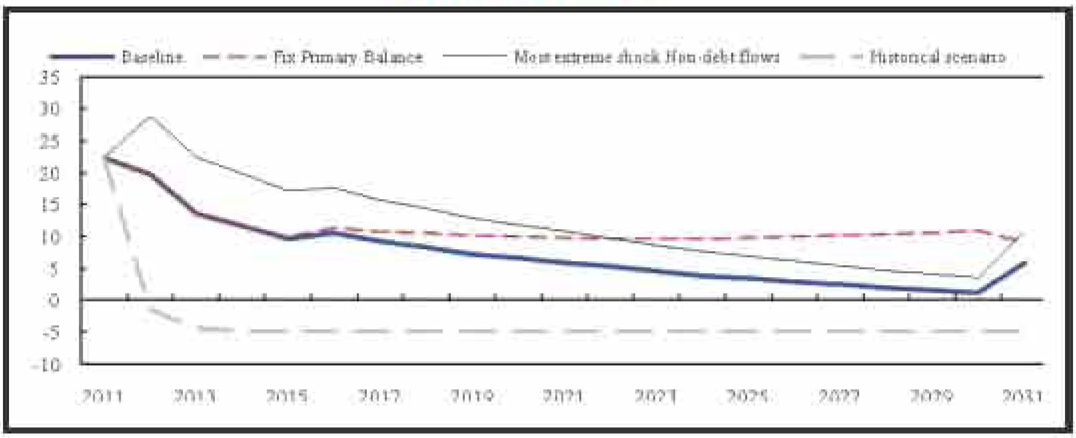
1/ The most extreme stress test is the test that yields the highest ratio in 2021. In figure b. it corresponds to a Combination shock; in c. to a Exports shock; in d. to a Combination shock; in e. to a Exports shock and in figure f. to a Combination shock

Fig. 5.2: Indicators of Public Debt for FGN under Baseline Scenarios, 2011- 2030

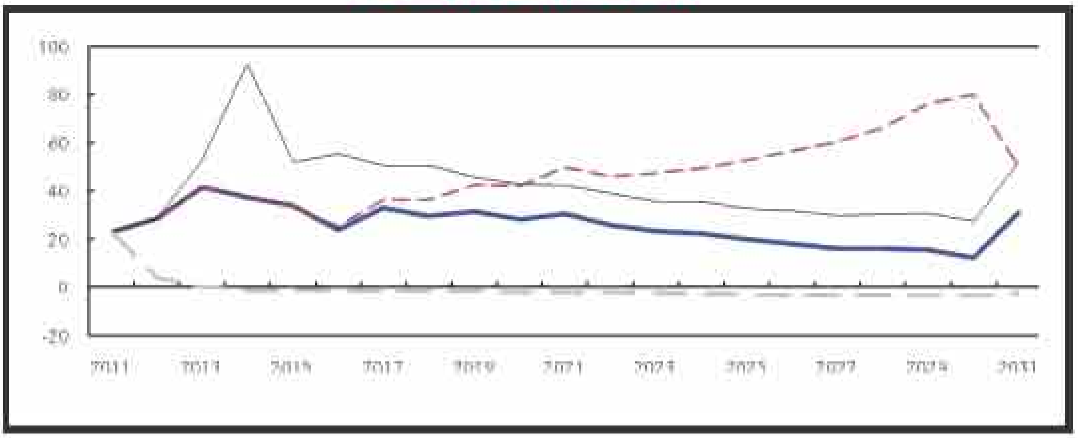
PV Debt-to-GDP Ratio



PV Debt-to-Revenue Ratio



Debt Service-to-Revenue Ratio



CHAPTER SIX

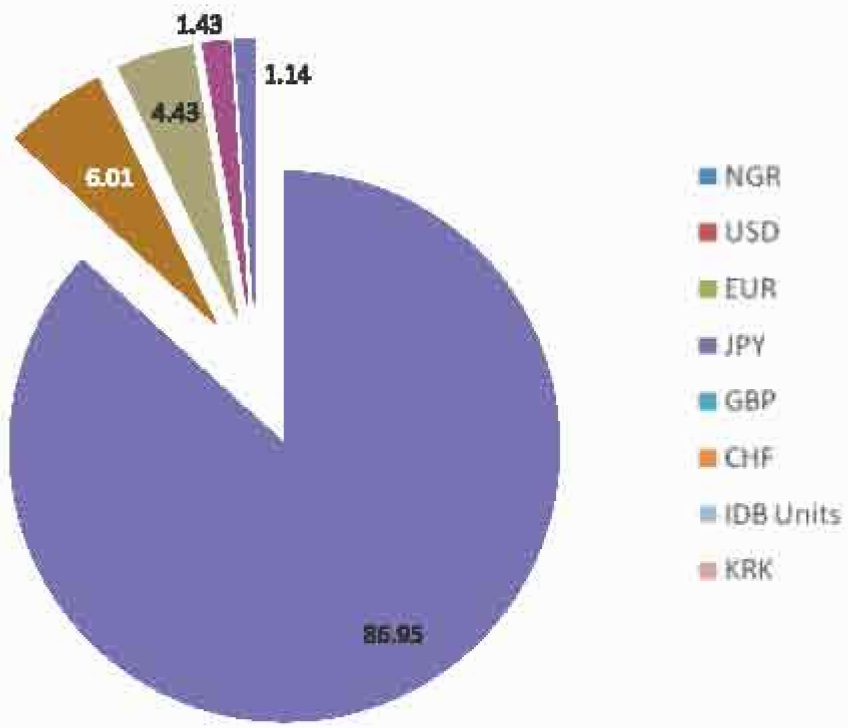
ANALYSIS OF THE RISKS IN THE PUBLIC DEBT PORTFOLIO

6.1 FOREIGN CURRENCY RISK

Foreign currency risk is low in the total debt portfolio of the country given the high ratio of domestic currency denominated debt in the portfolio. As at end December 2010, the total debt portfolio comprised of 86.95% Naira-denominated debt and 13.05% in various foreign currencies (Fig. 6.1). The foreign currency related debts were dominated by the US Dollar and Euro in the proportion of 46.06% and 33.93%, respectively. The Japanese Yen (0.29%) and IDB Units (0.01%) are in the rear.

