



**DEBT MANAGEMENT OFFICE
NIGERIA**

2018

**REPORT OF THE ANNUAL NATIONAL
DEBT SUSTAINABILITY ANALYSIS
(DSA)**



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GLOSSARY

AMCON	Asset Management Corporation of Nigeria
ASI	All-Share Index
ATM	Average Time-to-Maturity
BDC	Bureau De Change
BOF	Budget Office of the Federation
CBN	Central Bank of Nigeria
CHF	Swiss Franc
CPIA	Country Policy & Institutional Assessment
DDR	Debt Data Reconstruction
DSA	Debt Sustainability Analysis
DSF-LICs	Debt Sustainability Framework for Low Income Countries
DSF-MICs	Debt Sustainability Framework for Middle Income Countries
DMO	Debt Management Office
ECFA	External Creditors Funding Account
ERGP	Economic Recovery & Growth Plan
EMBI	Emerging Market Bond Index
FCT	Federal Capital Territory
FDIs	Foreign Direct Investments
FEC	Federal Executive Council
FGN	Federal Government of Nigeria
FMBNP	Federal Ministry of Budget and National Planning
FMF	Federal Ministry of Finance
FIRS	Federal Inland Revenue Service
GBP	British Pound Sterling
GDP	Gross Domestic Product
GIFMIS	Government Integrated Financial Management Information System
GNI	Gross National Income
ICM	International Capital Market
IGR	Internally Generated Revenue
IMF	International Monetary Fund
IPPIS	Integrated Payroll and Personnel Information System
ISPO	Irrevocable Standing Payment Order
JPY	Japanese Yen



M ₂	Broad Money Supply
MACs	Market Access Countries
Mbpd	Million Barrels Per Day
MDAs	Ministries, Departments and Agencies
MLT	Medium to Long-Term
MPR	Monetary Policy Rate
MTDS	Medium-Term Debt Management Strategy
MTEF	Medium-Term Expenditure Framework
NASS	National Assembly
NBS	National Bureau of Statistics
NCS	Nigeria Customs Service
NIRP	National Industrial Revolution Plan
NPV	Net Present Value
NSE	The Nigerian Stock Exchange
NTBs	Nigerian Treasury Bills
OAGF	Office of Accountant-General of the Federation
Pb	Per barrel
PENCOM	Pension Commission
PIB	Petroleum Industry Bill
PPG	Public and Publicly Guaranteed
PV	Present Value
SEC	Securities and Exchange Commission
SEZ	Special Economic Zones
SF	Sinking Fund
SMEs	Small and Medium Scale Enterprises
SOEs	State-Owned Enterprises
SPV	Special Purpose Vehicle
ST	Short-Term
TCC	e-Tax Clearance Certificate
TSA	Treasury Single Account
TTM	Term-To-Maturity
VAIDs	Voluntary Assets and Income Declaration Scheme
VOARS	Voluntary Offshore Assets Regularization Scheme
WAIFEM	West African Institute for Financial and Economic Management





EXECUTIVE SUMMARY

1.0 Background

The Debt Management Office (DMO), in collaboration with key stakeholders, conducts annual Debt Sustainability Analysis (DSA) to evaluate the level and risks associated with Public Debt. The 2018 exercise was conducted from October 30 to November 9, 2018 in partnership with the following institutions: Federal Ministry of Finance (FMF), Federal Ministry of Budget and National Planning (FMBNP), Central Bank of Nigeria (CBN), Budget Office of the Federation (BOF), National Bureau of Statistics (NBS), Office of the Accountant-General of the Federation (OAGF), Federal Inland Revenue Services (FIRS) and the Nigeria Customs Service (NCS). The West African Institute for Financial and Economic Management (WAIFEM), provided technical support.

2.0 Policy and Macroeconomic Developments

2.1 Global Environment

Global economic activities were weakened in 2018¹ by restrictive trade policies between the United States and China, two countries that account for approximately 40 percent of the world's Gross Domestic Product (GDP). The impact of the trade row on the economies of the two countries is mixed, with growth projected to be higher in the United States by 2.9 percent in 2018 compared to 2.2 percent in 2017, while China is estimated to grow by 6.6 percent from 6.9 percent in 2017.

In the Euro Area, the top economies, Germany, France, Italy and Spain that account for about 13 percent of global GDP, are predicted to experience sluggish growth in 2018. While growth in the entire Euro Area is estimated at 1.8 percent compared to 2.4 percent in 2017, Germany is expected to grow 1.5 percent in 2018 as against 2.5 percent in 2017, France 1.5 percent compared to 2.3 percent in 2017, Italy 1.0% from 1.6 percent in 2017, and Spain 2.5 percent as against 3.0 percent in 2017. The United Kingdom, still faced with the Brexit issues, is estimated to grow 1.4 percent from 1.8 percent in 2017.

Growth in Sub-Saharan Africa is projected to remain flat at 2.9 percent. However, the two top economies in the region, Nigeria and South Africa that account for about 0.9 percent of global GDP are projected to have mixed performance in 2018. While Nigeria is expected to record 2.9

¹ See the IMF World Economic Outlook, January 2019



percent, growth compared with 0.8 percent in 2017. South Africa's economy is projected to expand by only 0.8 percent in 2018 from 1.3 percent in 2017.

Overall, the International Monetary Fund (IMF) estimates that the global economy will expand by 3.7 percent in 2018, lower than the 3.8 percent recorded in 2017. Advanced Economies are to experience 2.3 percent growth as against 2.4 percent in 2017, while Emerging Market and Developing Economies will grow by 4.6 percent from 4.7 percent in 2017. The global economy will in the medium term continue to be affected by the protracted trade matter between the United States and China, even though both countries are making effort to resolve the impasse,² and the Brexit issue in the UK.

2.2 Domestic Environment

2.2.1 Policy Issues

In fiscal year 2018, the Federal Government continued with the implementation of sectoral programmes and projects as outlined in the Economic Recovery and Growth Plan (ERGP) 2017-2020. Macro-fiscal management was enhanced as monetary authorities achieved price and exchange rate stability, while convergence of the different exchange rates remains a priority for the CBN. For example, the premium between the Interbank and Bureau D' Change Exchange Rates narrowed to 17.40 percent in Q3 2018 from 18.59 percent in Q1 2018 but increased to 18.20 percent in Q4 2018.³

The restraint of access to foreign exchange market of 41 items that can be produced locally aided local production in 2018, while the Anchor Borrowers' Programme moved the country away from a net importer of rice to a key producer. Specifically, as at October 2018, about 862,069 farmers benefited from the programme, which had generated almost 2,502,675 jobs across the country.⁴ The positive stance expressed by the monetary authorities on the effective implementation of the ERGP and the 2018 capital Budget indicated how fiscal policy contributed to the decision-making process of the CBN in 2018.⁵

On their part, fiscal policy managers maintained fiscal discipline as emphasis continued on the funding of critical infrastructure projects. For example, funding selected capital projects in the 2018 Budget through the Sukuk Bond Issuance of N100 billion guaranteed efficiency in the

² <https://www.reuters.com/article/us-usa-trade-china-tariffs/ustr-to-suspend-china-tariff-hike-until-further-notice-idUSKCN1QG2WP>, Cited February 28, 2019.

³ Central Bank of Nigeria Economic Report for Q4 2018, page 38

⁴ https://www.cbn.gov.ng/FeaturedArticles/2018/articles/Emefiele_Woos_Foreign_Investors.asp, Cited February 28, 2019

⁵ Central Bank of Nigeria (CBN) Monetary Policy Communique, November 2018; page 3



construction and rehabilitation of road projects across each of the 6 Geo-political zones in the country. In addition, Mr. President on February 25, 2018 established the Presidential Infrastructure Development Fund (PIDF), the avenue through which the Nigeria Sovereign Investment Authority (NSIA) is investing in critical infrastructure projects nationwide. Another innovative means of funding critical infrastructure introduced recently is the Road Infrastructure Development and Refurbishment Investment Tax Credit Scheme. The strategy herein is that private sector participants will utilize project costs incurred in construction or refurbishment of Eligible Roads as a credit against Companies Income Tax payable.

On the revenue side, production shortfalls and unpredictable oil prices meant that forecasted oil revenues were not achieved in 2018. Specifically, the projected gross oil and gas federation revenues for 2018 was N7,618.07 billion and of this amount N5,078.71 billion was expected in the first 8 months of the year. However, only N3,603.25 billion was realized between January and August, indicating a shortfall of N1,475.46 billion or 29 percent.⁶ To enhance future oil revenue inflows, Government has continued to take measures to boost oil production, including ensuring stability in the Niger Delta area. Government fully understands the volatility associated with oil prices and the unpredictability of the Niger Delta region. Thus, efforts aimed at boosting non-oil revenues were stepped up in 2018 because all the components (Corporate Tax, VAT, Customs, and Tax Amnesty) under-performed by 28 percent in the first 8 months of the year.

Two important steps have therefore been taken to boost non-oil revenue generation. First, there is an Approved Revenue Performance Management Framework for Government Owned Enterprises (GOEs), and the goal is to raise revenue generation and the associated remittances to the treasury. The mechanisms for achieving the objective of the Framework are the introduction of Performance Contracts for Chief Executive Officers and other Management Staff of the GOEs, Expenditure Controls, Budgeting and Financial Reporting Requirements, Financial Oversight, and Amendment of Establishment Acts of some GOEs.

Second, the Strategic Revenue Growth Initiative (SRGI) finalized in 2018 but recently made public, is aimed at establishing sustainable revenue generation. In particular, key revenue institutions like the Federal Inland Revenue Service (FIRS) and the Nigeria Custom Service have developed innovative ways by which they will enhance their revenue generation and remittance to the treasury.

⁶ See 2019 – 2021 Medium Term-Expenditure Framework and Fiscal Strategy Paper page 10



2.2.2 Economic Performance

Real Gross Domestic Product

The Nigerian economy showed resilience in 2018 as a combination of good policy initiatives and efficiency in public spending resulted in economic activities gathering momentum in the latter part of the year, leading to improved real GDP growth of 1.93 percent as against 0.82 percent recorded in 2017.⁷ While the oil sector recorded a lower growth rate of 1.14 percent as against 4.69% in 2017, owing to production disruptions in the Niger Delta region, the non-oil sector was the catalyst for growth, increasing by 2 percent in 2018 compared with 0.47 percent in 2017. The sub-sectors that boosted non-oil performance were Information and communication, Transportation & Storage, Arts & Entertainment, while Agriculture and Manufacturing also made meaningful contributions in line with the set targets of Government as enshrined in the ERGP. In addition, the non-oil sector was supported by the stability in the exchange rate, effective implementation of the 2018 capital budget, and the interventions of the CBN in the real sector of the economy.⁸

Inflation

The monetary authorities were successful in controlling inflation in 2018, even though the preferred band of 6-9 percent was missed. Renewed inflationary pressure from mid-2018 resulted in headline inflation closing the year at 11.44 percent, this was however lower than the 15.13 percent recorded at the start of the year. Core inflation which excludes temporary price volatility, also closed 2018 lower at 9.77 percent from 12.09 percent at the start of the year. This implies that there was improvement in addressing the underlying structural causes of inflation in the economy. Food inflation was the main driver of inflation as it closed 2018 at 13.56 percent, but this was also a moderation from 18.92 percent at the beginning of the year. The upside risks to inflation include the effect of 2019 election-related spending, recurring herdsmen/farmers challenges, and seasonal flooding which impairs agricultural production.

Public Debt

Efficient and effective management of public debt was achieved in 2018. The ratio of Total Public Debt to GDP remained relatively low at 18.27 percent as at September 30, 2018. This compares favourably with the Country-Specific Debt Limit of 25 percent of GDP, the threshold of 56 percent of GDP for countries in Nigeria's peer-group, as well as the West African Monetary Zone (WAMZ)

⁷ National Bureau of Statistics GDP Report for Q4 2018

⁸ Some of these interventions are discussed in the body of the report.



Convergence Threshold of 70 percent of the GDP. In addition, efforts at moving towards a debt composition target of 60:40 ratio for domestic and external debt has continued while attaining 75:25 ratio for long to short-term debt in the domestic debt portfolio has been achieved.⁹

External sector

The external sector recorded improvement in the latter part of 2018¹⁰ as total foreign exchange inflows increased by \$1.56 billion or 12.1 percent in Q3 to \$14.51 billion in the Q4, compared with outflow of \$14.60 billion, thereby reducing the net outflow to \$87 million in Q4 2018 from \$3.9 billion in Q3 2018. The exchange rate was relatively stable, closing 2018 at N307/\$¹¹ and the firmness was due mainly to the interventions of the CBN which resulted in external reserves declining by 8.9 percent from \$46.7 billion in Q1 2018 to \$42.5 billion in Q4 2018. The reserves at the end of 2018 could finance 6.3 months of imports of goods and services and 10.1 months of import of goods only, higher than the 3 months IMF benchmark.

Summary

Overall, the Nigerian economy performed better in 2018 when compared with the relatively sluggish growth in 2017. The effect of the laudable policies initiated by both fiscal and monetary authorities culminated in the economy experiencing improved economic growth, subdued inflationary pressures, and a stable external sector. Importantly, efficiency in Public Debt Management continued in 2018 in line with DMO Strategic Plan 2018 – 2022.

3.0 Methodology, Objectives and Scope of Debt Coverage

The methodology for the 2018 DSA was anchored on the revised World Bank and International Monetary Fund (IMF) Low Income Countries (LIC) Debt Sustainability Framework (DSF), which was launched in July, 2018. Unlike the previous LIC-DSF which was based on the Country Policy and Institutional Assessment (CPIA) score only, the revised Framework is anchored on a Composite Indicator (CI), which evaluates the Debt Carrying capacity of a country by considering its peculiarities.

The objective of the DSA is to support government's efforts to achieve development goals, while minimizing the risks associated with Public Debt. Specifically, it helps in informing borrowing

⁹ DMO figures as at September 30, 2018 indicate that the domestic-external ratio is 71:29 while 77:23 ratio has been achieved for long to short-term debt in the domestic portfolio

¹⁰ Quoted figures from Central Bank of Nigeria Economic Report, Q4 2018

¹¹ <https://www.cbn.gov.ng/rates/exrate.asp?year=2018>, Cited February 28, 2018



decisions by considering the capacity to carry current debt as well as future borrowings under Baseline projections and Shock scenarios.

The coverage of Total Public Debt in the 2018 DSA include the debt of the Federal Government, Subnational, and Publicly Guaranteed Debt and Public Sector External. It also includes the FGN's Contingent liabilities and verified Government's Arrears.

4.0 Findings, Conclusions and Recommendations

4.1 Findings

Nigeria's External Debt indicators show a Moderate Risk of Debt Distress. The ratio of External Debt-to-GDP remained below its threshold under the Baseline Scenario, while the ratios of Debt-to-Exports and Debt Service-to-Exports tend to breach their thresholds by 2020 under the most Extreme Shock scenario. Similarly, the ratio of Debt Service-to-Revenue may breach its threshold by 2021. The debt outlook shows that External Debt is sensitive to shocks in Foreign Currency revenues, especially as oil revenue contributes the bulk of government revenues. However, this outlook will be mitigated by effects of on-going initiatives and reforms in Oil & Gas, Agriculture and Solid Minerals sectors, all aimed at improving Export base.

