DEBT MANAGEMENT OFFICE
NIGERIA

2020

REPORT OF THE ANNUAL NATIONAL DEBT SUSTAINABILITY ANALYSIS (DSA)

TABLE OF CONTENTS

CHAPTER SIX

CHAPTER SEVEN

List of Tables

List of Figures

List of Box

List of Annexures

GLOSSARY

BOF	Budget Office of the Federation
CBN	Central Bank of Nigeria
CPIA	Country Policy and Institutional Assessment
CI	Composite Indicator
DSA	Debt Sustainability Analysis
DMO	Debt Management Office
EEFP	Export Expenditure Facility Programme
ERGP	Economic Recovery & Growth Plan
EMBI	Emerging Market Bond Index
FCT	Federal Capital Territory
FDIs	Foreign Direct Investments
FGN	Federal Government of Nigeria
FMBNP	Federal Ministry of Finance, Budget and National Planning
GDP	Gross Domestic Product
GIFMIS	Government Integrated Financial Management Information System
ICM	International Capital Market
IMF	International Monetary Fund
IPPIS	Integrated Payroll and Personnel Information System
Mbpd	Million Barrels Per Day
MTDS	Medium-Term Debt Management Strategy
MTEF	Medium-Term Expenditure Framework
NBS	National Bureau of Statistics
NESP	Nigeria Economic Sustainability Plan
NPV	Net Present Value
NSIA	Nigeria Sovereign Investment Authority
OAGF	Office of Accountant-General of the Federation
Pb	Per barrel
PPG	Public and Publicly Guaranteed
PV	Present Value
SEC	Securities and Exchange Commission
SF	Sinking Fund
SOEs	State-Owned Enterprises
TSA	Treasury Single Account
TTM	Term-To-Maturity

EXECUTIVE SUMMARY

1.0 Background

1.0.1 In view of the need to ensure that Nigeria's Total public debt remains sutainable in the medium to long-term, the annual DSA exercise is usually conducted, and it is consistent with the country's macroeconomic framework. The Exercise assesses the current and future debt levels, as well as its ability to meet debt service obligations as and when due, without compromising growth and development. The objective of the 2020 DSA is to evaluate the country's risk of debt distres s, considering Nigeria's capacity to carry current debt and its future borrowings under both Baseline projections and Shock scenarios. Thus, it helps to inform the borrowing decisions of Government . The DSA, therefore, serves as a key input into the country's Medium-Term Expenditure Framework (MTEF), the Fiscal Strategy Paper (FSP), and the FGN Annual Budget , as well as the Medium-Term Debt Management Strategy (MTDS) . It also highlights Government's commitment to fiscal spending in line with the Fiscal Resp onsbility Act, 2007.

1.0.2 The 2020 DSA Exercise, as in previous exercises, was conducted based on several macroeconomic assumptions and underpinnings, which include a gradual recovery from recession with an initial output growth rate projected at 1.90 percent in 2021, following which the pace of recovery is projected to increase with a growth rate of 4.7 percent in 2022. The impact of Covid-19 pandemic on the economic activities and its containment necessitated several policy measures from the Government to save lives and likelihoods, which include tax waivers, cash transfers and direct lending to private sector. Against the background of these expenditure needs, COVID -19 also affected the Government's Revenues adversely. Consequently, the New Borrowing in the revised 2020 Appropriation Act was N4.686 trillion compared to N1.605 trillion in 2019. Thus, the budget deficit to GDP ratio in 2019 was 1.33 percent, the deficit to GDP ratio rose to 3.57 percent when the 2020 Appropriation Act was revised.

1.0.3 The 2020 DSA E xercise was conducted by the Debt Management Office (DMO) from December, 09-18, 2020 in collaboration with other stakeholders, namely: The Federal Ministry of Finance, Budget and National Planning (FMFBNP), Central Bank of Nigeria (CBN), Budget Office of t he Federation (BOF), National Bureau of Statistics (NBS), and the Office of the Accountant-General of the Federation (OAGF).

2.0 Key Macroeconomic Assumptions

2.1 The 2020 DSA Exercise derives its Baseline assumptions from the revised 2020 Appropriation Act, and the 2020-2022 Medium-Term Expenditure Framework (MTEF) and

Fiscal Strategy Paper (FSP), which reflect the key objectives and priorities of the draft 2021-2025 Medium-Term National Development Plan and Nigeria Economic Sustainability Plan (NESP). The assumptions in the Baseline scenario include contraction in economic growth in Q3, 2020 and reduction in fiscal and external balances, but with an expectation of a gradual recovery from 2021, as global conditions improves and local demand recovers. The real GDP is projected at 1.86, 1.90, 4.70 percent for 2020, 2021, 2022, and then grow by 3.10 and 3.20 percent in 2023 and 2024, respectively. The headline inflation on year-on-year basis is projected to remain at a double digit at 14.1 and 14.4 percent in 2020 and 2021, and then moderate to 13.3 and 11.8 percent in 2022 and 2023, respectively.

2.2 For the first time, the 2020 DSA also considered the Alternative Scenario by including the FGN's Ways and Means Advances at the Central bank of Nigeria (CBN) in the sum of N10 trillion, in the Total Public Debt Stock. This was included in 2021 and amortised over a 28-year period, in equal instalments of N357 billion from the year 2023 (since the moratorium is on principal repayment for the first two years, 2021 and 2022).

3.0 Debt Coverage

3.1 The 2020 DSA Exercise is based on Total Public Debt, which comprised the External Debt of the FGN and that of the thirty-six (36) States and the FCT, and the Domestic Debt of the FGN and that of the thirty-six (36) States and the FCT. The Exercise included the Contingent Liabilities of FGN. The shock to Contingent Liabilities was applied to reflect additional potential liabilities, which could arise from the guaranteed and non-guaranteed debt of the State-Owned Enterprises (SOEs), which included in the Total Public Debt.

4.0 Risk Rating and Recommendations

4.1 Risk Rating

4.2.1 **The outcome of the 2020 DSA revealed that Nigeria's Total Public Debt remains at a Moderate Risk of Debt distress.** The ratio of Total Public Debt to GDP was below Nigeria's self-imposed limit of 40 percent throughout the projection period, while the ratios of Total Public Debt-to-Revenue and Total Public Debt Service to Revenue were relatively high, indicating a revenue challenge, which itself is due mainly to the decline in revenue from crude oil, which is the single largest source of revenue to government. For External Debt, the ratios of External Debt Service to Revenue were projected at 5.39 percent, 11.54 percent, 21.66 percent, and 9.37 percent in 2021, 2024, 2030 and 2040, respectively, under the Baseline Scenario; these were slightly higher than the threshold of 18 percent. This further highlights the need to enhance the Non-oil revenue, in order to improve these indicators. Meanwhile, the inclusion of the FGN's Ways and Means Advances at the CBN under the Alternative Scenario resulted in the increase in Debt Service to Revenue when compared to the Baseline Scenario, from 23.36 percent to 25.70 percent in 2021; 31.25 percent to 35.94 percent in 2022; 30.12 percent to 39.74 percent in 2023; 34.67 percent to 49.46 percent in 2024; and, from 38.57 percent to 58.95 percent in 2025, respectively.

Market Financing Shock applies to countries with regular market access, that is, those that have access to commercial loans, such as Eurobonds. The Market Financing shock assesses rollover risk resulting from a deteriorating global market sentiment, temporary foreign exchange depreciation and shortening of maturities of new external commercial borrowing. In this scenario, the shock is measured as Liquidity Needs in terms of Gross Financing Needs (GFNs) and current market sentiments in terms of the latest Emerging Market Bond Index Spread, compared to their respective standard benchmarks (GFNs - 14 percent of GDP) and (EMBI Spread -570 basis points). A breach of both benchmarks would signal high market financing pressures from increased liquidity needs arising from worsening market sentiments, which increases Rollover Risk. A breach of one benchmark would signal moderate market financing pressures. With neither benchmark breached, the signal would be that market financing-related risks are low. In the case of Nigeria, the country's GFNs at 6.0 percent of the GDP in 2020 and 213.13 basis points (based on JP Morgan EMBI for Nigeria as at December 31, 2020), did not breach the two benchmarks, indicating that Nigeria's Market Financing Risk is still low.

Nigeria's economy remains sensitive to Oil Price Shocks, as a decline in the price to about US$24 per barrel would result in a much higher primary deficit with GFNs increasing to 17.1 percent in 2021. The ratio of Total Public Debt to GDP would be increased to 39.0 percent in 2021, from 27.5 percent of GDP under the Baseline Scenario, but remain below the WB/IMF recommended Benchmark of 55 percent of the GDP for countries in Nigeria's peer group and ECOWAS threshold of 70 percent. It is also within Nigeria's self-imposed limit of Total Public Debt as a percentage of GDP of 40 percent.

In terms of capacity to absorb shocks, it reduced from 'Some Space' in the 2019 DSA to 'Limited Space' in 2020 DSA, due mainly to the weakening in the revenue inflows, which are being addressed by the Government through its various measures aimed at improving revenue generation and diversifying the economy to enhance exports, through various initiatives and reforms in the Oil and Gas, Agriculture and Solid Minerals sectors, as well as opportunities from Nigeria's signing of the African Continental Free Trade Area ("AfCFTA Agreement" or "the Agreement"). This Agreement is expected to create a single market for goods and services by facilitating free movement of goods, services, and

investment within the African Continent. Thus, the Export and Revenue-related indicators and Borrowing Space are expected to improve in the medium to long-term.

4.3 Recommendations

The key policy recommendations of the 2020 DSA exercise include:

4.3.1 New Borrowing for 2021

The DSA Exercise presents an opportunity to determine the available fiscal space for borrowing for the succeeding year – 2021, based on the revised Country Specific Debt Limit of 40% (up to 2023), for ratio of Public Debt-to- GDP. Given the Total Public Debt-to-GDP ratio of 21.61% by December 31, 2020, the fiscal space available for borrowing is estimated at 18.39% for the three years up to 2023, which gives about 6.13% for 2021. Consequently, based on the projected 2021 GDP of US$376.50 billion and Nigeria's country specific Debt to GDP limit of 40 percent, the Borrowing Limit for the fiscal year-2021 will be about US$23.08 billion or N8.77 trillion (at an exchange rate of USD1/N379). It should be noted that the borrowing space may be higher if the GDP figure is higher than projected. In line with Nigeria's subsisting Debt Management Strategy, 2020-2023, the proposed New Borrowing could be raised in equal proportion of 50:50 from both Domestic and External sources as follows:

- New Domestic Borrowing: US$11.54 billion (equivalent of about N4.38 trillion); and,
- New External Borrowing: US$11.54 billion (equivalent of about N4.38 trillion).

It is noteworthy that these are recommended maximum amounts that could be borrowed, taking into account the absorptive capacity of the domestic debt market, and the options available in the external market. In line with the revised Medium-Term Debt Management Strategy, 2020-2023, such borrowings would be long-term, and would be strategically deployed to fund priority infrastructure projects, that would boost output, and put the economy on the path of sustainable recovery and growth.

4.3.2 Boosting Government Revenues

Given the need to grow revenue, the Government is expected to sustain the various on-going initiatives and reforms aimed at boosting non-Oil revenue and in blocking leakages and wastages in revenue generation and collection. These include: the Strategic Revenue Growth Initiative, the implementation of the Finance Act, 2020, Reforms in the Oil and Gas sectors, as well as in the Solid Mineral sector. All these initiatives and reforms are necessary for enhancing the country's revenue, and thus, its resilience to shocks.

4.3.3 Boosting Exports

The initiatives aimed at repositioning the nation's exports through the implementation of the N50 billion Export Expenditure Facility Programme (EEFP) as part of the Nigeria Economic Sustainability Plan (NESP) need to be sustained, as the programme is expected to boost Nigeria's non-oil exports. Other pre-existing export incentives including those on gas also need to be sustained in order to reduce Nigeria's dependence on crude oil.

4.3.4 Optimizing Efficiency in Expenditure

Government's level of efficiency has a bearing on its expenditure profile, which could impact the nation's economic growth. The Government therefore needs to sustain the various initiatives, such as the Treasury Single Account (TSA) system, Government Integrated Financial Management Information System (GIFMIS) and Integrated Payroll and Personnel Information System (IPPIS), which are aimed at strengthening Public Financial Management. These initiatives, which have improved the level of transparency in the FGN's finances would help to reduce government's idle balances, rationalize expenditure, improve the borrowing plan and the ultimately reduce cost of borrowing.

4.3.5 Leveraging on Private Sector Financing to support Road Infrastructure Development

The Government needs to sustain its innovative Road Infrastructure Financing Scheme, meant to address the huge infrastructural deficit in the Road sector. One of the major components of this laudable initiative is the establishment of a Road Trust Fund (RTF). The scheme is conceptualised as a Public-Private Partnership (PPP) arrangement, with the aim of increasing private sector participation in the rehabilitation and construction of

Federal roads in Nigeria by incentivising investment through a Tax Credit scheme. The main benefit to the government is to reduce budgetary pressures by increasing private sector partnership in the development of road infrastructure, while guaranteeing full and timely recovery of private companies' project costs through a tax credit mechanism.

The recent establishment of the Infrastructure Corporation with a capital base of ₦15 trillion (from CBN and Nigeria Sovereign Investment Authority (NSIA), and Africa Finance Corporation (AFC)), would also reduce the need for direct borrowing by the Government.

4.3.6 Close Monitoring of Contingent Liabilities

Contingent Liabilities, though low based on available data are expected to grow as more off-balance sheet instruments are used to finance infrastructure, and therefore, effective control and monitoring is required to manage them. This would ensure that the fiscal risks do not crystalize. In addition to contingent liabilities arising from instruments such as guarantees, contingent liabilities may also arise from SOEs. Therefore, there would be need to effectively monitor the SOEs, by implementing a Framework for identifying, estimating, disclosing, managing, and containing fiscal risks associated with their operations.

4.3.7 Strengthening Subnational Fiscal Management

In view of the need to ensure effective fiscal management both at the Federal and State levels, there is the need for the Government to sustain the effective implementation of the various initiatives aimed at strengthening fiscal management at the subnational level. These include the on-going Multilateral support projects in the States, namely: World Bank (States' Fiscal Transparency, Accountability and Sustainability (SFTAS), and the African Development Bank (AfDB) – Middle Income Country Technical Assistance Fund (MIC-TAF) Grant for Sub-national Debt Management Capacity Building Project, which are aimed at strengthening public financial management at the sub-national level. These initiatives would enable the 36 States and the FCT achieve debt sustainability in the medium to long-term, through fiscal transparency and accountability, domestic revenue mobilisation and rationalising public expenditure, amongst others.