The high level of domestic debts relative to foreign debts in the total portfolio is in line with the government's borrowing limits of 60:40 for domestic and external sources, respectively.

Fig. 6.1: Currency Composition of Nigeria's Public Debt



Foreign currency risk was analysed on the premise that adverse exchange rate regime will affect debt service costs, and on the assumption that the amount of reserve assets will be insufficient to cover debt service costs. As at end-2010, total reserve assets stood at USD32.339 billion while total external debt was USD4.578 billion with Special Drawing Rights (SDR) dominating the former.

The currency compositions of the reserve and external debt portfolio indicate a low level of currency risk, because the SDR is a basket of currencies which in themselves hedge against each other in the basket, thereby mitigating currency risk to a considerable extent.

In addition, the low level of the currency risk was strengthened by the composition of the external reserve assets of the country which was dominated by US Dollar and followed by the Euro.

Table 6.1: External Debt/reserves By Currency Composition, 2010

Currencies	USD	GBP	EUR	SDR	CHF	JPY	Others
External Debt Stock Currency Composition (%)	11.03	0.00	6.86	79.60	0.17	2.23	0.11
External Reserve Currency Composition (%)	73.611	3.989	14.325	7.977	0.006	0.088	0.0035

The country's ability to meet its external debt service payment obligation, as and when due, is a function of its foreign currency risk exposure. The currency composition of the external reserves and external debts portfolios, indicated a very low level of foreign currency risk because the US Dollar constitutes bulk of the Reserves (73.61%) followed by the Euro (14.31%). Considering the fact that the US Dollar also dominates the SDR basket, (46.06% as at end 2010) the composition of the foreign currency debt of the nation does not pose any significant currency risk, all things being equal.

6.2 INTEREST RATE RISK

Interest rate risk was not significant in the debt portfolio as at end 2010, because the share of fixed rate debts in the total portfolio was about 99% as against 1% floating rate debts. The relatively low level of floating rate instruments in Nigeria's total debt portfolio indicates a very low interest risk. Therefore, in general terms, the portfolio had insignificant level of interest rate risk during the period under review.

6.3 REFINANCING RISK

An assessment of the redemption profile indicates that there is significant refinancing risk in the overall debt portfolio in 2011. This is due to the significant size of short term domestic debt relative to the long term securities. The longer the maturity structure of the debt instruments the lower the refinancing risk.

Fig. 6.2: Redemption Profile of Domestic Debt (N Million)

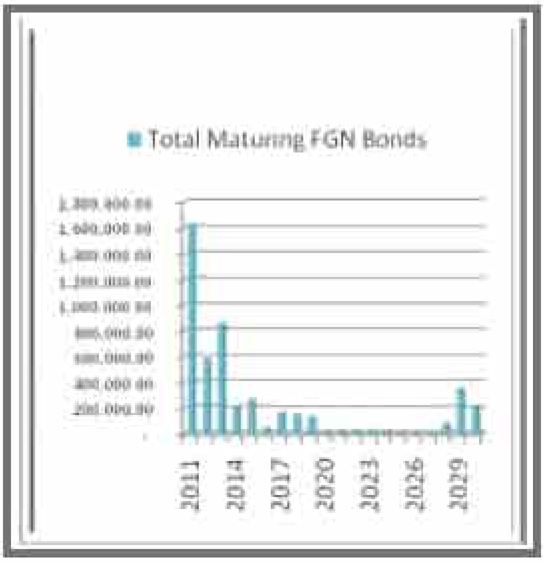
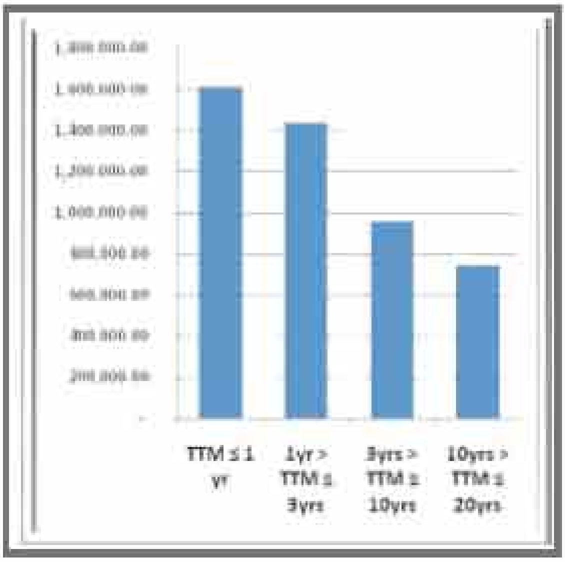


Fig. 6.3: Maturity Structure of Domestic Debt (N Million)



The redemption profile or term to maturity of the domestic debt portfolio showed that about N1.6 trillion debts, the bulk being in the NTB category, would mature within one year, while N1.4 trillion would mature within 2012/13 (Figure 6.2 and 6.3). If the authorities do not proactively address this challenge, the refinancing risk would be huge, considering the level of new funding required going forward. Thus, in order to mitigate refinancing risk, asset-liability management strategy should be intensified. Debt-buy-back and switching strategies could be used to mitigate refinancing risks identified during the period under reference.

6.4 CONTINGENT LIABILITY RISK

The estimate of the Federal Government's contingent liability as at end 2010 was N2.589 trillion, while the projection for 2011 is N4.47 trillion (Table 6.2). The ratio of outstanding contingent liability to GDP was 8.86% in 2010, while the projection for 2011 is 9.16%. This is expected to peak at about 10.7%, as investment in infrastructure reaches its highest point in 2019, and thereafter declines steadily up to 2030.