The Total Public Debt remains Sustainable in the medium to long-term, but sensitive to Revenue Shock. The ratio of Total Public Debt-to-GDP remained below its threshold throughout the projection period under the Baseline and most Extreme Shock Scenarios. However, the Revenue-based indicators (Total Public Debt-to-Revenue and Debt Service-to-Revenue) weakened under the Stress Test scenario, suggesting that the Total Public Debt portfolio is sensitive to revenue shocks.

In the context of the country's Borrowing Space, otherwise referred to as Granularity, the findings show that there is a limited borrowing space based on the country's current revenue profile, as the ratio of Debt Service-to-Revenue moved towards the threshold and breaches it by 2025. Nevertheless, the various reforms and initiatives aimed at boosting the revenue base and blockage leakages will improve the revenue-based indicators in the medium to long-term and ultimately improve the borrowing space.

4.2 Conclusion

The Final Risk Rating for the country from the 2018 DSA reveals that Nigeria remains at a Moderate Risk of Debt distress but with a sustainable debt profile. The DSA also reveals that the Debt Portfolio may be sensitive to Exports and Revenue shocks.



However, with the concerted efforts of the government, through its various reforms in the Oil & Gas, Agriculture & Solid Minerals sectors, as well as in the country's Tax Administration, and other Collections, it is expected that the Revenue-based indicators and borrowing space will improve.

4.3 Key Recommendations

The key policy recommendations of the 2018 DSA exercise include:

4.3.1 Borrowing Limit for 2019

Based on the Country-Specific Debt Limit for Total Public Debt-to-GDP ratio of 25 percent, (up to 2020), the borrowing limit for 2019 is determined. Given the DSA projected ratio of Total Public Debt to GDP of 23.3 percent by end-December, 2018 which takes into consideration the outstanding funding requirements for the year from both the domestic and external sources, the available fiscal borrowing space would be 1.7 percent. Based on the projected 2019 GDP of US\$457 billion, the quantum of borrowing will be 1.7 percent of US\$457 billion, which translates to US\$7.77 billion. In fiscal year 2019, the maximum amount of US\$7.77 billion may be borrowed without breaching the Country's Specific Debt Limit. In line with the Debt Management Strategy which emphasizes attaining a domestic to foreign debt ratio of 60:40 for the debt portfolio, the proposed borrowing could be in the ratio of 50:50 for the Domestic and External sources as follows:

- **New Domestic Borrowing US\$3.885 billion (equivalent of about N1.185 trillion); and,**
- **New External Borrowing: US\$3.885 billion (equivalent of about N1.185 trillion).**

This will improve the ratio of Domestic Debt to External Debt which was about 71:29 as at September 30, 2018.

Based on the Borrowing Space rationale, the cumulative effect of the implementation of the current Debt Management Strategy is significantly reducing the country's Debt Service burden through the refinancing of high cost short-term domestic debt with low-cost, long-term external debt, as well as the revenue enhancement initiatives of the government. This would lead to a more robust Debt Service to Revenue profile, as well as an enhanced borrowing space.

4.3.2 To explore the use of Non-debt funding arrangements to support Infrastructural Development.

In view of the huge funding requirements for critical infrastructure and other capital projects, Government may need to aggressively explore the use of Off-Balance Sheet arrangements to



fund such capital-intensive projects. Some of these arrangements may include – Public Private Partnerships (PPPs) – particularly Concessioning Schemes to attract Private Sector to participate in the delivery of viable infrastructural projects. This would also entail the mobilisation of additional Private Sector financing through the selective issuance of Sovereign Guarantees to priority and high-impact sectors of the economy.

5.3 Restructuring of Nigeria's Total Public Debt Profile

The current Debt Management Strategy which seeks to attain a Domestic to External ratio of 60:40, and a reduction in Debt Service costs, by refinancing high cost short-term domestic debt with lower cost external debt, extension in the maturity profile of the portfolio, by achieving a long-term to short-term debt ratio of 75:25 should be sustained.

There is need to consolidate efforts towards boosting and blocking leakages in government revenues by strengthening the implementation of the TSA, GIFMIS, IPPIS, and the different reforms in the Oil & Gas, Agriculture and Solid Minerals Sectors, and Tax Administration through the FIRS. These efforts will improve revenues and make the Debt Service to Revenue ratios more robust.

CHAPTER ONE

POLICY AND MACROECONOMIC DEVELOPMENTS IN 2018

1.1 Background

- 1.1.1 The DSA is a key input into the country's Medium-Term Expenditure Framework (MTEF), the Fiscal Strategy Paper (FSP), and the National Annual Budget. It is underpinned by policy and macroeconomic developments in both the global and domestic environments. The main objective of the DSA is to ensure the minimization risks related with Public Debt distress considering the country's debt carrying capacity, and projected debt burden under both baseline projections and shock scenarios.
- 1.1.2 The 2018 DSA Exercise was conducted from October 30 to November 9, 2018. The key stakeholders involved were - the Federal Ministry of Finance (FMF), Central Bank of Nigeria (CBN), Federal Ministry of Budget and National Planning (FMBNP), Budget Office of the Federation (BOF), National Bureau of Statistics (NBS), the Office of the Accountant-General of the Federation (OAGF), the Federal Inland Revenue Services (FIRS) and the Nigerian Customs Service (NCS). The West African Institute for Financial and Economic Management (WAIFEM) provided technical support.

1.2 Developments in the Global Environment

Weak Economic Growth

- 1.2.1 Global economic activities were impaired in 2018 by restrictive trade policies between the United States and China – the two countries that account for approximately 40 percent of the world economy in Gross Domestic Product (GDP) terms. Notwithstanding, and despite weak economic performance in some economies in Europe and Asia, the International Monetary Fund (IMF) projects that the global economy will expand by 3.7 percent in 2018.
- 1.2.2 In the Euro Area, the top economies, Germany, France, Italy and Spain that account for about 13 percent of global GDP, are predicted to experience sluggish growth in 2018. While growth in the entire Euro Area is estimated at 1.8 percent compared to 2.4 percent in 2017, Germany is expected to grow 1.5 percent in 2018 as against 2.5 percent in 2017, France 1.5 percent compared to 2.3 percent in 2017, Italy 1.0% from 1.6 percent in 2017 and Spain 2.5 percent as against 3.0 percent in 2017. The United Kingdom, still faced with the Brexit issues, is estimated to grow 1.4 percent from 1.8 percent in 2017. The Advanced Economies as a whole are projected to grow by 2.3 percent, lower than Emerging Markets and Developing Economies 4.6 percent, implying that the Emerging Markets and Developing Economies will drive global growth in 2018.



1.2.3 Growth in Sub-Saharan Africa is projected to remain flat at 2.9 percent. However, the two top economies in the region, Nigeria and South Africa, that account for about 0.9 percent of global GDP, are projected to have mixed performance in 2018. Whereas Nigeria is expected to record 1.9 percent growth compared with 0.8 percent in 2017, South Africa's economy is predicted to expand by only 0.8 percent in 2018 from 1.3 percent in 2017. When compared with the BRIC (Brazil, Russia, India, China) economies, estimated growth of 1.9 percent for Nigeria in 2018 will only be surpassed by India and China. The global economy will in the medium term continue to be affected by the protracted trade tensions and cold relationship between the United States and China, the Brexit issue in the UK, and episodes of large-scale flooding in major areas.

1.2.4 Overall, the global economy will in the medium term continue to be affected by the protracted trade matter between the United States and China, even though both countries are making efforts to resolve the impasse.¹²

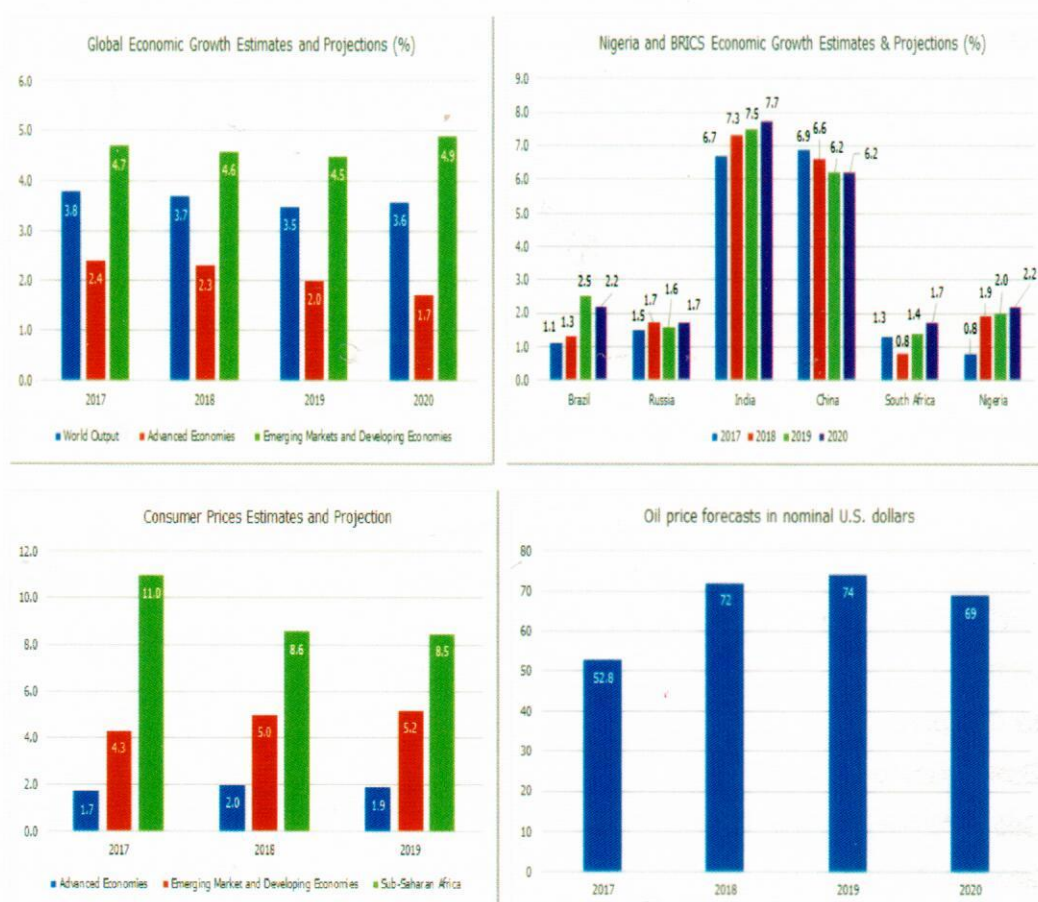
Inflationary Pressure

1.2.5 Inflationary pressure is estimated to intensify in Advanced Economies from 1.7 percent in 2017 to 2.0 percent in 2018, and from 4.3 percent in 2017 in Emerging Markets and Developing Economies to 5.0 percent in 2018. Weak demand is however expected to lead to moderation in Sub-Saharan Africa from 11 percent in 2017 to 8.6 percent in 2018. Oil price is estimated to average \$72 per barrel in 2018 from \$52.8 per barrel in 2017, while supply side factors were in 2018 influenced by geo-politics and OPEC quota rules.

¹² <https://www.reuters.com/article/us-usa-trade-china-tariffs/ustr-to-suspend-china-tariff-hike-until-further-notice-idUSKCN1QG2WP>, Cited February 28, 2019.



Figure 1.1: Selected Global Macroeconomic Indicators



Sources: International Monetary Fund World Economic Outlook, January 2019 and OPEC World Oil Outlook 2018

1.3 Domestic Policy and Macroeconomic Developments

Macro-fiscal management

1.3.1 In fiscal year 2018, the Federal Government continued with the implementation of sectoral programmes and projects as outlined in the Economic Recovery and Growth Plan (ERGP) 2017-2020. Macro-fiscal management was enhanced as monetary authorities achieved price and exchange rate stability, while convergence of the different exchange rates remains a priority for the CBN. For example, the premium between the Interbank and Bureau De Change Exchange Rates narrowed to 17.40 percent in Q3, 2018 from 18.59 percent in Q1 2018, but increased to 18.20 percent in Q4, 2018.¹³ The restraint of access to foreign exchange market of 41 items that can be produced locally aided local production in 2018, while the Anchor Borrowers' Programme moved the country away from a net importer of rice to a key producer.

¹³ Central Bank of Nigeria Economic Report for Q4 2018, page 38



Specifically, as at October 2018, about 862,069 farmers benefited from the programme, which had generated almost 2,502,675 jobs across the country.¹⁴ The positive stance expressed by the monetary authorities on the effective implementation of the ERGP and the 2018 capital Budget indicated how fiscal policy contributed to the decision-making process of the CBN in 2018.¹⁵

1.3.2 Fiscal policy managers maintained fiscal discipline as emphasis continued on the funding of critical infrastructure projects. Funding selected capital projects in the 2018 Budget through the Sukuk Bond Issuance of N100 billion guaranteed efficiency in the construction and rehabilitation of road projects across each of the 6 Geo-political zones in the country. In addition, Mr. President on February 25, 2018 established the Presidential Infrastructure Development Fund (PIDF), the avenue through which the Nigeria Sovereign Investment Authority (NSIA) is investing in critical infrastructure projects nationwide. Another innovative means of funding critical infrastructure introduced recently is the Road Infrastructure Development and Refurbishment Investment Tax Credit Scheme. The strategy is that private sector participants will utilize project costs incurred in construction or refurbishment of Eligible Roads as a credit against Companies Income Tax payable.

1.3.3 On the revenue side, production shortfalls and unpredictable oil prices meant that forecasted oil revenues were not achieved in 2018. Specifically, the projected gross oil and gas federation revenues for 2018 was N7,618.07 billion and of this amount N5,078.71 billion was expected in the first 8 months of the year. However, only N3,603.25 billion was realized between January and August, indicating a shortfall of N1,475.46 billion or 29 percent.¹⁶ To enhance future oil revenue inflows, Government has continued to take measures to boost oil production, including ensuring stability in the Niger Delta area. Government fully understands the volatility associated with oil prices and the unpredictability of the Niger Delta region. Thus, efforts aimed at boosting non-oil revenues were stepped up in 2018 because all the components (Corporate Tax, VAT, Customs, and Tax Amnesty) under-performed by 28 percent in the first 8 months of the year.

1.3.4 Two important steps have therefore, been taken to boost non-oil revenue generation. First, there is an Approved Revenue Performance Management Framework for Government Owned Enterprises (GOEs) and the goal is to raise revenue generation and the associated remittances to the treasury. The mechanisms for achieving the objective of the Framework are the

¹⁴ https://www.cbn.gov.ng/FeaturedArticles/2018/articles/Emefiele_Woos_Foreign_Investors.asp, Cited February 28, 2019

¹⁵ Central Bank of Nigeria (CBN) Monetary Policy Communique, November 2018; page 3

¹⁶ See 2019 – 2021 Medium Term-Expenditure Framework and Fiscal Strategy Paper page 10



introduction of Performance Contracts for Chief Executive Officers and other Management Staff of the GOEs, Expenditure Controls, Budgeting and Financial Reporting Requirements, Financial Oversight, and Amendment of Establishment Acts of some GOEs. Second, the Strategic Revenue Growth Initiative (SRGI) finalized in 2018 but recently made public, is aimed at establishing sustainable revenue generation. In particular, key institutions like the Federal Inland Revenue Service (FIRS) and the Nigeria Custom Service are expected to develop and implement innovative ways by which they will enhance their revenue generation and remittance to the treasury.