CHAPTER ONE
BACKGROUND AND OBJECTIVES

1.1 Background

1.1.1 The 2020 DSA Exercise, as in previous exercises, was conducted based on several macroeconomic assumptions and underpinnings, which include a gradual recovery from recession with an output growth rate of 1.90 percent in 2021, following which the pace of recovery is projected to increase with a growth rate of 4.7 percent in 2022. The impact of Covid-19 pandemic on the economic activities and its containment necessitated several policy measures from the Government to save lives and likelihoods, which include tax waivers, cash transfers and direct lending to private sector. The fiscal cost of these policy measures necessitated a revision of the 2020 Budget and the MTEF 2020-2022 incorporating much larger deficits from 1.33 percent of the GDP in 2019 to 3.30 percent of the GDP in the revised 2020 Appropriation Act. The revised 2020 Appropriation Act had a deficit of N4.61 trillion (3.30 percent of GDP) and New Borrowing of N4.20 trillion compared to the first Budget with a deficit of N 1.85 trillion (1.29 percent of GDP) and New Borrowing of N1.59 trillion.

1.1.2 In view of the need to ensure that Nigeria's Total public debt remains sutainable in the medium to long-term, the annual DSA exercise is usually conducted, and it is consistent with the country's macroeconomic framework. The Exercise assesses the current and future debt levels, as well as its ability to meet debt service obligations as and when due, without compromising growth and development.

1.2 The 2020 DSA Exercise was conducted by the Debt Management Office (DMO) from December 9, 2020 to December 18, 2020, in collaboration with other stakeholders, namely: the Federal Ministry of Finance, Budget and National Planning (FMFBNP), Central Bank of Nigeria (CBN), Budget Office of the Federation (BOF), National Bureau of Statistics (NBS), and the Office of the Accountant-General of the Federation (OAGF).

1.2 Objectives of 2020 DSA

1.2.1 The objective of the 2020 DSA is to evaluate the country's risk of debt distress, considering Nigeria's capacity to carry current debt and its future borrowings under both Baseline projections and Shock scenarios. Thus, it helps to inform the borrowing decisions of Government. The DSA, therefore, serves as a key input into Nigeria's Medium-Term Expenditure Framework (MTEF), the Fiscal Strategy Paper (FSP), and the FGN Annual Budget, as well as the Medium-Term Debt Management Strategy (MTDS).

1.2.2 The 2020 DSA Report is divided into seven (7) Chapters, as outlined below:

Chapter 1 –Background and Objectives of 2020 DSA

Chapter 2 –Methodology and Scope of Debt Coverage

Chapter 3 – Public Debt Portfolio Review

Chapter 4 – Macroeconomic Assumptions

Chapter 5 – Realism of Baseline Projections

Chapter 6 – Result and Analysis

Chapter 7 – Final Risk Rating, Conclusion and Recommendations

CHAPTER TWO
METHODOLOGY AND SCOPE OF DEBT COVERAGE

2.1 Methodology

2.1.1 The 2020 DSA adopted the revised World Bank (WB) and International Monetary Fund (IMF) Low Income Countries Debt Sustainability Framework (LIC-DSF,) which compares a country's debt burden indicators against the WB/IMF's thresholds based on the Composite Indicator (CI), which is determined by the WB's CPIA rating and other macroeconomic variables such as real GDP growth rate, remittances, import coverage of reserves and World Economic Growth. The Framework also incorporates the Realism Tools, that assess the reality of key macroeconomic and debt projections, as well as, Granularity, which measures the borrowing space available to absorb shocks in moderate risk countries.

2.1.2 Though Nigeria is classified as a Lower-Middle-Income country (LMIC), and qualifies to adopt the Market Access (MAC) DSA framework in the conduct of its DSA, given the country's visibility in the International Capital Market (ICM), the 2020 DSA exercise used the LIC-DSF Framework as in the 2019 DSA, given that the proportion of its concessional debt still accounted for about 60% of the country's External Debt portfolio as at September 30, 2020. Furthermore, the LIC-DSF provides Thresholds or Benchmarks which serve as early warning signals of potential risk of debt distress, and forms the basis for guiding the Government in its borrowing decisions. Such early warning triggers are not available in the MAC DSA Framework.

2.1.3 The 2020 DSA Exercise covers two main parts, namely, the Public and Publicly Guaranteed External DSA, which covers the External Debt of the Federal Government of Nigeria (FGN) and the thirty-six (36) States, as well as the FCT. The second part is the Public DSA (Fiscal DSA), which comprises External and Domestic Debts of the FGN, States and FCT. The Domestic Debt for the FGN includes Ways and Means Advances at the CBN, in the sum of N10.00 trillion under the Alternative Scenario.

2.1.3 The 2020 DSA covers a 10-year historical period (2010-2019), and a 20-year projection (2020-2040), under various macroeconomic assumptions and Stress scenarios. The Realism Tools were also applied to assess the credibility of the forecasts. The outcomes of the exercise were used to compare the country's debt sustainability indicators against international Debt Burden Thresholds and Benchmarks, which measure the Solvency and

Liquidity positions of the country. The 2020 DSA adopted the Baseline Scenario and Alternative Scenario, which also considered the FGN's Ways and Means Advances at the CBN.

2.2 Country Classification and Determination of Stress Test Scenario

2.2.1 The Composite Index (CI) evaluates a country's debt -carrying capacity, and classifies countries into one of the three categories: Weak (CI<2.69); Medium (2.69≤CI≤3.05); and, Strong Policy (CI>3.05). Nigeria remains a Medium Performer as in the 2019 DSA. Based on this classification the respective Thresholds for this category are 40 percent for the NPV of External Debt to GDP ratio, 180 percent for the NPV of External Debt to Exports ratio, 15 percent for External Debt Service to Exports ratio and 18 percent for External Debt Service to Revenue ratio. The Benchmark for the Total Public Debt to GDP (Fiscal) for Medium Performer category, to which Nigeria belongs, is 55 percent. The Fiscal Benchmark and External Debt Thresholds 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
	As a % of	NPV of Debt as a % of		Debt Service[1] as a % of	
	GDP	GDP	Export	Revenue	Export
Weak	35	30	140	14	10
Medium	55	40	180	18	15
Strong	70	55	240	23	21

Source: World Bank/IMF

[1]**Debt Service refers to the sum of Principal Repayments and Interest Payments**

2.3 Scope of the 2020 DSA Debt Coverage

2.3.1 The 2020 DSA exercise is consistent with the previous DSA. It utilises the Total Public Debt stock comprising Public and Publicly guaranteed External Debt and Public Domestic Debt. External Debt is defined on Residency basis, and consists of the External Debt of the FGN and those of the thirty-six (36) States and the FCT. The FGN borrows on behalf of the thirty-six (36) States and the FCT, as they are not allowed to borrow directly externally, based on the provisions of the DMO Act, 2003 and the FRA, 2007. The Domestic Debt comprised FGN Domestic Debt and the Domestic Debt of the thirty-six (36) States and the FCT (Table 2.2). For the first time, the FGN's Ways and Means Advances at the CBN was included under the Alternative Scenario as part of the Total Public Debt Stock.

Table 2.2: Coverage of the Public Sector Debt

	Subsectors of the public sector	Check box
1	Central government	X
2	State and local government	X
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to SOEs)	
7	Central bank (borrowed on behalf of the government)	
8	Non-guaranteed SOE debt	

2.3.2 The percentage of shock to Contingent Liabilities was assumed to be 2 percent of GDP to reflect additional potential liabilities, which could arise from the State-Owned Enterprises (SOEs)/Government-Owned Enterprises (GOEs), whose debt were not captured in the debt data coverage. Consequently, the Contingent Liability tailored test was adjusted to 2 percent of GDP for SOEs' debt (guaranteed and non-guaranteed debt by the Government) Table 2.3.

Table 2.3: The Contingent Liability Tailored Stress Test

1	The country's coverage of public debt	The central, state, and local governments		
		Default	Used for the analysis	Reasons for deviations from the default settings
2	Other elements of the general government not captured in 1.	0 percent of GDP	2	
3	SoE's debt (guaranteed and not guaranteed by the government) [1/]	2 percent of GDP	2	
4	PPP	35 percent of PPP stock	0.00	
5	Financial market (the default value of 6 percent of GDP is the minimum value)	5 percent of GDP	5	
	Total (2+3+4+6) (in percent of GDP)	9.0		

[1/] The default shock of 2% of GDP will be triggered for countries, whose government -guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

In addition, 5 percent of GDP used for the Nigerian financial market stress test in the 2019 DSA was retained as Nigeria's financial sector did not indicate vulnerabilities that could have warranted an upward adjustment in the value of 5 percent of GDP for the shock in the financial market.

2.3.3 The 2020 DSA relied on Standardized Stress Tests and Tailored Commodity Stress Test. The Standard Stress Tests are temporary shocks on the baseline assumptions to evaluate the impact of the shocks on the evolution of debt burden indicators in both Ex ternal and Public DSA. The External DSA considered the shocks on the baseline assumptions , which include exchange rate depreciat ion, a decline in export growth lower than the historical average, and a decline in non -debt creating flow s (Foreign Direct Inve stments - FDIs). For the Public DSA (a combination of external and domestic debt), the Stress Test/Shocks comprised a decline in Primary Balance (net fiscal position, excluding interest charges on public debt), and lower GDP growth rate than the historical average.

2.3.4 The Tailored Commodity Stress test was conducted, because crude oil constitutes over 60 percent of Nigeria's total exports. The shock assesses the sensitivity of projected debt indicators to a decline in oil prices by 40 percent on the baseline oil price of US$40 pb for 2021, which translates to US$24 bp.

2.4 Risk Rating

2.4.1 The LIC-DSF Risk Rating classifies countries into four (4) broad categories, namely: Low, Moderate, High and In-Debt Distress, according to their levels of probability of Debt Distress. These are 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 the respective World Bank/IMF 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 the respective World Bank/IMF benchmark under Stress Tests.

iii. **High Risk of Public Debt Distress**: Where any of the four (4) external debt burden indicators of the total Public Debt burden indicator breaches their corresponding World Bank/IMF benchmarks under the Baseline.

iv. **In-Debt Distress**: A situation where all the indicators substantially breach the Baseline and Stress Test scenarios, and the country is already experiencing difficulties in servicing its debts, as evidenced, for example by the existence of arrears.

2.5 The Borrowing Space (Granularity)

2.5.1 The robustness of a country's debt position is determined by the capacity ("space" it has, in order to absorb shocks), without being classified as a high-risk of debt distress. Nigeria's External Debt Distress is classified to be Moderate, with limited space to absorb shocks without leading to high risk of debt distress.

2.5.2 The Classification of Borrowing Space (Granularity)

2.5.2.1 The Borrowing Space is defined in three (3) categories as described below:

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 below their respective thresholds over the projection period; and,

iii Some Space to Absorb Shocks – if the baseline indicators do not fall in the two categories above.

The outcome of the exercise revealed that Nigeria's risk rating is Moderate, with *Limited Space* to absorb shocks.

CHAPTER THREE
PUBLIC DEBT PORTFOLIO REVIEW

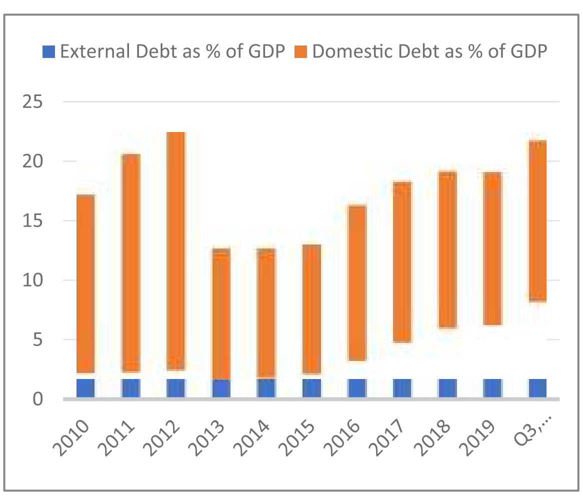
3.1 Evolution and Composition of Debt

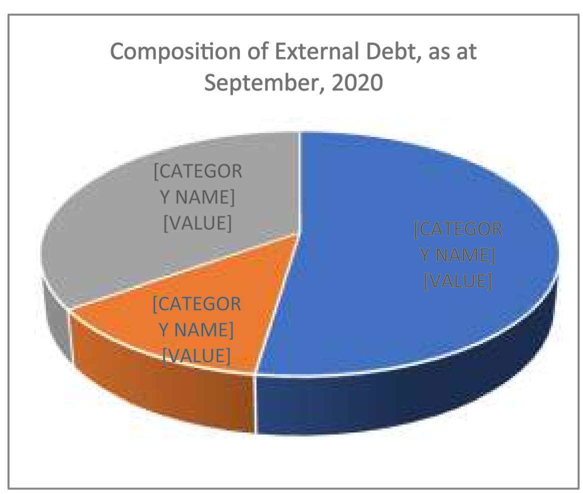
3.1.1 Nigeria's Total Public Debt outstanding was ₦32,222,763.86 million (US$ 84,574.18 million), as at September 30, 2020 compared to ₦27,401,381.29 million (US$84,053.32 million) as at December 31, 2019, representing an increase of ₦4,821,382.57 million or 17.60 percent in Naira terms (Figure 3.1). This comprised External Debt (FGN, States and FCT) of ₦12,186,349.77 million (US$ 31,985.17 million) or 37.82 percent and Domestic Debt of FGN, States and FCT ₦20,036,414.09 million (US$52,589.01 million) or 62.18 percent in Q3, 2020.

3.1.2 The ratio of Total Public Debt to GDP remained relatively low at 21.72 percent as at September 30, 2020. This compares favourably with the Country-Specific Debt Limit of 40 percent of GDP, and WB/IMF threshold for Public Debt to GDP ratio of 55 percent for countries in Nigeria's peer-group, as well as the West African Monetary Zone (WAMZ) Convergence Threshold of 70 percent of the GDP.