Table 6.2: Federal Government Contingent Liabilities

	Liability Type	2010 (N Millions)	2011 PROJECTION (N Millions)
1	Pension Arrears	1,499,663.41	1,391,257.45
2	Contractors Liabilities*	5,640.00	-
3	Pending Litigations**	83,368.62	83,368.62
4	AMCON Guarantee***	1,000,000.00	3,000,000.00
	TOTAL	2,588,672.03	4,474,626.07

** Contractors Liabilities for 2011 not available in the Budget Office of the Federation*
*** As supplied by the Federal Ministry of Justice*
****AMCON Bonds - By the end of 2011, AMCON proposes to issue about N3trillion (1.5trillion for the purchase of NPLs and another N1.5trillion for banks recapitalization)*

Fig. 6.4: Contingent Liabilities to GDP (%)

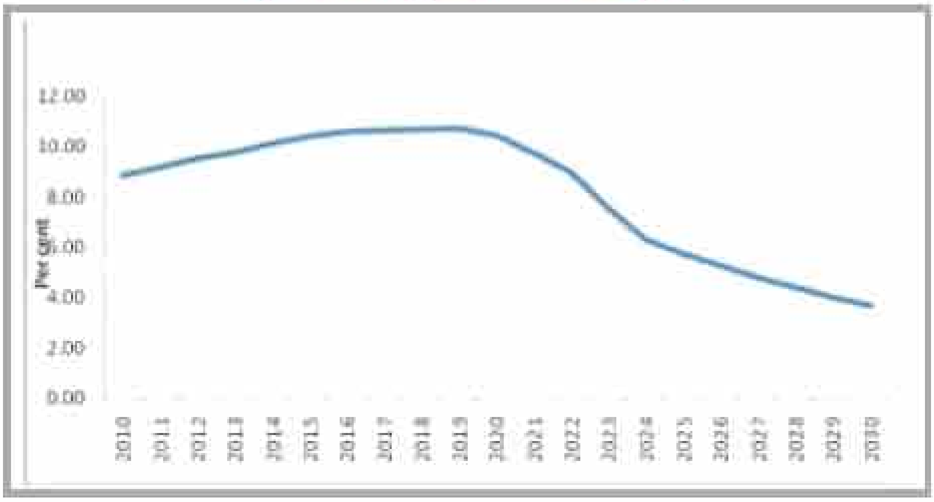
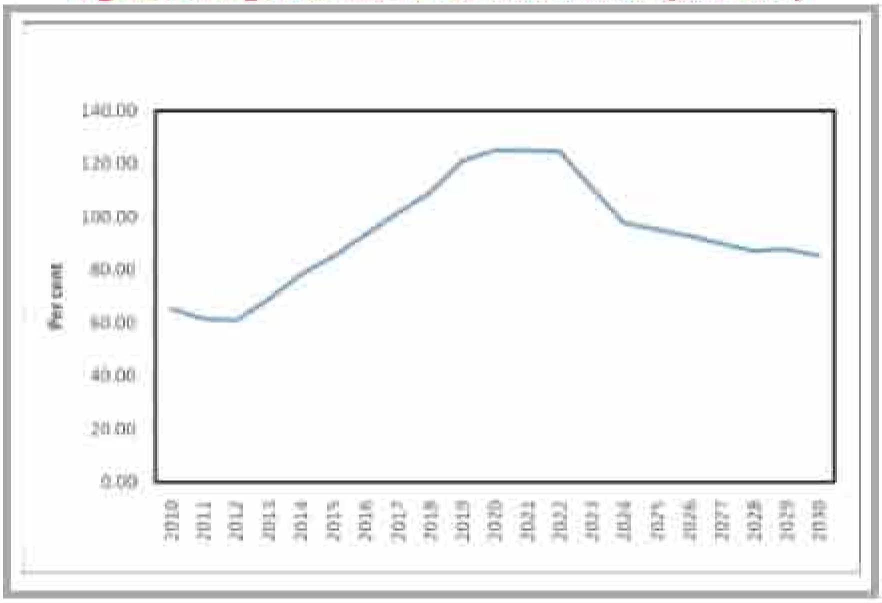


Fig. 6.5: Contingent Liabilities to Total Revenue Ratio (2010 2030)



The ratio of contingent liability to total revenue also exhibits similar upward sloping trend from 2010 to 2019, when it reached its peak at 122%, meaning that contingent liabilities would be more than the projected revenue of the FGN in the medium to long term. Thereafter, it dropped consistently up to 2030. Contingent liability risk is high in the medium term, and could lead to debt sustainability challenges if not proactively mitigated to avoid crystallization.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

7.1 CONCLUSION

The 2011 DSA, unlike the previous editions, incorporated the domestic debt data of the State Governments in the analysis. Also, the large errors and omissions usually found in the balance of payments figures, which had been a serious challenge in the previous years' DSA was considerably reduced this year. Overall results of the exercise showed that Nigeria's debt outlook remains robust. Under the Baseline Scenario, the country's external and total public debts remained sustainable, as all the available debt burden indicators based on the IMF/World Bank DSF, fell below the recommended international thresholds, which buttressed the outcome of the 2010 DSA.

However, the robust position could be weakened in the medium to long term, if there is a slack in fiscal and debt management strategies and a prolonged shock in crude oil prices, as well as production volumes.

7.2 RECOMMENDATIONS

The outcome of the 2011 DSA reveals a number of action points required to enhance both debt and fiscal sustainability. These include:

(i) Nigeria's Country-Specific debt-burden indicator threshold of 25% Debt/GDP ratio for total public debt set for 2010-2014, relative to the international threshold of 40%, should be sustained.

(ii) Since the FGN alone cannot fund the infrastructural projects and programmes under the Vision 20:2020 given the huge size of capital outlay (N6.7 trillion 2010-2013)[10] required, there is need to expand the sources of funding in order to maintain debt sustainability. To this end, the DMO is fine-tuning a frame work for the issuance of Sovereign Guarantee to private sector corporates to enable them undertake the development of commercially viable, national priority projects in the country, and relieve the government of the need to borrow to fund such Projects.