Economic Growth

- 1.3.5 In terms of economic growth, the Nigerian economy showed resilience in 2018 despite obvious revenue challenges. A combination of good policy initiatives and efficiency in public spending resulted in economic activities gathering momentum in the latter part of the year, leading to improved real GDP growth of 1.93 percent as against 0.82 percent recorded in 2017.¹⁷ While the oil sector recorded a lower growth rate of 1.14 percent in 2018 as against 4.69% in 2017, owing to production disruptions in the Niger Delta region, the non-oil sector was the catalyst for growth, increasing by 2 percent in 2018 compared with 0.47 percent in 2017. The sub-sectors that boosted non-oil performance were Information and communication, Transportation & Storage, Arts & Entertainment, while Agriculture and Manufacturing also made meaningful contributions in line with the set targets of Government as enshrined in the ERGP. Overall, the non-oil sector was supported by the stability in the Foreign Exchange Market, effective implementation of the 2018 capital budget, as well as the interventions of the CBN in the real sector of the economy.

Inflation

- 1.3.6 The monetary authorities were successful in controlling inflation in 2018, even though the preferred band of 6-9 percent was missed. Renewed inflationary pressure from mid-2018 resulted in headline inflation closing the year at 11.44 percent, this was however lower than the 15.13 percent recorded at the start of the year. Core inflation which excludes temporary price volatility, also closed 2018 lower at 9.77 percent from 12.09 percent at the start of the year. This implies that there was improvement in addressing the underlying structural causes of inflation in the economy. Food inflation was the main driver of inflation as it closed 2018 at 13.56 percent, but this was also a moderation from 18.92 percent at the beginning of the year.

¹⁷ National Bureau of Statistics GDP Report for Q4 2018

The upside risks to inflation include the effect of 2019 election-related spending, recurring herdsmen/farmers challenges, and seasonal flooding which impairs agricultural production.

Public Debt

- 1.3.7 Efficient and effective management of public debt was achieved in 2018. The ratio of Total Public Debt to GDP remained relatively low at 18.68 percent as at September 30, 2018. This compares favourably with the Country-Specific Debt Limit of 25 percent of GDP, the threshold of 56 percent of GDP for countries in Nigeria's peer-group, as well as the West African Monetary Zone (WAMZ) Convergence Threshold of 70 percent of the GDP. In addition, efforts at moving towards a debt composition target of 60:40 ratio for domestic and external debt has continued while attaining 75:25 ratio for long to short-term debt instruments in the domestic debt portfolio has been achieved.¹⁸

External Sector

- 1.3.8 The external segment of the economy recorded improvement in the latter part of 2018. Total foreign exchange inflows increased by \$1.56 billion or 12.1 percent from \$12.95 billion in the third quarter to \$14.51 billion in the fourth quarter. The increment was attributed to improvement in both oil and non-oil receipts, while proceeds from government debts, Treasury Single Account (TSA), third party receipts, interests on reserves and investments, and unutilized funds from foreign exchange transactions also boosted inflows.
- 1.3.9 The foreign exchange outflow decreased by \$2.33 billion from \$16.93 billion in the third quarter to \$14.60 billion in the fourth quarter. The reduction was attributed to fall in inter-bank utilisation, external debt service, forex special payment and Special Drawing Rights charges. The country, therefore, recorded a net outflow of \$87 million in the fourth quarter compared with \$3.9 billion in the third quarter of 2018.
- 1.3.10 The Foreign Exchange rate was relatively stable, closing 2018 at N307/\$ from the year-start rate of N306/\$.¹⁹ This firmness was due partly to the interventions of the CBN, resulting in external reserves decline by 8.9 percent from \$46.7 billion in the first quarter to \$42.5 billion in the fourth quarter. The reserves at the end of 2018 could finance 6.3 months of imports of goods and services and 10.1 months of import of goods only, higher than the 3 months IMF benchmark.

¹⁸ ¹⁸ DMO figures as at September 30, 2018 indicate that the domestic-external ratio is 71:29 while 77:23 ratio has been achieved for long to short-term debt in the domestic portfolio.

¹⁹ <https://www.cbn.gov.ng/rates/exrate.asp?year=2018>, Cited February 28, 2019



Summary

1.3.11 Overall, the Nigerian economy performed better in 2018 when compared with the relatively sluggish growth in 2017. The effect of the laudable policies initiated by both fiscal and monetary authorities culminated in the economy experiencing improved economic growth, subdued inflationary pressures, and a stable external sector. Importantly, efficiency in Public Debt Management continued in 2018 in line with the objectives of the national Debt Management Strategy and the DMO's Strategic Plan, 2018 – 2022.

Figure 1.2: Selected Domestic Macroeconomic Indicators



Source: National Bureau of Statistics and Central Bank of Nigeria



1.4 Outlook and Risks

- 1.4.1 The IMF projects that the Nigerian economy will experience sustained economic growth in the medium term, with real GDP expected to grow by 1.9 percent in 2018, 2.0 percent in 2019 and 2.2 percent in 2020. However, and as depicted in Table 1, Government projections are more optimistic as the economy is expected to grow by 2.10 and 3.01 percent in 2018 and 2019, respectively from 0.82 percent in 2017. The comparatively optimistic projection by Government is premised on efficiency and effectiveness in fiscal spending, implementation of the Economic Recovery and Growth Plan (ERGP), and relative stability in the foreign exchange market. In addition, the Ease of Doing Business is improving owing to the different Executive Orders that have been issued.²⁰
- 1.4.2 A major risk to the economy in the medium-term is the volatility associated with oil prices as well as oil production disruptions in the Niger Delta region. Although Government efforts have restored stability in the region, the risk of production disruptions remains. Another factor that could affect the economy negatively is the likelihood of delays in policy and reform implementation post-2019 elections. This risk is however unlikely to be high considering the outcome of the elections as the present administration will continue post-May 2019. Government is expected to consolidate on the various laudable initiatives and reforms that have been introduced since 2015.

Table 1:1 Key Parameters and other Macroeconomic Projections (2019 – 2021)

	2018	2019	2020	2021
Oil Price Benchmark (US\$)	51.0	60.0	56.5	56.5
Oil Production (mbpd)	2.30	2.30	2.44	2.62
Real GDP Growth Rate (%)	2.1	3.0	3.6	3.9
Total GDP (N'bn)	126,168.8	139,652.7	154,690.6	171,200.5
Non-Oil GDP (N'bn)	114,772.8	128,489.3	143,921.2	161,017.1
Oil GDP (N'bn)	11,396.0	11,163.5	10,769.3	10,183.4
Inflation (%)	11.78	9.98	9.43	9.58
Exchange Rate (N/\$)	305.0	305.0	305.0	305.0
Consumption (N'bn)	107,764.5	119,281.6	132,125.8	146,227.5
Fiscal Deficit (% of GDP)	(1.73%)	(1.33%)	(2.08%)	(1.67%)

Source: Medium-Term Expenditure Framework 2019 – 2021

²⁰ Some of the Executive Orders include but not limited to: (1) Executive Order on Road Infrastructure Development and Refurbishment Investment Tax Credit; (2) Executive Orders on Budgets, 2017; (3) Executive Order on Support for Local Content in Public Procurement by the Federal Government; (4) Executive Order on the Promotion of Transparency and Efficiency in the Business Environment

CHAPTER TWO

METHODOLOGY, OBJECTIVES AND SCOPE OF DEBT COVERAGE

2.1 Methodology, Objectives and Scope Debt of Coverage

2.1.1 The methodology for the 2018 DSA was anchored on the revised World Bank and International Monetary Fund (IMF) Low Income Countries (LIC) Debt Sustainability Framework (DSF) launched in July, 2018. Unlike the previous LIC-DSF which was based on the Country Policy & Institutional Assessment (CPIA) score, the revised Framework is premised on the Composite Indicator (CI), which evaluates the Debt Carrying capacity of a country by considering its peculiarities.

The DSA consists of two parts: External and Public Debt (Fiscal) Sustainability Analyses. The External DSA covers the External Debt of the Federal Government of Nigeria (FGN), the thirty-six (36) States and the FCT, as well as the Private Sector External Debt. The Public DSA comprises External (Public and Private) and Domestic Debt of the FGN, States and FCT. Stress tests (standard and tailored) are applied to assess debt vulnerabilities of the debt portfolio.

2.1.2 Although Nigeria is expected to migrate to the Market Access (MAC) DSA framework given that it has been reclassified as a Lower-Middle-Income country, with prospects of accessing more funding from non-concessional sources, the revised DSF-LICs framework was used for the 2018 DSA exercise. The rationale for this is because the bulk of the country's External Debt portfolio is still largely Concessional (over 50 percent as at September 30, 2018). In addition, the LIC-DSF provides thresholds with early warning signals of potential risk of debt distress, which forms the basis for guiding government in its borrowing decisions.

2.1.3 The components of the CI include the CPIA and other country specific factors such as the real growth rate, import coverage of reserves, remittances and World Economic Growth. The CI classifies countries into one of the three policy performance categories: Weak Policy ($CI < 2.69$); Medium Policy ($2.69 \leq CI \leq 3.05$); and, Strong Policy ($CI > 3.05$). The CI applies different indicative debt thresholds, depending on the performance category of these countries.

2.1.4 Correspondingly, there are four (4) Debt Burden Indicators in the External Block – two (2) Solvency and two (2) Liquidity measures, while the Solvency Threshold for the fiscal block (combined external and domestic debt), comprised one threshold. The External Debt burden thresholds and Total Public Debt benchmarks are shown in Table 2.1.



Table 2.1: Fiscal and External Debts Thresholds

Composite Indicator (CI)	Solvency Ratio			Liquidity Ratio	
	Fiscal	External	External	External	External
	NPV of Debt as a % of			Debt Service as a % of	
	GDP	GDP	Export	Revenue	Export
Weak	35	30	140	10	14
Medium	55	40	180	15	18
Strong	70	55	240	21	23

Source: World Bank/IMF

2.1.5 The 2018 DSA was based on the Baseline Scenario for over a 20-year projection period 2018-2038, under various macroeconomic assumptions, Stress Tests scenarios and Realism Tools to assess the credibility of the forecasts. The outcomes of the exercise were used to compare the country's debt sustainability indicators against internationally established debt burden thresholds, which measure the Solvency and Liquidity positions of the country. Based on the new LIC-DSF and the CI, Nigeria is currently classified as a Medium Performer with a score of 2.87, with applicable threshold for Total Debt to GDP of 55 percent, as shown in Table 2.1, under Medium.

2.1.6 The objective of the DSA is to evaluate the country's risk of debt distress, considering the country's capacity to carry current debt and its future borrowings under both Baseline projections and Shock scenarios. It is therefore to help inform the country's borrowing decisions as it feeds into the various macroeconomic documents such as National Budget, Medium-Term Strategy Paper and Expenditure Framework, as well as the Medium-Term Debt Management Strategy (MTDS), etc.

2.2 Scope of the 2018 DSA Debt Coverage

2.2.1 The coverage of Total Public Debt in the 2018 DSA include the debt of the Federal Government, Subnational, and Publicly Guaranteed Debt and Public Sector External Debt. It also includes the FGN Contingent liabilities and verified Government's Arrears (Securitised).

CHAPTER THREE

BASELINE MACROECONOMIC ASSUMPTIONS

The Baseline Scenario is premised on the 2018 Federal Government annual Budget, the Medium-Term Expenditure Framework (MTEF) and the Fiscal Strategy Paper (FSP) 2019-2021, which reflect the key ERGP execution priorities and objectives. The Key thrusts of the MTEF/FSP are in line with the goals of the ERGP which are aimed at sustaining growth and diversifying the productive base of the economy. The Baseline macroeconomic assumptions underlying the 2018 DSA are outlined below.

Box 3.1: Baseline Scenario Assumptions

Real and Nominal GDP Growth Rates: The real and nominal GDP growth rates are projected at 2.10 and 10.96 percent respectively, in 2018 from the 0.82 and 12.04 percent in 2017. The projected growth in real GDP is anchored on macroeconomic stability; investment in social programmes; diversification of the economy; improved agricultural production through agriculture transformation programmes (Anchor Borrowers, Fertiliser initiative, rice value-chain, N-Power Agro etc); development of physical infrastructure, especially in power, roads and solid minerals development. In 2019, these conditions are expected to further improve and boost real and nominal GDP growth rates to 3.01 and 10.69 percent, respectively. The real and nominal GDP are expected to grow on average by 5.90 and 7.69 percent, respectively, during the period 2019-2038.

Inflation Rate: Headline inflation on year-on-year basis is assumed at 11.78 percent in 2018²¹ and expected to decline to 9.98 percent in 2019. The decline in inflation rate in 2018 and 2019 is based the anticipated impact of Government programmes in agriculture sector such as the Anchor Borrowers, Fertiliser initiative, rice value-chain, N-Power Agro etc. Improved agricultural production and supplies of Agric-related products (road constructions and rehabilitations nationwide are opening the rural areas) will moderate food inflation and ultimately the headline inflation.²² Continued exchange rate stability will also check imported inflation rate. Consequently, inflation for 2018-2038 is expected to remain in the single digit region, averaging 8.59 percent per annum.

Crude Oil Production: The crude oil production which averaged 2.3 million barrels per day (mbpd) in 2018 is expected to remain at 2.3mbpd in 2019 and thereafter increase to 2.4mbpd and 2.6mbpd in 2020 and 2021, respectively. Production is maintained at 2.40 mbpd in 2022 through 2038 based on concerted Government efforts to curb corruption and increase investment in the oil sector. The expected presidential assent to the Petroleum Industry Governance Bill in 2019, as well as government and stakeholders' engagement to maintain peace in the Niger-Delta region will impact positively on the oil sector.

Crude Oil Benchmark Price: The 2018 oil price benchmark of US\$51 per barrel (pb) is expected to increase to US\$60pb in 2019 and moderate to US\$56.5pb within the projection period. The anticipated weakening in global oil prices is predicated on the projected slow economic growth for major economies. While growth in the United States is projected to decline from 2.9 percent in 2018 to 2.5 percent in 2019 and 1.8 percent in 2020, China's growth momentum will slow from 6.6 percent in 2018 to 6.2 percent in 2019 and 2020 respectively. Growth in Euro Area will decline from 1.8 percent in 2018 to 1.6 percent in 2019 but improve marginally to 1.7 percent in 2020.

Export: Export is projected to increase during the period 2019-2038, driven mainly by improvement in the global economy, which is anticipated to boost demand; and Government's sustained effort to diversify the economy through policy measures in the agricultural, industrial and solid minerals sectors. All of these are expected to impact positively and drive non-oil export growth. Also, government's effort towards improving domestic refining capacity²³ will help in conserving foreign exchange

²¹ Although headline inflation closed 2018 at 11.44 percent, this rate was assumed in line with inflationary trend in the first nine months of the year.