3.1.3 In terms of the Targets in the Medium-Term Debt Management Strategy, 2016-2019, the ratio of Domestic Debt to External Debt has progressively improved and was 62:38, in relation to the target of 70:30. The other target of attaining 75:25 ratio for long to short-term debt in the domestic debt portfolio had been exceeded by September 30, 2020, and was 83:17, while the Average Time to Maturity (ATM) stood at 10.50 years, which is also above the targeted minimum of 10 years.

Figure 3.1: Nigeria's Total Public Debt Structure





The composition of External Debt in Quarter 3, 2020, shows that Concessional loans from Multilateral and Bilateral sources accounted for US$ 16,741.82 million (52.34 percent) and US$4,075.00 million (12.74 percent), respectively of the Total External Debt. Other sources of External Debt were Commercial debt consisting of Eurobonds and Diaspora Bond, which together accounted for US$11,168.35 million (34.92 percent).

CHAPTER FOUR

MACROECONOMIC ASSUMPTIONS

The 2020 DSA Exercise derives its Baseline assumptions from the revised 2020 Appropriation Act, and the 2020-2022 Medium-Term Expenditure Framework (MTEF) and Fiscal Strategy Paper (FSP), which reflect the key objectives and priorities of the draft 2021-2025 Medium-Term National Development Plan (MTNDP) and the Nigeria Economic Sustainability Plan (NESP). The MTNDP was being developed at the time of this DSA Exercise and takes cognizance of the country's proposed long-term development Agenda, and it is titled "Nigeria Agenda 2050". The MTNDP is expected to provide a coordinated approach for harnessing the inherent potentials of the Nigerian economy. Under the Optimistic Scenario, Nigeria is expected to achieve significant economic growth and improvement in socio-economic indicators such as life expectancy, poverty and unemployment by deepening the initiatives for diversified growth and sustainable development. It is also intended to address most fundamental domestic constraints to economic growth which include inadequate infrastructure, weak institutions, inadequate energy supply, security challenges, corruption among others. The Baseline macroeconomic assumptions underpinning the 2020 DSA are outlined below.

Box 4.1: Baseline Scenario Assumptions

Real and Nominal GDP Growth: Against the backdrop of challenges in the global and domestic economy, the real GDP growth projection in the 2020 Budget and MTEF was revised to decline to minus (-) 1.86 percent for 2020, as a result of COVID-19 Pandemic and its containment measures as well as the fall in Oil prices in the international market. Economic recovery is projected to be slower than earlier expected with a projected growth of 1.90 percent in 2021, and later 4.7 percent in 2022. But because of the anticipated political uncertainty and quality of government spending during General Elections in the country, growth projection will be modest at 3.1 percent in 2023. As a result of the anticipated development in the economy, the GDP at current market prices is projected to increase from N129,679 billion in 2020 to N164,366.40 billion in 2021, N185,811.00 billion in 2022 and N205,217.4 billion in 2023.

Inflation Rate: Headline inflation on year-on-year basis is estimated at 14.1 percent in 2020, while it is projected to marginally increase to 14.5 percent in 2021, and then moderate to 13.79 percent and 12.56 percent in 2022 and 2023, respectively. The moderation in inflation in the period is premised on the anticipated impact of Government programmes in the various sectors of the economy. The projected trend assumes that the measures to implement structural reforms would yield the desired results.

Crude Oil Production: Crude oil production which averaged 1.96 million barrels per day (mbpd) in 2019 is expected to decline to about 1.80 mbpd in 2020 due to the Covid-19 pandemic and Nigeria's compliance with the OPEC+ quota which reduced base production. Production level is expected improve to 1.86 mbpd in 2021, and subsequently to 2.09 mbpd and 2.38 mbpd in 2022 and 2023 respectively, as economies recover from recession, and OPEC+ quota agreements moderated. The crude oil production output is pegged at 2.38 mbpd over the projection period.

Crude Oil Benchmark Price: The 2020 oil price benchmark was revised downward to US$28 per barrel (pb) from the initial projection of US$57pb due to decline in global economic activities occasioned by the covid-19 pandemic. The benchmark prices are projected to increase to US$ 40pd between 2021 and 2023 and will remain above US$45pb over the rest of the projection period. The anticipated improvement in global oil prices is predicated on the projected rebound in economic growth for major economies as early as 2021.

Export: Export is expected to grow in the medium to long term projected period, driven largely by anticipated improvement in the non-oil sector, as government's efforts to diversify the economy yields positive results. Specifically, the policy measures in the critical sectors of the economy, particularly the interventions by the CBN is expected to drive this improvement. The start of trading under the African Continental Free Trade Area (AfCFTA) agreement on 1 January 2021 which will open market for the over 1.3 billion people is also expected to improve non-oil export. Crude oil and gas export is also expected to grow, though slowly, as the effect of the COVID-19 Pandemic is expected to wane within the short-term horizon, with expected gradual global economic recovery, which is likely to boost demand and sustain the increase in oil and gas prices at the international market in the medium to long term horizon.

Current Account Position : The deficit in the current account is expected to persist in the short-term, driven largely by high import of goods and services, as well as, the persistent deficit in the primary income account, occasioned by payments of dividends to non-resident investors. However, it is believed that the steady increase in crude oil and gas prices at the international market and sustained inflow of remittances, as well as the improvement in non-oil export receipts, are expected to impact positively on the current account. Thus, the current account balance is expected to swing to the traditional surplus position in the medium to long term horizon.

Foreign Direct Investments : The negative effect of the COVID-19 pandemic on global capital flows which has affected the inflow of foreign direct investment into the country is expected to further dampen the growth of FDI in the short-term. However, with the sustained political stability, improved macroeconomic conditions, economic reforms, particularly structural reforms in critical areas such as infrastructural development, especially in the oil and transportation sectors, and the relative stability in the foreign exchange market are the major factors expected to drive growth in Foreign Direct Investment (FDI) inflow in the medium to long term.

Remittances: Stable inflow of remittance is expected through the forecast horizon. However, in the short-term, modest improvement in the inflow of remittance is expected, occasioned by the gradual recovery in the global economy from the effect of the COVID-19 Pandemic. A further improvement is expected in the medium to long-term horizon, which is expected to impact positively on the current account.

External Reserves: External reserves at the end of December 2020 was US$36.46 billion and could finance 6.4 months of import of goods and services or 8.7 months of import of goods only, higher than the 3-month international benchmark. This was lower than the US$38.09 billion recorded at end-December 2019 by US$1.63 billion or 4.3 percent. The decline was majorly due to increased intervention in the foreign exchange market by the CBN and lower inflow of oil-related proceeds.

Nominal Exchange Rate: The effort of the CBN to unify the exchange rate in all the segments of the market led to the adjustment of the nominal exchange rate in 2020. Once the unification of the exchange rate is achieved within the shortest term, the nominal exchange rate is expected to remain stable in the medium and long-term, driven by the sustained and robust foreign exchange policy of the CBN aimed at enhancing inflow of foreign exchange into the economy. The recent exchange rate reforms undertaken by the CBN to block leakages and ensure enhanced inflow of remittances by Nigerians in Diaspora is expected to further boost liquidity in the foreign exchange market, thereby curbing demand pressure in the short-term horizon.

Fiscal Deficit: Fiscal deficit in the revised 2020 appropriation act was ₦4.608 trillion or 3.30 percent of GDP, relative to ₦2.474 trillion or 1.37 percent of GDP in 2019. The fiscal deficit is projected to stand at ₦4.486 trillion or 3.14 percent in 2021, ₦4.805 trillion or 3.27 percent in 2022 and ₦4.539 trillion or 3.00 percent in 2023. The deficits are above the threshold of 3 percent of GDP set by the Fiscal Responsibility Act, 2007, due to the economic challenge attributed to Covid-19 pandemic. The deficit as percentage of GDP is expected to start declining below the threshold from 2024 to the end of projection period consistent with the projected faster growth of the GDP.

New Financing: New financing will continue to be in line with the country's Debt Management Strategy which provides a guide to the borrowing activities of the Government in the medium-term. The Strategy is to borrow more from domestic sources using long-term instruments, while concessional funding from multilateral and bilateral sources will be prioritized for external borrowing. The funding strategy is to support the strategic composition target of 70:30 ratio for domestic and external debt, as well as attaining the 75:25 ratio for long to short-term debt in the domestic debt portfolio. The aim is to further strengthen the domestic debt, sustain the issuance of longer-tenored instruments in order to minimize refinancing risk by reducing the component of short-term debt instruments in the public debt portfolio.

CHAPTER FIVE

REALISM OF BASELINE PROJECTIONS

5.1 Introduction

5.1.1 The Realism tools are those fiscal parameters that are provided in the Template, and are used to assess the reasonableness and consistency of the Baseline assumptions and projections. They comprised the Drivers of Debt Dynamics, Fiscal Adjustments and Growth Relationship, Planned Fiscal Adjustments, and Growth and Investment Relationship. The Realism tools do not highlight any risk to the Baseline projections, as the projections were in line with the historical trend, indicating the reasonableness of the various forecasts.

5.2 Drivers of Debt Dynamics

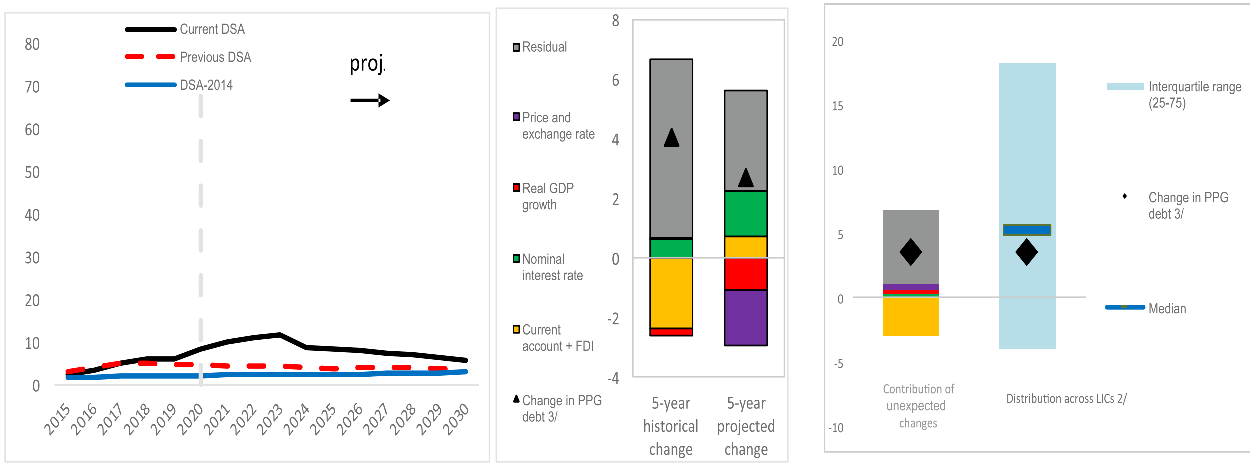
5.2.1 The current 2020 DSA Exercise seems consistent with the previous 2019 DSA. The increase in the ratio of Public Debt as a percentage of GDP, showed significant borrowing, and reached its peak in 2023, and thereafter started trending downwards (Figure 5.1). The Government financing need is expected to be met through concesional sources and market-based financing to fund huge infrastructure demand, and budget deficits in order to stimulate economic growth.

5.2.2 The External Debt dynamics were mainly driven by Current Account deficit, lower Foreign Direct Investments (FDIs) and Exchange Rate depreciation. Comparing the 5-year historical and forecast indicates that the projected change in debt will be driven by Current Account and FDIs, Interest Rate, real GDP growth and Exchange Rate. As in the previous years, the Current Account was in deficit at the time of the exercise, and increased due mainly to the volatility in Oil Exports. For Total Public Debt, the main drivers of debt in the 5-year historical has been the Primary Deficit (Budget Deficits). Other drivers of Debt are the real Interest Rate, real GDP growth and real Exchange Rate Depreciation (Figure 5.1b). The negative Residual in the Total Public Debt reflects the Contingent liabilities, which constitute downside risk to the Baseline projections.

Figure 5.1: Nigeria's Drivers of Debt Dynamics – Baseline Scenario

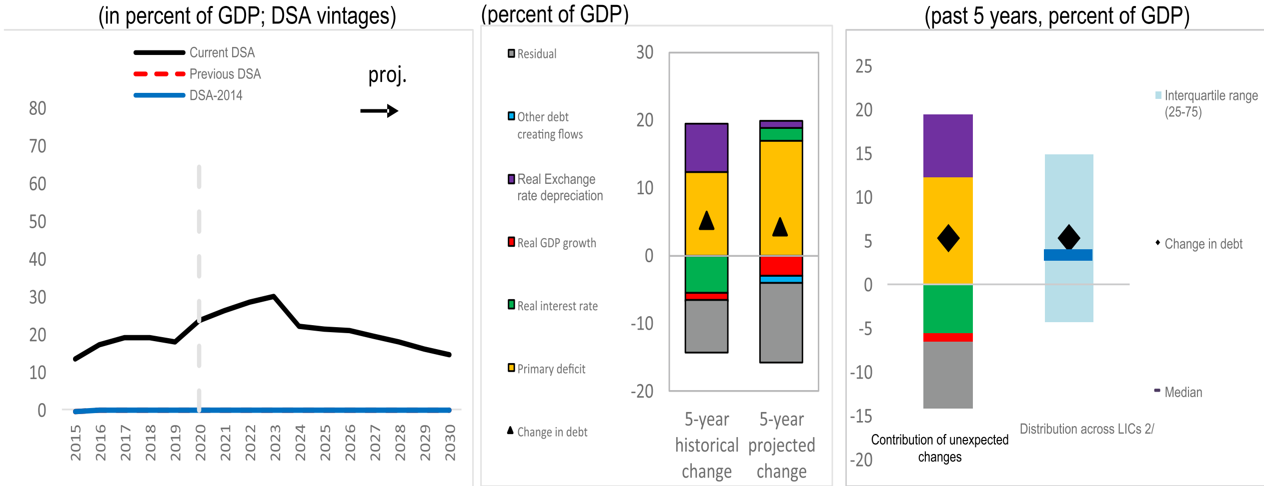
a. External Debt

Gross Nominal PPG External Debt (in percent of GDP; DSA vintages) | Debt-creating flows (percent of GDP) | Unexpected Changes in Debt[1] (past 5 years, percent of GDP)



b. Public Debt

Gross Nominal Public Debt (in percent of GDP; DSA vintages) | Debt-creating flows (percent of GDP) | Unexpected Changes in Debt[1] (past 5 years, percent of GDP)



[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.