(iii) The stock of FGN's contingent liabilities (CL) outstanding as at end 2010 was N2.59 trillion or 8.86% of GDP, and it is projected to rise to 9.16% of GDP in 2011. During 2011-2020, the DMO would ensure that total CL outstanding as a percentage of GDP is kept at not more than 15%, so that the ratio of Total Public and Publicly Guaranteed Debt (including the Country-Specific threshold) to GDP would not exceed the 40% international threshold.

(iv) The N3.0 trillion FGN securities (AMCON Bonds) maturing in 2011 through 2013 have inherent refinancing risks. The DMO would have to employ the strategies of debt buy-back and switching to mitigate this risk.

(v) In addition, the FGN would be encouraged to introduce Sinking Funds for new issues of FGN Bonds to minimise future redemption and refinancing risks of maturing obligations.

(vi) Under the Optimistic Scenario, Nigeria could borrow up to US$9.5 billion[11] in 2012. This was, however, considered to be too ambitious in view of the robust assumptions under which the simulations were Undertaken vis-à-vis the prevailing local and global economic conditions. It was, therefore, deemed

[10] NPC report at the July 16 2010 meeting with the Vice President on funding of infrastructure development programmes

[11] Total public debt in the optimistic scenario is programmed to increase from US$47.9 billion in 2011 to US$57.4 billion in 2012.

appropriate to estimate the borrowing limit for 2012 within the context of the Country-Specific debt/GDP threshold of 25% prescribed for 2010-2014 and utilise part of the available borrowing space left at the end of 2011. It is expected that the debt/GDP ratio will reach 22.2% by end-2011, thereby leaving a borrowing space of 2.8% for the next three years.

The module of Country-Specific threshold versus available borrowing space gave rise to a more realistic borrowing estimate of US$2.25 billion for 2012. This is expected to be sourced in the proportion of 60:40, that is, $1.35 billion (N208.31bn) and US$0.90 billion from domestic and external sources, respectively. Furthermore, it was considered appropriate to discount the amount allocated to the domestic market in view of maturing domestic debt obligations, gloomy global economic outlook, and new debt management initiatives being put in place to encourage private sector corporates to undertake the development of commercially viable and critical national priority projects, in line with the transformation agenda of the present administration.

In the final analysis, the borrowing limit for 2012 is set at N186.14 billion and $0.90 billion for domestic and external sources, respectively. This will add a marginal increase of 0.87% to debt/GDP ratio of 22.2% expected by end-2011, to attain a new debt/GDP ratio of 23.07% at the end of 2012 in order to remain within the Country-Specific threshold of 25% and also leave some borrowing space for 2013 and 2014.

(vii) The new borrowing limit for 2012 should be kept at N186.14 billion and US$0.90 billion to be sourced from domestic and external markets, respectively. More importantly, even the limited amount borrowed by government should be applied to specific national priority projects, which can create jobs and generate sufficient stream of incomes to service the borrowed funds.

(viii) Government at all levels should adhere to the provisions of the Fiscal Responsibility Act, 2007 for prudent management of scarce resources.

(ix) As a means of further sustaining macroeconomic stability, there is need to encourage robust information/data exchange amongst relevant agencies in order to further strengthen existing coordination between monetary, fiscal and debt management strategies.

(x) Nigerian professionals abroad constitute a significant work force in several economies of the world. Against this backdrop, Government policy and programmes should further be directed at attracting diaspora savings through remittances to Nigeria, for the development of critical infrastructure in the Economy.

Annex 1: Public Sector Domestic Debt Sustainability Framework Baseline Scenario, 2008–2031' FederalOnly (In percent of GDP, unless otherwise indicated)

	Actual					Estimate					Projections				
	2008	2009	2010	Average 5/	Standard Deviation 5/	2011	2012	2013	2014	2015	2016	2011-16 Average	2021	2031	2017-31 Average
Public sector debt 1/	11.6	15.4	17.9			22.2	18.7	15.4	13.3	11.1	10.2		6.0	5.0	
o/w foreign-currency denominated	2.0	2.4	2.4			2.9	3.5	3.9	4.2	4.3	4.3		3.2	2.3	
Change in public sector debt	-1.0	3.8	2.5			4.3	-3.5	-3.3	-2.1	-2.2	-0.9		-0.7	-6.7	
Identified debt-creating flows	-11.8	2.2	10.0			13.8	12.3	11.9	10.8	12.1	11.8		7.7	7.7	
Primary deficit	-11.1	1.0	2.6	-7.4	7.3	1.1	1.2	1.2	0.9	0.8	0.6	1.0	0.4	0.4	0.1
Revenue and grants	21.9	10.7	10.6			10.1	9.6	8.7	7.6	7.3	6.6		4.4	4.4	
of which: grants	0.0	0.0	1.1			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Primary (noninterest) expenditure	10.8	11.7	13.2			11.2	10.8	9.9	8.5	8.0	7.2		4.8	5.8	
Automatic debt dynamics	-0.6	1.2	-1.1			-0.7	-1.3	-0.9	-0.7	-0.6	-0.4		-0.3	-0.3	
Contribution from interest rate/growth differential	-0.8	1.3	-1.0			-0.6	-1.1	-0.7	-0.7	-0.6	-0.3		-0.2	-0.2	
of which: contribution from average real interest rate	0.6	-0.6	0.0			0.1	0.1	0.3	0.6	0.6	0.4		0.2	0.2	
of which: contribution from real GDP growth	-1.4	2.0	-1.0			-0.7	-1.2	-1.0	-1.3	-1.1	-0.8		-0.5	-0.5	
Contribution from real exchange rate depreciation	0.1	-0.1	-0.1			-0.1	-0.1	-0.2	-0.1	-0.1	-0.1		...	...	
Other identified debt-creating flows	-0.1	0.0	8.5			13.4	12.4	11.5	10.7	11.9	11.6		7.5	6.7	
Privatization receipts (negative)	-0.1	0.0	-0.4			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	8.9			13.4	12.4	11.5	10.7	11.9	11.6		7.5	7.5	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	10.8	1.6	-7.4			-9.5	-15.8	-15.1	-13.0	-14.2	-12.7		-8.3	-8.3	
Other Sustainability Indicators															
PV of public sector debt	...	...	18.4			22.4	19.8	13.6	11.7	9.6	10.5		5.9	5.9	
o/w foreign-currency denominated	...	...	2.8			3.1	4.6	2.2	2.6	2.8	4.6		3.1	3.1	
o/w external	...	...	2.8			3.1	4.6	2.2	2.6	2.8	4.6		3.1	3.1	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	-6.1	6.0	8.0			7.3	8.6	9.0	7.5	6.7	5.2		3.3	3.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	…	…	173.7			222.5	206.9	157.4	152.6	132.9	159.0		132.4	132.4	
PV of public sector debt-to-revenue ratio (in percent)	…	…	194.2			222.5	206.9	157.4	152.6	132.9	159.0		132.4	132.4	
o/w external 3/	…	…	29.4			30.9	48.1	24.8	34.0	39.1	69.1		69.1	69.1	
Debt service-to-revenue and grants ratio (in percent) 4/	9.4	20.9	23.6			22.8	28.4	41.6	37.3	34.0	23.7		30.5	30.5	
Debt service-to-revenue ratio (in percent) 4/	9.5	21.0	26.4			22.8	28.4	41.6	37.3	34.0	23.7		30.5	30.5	
Primary deficit that stabilizes the debt-to-GDP ratio	-10.1	-2.8	0.1			-3.1	4.7	4.5	3.0	2.9	1.5		1.0	1.0	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	12.1	-14.6	6.9	5.0	9.7	4.2	5.9	5.5	9.0	9.4	7.3	6.9	7.6	8.3	8.3
Average nominal interest rate on forex debt (in percent)	7.8	3.0	1.5	6.2	9.6	5.3	5.9	5.4	5.0	4.7	4.4	5.1	3.9	3.8	3.8
Average real interest rate on domestic debt (in percent)	4.6	-6.1	0.2	-9.7	31.4	0.1	0.0	1.1	4.8	5.6	5.2	2.8	5.7	5.9	6.0
Real exchange rate depreciation (in percent, + indicates depreciation)	7.1	-4.5	-6.4	-14.9	30.2	-5.1	...	...	...	...	...	…	...	…	…
Inflation rate (GDP deflator, in percent)	4.9	19.5	10.2	156.5	432.4	9.7	7.3	7.2	3.9	3.2	5.2	6.1	4.9	4.2	4.2
Growth of real primary spending (deflated by GDP deflator, in percent)	0.3	-0.1	0.2	-0.1	0.4	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	…	…	23.7	8.3	8.6	6.4	9.0	9.1	10.8	10.3	10.3	...