²² Inflationary pressure in 2018 was driven mainly by the food component as it closed the year in double digit

²³ The Turn-Around-Maintenance (TAM) of government-owned refineries and private owned refineries like Dangote Refinery will boost domestic refining capacity



and enhance CBN's ability to intervene in the foreign exchange market whenever it is necessary. This will enhance the stability of the exchange rate and access to foreign exchange, and ultimately boost non-oil production and exports.

Current Account Position: In the short-term, the various developmental initiatives embarked upon by Government will increase capital importation and push the current account into deficit. This was the case in the third quarter of 2018 when the CBN noted that rising import led to the current account balance recording a deficit of US\$1,973.63 million from a surplus position of US\$4,452.74 million and US\$1,973.62 million in the previous quarter and the corresponding quarter of 2017.²⁴ However, in the medium to long term the current account position is expected to revert to surplus due to improvement in the global economy and sustained efforts to enhance domestic productivity through the implementation of the ERGP and complemented by effective monetary policy.

Foreign Direct Investments: Stable macroeconomic and political environment, infrastructural development drive, economic reforms particularly in the oil and transportation sectors, relative stability in the foreign exchange market are the major factors that would drive FDIs inflows in the short to medium-term. In addition, foreign direct investors' continued quest for cheaper labour and lower cost of production is expected to impact positively on FDIs inflows to Nigeria in the short to medium-term.

Remittances: The recovery in the global economy in the medium to long term is expected to enhance the inflow of Diaspora remittances. This will improve the current account position as well as external reserves accretion. Furthermore, households' investment appetite may increase, especially in real estate and short-term investment instruments.

External Reserves: External reserves stock of US\$42.54 billion in the fourth quarter of 2018 is 8.1 percent higher than the US\$39.35 billion recorded in the corresponding period of 2018, and is able to cover 6.3 months of imports of goods and services and 10.1 months of import of goods only. Reserves are expected to remain above the international benchmark of 3 months of import cover from the short to the long-term due to: (1) Effective management of reserves by the CBN through control measures on foreign exchange demand. Currently, about 41 items that can be produced locally have been excluded from accessing the foreign exchange market; (2) Improvement in both oil and non-oil export receipts due to the revenue generation drive of Government. In Q4 2018 total non-oil export earnings was US\$1.16 billion, representing 1.5 percent increase from the previous quarter and 85.9 percent from the corresponding period of 2017.²⁵ As domestic economic conditions improve and export capacity is enhanced, this will impact positively on export earnings and the reserve level; (3) Improved local refining capacity of crude oil (the planned US\$12 billion Dangote Refinery is expected to be a major turning point for the downstream petroleum sector in Nigeria) will reduce the proportion of foreign exchange used for importation of refined petroleum products. In the first half of 2018, the CBN estimates that the oil sector used 12 percent of total foreign exchange utilized in the period²⁶; and (4) Improved remittances by Nigerians in the Diaspora as global economy recovers in the medium to long-term.

Fiscal Deficit: The approved fiscal deficit as % of GDP for 2017 was 2.18 percent, while the actual for the year was y percent, an indication of the revenue challenge faced by the government. Fiscal deficit is projected at ₦1.954 trillion or 1.73 percent of GDP in 2018, lower than the approved budget deficit of 2.18 percent in 2017. However, this is expected to increase to ₦2.316 trillion or 1.26 percent in 2019 and ₦3.004 trillion or 1.95% in 2020, and projected to decline to ₦2.614 trillion or 1.55% in 2021 in the medium-term. The fiscal deficit on the long-term, forecasted for 2022-2038 average, would drop to ₦1.334 trillion or 0.09% percentage of GDP. Projected decline in fiscal deficit is premised on improvement in oil and non-oil revenues generations based on the various initiatives,²⁷ as well as continued efficiency in spending which is helping to check leakages.

Nominal Exchange Rate: The Nominal Exchange Rate is expected to remain stable both in the short, medium and long-term horizons, as a result of the robust foreign exchange policy. The Investors and Exporters window is expected to continue to impact positively on foreign exchange inflow into the economy and further boost liquidity in the foreign exchange market. In addition, the CBN's efforts at achieving exchange rates convergence will result in more stability in the macroeconomy.

²⁴ Central Bank of Nigeria Third Quarter 2018 Brief on Balance of Payments Statistics; page 4

²⁵ Central Bank of Nigeria Economic Report Fourth Quarter 2018; page 35

²⁶ Central Bank of Nigeria Economic Report for the First Half of 2018; page 128

²⁷ The revenue generation initiatives were fully discussed in the introductory section of this DSA.



New Financing: New financing will be consistent with the recommendations of Nigeria's Debt Management Strategy 2016-2019. The Strategy provides for maximization of available funding envelopes from concessional and semi-concessional external sources before exploring other external funding sources. The funding strategy supports the reduction of debt servicing by gradually moving towards achieving the strategic composition target of 60:40 ratio for domestic and external debt, respectively, as well as attaining the 75:25 ratio for long to short-term debt in the domestic debt portfolio.²⁸ This would help to minimize refinancing risk by reducing the component of NTBs with external financing. The private sector would have more borrowing space to access long-term funds for investments in the real sector, as the FGn gradually reduces its domestic debt issuances, with more external financings.

²⁸ As at September 30, 2018, the strategic composition for domestic and external debt is 71:29, while 77:23 ratio for long to short-term debt in the domestic debt portfolio has been achieved.





CHAPTER FOUR

REALISM OF BASELINE PROJECTIONS DATA

4.1 Introduction

4.1 The Realism Forecast which evaluates the reasonableness of Baseline projections is critical for the credible assessment of debt sustainability. The Realism Forecast uses four (4) tools, namely: (i) Drivers of Debt Dynamics, (ii) Fiscal Adjustments and Growth Relationship (iii) Realism of Planned Fiscal Adjustments, and (iv) Growth and Investment Relationship.

4.2 Drivers of Debt Dynamics

4.2.1 The drivers of debt, which reflect the decomposition of previous and projected drivers of External and Public Debt dynamics show that Total External Debt accumulation is driven mainly by Current Account deficit and decline in FDIs. The Current Account deficit is enlarged on account of the volatility in oil exports. The contributions to changes in the Total External Debt is shown in Figure 4.1a. For Total Public Debt, the Primary Balance has been a significant driver of debt witnessed in the past five years (Figure 4.1b). However, the current Baseline projections assumed a relatively lower primary balance than the 5-year historical trend. Figure 4.1 shows the main drivers of both External and Total Public debt.

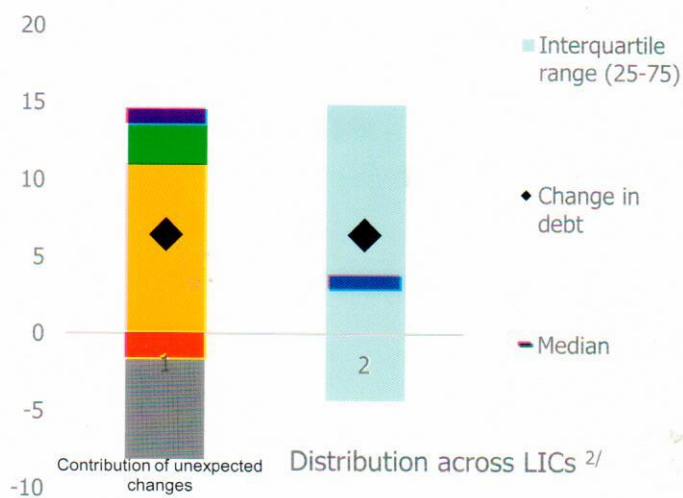
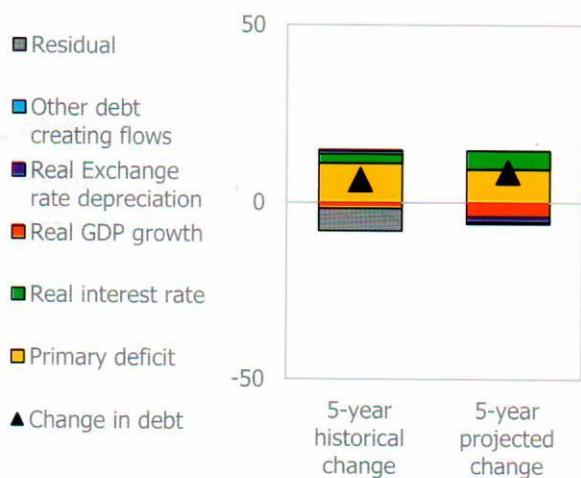
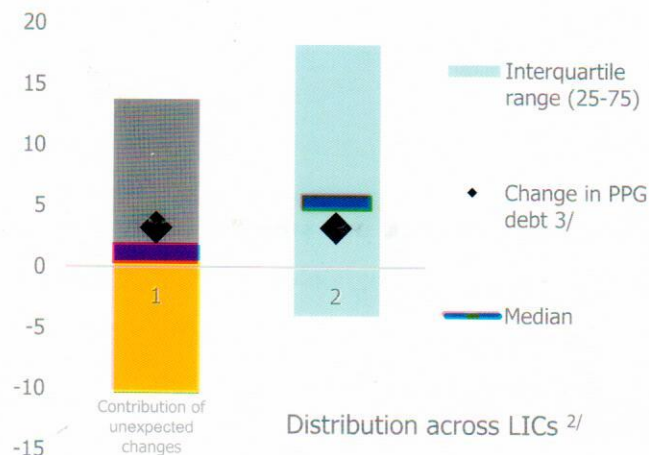
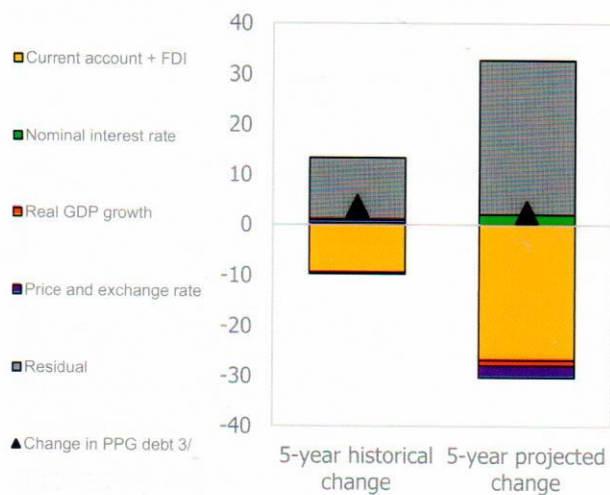


Figure 4.1: Nigeria's Drivers of Debt Dynamics – Baseline Scenario

a. External Debt

Debt-Creating Flows
as % of GDP)

Unexpected Changes in Debt^{1/}
(as % of GDP; Past 5-years)



^{1/}Difference between anticipated and actual contributions on debt ratios.

^{2/}Distribution across LICs for which LIC DSAs were produced.

^{3/}Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.



4.3 Fiscal Planned Adjustment

4.3.1 The assessment of the Fiscal Planned Adjustment which assess the credibility of projected fiscal adjustments based on cross-country experience with sustained fiscal adjustments shows that the projected fiscal adjustment at 1.5 percent of the GDP over a three-year horizon lies below the standard benchmark of 2.5 percent of the GDP, indicating that baseline projections are consistent with cross-country projected fiscal adjustment (Figure 4.2a).

4.4 Fiscal Adjustment and Growth assumption

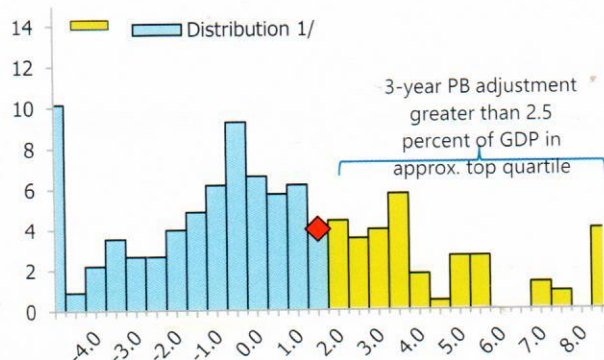
4.4.1 In respect of the relationship between Fiscal Adjustment and Growth assumption, which provides the benchmarks for assessing the consistency in the relationship between fiscal adjustments and growth assumptions, there is lack of consistency, as the baseline real GDP growth projection deviated from the cross-country experiences (Figure 4.2b). The projected larger real GDP growth of about 3.0 with relatively lower fiscal adjustment of 0.4 percent of GDP in 2019, is expected to be driven by a favourable oil prices, continued implementation of the ERGP and positive economic outlook.

4.5 Growth and Investment

4.5.1 The Growth and Investment relationship, which assesses the consistency between growth and public investment assumptions on the basis that growth assumptions should capture the impact of public investment in a realistic manner, indicates that the previous and the 2018 DSA assumed rising trend of both public and private investment from 2017 to 2023. However, the contribution of private investment to real GDP growth in the 2017 DSA is higher than the contribution of public investment to growth in the 2018 DSA (Figures 4.2c). Comparing with historical contribution, the 2018 DSA is consistent with historical contribution to growth, with contribution to growth from public investment higher, indicating projected growth in the economy coming mainly from the public investment (Figures 4.2d).

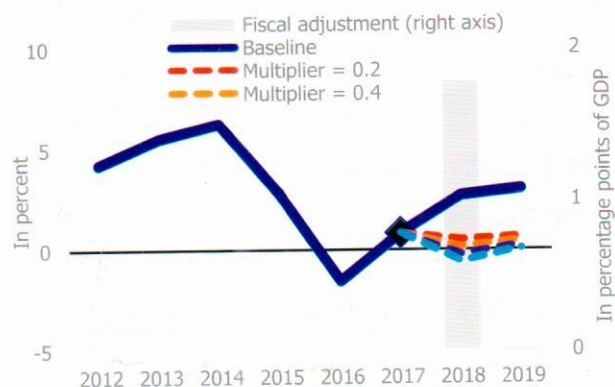


a. 3-Year Adjustment in Primary Balance
(Percentage Points of GDP)



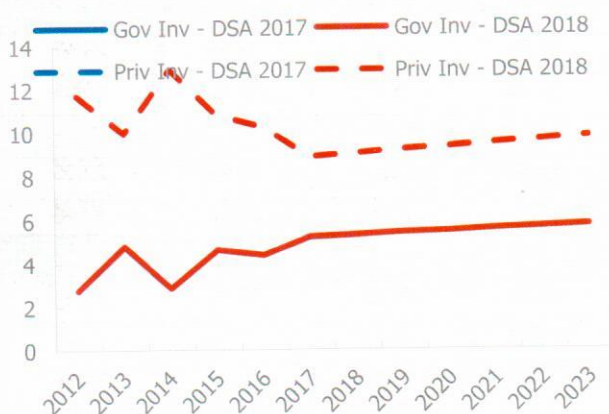
^{1/}Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

b. Fiscal Adjustment and Possible Growth Paths^{2/}

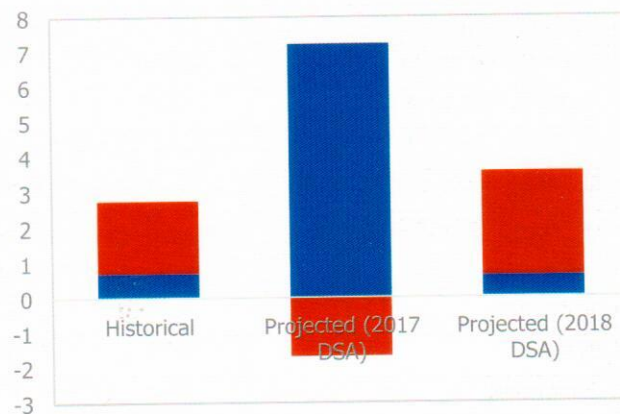


^{2/}Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

c. Public and Private Investment Rates
(as % of GDP)



a. Contribution to Real GDP Growth
(Percent; 5-year Average)



CHAPTER FIVE

RESULT ANALYSIS

5.1 Nigeria's Public Debt Profile and Sustainability

Table 5.1 shows the trend of Nigeria's debt profile and Sustainability from 2010 to September 30, 2018.