5.3 Fiscal Planned Adjustment

5.3.1 The Fiscal Planned Adjustment assesses Budget deficit over a 3-year horizon compared to other countries' historical experience with a benchmark of 2.5 percent of the GDP for the LICs. Meanwhile, Nigeria's planned Budget deficit for 2020 was reviewed upwards from 1.94 percent of GDP in its first budget to 3.30 percent in the revised 2020 budget, so as to accommodate extra funding needs arising from the Covid-19 challenges, and other government obligations. In 2021 Appropriation Act, the deficit was 3.3 percent of GDP

5.4 Fiscal Adjustment and Growth

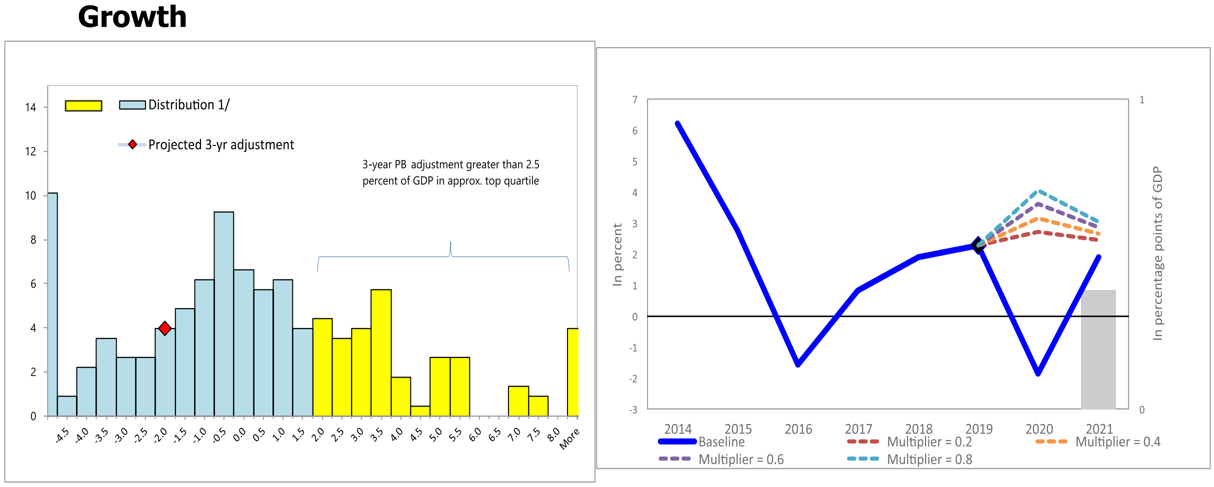
5.4.1 The Fiscal Adjustment and Growth Tool determines the relationship between Fiscal Adjustments and GDP growth assumptions. It captures the deviations between Baseline growth projections and cross-country comparisons (with estimated average of 0.4 for LICs). The growth projection dropped to 1.86 percent of GDP which in 2020 is below the path predicted by growth and fiscal adjustment. This deviation is due to the negative impact of Covid-19 on the economy. However, the GDP growth is expected to recover in 2021 at 1.9 percent of GDP (Figure 5.2d).

5.5 Growth and Investment

5.5.1The Growth and Investment tool evaluates the impact of contribution of public investment and private investment to GDP growth. The rate of Private investment is higher than the rates of Public investment in both the 2020 DSA and 2019 DSA. However, the contribution of Private investment to GDP growth in the current DSA is at par with previous DSA projection. The result shows that contribution to growth would be driven by private investment, but higher in the current projection than in the historical (Figure 5.2d).

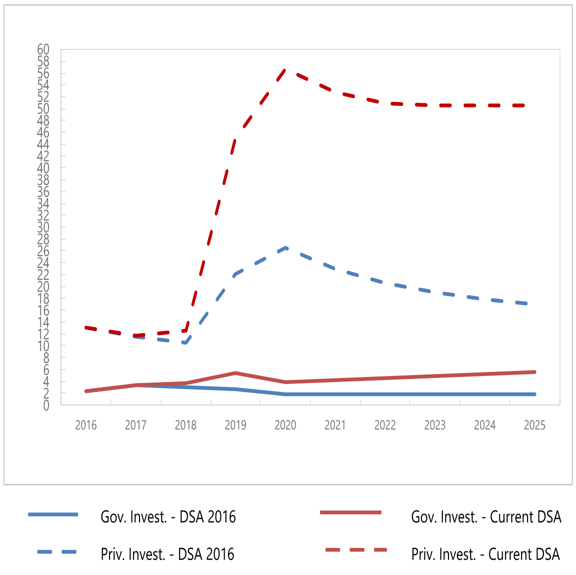
Figure 5.2: Nigeria's Realism Tools

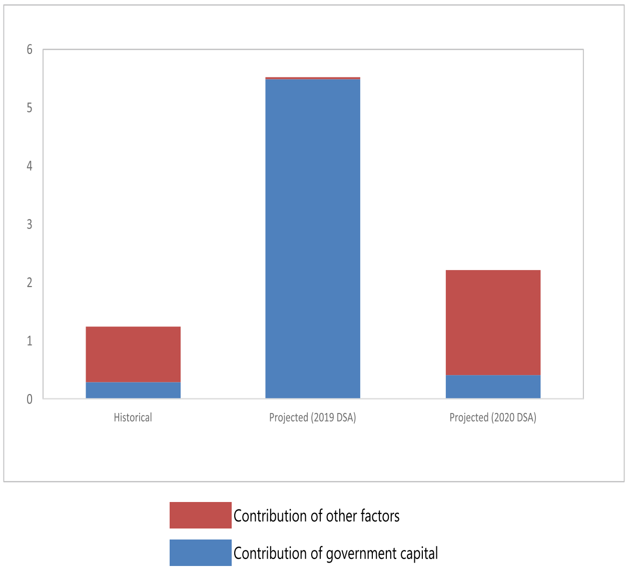
a. Fiscal Planned Adjustment Growth **b. Fiscal Adjustment and**



c. Public and Private Investment Rates (as % of GDP) **d. Contribution to Real GDP Growth (as % of 5-Year Average)**

which was higher than the LICs' benchmark of 2.5 percent of GDP and slightly above the 3.0 percent benchmark provided in the FRA, 2007. The deficit is projected to gradually return to 3.0 percent of GDP in 2023 with improved government's revenue (Figure 5.2d).


2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Gov. Invest. - DSA 2016
Gov. Invest. - Current DSA
Priv. Invest. - DSA 2016
Priv. Invest. - Current DSA


Historical
Projected (2019 DSA)
Projected (2020 DSA)
Contribution of other factors
Contribution of government capital

CHAPTER SIX
RESULT AND ANALYSIS

6.1 Extenal Debt Sustainability

6.1.1 **The 2020 DSA Exercise shows that the External Debt remains at a Moderate Risk of Debt Distress, as in the 2019 DSA** . The ratios of External Debt-to-GDP and Debt-to-Exports. remained below their respective thresholds over the projection period under the Baseline scenario, while the ratio of External Debt Service -to-Exports trended towards its threshold of 15 percent at 14.7 percent in 2030 (Table 6.1). For External Debt Service -to-Revenue ratio, breach occurs in 20 30, when the ratio at 21.7 percent exceeds its threshold of 18 percent , thus, highlighting revenue challenge facing Nigeria. However, this is being addressed by the various on-going reform initiatives undertaken by the Government to boost Exports and Revenue. The External Debt is expected to peak at 8.9 percent of GDP in 2023. However, the External Debt Service to Revenue is projected to rise and exceed its threshold of 18 percent between 2027 and 2030, before declining to 9.4 percent in 2040. External Debt is assessed at a Moderate Risk, given that recovery is projected to commence in 2021, when it is expected that the country's risk premia, which are low commodity prices and domestic revenue wou ld have improved and Covid -19 emergency provisions would have abated.

Table 6.1: External Debt Sustainability Indicators in Percent (2020-2040)

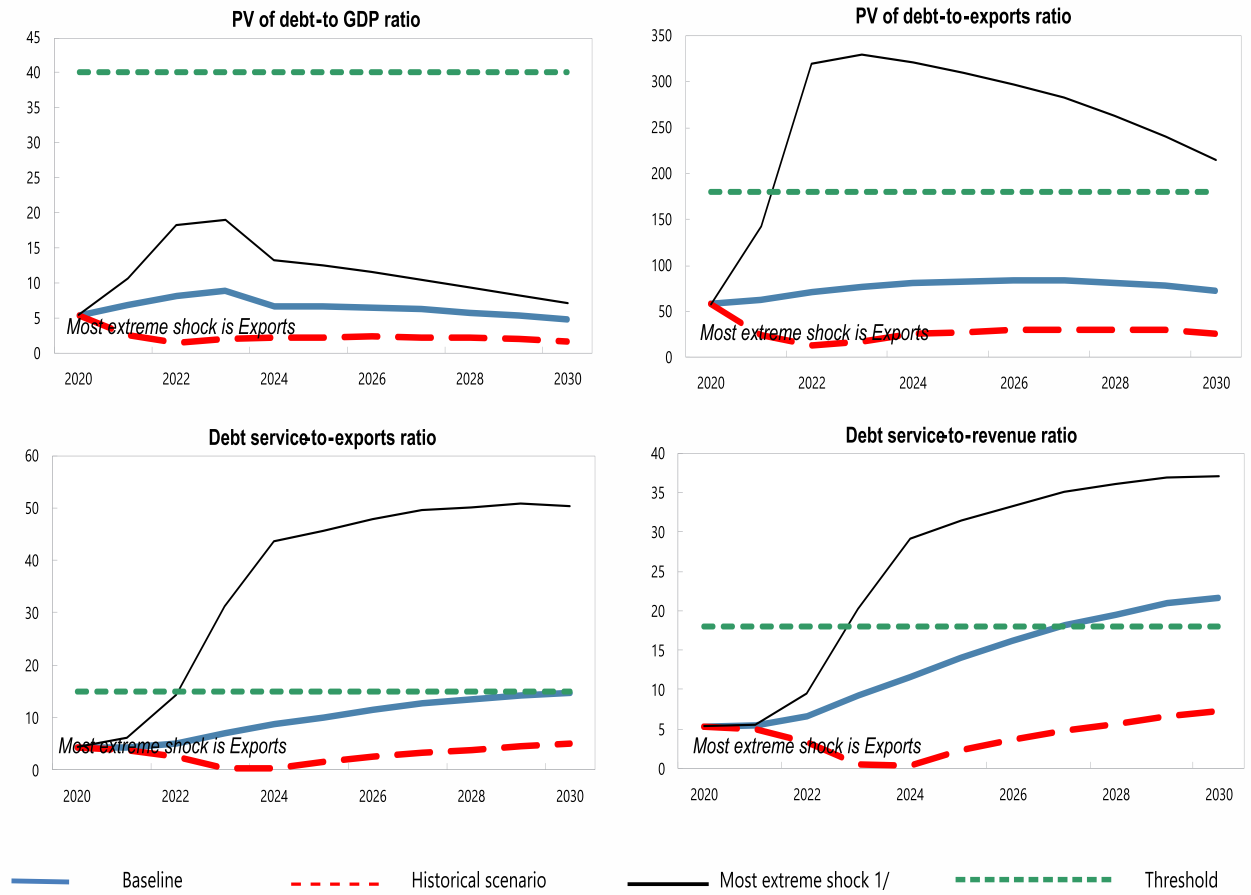
Details	Threshold	2020	2021	2022	2023	2024	2025	2030	2040
External Debt Stock									
In Percent of GDP	40	5.4	6.9	8.1	8.9	6.7	6.7	4.8	0.9
In percent of Exports	180	57.7	62.1	70.4	76.5	80.5	82.7	72.2	17.8
External Debt Service									
In percent of Exports	15	4.4	4.2	5.0	7.0	8.6	10.1	14.7	5.4
In percent of Revenue	18	5.3	5.4	6.6	9.2	11.5	14.0	21.7	9.4

Source: 2020 DSA
Notes: i. Debt Service refers to the sum of Principal Repayments and Interest Payments
ii. The Thresholds are determined periodically by the WB/IMF, based on the CI Rating Exercise.

Shocks and Risks and Mitigating Factors

6.1.2 Under the Stress Test scenario, the ratios of External Debt-to-Exports, and External Debt Service-to-Revenue slightly breached their respective thresholds in 2021, 2022 and 2023. Given Nigeria's low Debt to GDP ratio and the relatively low share of External Debt in the Total Public Debt and the high portion of concessional loans in the External Debt Stock, projected breach reflect s Nigeria's low revenue base. Exports and Revenue remain the most impactful shock for the External Debt and External Debt Service . These are expected to be mitigated by the anticipated increase in Foreign Direct Investments (FDIs) and enhanced Revenue from various Government's ongoing initiatives on the diversification of the economy, based on expectations of an improvement in the business environment and macroeconomic stability. Further details on the projected External Debt sustainability are shown in Annexure I.

Figure 6.1: Nigeria's External Debt Sustainability Indicators Under Alternative Scenarios, 2020-2030



Sources: 2020 DSA

[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.

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

6.2.1 The Total Public Debt DSA comprised the External debt of the FGN and the 36 States and the FCT, and their domestic debts plus the FGN's Ways and Means Advances. The Total Public debt remains sustainable as the ratio of Total Public Debt -to-GDP was below the WB/IMF threshold of 55 percent of the GDP under the Baseline and Extreme Shock scenarios. The ratio was also below the threshold in the previous 2019 DSA (Table 6.2). The ratios of Debt to Revenue and Debt Service to Revenue, which have no set thresholds by the WB/IMF are expected to increase and peak at 329.5 percent in 2025 and 56.9 percent in 2030, respectively. Thus, highlighting the critical importance of revenue mobilization, which is expected to drive down the rising Indicators.