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 7 years, subject to data availability.

Annex 2: Sensitivity Analysis for Key Indicators of Public Domestic Debt, 2011-2031, (Federal Only)

	Projections							
	2011	2012	2013	2014	2015	2016	2021	2030
PV of Debt-to-GDP Ratio								
Baseline	22	20	14	12	10	10	6	5.9
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	22	-1	-4	-5	-5	-5	-5	-5
A2. Primary balance is unchanged from 2011	22	20	13	12	10	11	10	9
A3. Permanently lower GDP growth 1/	22	-18	-2	-6	-5	-5	-3	-3
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012	22	-11	-7	-14	-19	-24	-38	-41
B2. Primary balance is at historical average minus one standard deviations in 2012	22	21	15	13	11	12	7	9
B3. Combination of B1-B2 using one half standard deviation shocks	22	-8	1	-5	-11	-15	-29	-29
B4. One-time 30 percent real depreciation in 2012	22	22	14	12	10	12	7	7
B5. 10 percent of GDP increase in other debt-creating flows in 2012	22	29	22	20	17	18	11	11
PV of Debt-to-Revenue Ratio 2/								
Baseline	222	207	157	153	133	159	132	130.4
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	222	-15	-52	-63	-67	-73	-109	-109
A2. Primary balance is unchanged from 2011	222	206	156	154	138	172	222	232
A3. Permanently lower GDP growth 1/	222	-185	-25	-84	-62	-70	-68	-67
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012	222	-115	-80	-177	-265	-365	-855	-855
B2. Primary balance is at historical average minus one standard deviations in 2012	222	214	173	169	149	176	150	150
B3. Combination of B1-B2 using one half standard deviation shocks	222	-87	11	-68	-148	-228	-650	-650
B4. One-time 30 percent real depreciation in 2012	222	225	162	158	138	176	151	151
B5. 10 percent of GDP increase in other debt-creating flows in 2012	222	302	259	259	237	266	243	243
Debt Service-to-Revenue Ratio 2/								
Baseline	23	28	42	37	34	24	30	31
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	23	4	0	-1	-1	-2	-2	-2
A2. Primary balance is unchanged from 2011	23	28	41	37	33	25	50	50
A3. Permanently lower GDP growth 1/	23	-9	9	-6	-1	-3	-2	-2
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2012	23	-2	1	-4	-56	-72	-160	-110
B2. Primary balance is at historical average minus one standard deviations in 2012	23	28	42	42	40	28	33	32
B3. Combination of B1-B2 using one half standard deviation shocks	23	-11	6	6	-10	-49	-125	-125
B4. One-time 30 percent real depreciation in 2012	23	29	43	39	36	26	35	35
B5. 10 percent of GDP increase in other debt-creating flows in 2012	23	28	52	93	52	55	42	52

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.