Table 5.1: Nigeria's Public Debt Profile and Sustainability

	2010	2014	2015	2016	2017	As end September, 2018
Nigeria's Total Debt Stock (US\$' Million)						
External Debt Stock	4,578.77	9,711.45	10,718.43	11,406.28	18,913.44	21,591.68
FGN's Domestic Debt Stock	30,514.33	47,047.77	44,857.85	36,256.41	41,142.11	40,107.11
States' Domestic Debt Stock	-	10,967.06	9,852.25	9,728.84	10,943.71	11,514.21
Nigeria's Total Debt Stock	35,093.10	67,726.28	65,428.53	57,391.53	70,999.26	73,213.00
Composition of Total Public Debt (in percentage)						
External Debt as % of Total	13.68	14.34	16.38	20.04	26.64	29.49
Domestic Debt as % of Total	86.33	85.66	83.62	79.96	73.36	70.51
Composition of Domestic Debt (in percentage)						
Short-term as % of Total	28.06	35.62	31.38	29.64	28.43	22.90
Long-term as % of Total	71.94	64.38	68.62	70.36	71.57	77.10
Composition of External Debt (in percentage)						
Multilateral	92.12	70.01	70.54	70.03	54.15	50.42
Bilateral	3.56	14.54	15.47	16.82	12.54	11.14
Commercial	4.32	15.45	13.99	13.15	33.31	38.44
Debt as Percentage of GDP						
External Debt as % of GDP	2.35	1.81	2.13	3.26	4.85	5.09
Domestic as % of GDP	15.63	10.84	10.89	13.01	13.35	12.77
Total Public Debt as % of GDP	17.20	12.65	13.02	16.27	18.20	18.12

Source: DMO

5.2 The Borrowing Space (Granularity)

5.2.1 The Borrowing Space, otherwise referred to as Granularity, is usually applied when a country moves from Low Risk to a Moderate Risk. From the 2018 DSA, Nigeria is classified as a Moderate Risk of Debt Distress due to Revenue challenges. The Granularity determines the Borrowing Space that would be available to the country without undermining debt sustainability.



5.3 The Classification of Borrowing Space (Granularity)

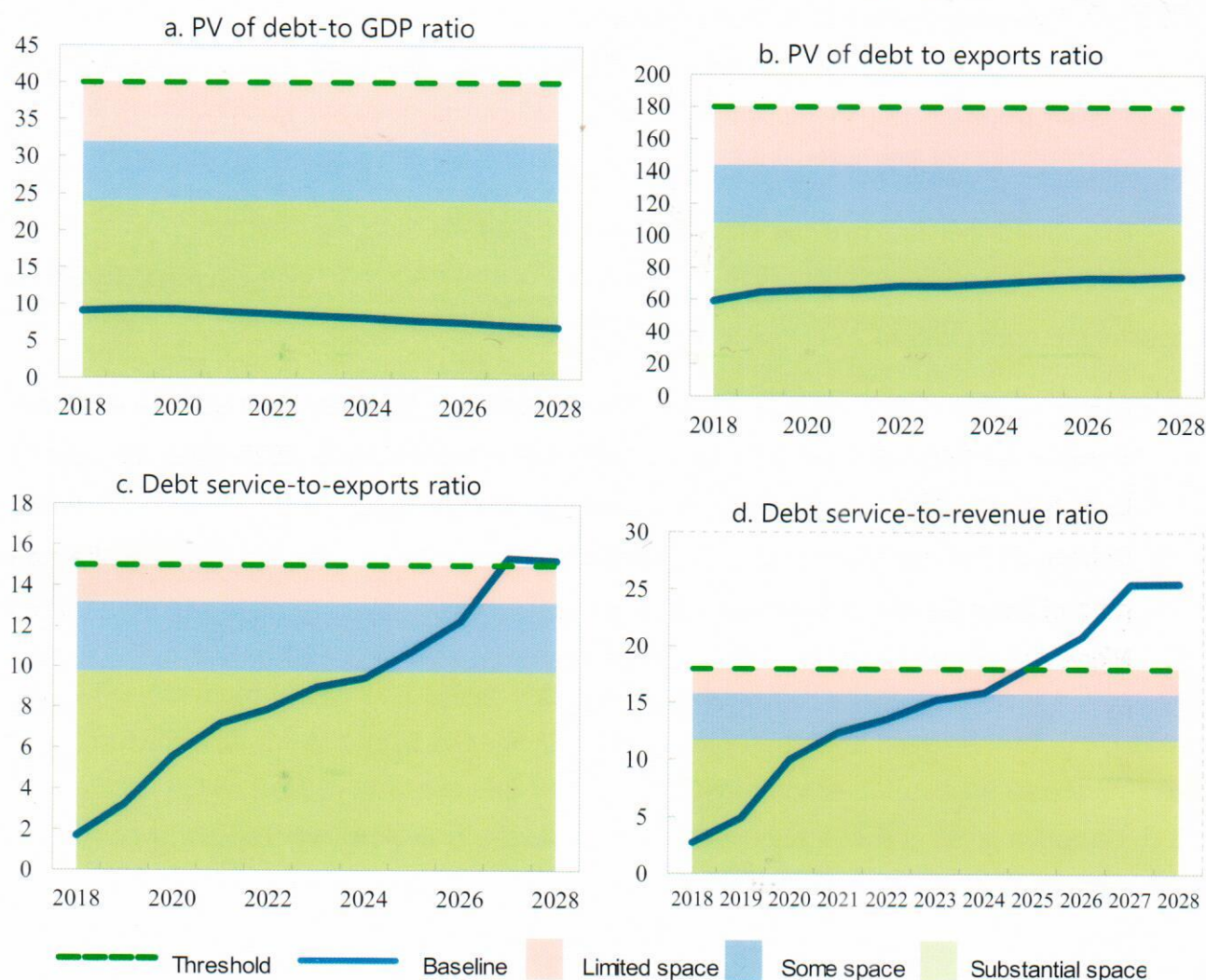
5.3.1 The Borrowing Space is classified as follows:

- i Limited Space to Absorb Shocks – if at least one Baseline Debt burden indicator is close enough to its threshold that the median shock would downgrade it to high risk;
- ii Substantial Space to Absorb Shocks – if all Baseline indicators are well below their thresholds over the projection period; and
- iii Some Space to Absorb Shocks – if Baseline indicators do not fall in the two categories above.

5.3.2 Figure 5.1 shows that the borrowing space is substantial between 2018 to 2019 as all the baseline indicators trended below their respective thresholds until 2025 when the ratio of Debt Service-to-Revenue breached its threshold (Figure 5.1d). The ratio of Total Public Debt-to-GDP places Nigeria in the Substantial Borrowing Space category. However, the high ratio of Debt Service-to-Revenue, although does not portray debt unsustainability, places Nigeria at *Some Space to Absorb shocks* category. This indicates constraints to debt repayment capacity arising from low revenue base which is being mitigated by the sustained initiatives of Government in boosting revenue, thereby enhancing the country's Borrowing Space in the medium to long-term.



Figure 5.1: Nigeria's Qualification of the Moderate Category, 2018-2028^{1/}



Sources: Country authorities; and staff estimates and projections.

^{1/}For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y are 35 percent.

5.4 Determination of Borrowing Limit for 2019

5.4.1 Based on the Country-Specific Debt Limit for Total Public Debt-to-GDP ratio of 25 percent (up to 2020), the borrowing limit for 2019 is determined. Given the DSA projected ratio of Total Public Debt to GDP of 23.3 percent by end-December 2018, which takes into consideration the outstanding funding requirements for the year from both the domestic and external sources, the available fiscal borrowing space would be 1.7 percent. Based on the projected 2019 GDP of US\$457 billion, the quantum of borrowing will be 1.7 percent of US\$457 billion, which translates to US\$7.77 billion. In the fiscal year 2019, the maximum amount of US\$7.77 billion may be borrowed without breaching the Country's Specific Debt



Limit. In line with the Debt Management Strategy which emphasizes attaining a domestic to foreign debt ratio of 60:40 for the debt portfolio, the proposed borrowing could be in the ratio of 50:50 for the Domestic and External sources as follows:

- New Domestic Borrowing US\$3.885 billion (equivalent of about N1.185 trillion); and,
- New External Borrowing: US\$3.885 billion (equivalent of about N1.185 trillion).

This will further improve the ratio of Domestic Debt to External Debt which was about 70:30 as at end-September, 2018. Based on the Borrowing Space rationale, the cumulative effect of the implementation of the current Debt Management Strategy in significantly reducing the country's Debt Service burden through the refinancing of high cost short-term domestic debt with low-cost, long-term external debt, as well as the revenue enhancement initiatives of the government, would lead to a more robust Debt Service to Revenue profile, as well as an enhanced borrowing space.

CHAPTER SIX

RISK ANALYSIS

6.1 Introduction

6.1.1 Under Risk Analysis the focused areas are: Stress tests, Risk Signals, Use of Judgement, the Final Risk Ratings and Granularity to Risk Ratings.

6.2 Stress Tests

6.2.1 The Standardized Stress Tests: Stress Tests are conducted by incorporating the impact of temporary shocks onto the evolution of debt burden indicators in both External and Public DSA. Under the External DSA, the debt burden indicators would deteriorate if the exchange rate depreciates or decline in export growth is lower than the historical average or there is a decline in non-debt creating flow (FDI). This is evidenced in the breach of the threshold for ratios of External Debt-to-Exports, External Debt Service-to-Exports and External Debt Service-to- Revenue observed under the most extreme shock scenario (Annexure 1).

6.2.2 For Standard Stress Test under Public DSA, shocks in Primary Balance and lower GDP growth than the historical average show a deviation from the Baseline, with the ratios of Total Public Debt-to-Revenue and Total Public Debt Service-to-Revenue trending upward above the Baseline, indicating a challenge in the revenue, which is being mitigated by the Government through the various revenue generation initiatives and reforms (Annexure 2).

Market-Financing Shock

6.2.3 The Market Financing shock is applied given that the country has regular access to market financing. The Market-Financing shock evaluates the potential market risk the country could face arising from increased liquidity needs or roll-over of its outstanding Eurobonds, at a time of deteriorating market sentiments. This is measured by the latest Emerging Market Bond Index (EMBI) spread and their respective Benchmarks. The Table 6.1 shows that the EMBI spreads of 410 bps is below the benchmark of 570 bps, indicating the absence of rollover risks arising from deterioration in market sentiments.

Table 6.1: Market Financing Pressures Benchmarks

S/N	Public GFN	EMBI Speeds
Benchmark	14% of GDP	570 bps
2018 DSA	3.6% of GDP	410 bps

Notes:

Gross Financing Needs (GFN)

Emerging Market Bond Index (EMBI)



6.3 Mechanical Risk Rating

6.3.1 Based on the mechanical rating approach, the outcome of the 2018 DSA shows an elevated risk of External Debt Distress as the ratio of Debt Service-to-Revenue breaches its threshold by 2025 under the Baseline Scenario. Apart from the ratio of External Debt-to-GDP, other ratios breach their respective thresholds under the most extreme shock, indicating that External Debt is sensitive to Exports and Revenue shocks.

The Fiscal Sustainability Analysis reveals that Total Public Debt is sustainable in the medium to long-term, but remains sensitive to Revenue shocks. However, with favourable oil prices, sustained implementation of the ERGP, the on-going initiatives and reforms of the Government towards shoring-up the country's Exports and Revenue, as well as the positive economic outlook, the potential debt distress arising from Export and Revenue shocks is expected to be mitigated in the medium to long-term.

6.4 Final Risk Rating

6.4.1 The LIC-DSF Final Risk Rating classifies countries into four broad categories, namely: Low, Moderate, High and in Debt Distress, according to their levels of probability of Debt Distress as explained below.

- i. **Low Risk of Public Debt Distress:** Where the Public and Publicly Guaranteed (PPG) External Debt and the Total Public Debt-to-GDP ratio remain below its benchmarks under the Baseline and the most Extreme shocks.
- ii. **Moderate Risk and Debt Distress:** Where the PPG of External Debt has a moderate risk signal or if the PPG External Debt is low and the Total Public Debt stock indicator breaches its benchmark under stress tests.
- iii. **High Risk of Public Debt Distress:** Where any of the four external debt burden indicators of the total Public Debt burden indicator breach their corresponding threshold/benchmark under the baseline.
- iv. **In Debt Distress:** A situation where a country is already experiencing difficulties in servicing its debts, as evidenced, for example by the existence of arrears.

6.5 Application of Judgement

In arriving at the final risk rating of the sustainability of the country's public debt portfolio, country-specific factors not fully accounted for in the model were used in line with the LIC-DSF. These judgmental factors included the reconstruction of the public debt dynamics based on changes in the debt strategy of the country, financing re-arrangements with emphasis on non-debt financing and pursuit of major reforms and initiatives in key sectors of the country's economy.

- The DMO's debt management strategy of attaining a set target ratio of 60:40 between domestic debt and external debt. Towards achieving this, the DMO has been raising less expensive, longer tenured external debt, particularly from the International Capital Market (ICM) to refinance the country's high-cost and short-dated domestic public debt.
- This fits into the DMO strategy of rebalancing the ratio of the long-dated debt to the short-dated debt to 75:25 as attested to by the deliberate policy of refinancing the short-term domestic debt which are not only expensive but also pose daunting rollover risk, with less expensive and longer tenured external debt.
- The refinancing of the more expensive, short-dated domestic public debt with less expensive and longer-tenured external debt also fits into the DMO's efforts towards ensuring reduction in the country's debt service burden
- The four (4) key sectors of the economy and the reforms being implemented are:

6.5.1 Oil and Gas:

- The Nigerian National Petroleum Corporation (NNPC) four major investments with key upstream joint venture partners including Chevron Nigeria Limited (Project Cheetah and Project Falcon on Sonam), First E&P JV and Schlumberger, SPDC (JV Project Santolina), are capable of providing incremental revenue to the national treasury by over \$30 billion within the next 10 years.
- The far-reaching benefits of an accelerated passage of the oil industry reform legislation. The PIB seeks to boost accruals to government coffers from the deep-water offshore operations from the current level of 32 percent to 72.3 percent. In a similar vein, the proposed law is aimed at raising revenue to the national purse from onshore and shallow waters to 87.5 percent from the current 84 percent.