Table 6.2: Total Public Debt Sustainability in Percent (2020-2040)

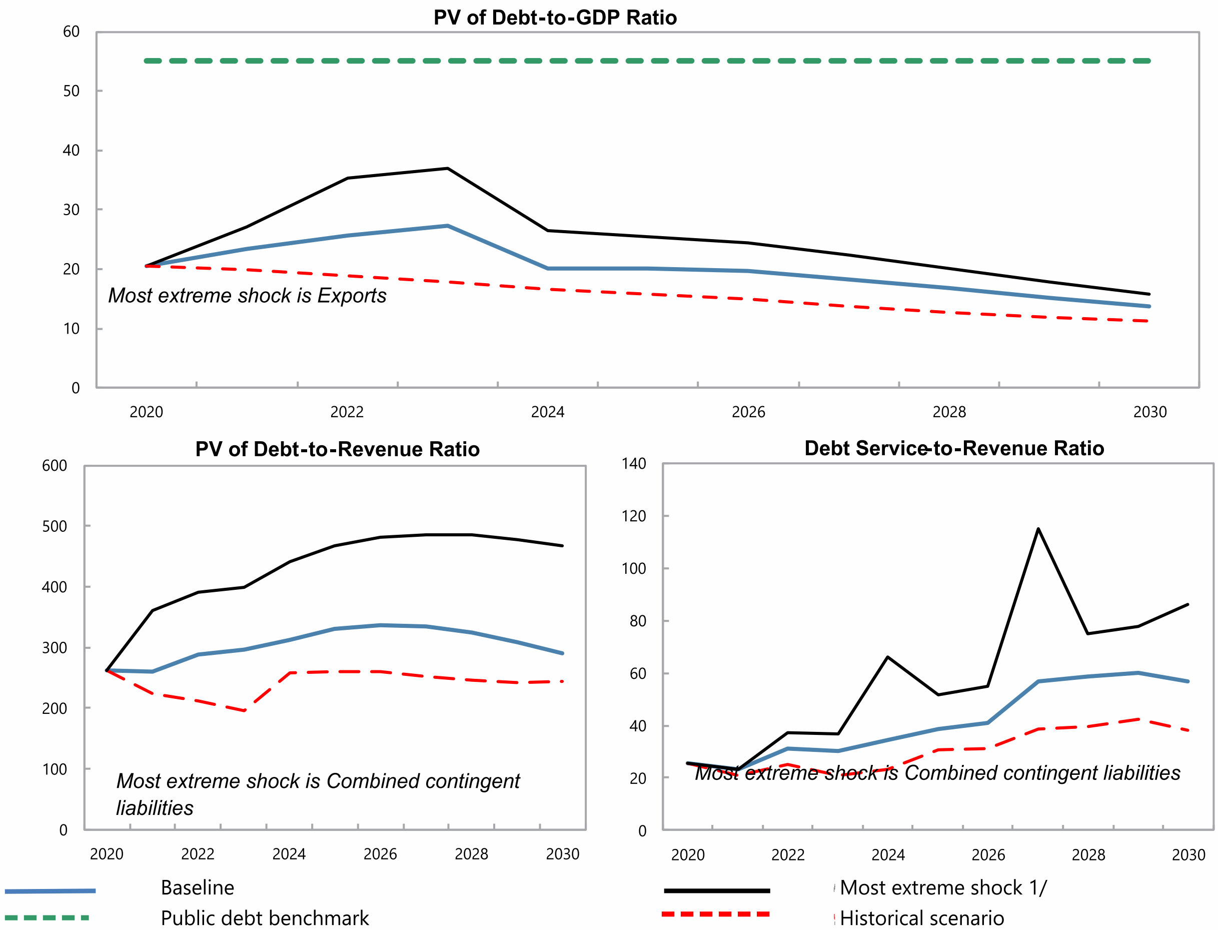
Details	Threshold	2020	2021	2022	2023	2024	2025	2030	2040
Total Public Debt Stock									
In percent of GDP	55	20.5	23.4	25.6	27.4	20.2	20.0	13.7	3.4
In Percent of Revenue	Nil	261.2	260.3	287.6	296.7	311.8	329.5	291.0	115.7
Total Public Debt Service									
In Percent of Revenue	Nil	25.7	23.4	31.3	30.1	34.7	38.6	56.9	22.0

Source: 2020 DSA

Notes: **i. Debt Service refers to the sum of Principal Repayments and Interest Payments**

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

Figure 6.2: Nigeria's Public Debt Sustainability Under Alternative Scenarios, 2020-2030



Sources: 2020 DSA

[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.

6.2.2 Nigeria's economy is sensitive to Commodity Price Shocks in terms of volatility in Oil prices. A Commodity Shock – by lowering the oil price to US$24 per barrel would result in higher primary deficit with GFNs being pushed to 17.1 percent in 2021. The ratio of Total

Public Debt to GDP would be pushed to 39.0 percent in 2021, from 27.5 percent of GDP under the baseline scenario, but would remain under the Benchmark of 55 percent of the GDP and Nigeria's self-imposed limit of 40 percent of GDP.

Alternative Scenario

6.2.3 Under the Alternative Scenario, the FGN's Ways and Means Advances at the CBN were added to the Total Public Debt , resulting to some increase in the debt ratios of the country. While the ratio of Total Public Debt -to-GDP remained below its threshold of 55 percent of the GDP, throughout the projection period, it however, increased to 26.0 percent in 2022 and peaked at 28.1 percent in 2023 , when compared to the Baseline results of 25.6 percent in 2022 and 27.4 percent in 2 023. Similarly, the ratio of Debt Service-to-Revenue was 59.0 percent (2025), 107.7 percent (2030) and 178.5 percent (2040), compared to 38.6 percent (2025), 56.9 percent (2030) and 22.0 percent (2040) under the Baseline Scenario (Table 6.3).

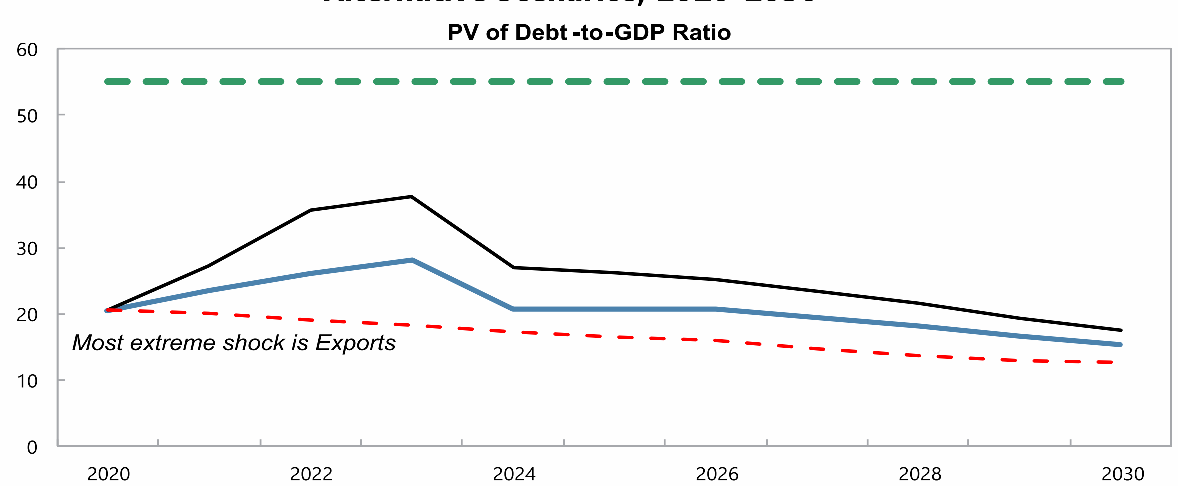
Table 6.3: Alternative Scenario in Percent (2020-2040)

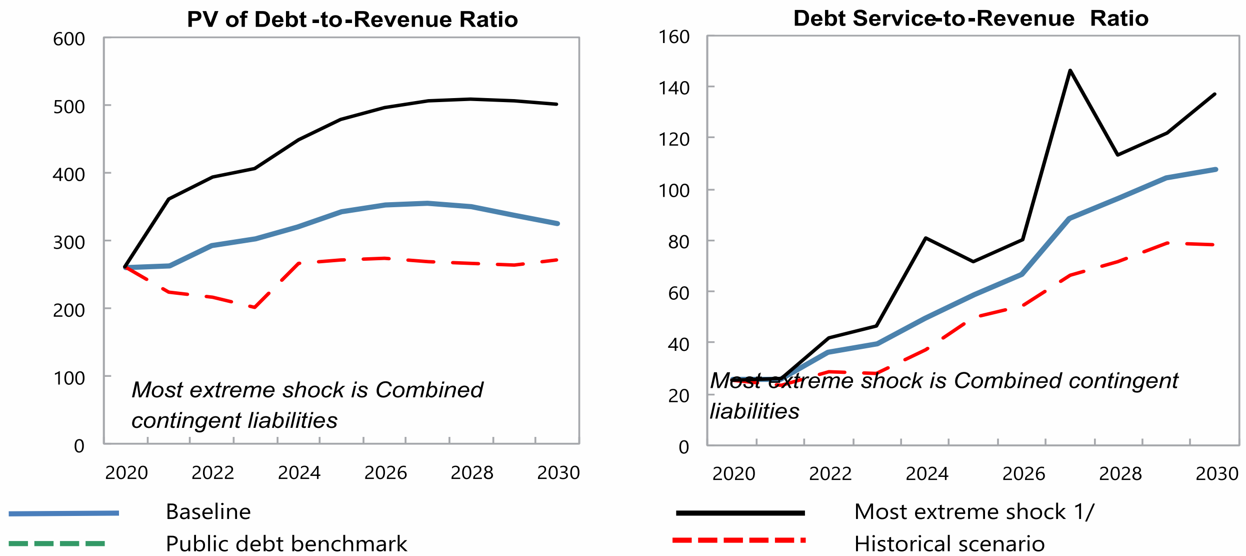
Details	Threshold	2020	2021	2022	2023	2024	2025	2030	2040
Total Public Debt Stock									
In percent of GDP	55	20.5	23.6	26.0	28.1	20.8	20.8	15.3	7.2
In Percent of Revenue	Nil	261.2	262.6	292.3	303.8	321.7	342.7	326.3	248.6
Total Public Debt Service									
In Percent of Revenue	Nil	25.7	25.7	35.9	39.7	49.5	59.0	107.7	178.5

Source: 2020 DSA

Notes: **i**. Debt Service refers to the sum of Principal Repayments and Interest Payments
ii. Under the Fiscal Sustainability, the WB/IMF threshold is only applicable to the Total Public Debt to GDP, which is set at 55 percent.

Figure 6.3: Nigeria's Public Debt + FGN's Ways & Means Sustainability Under Alternative Scenarios, 2020-2030





Sources: 2020 DSA

[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.

6.3 Risk Rating

6.3.1 The Risk Rating from the 2020 DSA reveals that Nigeria's External Debt remains at a Moderate Risk of Debt distress, but sensitive to Export shock, while Nigeria's Total Public Debt remains within a sustainable debt profile, but susceptible to Revenue shocks.

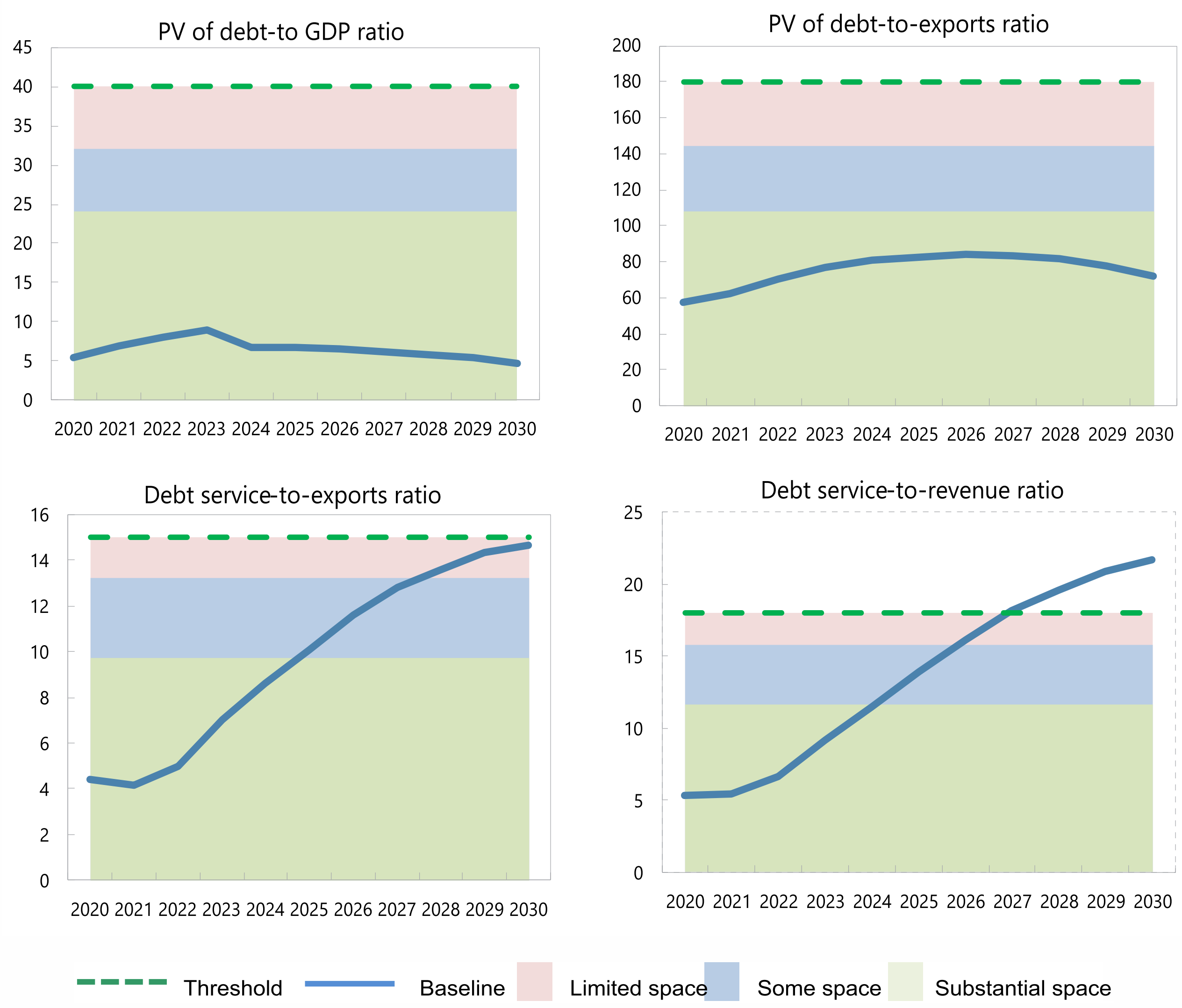
6.3.2 On the External Debt Sustainability Analysis, the results show that the ratio of External Debt to GDP remains below its indicative threshold under the Baseline Scenario all through the period (2021-2040). The liquidity indicators, such as ratios of Debt Service-to-Exports and Debt Service-to-Revenue breached their respective thresholds at the most extreme shock on Exports and Revenue. For Total Public Debt Sustainability Analysis, the ratio of Public Debt to GDP remains below the WB/IMF's recommended benchmark of 55 percent and Nigeria's Specific Limit of 40 percent, under the Baseline Scenario. The ongoing efforts by the government towards improving revenue generation and diversifying the economy to enhance exports, through various initiatives and reforms in the Oil and Gas, Agriculture and Solid Minerals sectors, Tax Administration and Collections, as well as the Strategic Revenue Growth Initiative with the recent signing into law of the Finance Act, 2020 by Mr. President, which takes effect from February 1, 2020, is expected to improve revenue performance and diversification of the economy, and thus, improve the outlook for Total Public Debt sustainability.