Annex 3: External Debt Sustainability Framework, Baseline Scenario, 2008 - 2031, (In percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections									
	2008	2009	2010			2011	2012	2013	2014	2015	2016	2011-2016 Average	2021	2030/31	2017-2030/31 Average
External debt (nominal) 1/	**2.0**	**2.4**	**2.4**			**2.9**	**3.5**	**3.9**	**4.2**	**4.3**	**4.3**		**3.2**	**0.8**	
o/w public and publicly guaranteed (PPG)	2.0	2.4	2.4			2.9	3.5	3.9	4.2	4.3	4.3		3.2	0.8	
Change in external debt	0.0	0.4	0.0			0.6	0.5	0.5	0.3	0.1	0.0		-0.2	-0.2	
Identified net debt-creating flows	-13.7	-6.6	-4.3			-3.3	-3.1	-2.3	-1.9	-1.1	-0.1		2.7	2.8	
Non-interest current account deficit	**-14.0**	**-8.1**	**-1.3**	**-10.9**	**7.7**	**-0.8**	**-0.7**	**0.1**	**0.5**	**1.2**	**2.0**		**4.3**	**3.8**	4.0
Deficit in balance of goods and services	-22.6	-15.4	-0.5			0.7	0.8	1.4	1.9	2.1	2.6		4.1	4.6	
Exports	42.2	34.1	39.8			37.1	34.6	32.6	29.5	26.8	24.7		16.0	7.4	
Imports	19.6	18.7	39.3			37.8	35.4	34.0	31.4	28.9	27.3		20.1	12.0	
Net current transfers (negative = inflow)	-9.5	-11.4	-10.4	-6.6	4.7	-9.1	-8.2	-7.6	-6.6	-5.9	-5.4		-3.6	-3.3	-3.5
o/w official	-0.4	-0.6	-0.5			-0.5	-0.5	-0.5	-0.6	-0.6	-0.7		-1.1	-2.6	
Other current account flows (negative = net inflow)	18.2	18.7	9.6			7.6	6.7	6.3	5.3	4.9	4.8		3.8	2.6	
Net FDI (negative = inflow)	**0.5**	**0.9**	**-2.7**	**0.0**	**1.0**	**-2.5**	**-2.4**	**-2.4**	**-2.2**	**-2.1**	**-2.0**		**-1.5**	**-1.0**	-1.3
Endogenous debt dynamics 2/	**-0.3**	**0.5**	**-0.3**			**0.0**	**0.0**	**0.0**	**-0.1**	**-0.2**	**-0.1**		**-0.1**	**0.0**	
Contribution from nominal interest rate	0.1	0.1	0.0			0.1	0.2	0.2	0.2	0.2	0.2		0.1	0.0	
Contribution from real GDP growth	-0.2	0.4	-0.1			-0.1	-0.2	-0.2	-0.3	-0.3	-0.3		-0.2	-0.1	
Contribution from price and exchange rate changes	-0.2	0.1	-0.2			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**13.7**	**7.0**	**4.3**			**3.8**	**3.6**	**2.7**	**2.1**	**1.2**	**0.1**		**-2.9**	**-3.0**	
o/w exceptional financing	0.0	0.0	-5.2			-2.9	-3.7	-3.1	-2.6	-2.4	0.4		0.2	0.1	
PV of external debt 4/	...	...	2.8			3.1	4.6	2.2	2.6	2.8	4.6		3.1	0.7	
In percent of exports	...	...	7.0			8.4	13.3	6.6	8.8	10.6	18.5		19.1	9.4	
PV of PPG external debt	**...**	**...**	**2.8**			**3.1**	**4.6**	**2.2**	**2.6**	**2.8**	**4.6**		**3.1**	**0.7**	
In percent of exports	**...**	**...**	**7.0**			**8.4**	**13.3**	**6.6**	**8.8**	**10.6**	**18.5**		**19.1**	**9.4**	
In percent of government revenues	**...**	**...**	**29.4**			**30.9**	**48.1**	**24.8**	**34.0**	**39.1**	**69.1**		**69.1**	**27.9**	
Debt service-to-exports ratio (in percent)	**0.9**	**0.8**	**0.5**			**0.6**	**0.6**	**0.8**	**0.8**	**0.8**	**0.9**		**1.4**	**0.7**	
PPG debt service-to-exports ratio (in percent)	**0.7**	**0.8**	**0.5**			**0.5**	**0.6**	**0.7**	**0.8**	**0.8**	**0.9**		**1.4**	**0.7**	
PPG debt service-to-revenue ratio (in percent)	**1.4**	**2.4**	**1.9**			**2.0**	**2.1**	**2.8**	**2.9**	**2.9**	**3.2**		**5.1**	**2.0**	
Total gross financing need (Billions of U.S. dollars)	-26.7	-11.4	-7.4			-6.6	-6.9	-5.4	-4.6	-2.5	0.8		22.8	68.0	
Non-interest current account deficit that stabilizes debt ratio	-13.9	-8.4	-1.3			-1.4	-1.2	-0.3	0.2	1.1	2.0		4.5	4.0	
Key macroeconomic assumptions															
Real GDP growth (in percent)	12.1	-14.6	6.9	631.0	2012.5	4.2	5.9	5.5	9.0	9.4	7.3	6.9	7.6	7.8	8.3
GDP deflator in US dollar terms (change in percent)	11.0	-4.6	9.2	149.4	418.7	6.8	5.7	5.3	5.5	5.2	5.2	5.6	4.9	4.5	4.8
Effective interest rate (percent) 5/	7.8	3.0	2.4	6.3	9.5	5.1	5.7	5.3	4.9	4.6	4.4	5.0	3.9	3.9	3.9
Growth of exports of G&S (US dollar terms, in percent)	29.5	-34.2	36.4	19.9	32.0	3.6	4.5	4.6	4.3	4.5	3.9	4.2	4.2	4.3	4.1
Growth of imports of G&S (US dollar terms, in percent)	40.5	-22.4	145.5	28.9	47.7	7.0	5.0	6.6	6.3	6.1	6.4	6.2	6.8	7.4	7.0
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	23.7	8.3	8.6	6.4	9.0	9.1	10.8	10.3	50.7	7.0
Government revenues (excluding grants, in percent of GDP)	21.8	10.7	9.5			10.1	9.6	8.7	7.6	7.3	6.6		4.4	2.5	3.8
Aid flows (in Billions of US dollars) 7/	0.4	0.3	2.6			0.7	0.1	0.1	0.1	0.1	0.1		0.2	0.0	
o/w Grants	0.1	0.1	2.2			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
o/w Concessional loans	0.3	0.2	0.4			0.7	0.1	0.1	0.1	0.1	0.1		0.2	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			0.2	0.1	0.1	0.1	0.1	0.0		0.0	0.0	0.0
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			23.7	8.3	8.6	6.4	9.0	9.1		10.3	-11.5	2.8
Memorandum items:															
Nominal GDP (Billions of US dollars)	204.3	166.5	194.3			216.2	242.1	269.0	309.6	356.5	402.5		755.6	2368.1	
Nominal dollar GDP growth	24.5	-18.5	16.7			11.2	12.0	11.1	15.1	15.2	12.9	12.9	12.8	12.7	13.4
PV of PPG external debt (in Billions of US dollars)			5.4			6.7	11.3	6.0	8.2	10.1	18.2		22.0	14.7	
(PVt-PVt-1)/GDPt-1 (in percent)						0.7	2.1	2.2	0.8	0.6	2.3	1.5	0.0	-0.1	0.0
Gross workers' remittances (Billions of US dollars)	19.2	18.4	19.8			19.1	19.1	19.4	19.2	19.2	19.3		19.3	0.0	
PV of PPG external debt (in percent of GDP + remittances)	...	...	2.5			2.9	4.3	2.0	2.4	2.7	4.4		3.0	0.7	
PV of PPG external debt (in percent of exports + remittances)	...	...	5.6			6.8	10.8	5.4	7.3	8.8	15.5		16.5	9.4	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	0.4			0.4	0.5	0.6	0.6	0.7	0.7		1.2	0.7	