- The efforts to enact a law prohibiting gas flaring would significantly grow Nigeria's revenue. The NPDC, the Exploration and Production arm of the NNPC, is already going ahead to see that the monetization of flared gas is realized.
- The establishment of two condensate refineries with a total refining capacity of 200,000 barrels per day by the NNPC which would operate along the NLNG model, would increase the nation's revenue base, provide jobs for the people and save for the country a lot of foreign exchange.
- The proposed amendments to the Deep Offshore and Inland Basin Production Sharing Contract (PSC) Act by the NNPC in order to help the government boost revenues from deep water oil production.

6.5.2 Tax Reforms by the Federal Inland Revenue Service (FIRS)

- The roll-out of the Integrated Tax Administration System (ITAS) initiative by the FIRS, which was deployed in 2016 and targeted at automating all core tax administration processes nationwide, and the deployment of technology among other strategies, resulted in the generation of over N3.303 trillion in 2016. The deployment of technology expansion and deepening of Information Communications Technology initiatives has become a marked feature of the bid to shore up non-oil revenue for the government.
- The strategies for the deployment of technology include the implementation of the automated Value Added Tax (VAT) and Withholding Tax deductions at source for the Aviation industry which began in September 2013, with extensions to other sectors such as the Telecommunication and Financial services as well as the automation of all receipt processes and increase in the number of payment channels to ensure increased tax revenue collection for the government.
- Other government revenue enhancing and leakages blocking strategies by the FIRS include:
 - a. Collaboration with the commercial banks to make the Taxpayer Identification Number (TIN) mandatory for opening of an account and all transaction with the individuals and corporate bodies;
 - b. Collaboration with a corporate technology provider, West Metro Limited (WML), for an auto-tracking system to accelerate FIRS' monitoring of Value Added Tax, VAT in the hospitality sector. The auto-remittance technology is designed to automatically



- track VAT from various points of transaction in the hospitality sector all the way to final payment with as little human intervention as possible;
- c. Redesigning of tax forms by the FIRS is primarily aimed at curbing tax leakages and so boosting government revenues and conspicuous inefficiencies in tax service delivery process and global challenges of ICT penetration, among others;
 - d. Deployment of the six e-solutions which give taxpayers a platform to conduct their tax transactions any day and time from anywhere in the world in order to maximise non-oil revenue.

6.5.3 Customs & Excise

The implementation of three-pronged Presidential mandate of 'Restructure, Reform and Raise revenue' in NCS has continued to strengthen the Service as a crucial contributor to National economy and Security. The strategies by the Nigerian Customs & Excise aimed at boosting government revenue and blocking revenue leakages include:

- a. Introduction of the Nigerian Integrated Customs Information System (NICIS);
- b. Strategic deployment of manpower and upgrade on the electronic systems from Nigeria Integrated Customs Information System (NICIS I) to NICIS II which had succeeded in blocking leakages;
- c. Strict enforcement of extant guidelines by the NCS Tariff and Trade Department and robust stakeholder engagements resulting in higher compliance.

6.5.4 Agriculture

Building on the successes and lessons from the Agriculture Transformation Agenda (ATA), the vision of the Government for agriculture is to work with key stakeholders to build an agribusiness economy capable of delivering sustained prosperity by meeting domestic food security goals, generating exports, and supporting sustainable income and job growth. In this regard, a number of specific objectives for the period 2016 – 2020 emerged. One of the key strategies is to integrate agricultural commodity value chains into the broader supply chain of Nigerian and global industry, driving job growth, increasing the contribution of agriculture to wealth creation, and enhancing the capacity of the country to earn foreign exchange from agricultural exports. The target is to achieve making Agriculture account for 75% of the country's Non-Oil Exports Earning.



6.5.5 Solid Minerals

The Roadmap for the Growth and Development of the Nigerian Mining Industry was adopted in September 2016. It is targeted that the mining industry would be worth about \$27bn in direct and indirect contributions – a figure that would represent around 3% of GDP and over \$5bn in new investments in the intervening years.

6.5.6 Other Reforms

The Government Integrated Financial Management Information System (GIFMIS) and Implementation of Treasury Single Account (TSA) are also initiatives by the government to significantly boost and prevent leakages of government revenues. The posting of Revenue Directors to all government revenue generating entities also underscores governments avowed determination to boost its revenues by not only preventing revenue leakages but ensuring proper accounting for same.

6.5.7 Based on the judgemental approach, and given the specific factors of the country as outlined above, the Final Risk Rating for the country in 2018 DSA reveals that Nigeria remains at a Moderate Risk of Debt Distress as in the previous DSA, but remains sensitive to Export and Revenue shocks. However, with the concerted efforts of the government, through its various reforms in the Oil & Gas, Agriculture & Solid Minerals sectors, as well as in the country's Tax Administration, and other Collections, it is expected that the Revenue-based indicators would significantly improve, as well as the borrowing space.

6.6 Baseline Scenario

The result analysis determines the country's debt carrying capacity as it compares the debt indicators with their respective thresholds, based on the Composite Indicator. Under the CI the Debt Carrying Capacity of the country is Medium with thresholds comprising External Debt-to- GDP - 40 percent, External Debt-to-Exports - 180 percent, External Debt Service-to-Revenue - 15 percent, while the External Debt Service-to-Exports - 18 percent, and Total Public Debt (Fiscal) - 55 as a percentage of GDP.

A. External Debt Sustainability

6.6.1 The ratio of Debt Service-to-Revenue breaches its threshold by 2025 under the baseline scenario. However, relative to the size of the economy (GDP) and Exports, the debt level remains low throughout the projection period as shown in Table 6.2. The increase in the



level of External Debt can be attributed to the current rebalancing of the debt portfolio, in line with the Debt Management Strategy of achieving an External Debt ratio of 40 percent by end-2019, with more borrowing expected from the commercial sources. The current initiatives by the Government to boost Exports and Revenue mobilization, and increase in non-debt creating flows such as Foreign Direct Investments (FDIs), are expected to moderate the Revenue-Based indicators under the Baseline and Stress Test scenarios.

Table 6.2: External Debt Sustainability Indicators in Percent (2018-2038)

Details	Threshold	2018	2019	2020	2021	2022	2023	2028	2038
External Debt Stock									
In Percent of GDP	40	9.0	9.3	9.3	9.0	8.7	8.4	6.9	5.3
In percent of Exports	180	59.1	64.5	65.9	66.3	68.5	68.5	74.7	101.7
External Debt Service									
In percent of Exports	15	1.7	3.3	5.6	7.2	7.9	9.0	15.2	37.7
In percent of Revenue	15	2.8	4.9	10.0	12.4	13.6	15.2	25.5	61.9

Source: 2018 DSA

Note: The Thresholds are determined periodically by the WB/IMF, based on the CI Rating Exercise.

B. Fiscal Sustainability Analysis: FGN-Only

6.6.2 The Fiscal sustainability of the FGN-only covers the External and Domestic Debt of the FGN.

The Fiscal sustainability has only one internationally recommended peer group solvency threshold of 55 percent for the ratio of Total Debt-to-GDP. The ratio of Total FGN Public Debt as a percentage of GDP is projected to remain low throughout the period, indicating a sustainable Total Public Debt path in the medium to long-term, and trends gradually from 19.9 percent in 2018 to 50.2 percent in 2038 (Table 6.3). These ratios are within the revised peer group threshold of 55 percent. Even though there are no international thresholds for the ratios of Total Public Debt to Revenue and Total Public Debt Service to Revenue, respectively, the relative higher ratios of Total FGN Debt-to-Revenue and Debt Service-to-Revenue over the projection period reflects the revenue challenge the economy faces, which has been duly recognised by the Government and it's being addressed through various initiatives and reforms aimed at enhancing non-oil revenue.



Table 6.3: Total FGN's Debt Sustainability in Percent (2018-2038)

Details	Threshold	2018	2019	2020	2021	2022	2023	2028	2038
Total Public Debt Stock									
In percent of GDP	55	19.9	21.3	22.2	23.9	23.8	25.0	31.5	50.2
In Percent of Revenue		341.3	364.8	490.0	505.4	561.9	604.9	996.4	2,488.3
Total Public Debt Service									
In Percent of Revenue	Nil	28.6	37.4	61.1	70.9	82.8	96.7	228.0	692.4

Source: 2018 DSA

Note: Under the Fiscal Sustainability, the WB/IMF threshold is only applicable to the Total Public Debt to GDP, which is set at 55 percent

C. Total Public Debt Sustainability - Fiscal Sustainability Analysis (The Federation – FGN, States and FCT)

6.6.3 The Fiscal Sustainability of the Federation covers the External debt and the Domestic debt of the FGN, States and FCT, as well as their respective Revenues, including Internally Generated Revenues (IGRs). The Fiscal Sustainability has only one threshold for the ratio of Total Public Debt-to-GDP, which is set at 55 percent for countries in Nigeria's peer group.

The outcome of the Fiscal Sustainability mirrors largely those indicators in the FGN-only. The ratio of Total Public Debt-to-GDP remains below its threshold until 2038. (Table 6.4). The Revenue-based indicators - Total Public Debt-to- Revenue and Total Debt Service-to- Revenue do not have international thresholds. The observed lower values of Revenue-based indicators vis-à-vis the indicators in the FGN-only, were mainly due to the inclusion of States' and FCT revenues, which enhanced the combined revenue (the denominator). The relatively rising revenue-based indicators is expected to be moderated with the faithful implementation of the various reform initiatives by the Government.

Table 6.4: Total Public Debt Sustainability in Percent (2018-2038)

Details	Threshold	2018	2019	2020	2021	2022	2023	2028	2038
Total Public Debt Stock									
In percent of GDP	55	23.3	25.1	26.5	27.5	28.7	30.2	39.1	63.1
In Percent of Revenue		233.8	253.4	326.9	340.0	377.7	407.1	684.0	1,910.7
Total Public Debt Service									
In Percent of Revenue	Nil	19.1	26.9	41.8	49.0	57.1	66.9	159.4	532.9

Source: 2018 DSA

Note: Under the Fiscal Sustainability, the WB/IMF threshold is only applicable to the Total Public Debt to GDP, which is set at 56 percent.



CHAPTER SEVEN

MAIN FINDINGS, CONCLUSION AND RECOMMENDATIONS

7.1 Summary of Key Findings

7.1.1 Nigeria's External Debt indicators show a Moderate Risk of Debt Distress. The ratio of External Debt-to-GDP remained below its threshold under the Baseline Scenario, while the ratios of Debt-to-Exports and Debt Service-to-Exports tend to breach their thresholds by 2020 under the most Extreme Shock scenario. Similarly, the ratio of Debt Service-to-Revenue may breach its threshold by 2021. The debt outlook shows that External Debt is sensitive to shocks in Foreign Currency revenues, more so, as the country relies mainly oil revenue. However, this outlook is expected to be significantly mitigated by the on-going initiatives and reforms of the Government in the Oil & Gas sector, as well as Agriculture and Solid Minerals sectors aimed at shoring up the country's Exports and Revenue base.

7.1.2 The Total Public Debt remains Sustainable in the medium to long-term, but sensitive to Revenue Shock. The ratio of Total Public Debt-to-GDP remains below its threshold throughout the projection period under the Baseline Scenario and most Extreme Shock, but the Revenue-based indicators (Total Public Debt-to-Revenue and Debt Service-to-Revenue) weakened under the Stress Test scenario, suggesting that the Total Public Debt portfolio is sensitive to revenue shocks. However, with the sustained efforts in the implementation of the various government reforms and initiatives towards boosting the country's revenue base and blockage of revenue leakages, the revenue-based indicators would significantly improve in the medium to long-term, thereby improving the sustainability status of the debt portfolio.

7.1.3 In the context of the country's Borrowing Space, otherwise referred to as Granularity, the findings show that there is a limited borrowing space based on the country's current revenue profile, as the ratio of Debt Service-to-Revenue trends towards the threshold and breaches it by 2025. However, with the sustained initiatives of the Government in the various sectors of the economy to boost its revenue, the country's borrowing space is expected to be enhanced.



7.2 Conclusion

7.2.1 The Final Risk Rating for the country from the 2018 DSA reveals that Nigeria remains at a Moderate Risk of Debt distress but with a sustainable debt profile. The DSA also reveals that the Debt Portfolio may be sensitive to Exports and Revenue shocks. However, with the concerted efforts of the government, through its various reforms in the Oil & Gas, Agriculture & Solid Minerals sectors, as well as in the country's Tax Administration, and other Collections, it is expected that the Revenue-based indicators and borrowing space will improved.

7.3 Recommendations

The key policy recommendations of the 2018 DSA exercise include:

7.3.1 Borrowing Limit for 2019

Based on the Country-Specific Debt Limit for Total Public Debt-to-GDP ratio of 25 percent, (up to 2020), the borrowing limit for 2019 is determined. Given the DSA projected ratio of Total Public Debt to GDP of 23.3 percent, by end-December 2018, which takes into consideration the outstanding funding requirements for the year from both the domestic and external sources, the available fiscal borrowing space would be 1.7 percent. Based on the projected 2019 GDP of US\$457 billion, the quantum of borrowing will be 1.7 percent of US\$457 billion, which translates to US\$7.77 billion. In the fiscal year 2019, the maximum amount of US\$7.77 billion may be borrowed without breaching the Country's Specific Debt Limit. In line with the Debt Management Strategy, which emphasizes attaining a domestic to foreign debt ratio of 60:40 for the debt portfolio, the proposed borrowing could be in the ratio of 50:50 for the Domestic and External sources as follows:

- **New Domestic Borrowing US\$3.885 billion (equivalent of about N1.185 trillion); and,**
- **New External Borrowing: US\$3.885 billion (equivalent of about N1.185 trillion).**

This will help to further improve the ratio of Domestic Debt to External Debt, which was about 70:30 as at end-September, 2018. Based on the Borrowing Space rationale, the cumulative effect of the implementation of the current Debt Management Strategy, in significantly reducing the country's Debt Service burden through the refinancing of high



cost short-term domestic debt with low-cost, long-term external debt, as well as the revenue enhancement initiatives of the government. This would lead to a more robust Debt Service to Revenue profile, as well as an enhanced borrowing space.

7.3.2 To explore the use of Non-debt funding arrangements to support Infrastructural Development.

In view of the huge funding requirements for critical infrastructure and other capital projects, which are far beyond the carrying capacity of the annual national Budgets, Government may need to aggressively explore the use of Off-Balance Sheet arrangements to fund such capital-intensive projects. Some of these arrangements may include – Public Private Partnerships (PPPs) – particularly Concessioning Schemes to attract Private Sector to participate in the delivery of viable infrastructural projects. This would also entail the mobilisation of additional Private Sector financing through the selective issuance of Sovereign Guarantees to priority and high-impact sectors of the economy.