6.3.3 The downside risks to Risk Rating include the Oil price volatility and Oil production shocks, which could negatively impact on exports and revenue.

6.3.4 With Moderate External Debt Risk Distress Rating, the country's Borrowing Space, is further assessed to be with a Limited Space to Borrow based on the country's current revenue profile, as the maximum amount the FGN can borrow in 2021 is N8.77 trillion , violating the country's self -imposed limit of 40 percent. With the concerted efforts to improve its revenue through various initiatives and reforms in the various sectors of the economy, which are highlighted in Section 6.3.2 of this Report , the country's Borrowing Space is expected to be enhanced considerably.

6.3.5 Figure 6.4 shows that the ratios of Debt Service -to-Revenue marginally breach the threshold of 18 percent, from 2027 (18.1 percent) to 19.4 percent in 2033 . This places Nigeria at ***Limited Space to Absorb Shocks*** **category**. This highlights the challenge to debt repayment capacity arising from low revenue base of the government. It is expected that this would be addressed in view of the various on -going Revenue Growth Initiatives of the government to boost revenue, thereby enhancing the country's Borrowing Space in the medium to long term.

Figure 6.4: Nigeria's Qualification of the Moderate Category, 2020-2030[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.

6.4 Market-Financing Shock

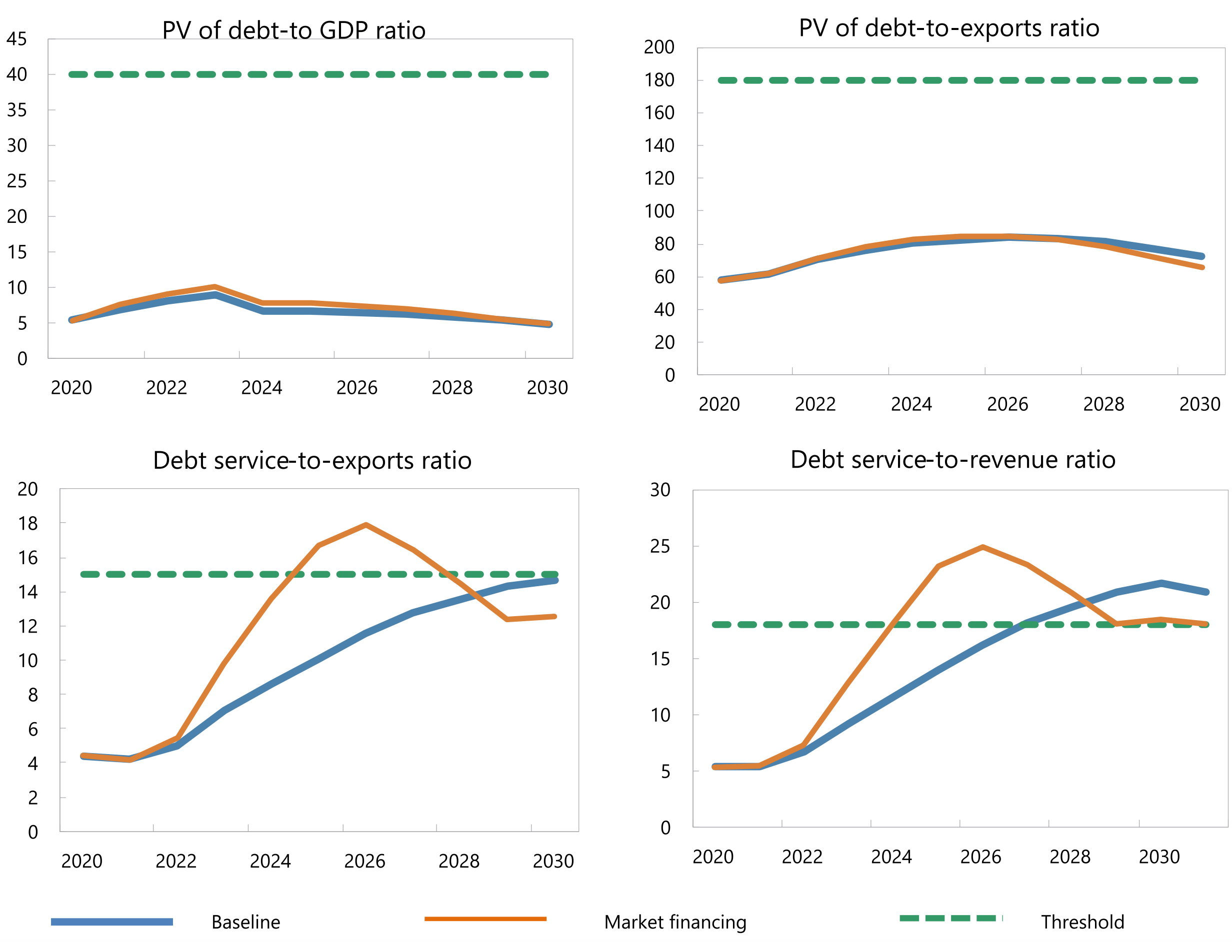
6.4.1 Under the market financing risk, the Gross Financing Needs (GFN), that is the overall borrowing requirements plus debt maturing in the year, increased from 3.8 percent of the GDP in 2019 to 6.0 percent of GDP in 2020, due to the increased borrowing required to address the impact of Covid -19 pandemic on Nigeria's fiscal position, but would drop to 5.6 percent in 2021. The GFN is below its standard Benchmark of 14 percent. Likewise, the Emerging Market Bond Index (EMBI) spread using the JP Morgan Emerging Market Bond Index for Nigeria was 213.13 basis points as at December 31, 2020 compared to 186.26 basis points in 2019. As a measure of potential market risk for the country in terms of liquidity needs or roll -over of its outstanding Eurobonds, the increase was not significant enough as to pose any appreciable liquidity pressure in the market place.

Figure 6.2: Market Financing Pressures Benchmarks

Market Financing Pressures Benchmarks

	GFN	1/	EMBI	2/
Benchmarks	14		586.3	
Values	6		362	
Breach of benchmark	No		No	
Potential heightened liquidity needs	Low			

1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.
2/ EMBI spreads correspond to the latest available data.



CHAPTER SEVEN

RISK RATING AND RECOMMENDATIONS

7.1 Risk Rating

The outcome of the 2020 DSA revealed that Nigeria's Total Public Debt remains at a Moderate Risk of Debt distress. The ratio of Total Public Debt to GDP was below the WB/IMF's recommended threshold of 55 percent, as well as Nigeria's self-imposed limit of 40 percent, throughout the projection period. It went up to 23.4 percent in 2021, 27.4 percent in 2023, and started trending downwards to 20.2 percent in 2024, 20.0 percent in 2025, and 13.7 percent in 2030, in response to the anticipated growth and economic diversification initiatives. Meanwhile, the ratios of Total Public Debt-to-Revenue and Total Public Debt Service to Revenue were relatively high, indicating a revenue challenge, which itself is due mainly to the decline in revenue from crude oil prices, which is the single largest source of revenue for government. For External Debt, the ratios of External Debt Service to Revenue were projected at 5.39 percent, 11.54 percent, 21.66 percent and 9.37 percent in 2021, 2024, 2030 and 2040, respectively, under the Baseline Scenario. This further highlights the need to enhance the Non-oil revenue, in order to improve these indicators. The inclusion of the FGN Ways and Means Advances under the Alternative Scenario resulted in the increase in Debt Service to Revenue from 23.36 percent to 25.70 percent in 2021; from 30.12 percent to 39.74 percent in 2023; and, from 38.57 percent to 58.95 percent in 2025.
In the case of Nigeria, the country's GFNs at 6.0 percent of the GDP in 2020 and 213.13 basis points (based on JP Morgan EMBI for Nigeria as at December 31, 2020), did not breach the two benchmarks, indicating that Nigeria's Market Financing Risk is still low.

Nigeria's economy remains sensitive to Oil Price Shocks, as a decline in the crude oil price to US$24 per barrel would result in a much higher primary deficit with GFNs increasing to 17.1 percent in 2021. The ratio of Total Public Debt to GDP would increase to 39.0 percent in 2021, from 27.5 percent of GDP under the Baseline Scenario, but remain below the WB/IMF's recommended Benchmark of 55 percent of the GDP for countries in Nigeria's peer group and ECOWAS threshold of 70 percent. Also, the ratio is within Nigeria's self-imposed limit of the ratio of Total Public Debt to GDP of 40 percent.

The room to absorb shocks reduced from 'Some Space' in the 2019 DSA to 'Limited Space' in 2020 DSA, due mainly to the weakening in the revenue inflows and sources, which are being addressed by the Government through its various measures aimed at improving revenue generation and diversifying the economy to enhance exports, through various initiatives and reforms in the Oil and Gas, Agriculture and Solid Minerals sectors,

as well as opportunities from Nigeria's signing of the African Continental Free Trade Area ("AfCFTA Agreement" or "the Agreement"). The Agreement is expected to create a sing le market for goods and services by facilitating free movement of goods, services, and investment within the African Continent. Thus, the Export and Revenue -related indicators and Borrowing Space are expected to improve in the medium to long-term.

7.2 Recommendations

The key policy recommendations of the 2020 DSA exercise include:

7.2.1 New Borrowing for 2021

The DSA Exercise presents an opportunity to determine the available fiscal space for borrowing for the succeeding year – 2021, based on the revised Co untry Specific Debt Limit of 40% (up to 2023), for ratio of Public Debt-to- GDP. Given the Total Public Debt-to-GDP ratio of 21.61% by December 31, 2020, the fiscal space available for borrowing is estimated at 18.39% for the three years up to 2023, which gives about 6.13% for 2021. Thus, based on the projected 2021 GDP of US$376.50 billion and Nigeria's country specific Debt to GDP limit of 40 percent , the Borrowing limit for the fiscal year - 2021 will be US$ 23.08 billion or N8.77 trillion (at a USD1/N379 e xchange rate). In line with Nigeria's Debt Management Strategy, 2020-2023, the proposed New Borrowing could be raised in equal proportion of 50:50 from both Domestic and External sources as follows:

- New Domestic Borrowing: US$11.54 billion (equivalent of about N4.38 trillion); and,
- New External Borrowing: US$11.54 billion (equivalent of about N4.38 trillion).

From the activities in the domestic debt market , there is absorptive capacity for the domestic borrowing, while options are available for the external borrowing. In line with the Medium -Term Debt Management Strategy, 2020 -2023, the borrowings would be long-term and strategically deployed to fund priority infrastructure projects, that would boost economic growth and sustainable development.

7.2.2 Boosting Government Revenues

The 2020 DSA reinforces the DMO's position that Revenues need to grow significantly for Nigeria's Public Debt to remain sustainable in the medium to long term. This position is clearly highlighted by the fact that while the Debt to GDP indicators were below the WB/IMF and Nigeria specific limits, the Debt Service to Revenue and External Debt Service to Revenue Ratios were high. Equally important is the diversification of the sources of Revenue and Exports.

The Government is expected to sustain the various on-going initiatives and reforms aimed at boosting Non-Oil revenue and in blocking leakages and wastages in revenue generation and collection. These include: Strategic Revenue Growth Initiative, the implementation of the Finance Act, 2020, Reforms in the Oil and Gas sectors, as well as in the Solid Mineral sector. All these initiatives and reforms are necessary for enhancing the country's revenue, and thus, its resilience to shocks.

7.2.3 Boosting Export

There is an on-going initiative to re position the nation's export base, through the implementation of the N50 billion Export Expenditure Facility Programme (EEFP), as part of the Nigeria Economic Sustainability Plan. The programme is expected to raise the volume of non-oil exports in the Nigeria, which would help to boost export revenues, and thus, drive down the high export-oriented indicators.

7.2.4 Optimizing Efficiency in Government Expenditure

Government's level of efficiency has a bearing on its expenditure profile, which could impact the nation's economic growth, especially, if it is not matched to revenue. The Government therefore, needs to sustain the various initiatives, such as the Treasury Single Account (TSA) system, Government Integrated Financial Management Information System (GIFMIS) and Integrated Payroll and Personnel Information System (IPPIS), which are aimed at strengthening Public Financial Management. These initiatives, which have improved the level of transparency in the FGN's finances. Also, they should help to reduce government's idle balances, rationalize expenditure, and improve the borrowing plan and the ultimately reduce cost of borrowing.

7.2.5 Leveraging on Private Sector Financing to support Road Infrastructure Development

The Government needs to sustain its innovative Road Infrastructure Financing Scheme, meant to address the huge infrastructural deficit in the Road sector. One of the major components of this laudable initiative is the establishment of a Road Trust Fund (RTF).

The scheme is conceptualised as a Public-Private Partnership (PPP) arrangement, with the aim of increasing private sector participation in the rehabilitation and construction of Federal roads in Nigeria by incentivising investment through a Tax Credit scheme. The main benefit to the government is to reduce budgetary pressures by increasing private sector partnership in the development of road infrastructure, while guaranteeing full and timely recovery of private companies' project costs through a tax credit mechanism.

The recent establishment of the Infrastructure Corporation with a capital base of ₦15 trillion (from CBN and Nigeria Sovereign Investment Authority (NSIA), and Africa Finance Corporation (AFC)), would also reduce the need for direct borrowing by the Government.