Sources: Country authorities; and staff estimates and projections0

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) 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).

Annex 4: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2011-2031 (in Percent)

	Projections							
	2011	2012	2013	2014	2015	2016	2021	2031
PV of debt-to GDP ratio								
Baseline	3	5	2	3	3	5	3	1
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	3	-7	-9	-9	-10	-11	-15	-15
A2. New public sector loans on less favorable terms in 2011-2031 2	3	5	3	3	3	5	4	4
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	3	0	0	0	0	0	0	0
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	3	10	17	16	15	16	9	8
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	3	-3	1	1	1	2	1	1
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	3	14	21	19	18	18	10	10
B5. Combination of B1-B4 using one-half standard deviation shocks	3	-20	23	22	20	21	12	12
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	3	7	3	4	4	6	4	4
PV of debt-to-exports ratio								
Baseline	8	13	7	9	11	18	19	9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	8	-20	-26	-31	-38	-46	-92	-90
A2. New public sector loans on less favorable terms in 2011-2031 2	8	14	8	11	13	21	26	26
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	8	14	7	9	11	18	18	18
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	8	35	74	77	79	91	81	90
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	8	14	7	9	11	18	18	18
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	8	42	63	65	67	74	66	66
B5. Combination of B1-B4 using one-half standard deviation shocks	8	57	71	73	74	82	72	72
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	8	14	7	9	11	18	18	18
PV of debt-to-revenue ratio								
Baseline	31	48	25	34	39	69	69	28
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	31	-73	-99	-120	-141	-172	-333	-333
A2. New public sector loans on less favorable terms in 2011-2031 2	31	51	30	42	48	80	93	93
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	31	-4	0	0	0	0	0	0
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	31	107	198	211	207	239	207	200
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	31	-30	10	13	15	27	26	25
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	31	151	237	252	245	278	237	236
B5. Combination of B1-B4 using one-half standard deviation shocks	31	-207	270	285	278	311	262	262
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	31	68	36	48	55	96	92	92

Annex 4 Continued: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2011-2031 (in Percent)

Debt service-to-exports ratio

Baseline	1	1	1	1	1	1	**1**	1
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	1	0	0	0	0	0	**0**	0
A2. New public sector loans on less favorable terms in 2011-2031 2	1	1	1	1	1	1	**2**	2
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	1	1	1	1	1	1	**1**	1
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	1	1	2	4	4	4	**8**	8
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	1	1	1	1	1	1	**1**	1
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	1	1	2	3	3	3	**7**	7
B5. Combination of B1-B4 using one-half standard deviation shocks	1	1	2	3	3	3	**8**	8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	1	1	1	1	1	1	**1**	1

Debt service-to-revenue ratio

Baseline	2	2	3	3	3	3	**5**	2
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2011-2031 1/	2	0	0	0	0	0	**-1**	-1
A2. New public sector loans on less favorable terms in 2011-2031 2	2	2	2	3	3	3	**8**	8
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2012-2013	2	0	0	0	0	0	**0**	0
B2. Export value growth at historical average minus one standard deviation in 2012-2013 3/	2	2	5	10	10	10	**21**	21
B3. US dollar GDP deflator at historical average minus one standard deviation in 2012-2013	2	-1	1	1	1	1	**2**	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2012-2013 4/	2	2	7	12	11	11	**25**	25
B5. Combination of B1-B4 using one-half standard deviation shocks	2	-2	9	13	12	13	**28**	28
B6. One-time 30 percent nominal depreciation relative to the baseline in 2012 5/	2	3	4	4	4	4	**7**	7
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	-2	-2	-2	-2	-2	-2	**-2**	-2