7.3.3 Restructuring of Nigeria's Total Public Debt Profile

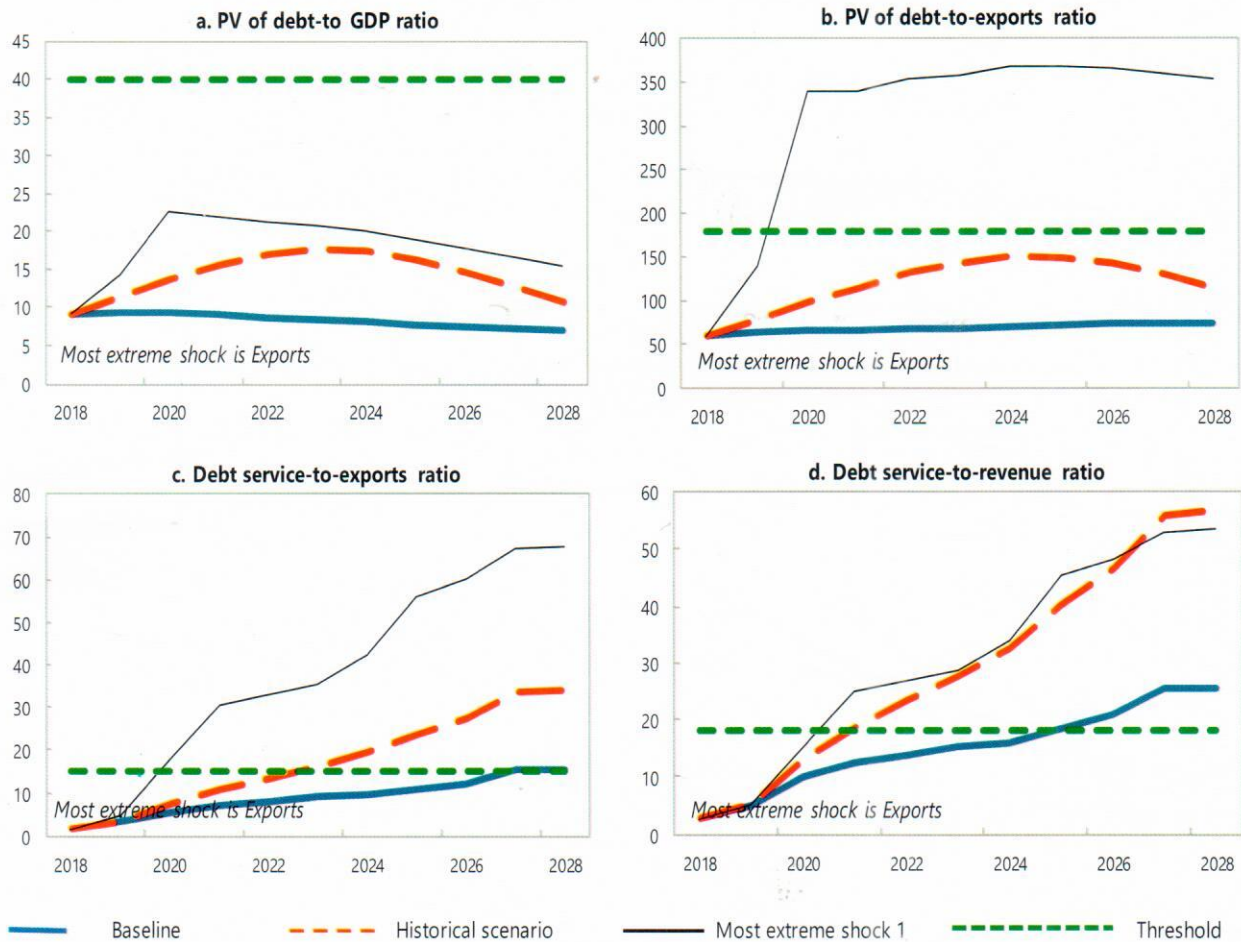
The current Debt Management Strategy, which seeks to, amongst others, attain a Domestic to External ratio of 60:40, and a reduction in Debt Service costs, by refinancing high cost short-term domestic debt with lower cost external debt, extension in the maturity profile of the portfolio, by achieving a long-term to short-term debt ratio of 75:25, should be sustained.

7.3.4 Consolidate on efforts towards boosting and blocking leakages in government revenues by strengthening the implementation of the TSA, GIFMIS and IPPIS, as well as the reforms in the Oil & Gas, Agriculture and Solid Minerals Sectors and also the country's Tax Administration through the FIRS. This will make Debt Service to Revenue ratios more robust giving more health to the country's Balance Sheet.





Annexure 1: Nigeria's External Debt Sustainability Indicators Under Alternative Scenarios, 2018-2028



Customization of Default Settings			Borrowing Assumptions for Stress Tests*		
	Size	Interactions		Default	User defined
Tailored Tests			Shares of marginal debt		
Combined CLs	Yes		External PPG MLT debt	100%	
Natural Disasters	n.a.	n.a.	Terms of marginal debt		
Commodity Prices ^{2/}	n.a.	n.a.	Avg. nominal interest rate on new borrowing in USD	8.2%	8.2%
Market Financing	n.a.	n.a.	USD Discount rate	5.0%	5.0%
			Avg. maturity (incl. grace period)	14	14
			Avg. grace period	4	4

Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

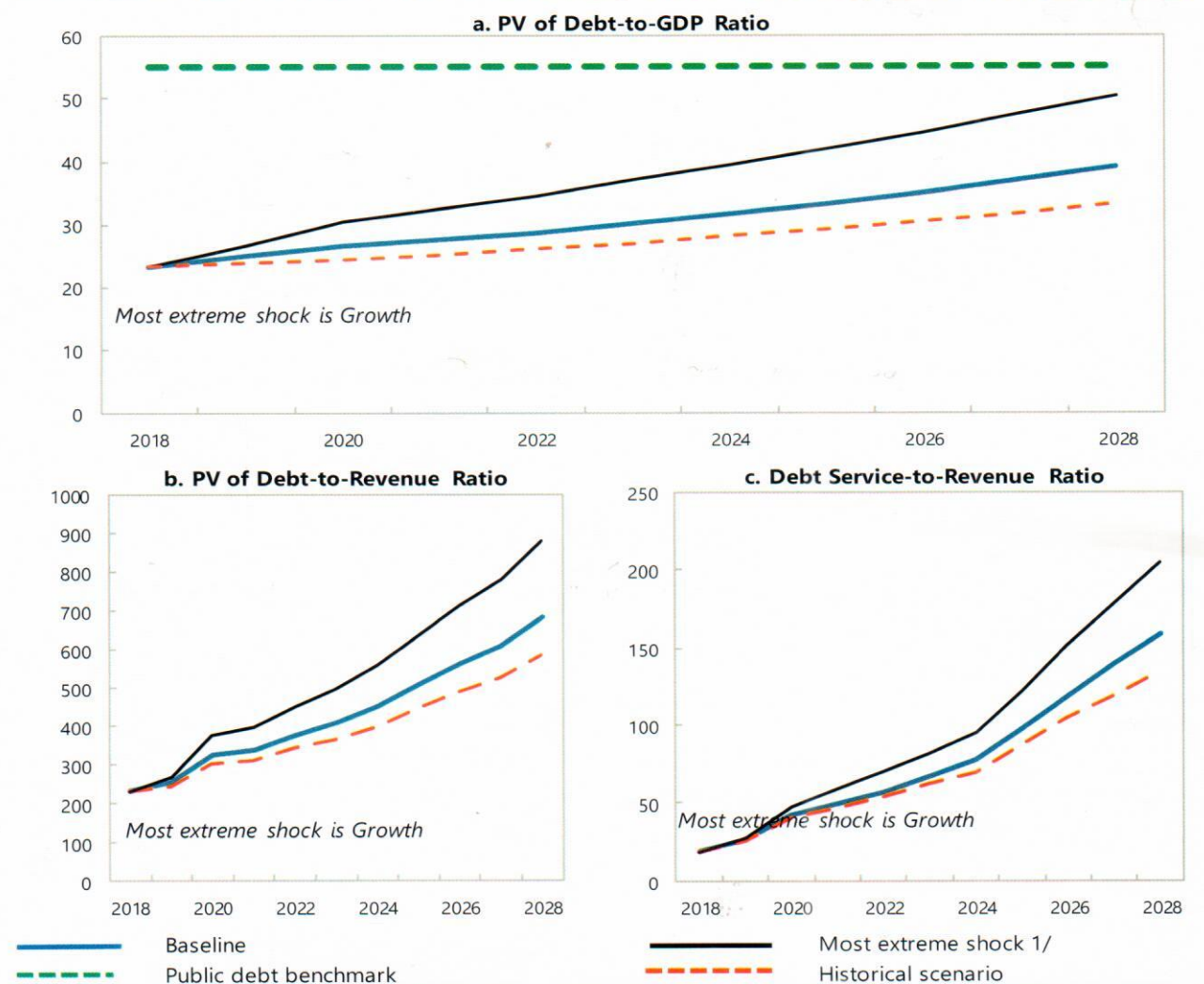
Sources: Country authorities; and staff estimates and projections.

^{1/} The most extreme stress test is the test that yields the highest ratio in or before 2028. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

^{2/} The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.



Annexure 2: FGN's Public Debt Sustainability Under Alternative Scenarios, 2018-2028



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	19%	19%
Domestic medium and long-term	58%	58%
Domestic short-term	19%	23%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	8.2%	8.2%
Avg. maturity (incl. grace period)	14	14
Avg. grace period	4	4
Domestic MLT debt		
Avg. real interest rate on new borrowing	9.8%	9.8%
Avg. maturity (incl. grace period)	6	6
Avg. grace period	5	5
Domestic short-term debt		
Avg. real interest rate	8%	8.0%

* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

^{1/} The most extreme stress test is the test that yields the highest ratio in or before 2028. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.



Annexure 3: Nigeria's External Debt Sustainability Framework, Baseline Scenario, 2015-2038

(In percent of GDP, unless otherwise indicated)

	Actual			Projections										Average 8/ Historical Projections	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038				
External debt (nominal) 1/	2.2	4.1	5.1	6.4	6.9	7.5	7.5	7.5	7.5	6.6	5.4	2.2	7.1		
<i>of which: public and publicly guaranteed (PPG)</i>	<i>2.2</i>	<i>4.1</i>	<i>5.1</i>	<i>6.4</i>	<i>6.9</i>	<i>7.5</i>	<i>7.5</i>	<i>7.5</i>	<i>7.5</i>	<i>6.6</i>	<i>5.4</i>	2.2	7.2		
Change in external debt	0.3	1.9	1.0	1.3	0.5	0.5	0.1	0.0	-0.1	-0.2	-0.5				
Identified net debt-creating flows	2.8	-1.2	-4.2	-4.4	-5.7	-5.6	-5.3	-4.8	-4.3	-2.2	-0.9	-4.3	-4.1		
Non-interest current account deficit	3.2	-0.9	-2.9	-3.9	-4.8	-4.5	-4.3	-4.0	-3.5	-1.7	-1.0	-2.9	-3.4		
Deficit in balance of goods and services	4.8	2.6	0.0	-1.6	-2.3	-1.8	-1.6	-1.7	-1.3	-0.2	0.2	-2.8	-1.2		
Exports	10.2	11.5	13.7	15.3	14.4	14.1	13.5	12.6	12.2	9.2	5.2				
Imports	15.0	14.1	13.7	13.7	12.1	12.3	11.9	10.9	10.9	9.0	5.5				
Net current transfers (negative = inflow)	-4.2	-6.0	-5.9	-5.5	-4.7	-4.5	-4.3	-4.1	-3.9	-3.0	-1.7	-5.4	-4.1		
<i>of which: official</i>	<i>-0.3</i>	<i>-0.4</i>	<i>-0.2</i>	<i>-0.5</i>	<i>-0.5</i>	<i>-0.5</i>	<i>-0.5</i>	<i>-0.4</i>	<i>-0.4</i>	<i>-0.2</i>	<i>-0.1</i>				
Other current account flows (negative = net inflow)	2.6	2.5	3.0	3.2	2.2	1.8	1.7	1.7	1.7	1.5	0.5	5.3	1.9		
Net FDI (negative = inflow)	-0.6	-1.3	-0.9	-0.6	-1.0	-1.4	-1.3	-1.0	-1.0	-0.6	-0.3	-1.5	-0.9		
Endogenous debt dynamics 2/	0.2	1.0	-0.3	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.4				
Contribution from nominal interest rate	0.0	0.1	0.1	0.2	0.3	0.5	0.5	0.5	0.5	0.6	0.7				
Contribution from real GDP growth	-0.1	0.1	0.0	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4	-0.4				
Contribution from price and exchange rate changes	0.2	0.9	-0.4	...	...	...	...	...	...	...	...
Residual 3/	-2.5	3.1	5.1	5.8	6.2	6.1	5.4	4.8	4.3	2.0	0.4	4.7	4.3		
<i>of which: exceptional financing</i>	<i>-1.2</i>	<i>-0.4</i>	<i>3.3</i>	<i>-0.3</i>	<i>-0.2</i>	<i>0.4</i>	<i>0.2</i>	<i>0.1</i>	<i>0.4</i>	<i>0.2</i>	<i>0.1</i>				
Sustainability indicators															
PV of PPG external debt-to-GDP ratio	...	...	8.1	9.0	9.3	9.3	9.0	8.7	8.4	6.9	5.3				
PV of PPG external debt-to-exports ratio	...	...	59.5	59.1	64.5	65.9	66.3	68.5	68.5	74.7	101.7				
PPG debt service-to-exports ratio	0.7	0.9	0.9	1.7	3.3	5.6	7.2	7.9	9.0	15.2	37.7				
PPG debt service-to-revenue ratio	1.1	1.4	2.5	2.8	4.9	10.0	12.4	13.6	15.2	25.5	61.9				
Gross external financing need (Billion of U.S. dollars)	12.5	-7.1	-13.8	-17.6	-24.1	-25.4	-25.6	-25.0	-22.7	-6.9	34.0				
Key macroeconomic assumptions															
Real GDP growth (in percent)	2.8	-1.6	0.8	2.7	3.0	3.6	3.9	4.5	4.9	6.5	7.0	4.7	3.8		
GDP deflator in US dollar terms (change in percent)	-11.2	-29.3	10.8	8.1	7.4	8.9	8.3	6.6	4.0	1.9	0.0	-1.7	7.2		
Effective interest rate (percent) 4/	2.2	2.2	2.5	4.5	5.8	7.8	7.4	7.4	7.5	8.9	13.5	2.6	6.8		
Growth of exports of G&S (US dollar terms, in percent)	-42.0	-21.6	32.3	24.4	4.4	10.1	7.9	4.1	5.5	2.7	2.8	1.2	9.4		
Growth of imports of G&S (US dollar terms, in percent)	-16.8	-34.7	8.4	11.3	-2.1	13.8	9.2	2.2	9.1	2.7	3.6	11.2	7.2		
Grant element of new public sector borrowing (in percent)	...	...	...	15.1	8.9	19.0	16.9	16.0	13.8	6.4	0.5	...	14.9		
Government revenues (excluding grants, in percent of GDP)	6.5	7.8	4.9	9.5	9.6	7.8	7.8	7.4	7.2	5.5	3.2	10.1	8.2		
Aid flows (in Billion of US dollars) 5/	9.7	10.0	11.9	4.0	2.1	4.0	3.6	3.6	3.4	3.4	2.9				
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	0.8	0.4	0.5	0.4	0.4	0.4	0.3	0.1	...	0.5		
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	33.1	29.3	31.7	31.3	31.4	31.4	25.1	9.3	...	31.3		
Nominal GDP (Billion of US dollars)	479	333	372	413	457	516	580	646	705	1,070	2,481				
Nominal dollar GDP growth	-8.7	-30.4	11.7	11.0	10.6	12.8	12.5	11.4	9.0	8.5	7.0	3.1	11.2		
Memorandum items:															
PV of external debt 7/	...	...	8.1	9.0	9.3	9.3	9.0	8.7	8.4	6.9	5.3				
In percent of exports	...	...	59.5	59.1	64.5	65.9	66.3	68.5	68.5	74.7	101.7				
Total external debt service-to-exports ratio	0.7	0.9	0.9	1.7	3.3	5.6	7.2	7.9	9.0	15.2	37.7				
PV of PPG external debt (in Billion of US dollars)	...	...	30.2	37.4	42.5	47.9	52.0	55.9	59.0	73.7	132.4				
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...	1.9	1.2	1.2	0.8	0.7	0.5	0.3	-0.2				
Non-interest current account deficit that stabilizes debt ratio	2.9	-2.8	-3.8	-5.3	-5.3	-5.0	-4.3	-4.1	-3.4	-1.6	-0.4				

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - \rho(1+g) + \epsilon\alpha(1+r)] / (1+g+\rho+gp)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, ϵ = nominal appreciation of the local currency, and α = share of local currency-denominated external debt in total external debt.