7.2.6 Close Monitoring of Contingent Liabilities

Contingent Liabilities, though low based on available data are expected to grow as more off-balance sheet instruments are used to finance infrastructure, and therefore, effective control and monitoring is required to manage them. This would ensure that the fiscal risks do not crystalize. In addition to contingent liabilities arising from instruments such as guarantees, contingent liabilities may also arise from SOEs. Therefore, there would be need to effectively monitor the SOEs, by implementing a Framework for identifying, estimating, disclosing, managing, and containing fiscal risks associated with their operations.

7.2.7 Strengthening Subnational Fiscal Management

In view of the need to ensure effective fiscal management both at the Federal and State levels, there is the need for the Government to sustain the effective implementation of the various initiatives aimed at strengthening fiscal management at the subnational level. These include the on-going Multilateral support projects in the States, namely: World Bank (States' Fiscal Transparency, Accountability and Sustainability (SFTAS), and the African Development Bank (AfDB) – Middle Income Country Technical Assistance Fund (MIC-TAF) Grant for Sub-national Debt Management Capacity Building Project, which are aimed at strengthening public financial management at the sub-national level. These initiatives would enable the 36 States and the FCT achieve debt sustainability in the medium to long-term, through fiscal transparency and accountability, domestic revenue mobilisation and rationalising public expenditure, amongst others.

Annexure 1: Nigeria's External Debt Sustainability Framework, Baseline Scenario, 2017-2040

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	5.1	6.0	5.9	8.5	9.9	11.0	11.7	8.6	8.3	5.6	1.1	3.0	8.4
of which: public and publicly guaranteed (PPG)	5.1	6.0	5.9	8.5	9.9	11.0	11.7	8.6	8.3	5.6	1.1	3.0	8.7
Change in external debt	1.6	1.0	-0.2	2.6	1.5	1.1	0.6	-3.1	-0.3	-0.8	-0.2		
Identified net debt-creating flows	-3.5	-2.3	2.2	3.5	1.5	-0.3	-1.9	-1.5	-1.7	-1.6	-1.2	-2.4	-0.7
Non-interest current account deficit	-2.9	-1.5	3.4	3.8	3.4	1.8	-0.5	-0.5	-0.6	-0.9	-1.0	-1.3	0.4
Deficit in balance of goods and services	-2.8	-4.6	-0.6	3.6	2.6	1.2	0.0	-0.1	-0.2	-0.1	-0.1	-3.6	0.6
Exports	12.3	15.1	13.8	9.4	11.1	11.5	11.6	8.3	8.1	6.6	4.8		
Imports	9.5	10.5	13.2	12.9	13.7	12.6	11.6	8.2	7.9	6.5	4.7		
Net current transfers (negative = inflow)	-5.9	-5.8	-5.6	-5.0	-5.6	-5.9	-5.9	-4.2	-4.1	-3.3	-2.3	-5.1	-4.5
of which: official	-0.2	-0.1	-0.4	-0.7	-0.8	-0.8	-0.7	-0.5	-0.5	-0.3	-0.1		
Other current account flows (negative = net inflow)	5.8	8.9	9.6	5.1	6.3	6.5	5.4	3.8	3.7	2.5	1.5	7.4	4.3
Net FDI (negative = inflow)	-0.9	-0.5	-0.7	-0.7	-1.9	-2.0	-1.5	-1.2	-1.1	-0.6	-0.3	-1.1	-1.2
Endogenous debt dynamics 2/	0.3	-0.4	-0.5	0.4	0.0	-0.1	0.0	0.1	-0.1	0.0	0.0		
Contribution from nominal interest rate	0.1	0.2	0.2	0.3	0.2	0.3	0.4	0.4	0.2	0.2	0.1		
Contribution from real GDP growth	0.0	-0.1	-0.1	0.1	-0.2	-0.5	-0.3	-0.3	-0.3	-0.2	0.0		
Contribution from price and exchange rate changes	0.3	-0.5	-0.6	...	...	...	...	...	...	...	...		
Residual 3/	5.1	3.3	-2.4	-1.0	0.0	1.4	2.6	-1.6	1.4	0.8	1.1	2.8	0.8
of which: exceptional financing	3.3	0.8	-1.0	-1.0	0.3	0.7	0.5	0.4	0.4	0.2	0.1		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	...	...	3.8	5.4	6.9	8.1	8.9	6.7	6.7	4.8	0.9		
PV of PPG external debt-to-exports ratio	...	...	27.6	57.7	62.1	70.4	76.5	80.5	82.7	72.2	17.8		
PPG debt service-to-exports ratio	1.0	2.3	2.1	4.4	4.2	5.0	7.0	8.6	10.1	14.7	5.4		
PPG debt service-to-revenue ratio	2.5	5.2	3.6	5.3	5.4	6.6	9.2	11.5	14.0	21.7	9.4		
Gross external financing need (Billion of U.S. dollars)	-13.8	-6.6	14.0	13.6	7.2	1.4	-4.6	-5.5	-5.2	-6.2	-24.6		
Key macroeconomic assumptions													
Real GDP growth (in percent)	0.8	1.9	2.3	-1.9	1.9	4.7	3.1	3.2	3.8	3.8	3.8	3.7	2.5
GDP deflator in US dollar terms (change in percent)	-7.5	9.8	10.1	-15.9	-4.7	-1.7	0.1	44.1	5.7	6.1	4.2	1.9	4.6
Effective interest rate (percent) 4/	2.5	4.0	4.2	4.1	2.1	3.3	3.4	4.8	2.8	3.5	5.8	2.8	3.4
Growth of exports of G&S (US dollar terms, in percent)	31.7	37.3	3.2	-44.2	15.0	6.5	4.6	6.5	6.7	5.5	5.5	4.9	-0.8
Growth of imports of G&S (US dollar terms, in percent)	-5.2	24.0	41.4	-19.3	2.7	-5.0	-5.0	5.5	5.5	5.5	5.5	8.5	-2.6
Grant element of new public sector borrowing (in percent)	...	...	...	33.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	...	5.6
Government revenues (excluding grants, in percent of GDP)	4.9	6.8	8.0	7.7	8.6	8.6	8.9	6.2	5.8	4.5	2.7	7.0	7.6
Aid flows (in Billion of US dollars) 5/	11.9	12.7	12.7	5.6	1.5	1.3	1.3	1.4	1.6	2.3	4.2		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.2	...	0.4
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	40.5	20.7	17.6	18.3	18.2	18.6	27.2	59.5	...	22.3
Nominal GDP (Billion of US dollars)	373	417	470	388	377	387	400	594	652	1,044	2,466		
Nominal dollar GDP growth	-6.8	11.9	12.6	-17.5	-2.9	2.9	3.2	48.7	9.7	10.2	8.2	5.8	7.4
Memorandum items:													
PV of external debt 7/	...	...	3.8	5.4	6.9	8.1	8.9	6.7	6.7	4.8	0.9		
In percent of exports	...	...	27.6	57.7	62.1	70.4	76.5	80.5	82.7	72.2	17.8		
Total external debt service-to-exports ratio	1.0	2.3	2.1	4.4	4.2	5.0	7.0	8.6	10.1	14.7	5.4		
PV of PPG external debt (in Billion of US dollars)			17.9	20.9	25.9	31.3	35.6	39.8	43.7	49.9	21.0		
(PVt-PVt-1)/GDPt-1 (in percent)				0.6	1.3	1.4	1.1	1.1	0.6	-0.1	-0.1		
Non-interest current account deficit that stabilizes debt ratio	-4.5	-2.4	3.6	1.2	1.9	0.7	-1.2	2.6	-0.2	-0.2	-0.8		

Sources: 2020 DSA

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g) + Ɛα (1+r)]/(1+g+ρ+gρ) 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, Ɛ=nomi nal 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 adj ustments. 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 2: Nigeria's Public Sector Debt Sustainability Framework, Baseline Scenario, 2017-2040

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	19.0	19.1	17.9	23.6	26.4	28.5	30.2	22.1	21.6	14.5	3.6	14.6	22.7
of which: external debt	5.1	6.0	5.9	8.5	9.9	11.0	11.7	8.6	8.3	5.6	1.1	3.0	8.7
Change in public sector debt	1.9	0.0	-1.2	5.7	2.8	2.1	1.6	-8.1	-0.5	-1.8	-0.4		
Identified debt-creating flows	3.3	3.0	0.4	7.8	4.8	4.7	4.4	-5.8	1.9	0.9	0.2	1.9	2.4
Primary deficit	3.7	3.3	1.7	4.0	3.6	3.7	3.3	2.4	2.3	1.3	0.2	2.1	2.7
Revenue and grants	5.1	7.1	8.3	7.9	9.0	8.9	9.2	6.5	6.1	4.7	2.9	7.2	6.9
of which: grants	0.2	0.3	0.3	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.2		
Primary (noninterest) expenditure	8.7	10.5	10.0	11.8	12.6	12.6	12.5	8.8	8.4	6.0	3.1	9.3	9.6
Automatic debt dynamics	-0.3	-0.3	-1.3	4.1	1.5	1.3	1.3	-8.2	-0.4	-0.4	0.0		
Contribution from interest rate/growth differential	-1.6	-1.0	-6.9	2.6	0.5	0.6	0.7	-5.5	-0.4	-0.4	0.0		
of which: contribution from average real interest rate	-1.4	-0.6	-6.5	2.3	0.9	1.8	1.5	-4.6	0.4	0.2	0.1		
of which: contribution from real GDP growth	-0.1	-0.4	-0.4	0.3	-0.4	-1.2	-0.9	-0.9	-0.8	-0.6	-0.1		
Contribution from real exchange rate depreciation	1.2	0.7	5.5	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.2	0.0	0.0	0.0	0.0	-0.1	-0.1
Privatization receipts (negative)	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.2	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	-1.4	-3.0	-1.5	-0.6	-1.0	-1.9	-2.1	-4.9	-2.4	-2.7	-0.6	-1.0	-2.5
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	15.8	20.5	23.4	25.6	27.4	20.2	20.0	13.7	3.4		
PV of public debt-to-revenue and grants ratio	...	...	191.4	261.2	260.3	287.6	296.7	311.8	329.5	291.0	115.7		
Debt service-to-revenue and grants ratio 3/	52.5	41.3	25.2	25.7	23.4	31.3	30.1	34.7	38.6	56.9	22.0		
Gross financing need 4/	4.8	4.5	3.8	5.7	5.4	6.2	5.8	4.6	4.7	3.9	0.9		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	0.8	1.9	2.3	-1.9	1.9	4.7	3.1	3.2	3.8	3.8	3.8	3.7	3.0
Average nominal interest rate on external debt (in percent)	3.0	4.0	4.2	4.1	2.1	3.3	3.4	4.8	2.8	3.5	5.8	2.8	3.9
Average real interest rate on domestic debt (in percent)	-43.4	-19.6	-98.8	-0.6	-5.2	-4.3	-3.5	-1.5	-2.7	-2.5	1.5	-13.2	-2.2
Real exchange rate depreciation (in percent, + indicates depreciation)	63.5	17.7	7516.3	...	...	...	...	...	...	...	...	768.4	...
Inflation rate (GDP deflator, in percent)	11.7	10.1	17.1	-7.2	0.4	-1.7	0.1	44.1	5.7	6.1	4.2	9.7	6.4
Growth of real primary spending (deflated by GDP deflator, in percent)	3.5	21.8	-2.4	16.2	8.2	5.1	2.6	-27.2	-1.5	-3.9	-1.2	7.5	-0.8
Primary deficit that stabilizes the debt-to-GDP ratio 5/	1.8	3.3	2.9	-1.8	0.7	1.6	1.7	10.5	2.8	3.1	0.7	2.6	2.8
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: 2020 DSA

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 u nder 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 3: Nigeria's Public Sector Debt + FGN's Ways & Means Sustainability Framework, Baseline Scenario, 2017-2040

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	19.0	19.1	17.9	23.6	26.6	28.9	30.8	22.7	22.4	16.1	7.5	14.6	23.5
of which: external debt	5.1	6.0	5.9	8.5	9.9	11.0	11.7	8.6	8.3	5.6	1.1	3.0	8.7
Change in public sector debt	1.9	0.0	-1.2	5.7	3.0	2.3	1.9	-8.1	-0.3	-1.6	-0.2		
Identified debt-creating flows	3.3	3.0	0.4	7.8	5.0	5.0	4.6	-5.8	2.1	1.1	0.5	1.9	2.6
Primary deficit	3.7	3.3	1.7	4.0	3.6	3.7	3.3	2.4	2.3	1.3	0.2	2.1	2.7
Revenue and grants	5.1	7.1	8.3	7.9	9.0	8.9	9.2	6.5	6.1	4.7	2.9	7.2	6.9
of which: grants	0.2	0.3	0.3	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.2		
Primary (noninterest) expenditure	8.7	10.5	10.0	11.8	12.6	12.6	12.5	8.8	8.4	6.0	3.1	9.3	9.6
Automatic debt dynamics	-0.3	-0.3	-1.3	4.1	1.7	1.6	1.6	-8.2	-0.2	-0.2	0.2		
Contribution from interest rate/growth differential	-1.6	-1.0	-6.9	2.6	0.7	0.8	0.9	-5.5	-0.2	-0.2	0.2		
of which: contribution from average real interest rate	-1.4	-0.6	-6.5	2.3	1.1	2.0	1.8	-4.6	0.6	0.4	0.5		
of which: contribution from real GDP growth	-0.1	-0.4	-0.4	0.3	-0.4	-1.2	-0.9	-1.0	-0.8	-0.6	-0.3		
Contribution from real exchange rate depreciation	1.2	0.7	5.5	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.2	0.0	0.0	0.0	0.0	-0.1	-0.1
Privatization receipts (negative)	0.0	0.0	0.0	-0.2	-0.3	-0.3	-0.2	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	-1.4	-3.0	-1.5	-0.6	-1.0	-1.9	-2.1	-5.0	-2.4	-2.7	-0.6	-1.0	-2.5
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	15.8	20.5	23.6	26.0	28.1	20.8	20.8	15.3	7.2		
PV of public debt-to-revenue and grants ratio	...	...	191.4	261.2	262.6	292.3	303.8	321.7	342.7	326.3	248.6		
Debt service-to-revenue and grants ratio 3/	52.5	41.3	25.2	25.7	25.7	35.9	39.7	49.5	59.0	107.7	178.5		
Gross financing need 4/	4.8	4.5	3.8	5.7	5.6	6.6	6.7	5.6	5.9	6.3	5.4		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	0.8	1.9	2.3	-1.9	1.9	4.7	3.1	3.2	3.8	3.8	3.8	3.7	3.0
Average nominal interest rate on external debt (in percent)	3.0	4.0	4.2	4.1	2.1	3.3	3.4	4.8	2.8	3.5	5.8	2.8	3.9
Average real interest rate on domestic debt (in percent)	-43.4	-19.6	-98.8	-0.6	-5.2	-4.3	-3.5	-1.5	-2.7	-2.5	1.5	-13.2	-2.2
Real exchange rate depreciation (in percent, + indicates depreciation)	63.5	17.7	7516.3	...	...	...	...	...	...	...	...	768.4	...
Inflation rate (GDP deflator, in percent)	11.7	10.1	17.1	-7.2	0.4	-1.7	0.1	44.1	5.7	6.1	4.2	9.7	6.4
Growth of real primary spending (deflated by GDP deflator, in percent)	3.5	21.8	-2.4	16.2	8.2	5.1	2.6	-27.2	-1.5	-3.9	-1.2	7.5	-0.8
Primary deficit that stabilizes the debt-to-GDP ratio 5/	1.8	3.3	2.9	-1.8	0.5	1.4	1.4	10.5	2.6	2.9	0.4	2.6	2.7
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: 2020 DSA