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 assuming an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Annex 5: Public Sector Debt Sustainability Framework, Baseline Scenario, 2008-2031, Consolidated (Federal & States' Domestic Debt) (In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2008	2009	2010	Average 5/	Standard Deviation 5/	2011	2012	2013	2014	2015	2016	2011-16 Average	2021	2031	2017-31 Average
Public sector debt 1/	11.6	15.4	20.7			25.5	21.7	18.0	15.4	13.2	12.0		7.2	...	
o/w foreign-currency denominated	2.0	2.4	2.4			2.9	3.5	3.9	4.2	4.3	4.3		3.2	...	
Change in public sector debt	-1.0	3.8	5.3			4.8	-3.8	-3.7	-2.6	-2.3	-1.2		-0.7	...	
Identified debt-creating flows	-11.8	2.2	10.4			14.0	12.5	11.9	10.7	12.2	11.7		7.9	...	
Primary deficit	-11.1	1.0	2.9	-4.5	6.6	1.4	1.6	1.5	1.0	-1.8	0.7	0.7	0.7	...	0.4
Revenue and grants	21.9	10.7	20.0			18.7	18.3	16.6	15.0	14.2	13.1		9.0	...	
of which: grants	0.0	0.0	1.1			0.0	0.0	0.0	0.0	0.0	0.0		0.0	...	
Primary (noninterest) expenditure	10.8	11.7	22.8			20.1	19.9	18.1	16.0	12.4	13.8		9.7	...	
Automatic debt dynamics	-0.6	1.2	-0.9			-0.9	-1.5	-1.1	-0.9	2.1	-0.6		-0.3	...	
Contribution from interest rate/growth differential	-0.8	1.3	-0.8			-0.8	-1.3	-0.9	-0.8	2.1	-0.5		-0.3	...	
of which: contribution from average real interest rate	0.6	-0.6	0.2			0.1	0.1	0.2	0.7	3.4	0.4		0.2	...	
of which: contribution from real GDP growth	-1.4	2.0	-1.0			-0.8	-1.4	-1.1	-1.5	-1.3	-0.9		-0.6	...	
Contribution from real exchange rate depreciation	0.1	-0.1	-0.1			-0.1	-0.1	-0.2	-0.1	-0.1	-0.1		...	...	
Other identified debt-creating flows	-0.1	0.0	8.5			13.4	12.4	11.5	10.7	11.9	11.6		7.5	0.0	
Privatization receipts (negative)	-0.1	0.0	-0.4			0.0	0.0	0.0	0.0	0.0	0.0		0.0	...	
Recognition of implicit or contingent liabilities	0.0	0.0	8.9			13.4	12.4	11.5	10.7	11.9	11.6		7.5	...	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	...	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	...	
Residual, including asset changes	10.8	1.6	-5.1			-9.1	-16.3	-15.6	-13.3	-14.4	-12.9		-8.6	...	
Other Sustainability Indicators															
PV of public sector debt	...	...	21.1			25.7	22.9	16.2	13.8	11.7	12.2		7.1	...	
o/w foreign-currency denominated	...	...	2.8			3.1	4.6	2.2	2.6	2.8	4.6		3.1	...	
o/w external	...	...	2.8			3.1	4.6	2.2	2.6	2.8	4.6		3.1		
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...		
Gross financing need 2/	-6.1	6.0	9.0			10.4	11.9	11.9	9.8	8.8	7.1		4.8		
PV of public sector debt-to-revenue and grants ratio (in percent)	…	…	105.8			137.5	125.2	97.5	92.3	82.4	93.5		78.8		
PV of public sector debt-to-revenue ratio (in percent)	…	…	112.0			137.5	125.2	97.5	92.3	82.4	93.5		78.8		
o/w external 3/	…	…	14.8			16.7	25.2	12.9	17.3	20.0	34.9		34.0		
Debt service-to-revenue and grants ratio (in percent) 4/	9.4	20.9	16.2			16.7	19.2	25.7	22.6	40.8	15.2		18.6		
Debt service-to-revenue ratio (in percent) 4/	9.5	21.0	17.1			16.7	19.2	25.7	22.6	40.8	15.2		18.6		
Primary deficit that stabilizes the debt-to-GDP ratio	-10.1	-2.8	-2.4			-3.4	5.4	5.2	3.5	0.4	1.9		1.4		
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	12.1	-14.6	6.9	631.0	2012.5	4.2	5.9	5.5	9.0	9.4	7.3	6.9	7.6	-100.0	1.1
Average nominal interest rate on forex debt (in percent)	7.8	3.0	1.5	6.2	9.6	5.3	5.9	5.4	5.0	4.7	4.4	5.1	3.9	...	3.8
Average real interest rate on domestic debt (in percent)	4.6	-6.1	1.7	-9.5	31.5	-0.1	-0.1	0.8	4.3	32.5	4.2	6.9	4.5	...	4.6
Real exchange rate depreciation (in percent, + indicates depreciation)	7.1	-4.5	-6.4	-14.9	30.2	-5.1	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	4.9	19.5	10.2	156.5	432.4	9.7	7.3	7.2	3.9	3.2	5.2	6.1	4.9	...	4.2
Growth of real primary spending (deflated by GDP deflator, in percent)	0.3	-0.1	1.1	0.0	0.6	-0.1	0.0	0.0	0.0	-0.2	0.2	0.0	0.0	…	0.0
Grant element of new external borrowing (in percent)	...	...	...	…	…	23.7	8.3	8.6	6.4	9.0	9.1	10.8	10.3	50.7	...

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.

ANNEX 6: DSA TECHNICAL TEAM

Technical Advisor/Resource Person:

1.	1. Mr. Baba Musa	-	WAIFEM
2.	2. Karamo Jawara	-	WAIFEM

Technical Members:

3.	James K. A. Olekah	DMO
4.	Joe Ugoala	DMO
5.	Hannatu Suleiman-Onuja	DMO
6.	Janet Jiya	DMO
7.	Ibrahim Natagwandu	DMO
8.	Elizabeth Ekpenyong	DMO
9.	Lucy Okpanachi	DMO
10.	Maraizu Nwankwo	DMO
11.	Suleiman Yusuff-Shelleng	DMO
12.	Ibrahim Aliyu	DMO
13.	Funmi O. Onadipe	DMO
14.	Idowu Akodu	DMO
15.	Jummai Sa'id	DMO
16.	Ruth Yoriyo	DMO
17.	Bartholomew Aja	DMO
18.	Akin Aimola	DMO
19.	Umar Abubakar	DMO
20.	Greg Anowuru	DMO
21.	Pamela Kumar	DMO
22.	Popoola Lukmon	DMO
23.	Akelidhu Emmanuel	DMO
24.	Sam Rapu	CBN
25.	G.K. Sanni	CBN
26.	Musa A.U	CBN
27.	Tunde Lawal	NPC
28.	Philip Obasi	NPC
29.	Austen Anyakorah	NBS
30.	Nazeer Bello	BOF
31.	Adeniran Tunde	BOF
32.	Mekoma S.A	FMF
33.	C.U. Okoye	FMF