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/ Current-year interest payments divided by previous period debt stock.

5/ Defined as grants, concessional loans, and debt relief.

6/ 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).

7/ Assumes that PV of private sector debt is equivalent to its face value.

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.



Annexure 4: Nigeria's Public Sector Debt Sustainability Framework, Baseline Scenario, 2015-2038

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038	Historical	Projections
Public sector debt 1/	13.4	20.6	19.1	20.7	22.7	24.7	26.1	27.5	29.3	38.7	63.2	13.0	28.6
of which: external debt	2.2	4.1	5.1	6.4	6.9	7.5	7.5	7.5	7.5	6.6	5.4	2.2	7.2
Change in public sector debt	-0.1	7.2	-1.5	1.6	2.0	2.0	1.4	1.5	1.8	2.0	3.5		
Identified debt-creating flows	1.7	7.0	0.0	1.6	2.0	2.0	1.5	1.5	1.9	2.1	4.3	1.3	1.8
Primary deficit	1.8	2.3	3.7	1.9	2.0	2.3	1.7	1.4	1.1	0.5	0.0	1.3	1.4
Revenue and grants	6.7	7.9	5.1	10.0	9.9	8.1	8.1	7.6	7.4	5.7	3.3	10.4	7.7
of which: grants	0.2	0.2	0.2	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.1		
Primary (noninterest) expenditure	8.5	10.2	8.8	11.9	11.9	10.4	9.8	9.0	8.5	6.2	3.3	11.7	9.1
Automatic debt dynamics	0.0	4.7	-3.7	-0.1	0.1	-0.3	-0.2	0.1	0.7	1.6	4.3		
Contribution from interest rate/growth differential	-0.2	3.0	-2.7	0.2	-0.4	0.1	0.2	0.3	0.9	1.6	4.2		
of which: contribution from average real interest rate	0.2	2.8	-2.6	0.7	1.0	0.9	1.1	1.5	2.1	3.8	8.1		
of which: contribution from real GDP growth	-0.4	0.2	-0.2	-0.5	-0.6	-0.8	-0.9	-1.1	-1.3	-2.2	-3.9		
Contribution from real exchange rate depreciation	0.1	1.7	-1.0	...	...	...	...	...	...	...	...
Other identified debt-creating flows	0.0	0.0	0.0	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Privatization receipts (negative)	0.0	0.0	0.0	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (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		
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 debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	-1.9	0.2	-1.4	-0.3	-0.3	-0.4	-0.4	-0.3	-0.2	-0.1	-0.7	-0.1	-0.3
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	22.1	23.3	25.1	26.5	27.5	28.7	30.2	39.1	63.1		
PV of public debt-to-revenue and grants ratio	...	...	435.1	233.8	253.4	326.9	340.0	377.7	407.1	684.0	1910.7		
Debt service-to-revenue and grants ratio 3/	44.1	37.0	52.5	19.1	26.9	41.8	49.0	57.1	66.9	159.4	532.9		
Gross financing need 4/	3.4	3.5	6.3	3.6	4.6	5.7	5.7	5.8	6.1	9.6	17.6		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	2.8	-1.6	0.8	2.7	3.0	3.6	3.9	4.5	4.9	6.5	7.0	4.7	4.4
Average nominal interest rate on external debt (in percent)	2.3	2.2	3.0	4.5	5.8	7.8	7.4	7.4	7.5	8.9	13.5	2.7	7.3
Average real interest rate on domestic debt (in percent)	0.5	1.1	1.6	2.6	3.9	5.6	5.3	5.4	5.4	6.7	11.2	1.0	5.2
Real exchange rate depreciation (in percent, + indicates depreciation)	7.1	72.0	-24.0	...	...	...	...	...	...	...	...	7.5	...
Inflation rate (GDP deflator, in percent)	10.1	-8.9	33.8	7.9	7.4	8.9	8.3	6.6	4.0	1.9	0.0	7.2	5.5
Growth of real primary spending (deflated by GDP deflator, in percent)	-10.8	18.9	-13.6	39.0	3.4	-9.1	-2.7	-3.7	-0.8	-1.5	1.7	2.9	2.4
Primary deficit that stabilizes the debt-to-GDP ratio 5/	1.9	-4.9	5.2	0.3	0.0	0.4	0.3	0.0	-0.7	-1.5	-3.5	0.7	-0.4
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Sources: Country authorities; and staff estimates and projections.

^{1/} Coverage of debt: The central, state, and local governments, government-guaranteed debt. Definition of external debt is Residency-based.

^{2/} The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

^{3/} Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

^{4/} 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 and other debt creating/reducing flows.

^{5/} Defined as a primary deficit minus a change in the public debt-to-GDP ratio (-): a primary surplus, which would stabilize the debt ratio only in the year in question.

^{6/} Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.



Annexure 5: Nigeria's Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018-2028 (In percent)

	Projections										
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PV of debt-to GDP ratio											
Baseline	9.0	9.3	9.3	9.0	8.7	8.4	8.1	7.8	7.5	7.1	6.9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 85-1569 1/	9.0	11.4	13.7	15.5	16.8	17.5	17.3	16.1	14.6	12.7	10.6
B. Bound Tests											
B1. Real GDP growth	9.0	9.8	10.3	9.9	9.6	9.3	9.0	8.6	8.3	7.9	7.6
B2. Primary balance	9.0	9.8	10.3	10.1	9.9	9.6	9.4	9.2	9.2	8.9	8.7
B3. Exports	9.0	14.3	22.7	21.8	21.1	20.7	20.1	18.8	17.7	16.6	15.5
B4. Other flows 2/	9.0	10.8	12.3	11.9	11.5	11.2	10.8	10.2	9.8	9.2	8.8
B6. One-time 30 percent nominal depreciation	9.0	11.5	9.9	9.6	9.2	8.9	8.5	8.3	8.0	7.7	7.5
B6. Combination of B1-B5	9.0	13.8	14.6	14.1	13.6	13.3	12.7	12.1	11.5	10.8	10.3
C. Tailored Tests											
C1. Combined contingent liabilities	9.0	11.0	11.4	11.2	10.9	10.7	10.5	10.8	10.9	10.7	10.6
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	59.1	64.5	65.9	66.3	68.5	68.5	70.2	71.9	73.3	73.4	74.7
A. Alternative Scenarios											
A1. Key variables at their historical averages in 85-1569 1/	59.1	78.9	97.5	115.0	133.4	143.3	150.2	149.5	142.9	130.0	115.0
B. Bound Tests											
B1. Real GDP growth	59.1	64.5	65.9	66.3	68.5	68.5	70.2	71.9	73.3	73.4	74.7
B2. Primary balance	59.1	67.6	73.2	74.9	78.3	78.9	81.5	85.3	89.5	91.3	94.0
B3. Exports	59.1	139.4	339.4	340.7	353.4	358.4	367.7	368.0	365.6	359.3	354.7
B4. Other flows 2/	59.1	75.1	87.3	87.7	90.9	91.4	93.5	94.8	95.6	94.9	95.3
B6. One-time 30 percent nominal depreciation	59.1	64.3	56.6	56.9	58.8	58.5	59.7	61.6	63.2	63.6	65.2
B6. Combination of B1-B5	59.1	107.6	94.6	146.1	151.3	152.4	154.7	156.4	157.2	155.7	155.9
C. Tailored Tests											
C1. Combined contingent liabilities	59.1	76.1	80.7	82.7	86.7	87.9	91.5	100.2	106.4	110.2	114.9
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	1.7	3.3	5.6	7.2	7.9	9.0	9.4	10.8	12.3	15.3	15.2
A. Alternative Scenarios											
A1. Key variables at their historical averages in 85-1569 1/	1.7	3.5	7.3	10.9	13.5	16.4	19.4	23.6	27.4	33.6	33.9
B. Bound Tests											
B1. Real GDP growth	1.7	3.3	5.6	7.2	7.9	9.0	9.4	10.8	12.3	15.3	15.2
B2. Primary balance	1.7	3.3	5.8	7.7	8.6	9.7	10.5	12.3	14.1	17.5	17.6
B3. Exports	1.7	4.7	17.6	30.6	32.8	35.6	42.7	56.3	60.1	67.4	67.6
B4. Other flows 2/	1.7	3.3	6.3	8.8	9.6	10.7	12.1	14.4	15.9	19.0	19.0
B6. One-time 30 percent nominal depreciation	1.7	3.3	5.5	6.5	7.2	8.2	8.6	9.2	10.7	13.7	13.6
B6. Combination of B1-B5	1.7	3.9	11.4	14.4	15.6	17.4	21.1	23.8	26.2	31.0	31.0
C. Tailored Tests											
C1. Combined contingent liabilities	1.7	3.3	6.4	8.3	9.2	10.4	11.0	12.5	14.5	18.0	18.2
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	2.8	4.9	10.0	12.4	13.6	15.2	15.9	18.4	20.8	25.4	25.5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 85-1569 1/	2.8	5.3	13.2	18.8	23.2	27.8	32.7	40.2	46.5	55.8	56.8
B. Bound Tests											
B1. Real GDP growth	2.8	5.2	11.0	13.7	15.0	16.9	17.6	20.3	23.0	28.2	28.2
B2. Primary balance	2.8	4.9	10.4	13.3	14.7	16.5	17.7	20.9	23.9	29.9	29.4
B3. Exports	2.8	5.1	15.0	25.0	26.7	28.7	34.1	45.5	48.3	53.0	53.6
B4. Other flows 2/	2.8	4.9	11.4	15.2	16.5	18.2	20.3	24.5	27.0	31.5	31.7
B6. One-time 30 percent nominal depreciation	2.8	6.1	12.4	13.8	15.3	17.3	18.1	19.5	22.5	28.3	28.3
B6. Combination of B1-B5	2.8	5.3	14.6	17.7	19.2	21.1	25.4	29.0	31.8	36.8	37.0
C. Tailored Tests											
C1. Combined contingent liabilities	2.8	4.9	11.5	14.3	15.8	17.6	18.5	21.3	24.7	29.8	30.4
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	18	18	18	18	18	18	18	18	18	18	18

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Includes official and private transfers and FDI.



Annexure 6: Nigeria's Sensitivity Analysis for Key Indicators of Public Debt 2018-2028 (In percent)

	Projections										
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PV of Debt-to-GDP Ratio											
Baseline	23.3	25.1	26.5	27.5	28.7	30.2	31.8	33.3	35.1	37.1	39.1
A. Alternative Scenarios											
A1. Key variables at their historical averages in 85-1569 1/	23	24	25	25	26	27	28	29	31	32	33
B. Bound Tests											
B1. Real GDP growth	23	27	31	33	35	37	40	42	45	48	50
B2. Primary balance	23	27	31	32	34	35	37	39	41	43	45
B3. Exports	23	30	39	39	40	41	43	43	44	46	47
B4. Other flows 2/	23	27	30	30	31	33	34	36	37	39	41
B6. One-time 30 percent nominal depreciation	23	26	26	26	27	27	28	29	30	32	33
B6. Combination of B1-B5	23	26	27	27	28	30	31	33	34	36	38
C. Tailored Tests											
C1. Combined contingent liabilities	23	34	36	37	38	40	42	44	46	48	50
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
PV of Debt-to-Revenue Ratio											
Baseline	233.8	253.4	326.9	340.0	377.7	407.1	450.3	508.1	562.5	610.6	684.0
A. Alternative Scenarios											
A1. Key variables at their historical averages in 85-1569 1/	234	243	303	312	344	365	400	450	492	528	587
B. Bound Tests											
B1. Real GDP growth	234	271	377	401	454	498	559	639	714	781	881
B2. Primary balance	234	278	387	401	444	477	525	591	650	702	782
B3. Exports	234	299	476	484	527	558	604	661	711	751	820
B4. Other flows 2/	234	269	364	376	415	445	488	546	599	645	717
B6. One-time 30 percent nominal depreciation	234	262	324	325	351	370	401	446	488	525	584
B6. Combination of B1-B5	234	260	339	339	374	402	444	500	552	596	667
C. Tailored Tests											
C1. Combined contingent liabilities	234	344	441	456	504	539	593	666	731	786	874
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Service-to-Revenue Ratio											
Baseline	19.1	26.9	41.8	49.0	57.1	66.9	77.1	96.8	118.8	139.8	159.4
A. Alternative Scenarios											
A1. Key variables at their historical averages in 85-1569 1/	19	27	41	47	54	62	70	87	104	120	134
B. Bound Tests											
B1. Real GDP growth	19	28	48	59	70	82	96	123	152	179	205
B2. Primary balance	19	27	52	66	70	78	89	122	153	166	183
B3. Exports	19	27	46	60	68	78	93	121	143	164	184
B4. Other flows 2/	19	27	43	52	60	70	81	103	125	146	165
B6. One-time 30 percent nominal depreciation	19	26	42	48	55	64	73	91	111	132	149
B6. Combination of B1-B5	19	26	41	50	57	67	77	97	121	139	158
C. Tailored Tests											
C1. Combined contingent liabilities	19	27	81	73	79	87	98	163	168	179	197
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

2/ Includes official and private transfers and FDI.



THE DSA TECHNICAL TEAM

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8.	Barth Aja	DMO
9.	Adeoye Felix	DMO
10.	Chima Edomobi	DMO
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