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 refers to the sum of Principal Repayments and Interest Payments

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 4: Nigeria's Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020-2030 (In percent)

	Projections										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of debt-to GDP ratio											
Baseline	**5.4**	**6.9**	**8.1**	**8.9**	**6.7**	**6.7**	**6.5**	**6.2**	**5.8**	**5.3**	**4.8**
A. Alternative Scenarios											
A1. Key variables at their historical aver ages in 91-89 1/	5.4	2.6	1.5	2.0	2.2	2.2	2.3	2.2	2.2	2.1	1.7
B. Bound Tests											
B1. Real GDP growth	5.4	7.2	8.9	9.8	7.4	7.4	7.2	6.9	6.4	5.9	5.3
B2. Primary balance	5.4	7.2	8.9	9.7	7.4	7.4	7.2	6.9	6.6	6.1	5.5
B3. Exports	5.4	10.7	18.3	19.1	13.4	12.5	11.6	10.5	9.4	8.3	7.1
B4. Other flows 2/	5.4	9.4	13.6	14.4	10.2	9.8	9.2	8.5	7.7	6.8	5.9
B6. One-time 30 percent nominal depreciation	5.4	8.8	5.8	6.7	5.5	5.9	6.1	6.0	5.8	5.5	5.1
B6. Combination of B1-B5	5.4	12.1	13.9	14.5	10.4	10.0	9.4	8.7	7.9	7.1	6.2
C. Tailored Tests											
C1. Combined contingent liabilities	5.4	10.9	12.2	13.2	10.5	10.5	10.4	11.2	10.7	10.2	9.8
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	5.4	8.0	11.6	13.4	10.4	10.6	10.4	9.9	9.2	8.3	7.4
C4. Market Financing	5.4	7.7	9.1	10.2	7.8	7.7	7.4	6.9	6.3	5.6	4.9
Threshold	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**
PV of debt-to-exports ratio											
Baseline	**57.7**	**62.1**	**70.4**	**76.5**	**80.5**	**82.7**	**83.8**	**83.6**	**81.3**	**77.4**	**72.2**
A. Alternative Scenarios											
A1. Key variables at their historical aver ages in 91-89 1/	57.7	23.6	12.7	17.3	26.0	27.1	29.9	29.7	30.2	29.8	26.4
B. Bound Tests											
B1. Real GDP growth	57.7	62.1	70.4	76.5	80.5	82.7	83.8	83.6	81.3	77.4	72.2
B2. Primary balance	57.7	65.1	77.7	83.6	88.7	90.8	91.9	92.8	91.7	87.8	83.3
B3. Exports	57.7	142.0	320.0	329.2	321.3	309.7	297.4	282.2	262.6	239.9	214.6
B4. Other flows 2/	57.7	85.1	118.7	123.5	123.0	120.8	117.8	113.5	107.1	99.2	90.0
B6. One-time 30 percent nominal depreciation	57.7	62.1	39.6	45.1	51.9	57.0	60.7	63.1	63.4	62.2	59.6
B6. Combination of B1-B5	57.7	130.7	111.6	169.8	170.2	168.0	164.6	159.2	150.6	139.7	127.0
C. Tailored Tests											
C1. Combined contingent liabilities	57.7	98.3	106.6	113.4	126.1	129.8	133.0	149.2	148.8	147.1	147.7
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	57.7	71.0	99.4	114.2	123.7	130.1	133.2	131.6	127.1	120.4	111.9
C4. Market Financing	57.7	62.1	71.0	78.0	83.0	85.0	85.0	82.7	77.9	72.1	65.6
Threshold	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**
Debt service-to-exports ratio											
Baseline	**4.4**	**4.2**	**5.0**	**7.0**	**8.6**	**10.1**	**11.6**	**12.8**	**13.6**	**14.3**	**14.7**
A. Alternative Scenarios											
A1. Key variables at their historical aver ages in 91-89 1/	4.4	3.8	2.5	0.3	0.3	1.6	2.6	3.4	3.9	4.5	4.9
B. Bound Tests											
B1. Real GDP growth	4.4	4.2	5.0	7.0	8.6	10.1	11.6	12.8	13.6	14.3	14.7
B2. Primary balance	4.4	4.2	5.3	7.9	9.7	11.2	12.9	14.1	15.0	16.0	16.5
B3. Exports	4.4	6.2	14.3	31.2	43.6	45.5	47.9	49.5	50.2	50.7	50.3
B4. Other flows 2/	4.4	4.2	6.3	12.0	15.7	16.9	18.2	19.2	19.7	20.1	20.2
B6. One-time 30 percent nominal depreciation	4.4	4.2	5.0	5.2	4.0	5.6	7.3	8.6	9.6	10.5	11.0
B6. Combination of B1-B5	4.4	5.3	11.0	19.7	21.7	23.5	25.4	26.9	27.7	28.5	28.5
C. Tailored Tests											
C1. Combined contingent liabilities	4.4	4.2	7.1	9.2	10.8	12.8	14.4	15.7	17.5	18.4	18.8
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	4.4	4.4	6.0	10.4	14.4	16.7	19.2	20.8	21.8	22.9	23.3
C4. Market Financing	4.4	4.2	5.5	9.8	13.6	16.7	17.9	16.4	14.5	12.3	12.5
Threshold	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
Debt service-to-revenue ratio											
Baseline	**5.3**	**5.4**	**6.6**	**9.2**	**11.5**	**14.0**	**16.1**	**18.1**	**19.6**	**20.9**	**21.7**
A. Alternative Scenarios											
A1. Key variables at their historical aver ages in 91-89 1/	5.3	5.0	3.4	0.5	0.4	2.3	3.6	4.8	5.6	6.5	7.2
B. Bound Tests											
B1. Real GDP growth	5.3	5.7	7.3	10.1	12.7	15.4	17.8	20.0	21.6	23.1	23.9
B2. Primary balance	5.3	5.4	7.0	10.3	13.0	15.6	17.9	20.0	21.6	23.3	24.3
B3. Exports	5.3	5.5	9.5	20.3	29.1	31.5	33.3	35.0	36.1	37.0	37.1
B4. Other flows 2/	5.3	5.4	8.5	15.7	21.0	23.4	25.3	27.2	28.4	29.4	29.8
B6. One-time 30 percent nominal depreciation	5.3	6.9	8.5	8.7	6.9	10.0	13.0	15.7	17.7	19.7	20.9
B6. Combination of B1-B5	5.3	5.7	10.8	18.9	21.3	23.9	26.0	27.9	29.3	30.4	30.9
C. Tailored Tests											
C1. Combined contingent liabilities	5.3	5.4	9.5	12.0	14.5	17.7	20.0	22.3	25.2	26.8	27.8
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	5.3	-23.5	-32.3	-68.4	-67.5	282.8	51.4	29.6	31.6	33.5	34.5
C4. Market Financing	5.3	5.4	7.3	12.8	18.2	23.1	24.9	23.3	20.9	18.0	18.5
Threshold	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**

Sources: 2020 DSA

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

2/ Includes official and private transfers and FDI.

Annexure 5: Nigeria's Sensitivity Analysis for Key Indicators of Public Debt 2020-2030 (In percent)

	Projections										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of Debt-to-GDP Ratio											
Baseline	**20.5**	**23.4**	**25.6**	**27.4**	**20.2**	**20.0**	**19.6**	**18.3**	**16.9**	**15.3**	**13.7**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 91-89 1/	21	20	19	18	17	16	15	14	13	12	11
B. Bound Tests											
B1. Real GDP growth	21	25	29	32	25	25	25	24	23	22	21
B2. Primary balance	21	24	27	29	22	21	21	20	18	17	15
B3. Exports	21	27	35	37	26	25	24	22	20	18	16
B4. Other flows 2/	21	26	31	33	24	23	22	21	19	17	15
B6. One-time 30 percent nominal depreciation	21	23	24	25	18	17	16	15	13	11	10
B6. Combination of B1-B5	21	23	26	28	21	21	20	19	17	16	14
C. Tailored Tests											
C1. Combined contingent liabilities	21	32	35	37	29	28	28	27	25	24	22
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	21	36	52	70	68	75	79	77	76	74	72
C4. Market Financing	21	23	26	28	20	20	20	18	17	15	13
Public debt benchmark	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**
PV of Debt-to-Revenue Ratio											
Baseline	**261.2**	**260.3**	**287.6**	**296.7**	**311.8**	**329.5**	**337.2**	**333.6**	**324.2**	**308.1**	**291.0**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 91-89 1/	261	223	213	196	257	260	259	251	246	241	244
B. Bound Tests											
B1. Real GDP growth	261	278	329	348	381	412	433	442	446	444	441
B2. Primary balance	261	269	305	314	333	352	360	358	350	336	321
B3. Exports	261	301	396	401	408	419	418	406	388	362	336
B4. Other flows 2/	261	289	350	356	367	380	383	374	360	338	316
B6. One-time 30 percent nominal depreciation	261	254	270	270	274	282	281	269	253	231	207
B6. Combination of B1-B5	261	259	295	304	320	338	346	342	333	317	299
C. Tailored Tests											
C1. Combined contingent liabilities	261	360	391	399	441	467	481	486	485	477	468
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	261	-2132	-2971	-4956	-4543	9495	2446	1390	1439	1478	1520
C4. Market Financing	261	260	288	299	315	333	339	332	320	301	282
Debt Service-to-Revenue Ratio											
Baseline	**25.7**	**23.4**	**31.3**	**30.1**	**34.7**	**38.6**	**41.2**	**56.9**	**58.6**	**60.2**	**56.9**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 91-89 1/	26	21	25	21	23	31	31	39	39	42	38
B. Bound Tests											
B1. Real GDP growth	26	24	35	34	46	47	52	74	79	84	86
B2. Primary balance	26	23	32	32	41	42	45	65	67	65	65
B3. Exports	26	23	34	40	51	55	57	72	73	74	71
B4. Other flows 2/	26	23	33	36	44	48	50	66	67	68	65
B6. One-time 30 percent nominal depreciation	26	22	30	29	31	36	37	51	49	53	48
B6. Combination of B1-B5	26	23	33	32	38	41	43	58	63	61	58
C. Tailored Tests											
C1. Combined contingent liabilities	26	23	37	37	66	52	55	115	75	78	86
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	26	-133	-218	-395	-795	1041	297	265	278	294	354
C4. Market Financing	26	23	32	34	41	47	50	62	60	57	54

Sources: 2020 DSA

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

[2/] Includes official and private transfers and FDI.

Annexure 6: Nigeria's Sensitivity Analysis for Key Indicators of Public Debt + FGN's Ways & Means, 2020-2030 (In percent)

	Projections										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of Debt-to-GDP Ratio											
Baseline	**20.5**	**23.6**	**26.0**	**28.1**	**20.8**	**20.8**	**20.6**	**19.5**	**18.2**	**16.8**	**15.3**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 91-184 1/	21	20	19	18	17	16	16	15	14	13	13
B. Bound Tests											
B1. Real GDP growth	21	25	30	33	25	26	26	26	25	24	23
B2. Primary balance	21	24	28	30	22	22	22	21	20	18	17
B3. Exports	21	27	36	38	27	26	25	23	21	19	17
B4. Other flows 2/	21	26	32	34	24	24	23	22	20	18	17
B6. One-time 30 percent nominal depreciation	21	23	24	25	18	18	17	16	14	13	11
B6. Combination of B1-B5	21	23	27	29	21	21	21	20	19	17	16
C. Tailored Tests											
C1. Combined contingent liabilities	21	33	35	37	29	29	29	28	27	25	24
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	21	24	26	28	21	21	21	19	18	16	15
Public debt benchmark	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**
PV of Debt-to-Revenue Ratio											
Baseline	**261.2**	**262.6**	**292.3**	**303.8**	**321.7**	**342.7**	**353.9**	**354.3**	**349.4**	**338.2**	**326.3**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 91-184 1/	261	225	216	201	266	272	274	269	266	265	272
B. Bound Tests											
B1. Real GDP growth	261	280	334	356	391	426	450	464	473	476	479
B2. Primary balance	261	271	310	320	342	364	376	378	375	365	355
B3. Exports	261	303	401	408	418	432	434	426	413	392	371
B4. Other flows 2/	261	291	355	363	376	393	399	395	385	369	351
B6. One-time 30 percent nominal depreciation	261	256	274	276	283	293	296	288	276	258	239
B6. Combination of B1-B5	261	261	299	310	330	350	361	362	357	346	334
C. Tailored Tests											
C1. Combined contingent liabilities	261	363	395	406	450	479	497	506	509	506	503
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	261	263	293	306	325	346	356	353	345	331	317
Debt Service-to-Revenue Ratio											
Baseline	**25.7**	**25.7**	**35.9**	**39.7**	**49.5**	**59.0**	**66.9**	**88.6**	**96.4**	**104.4**	**107.7**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 91-184 1/	26	23	29	28	37	50	55	66	71	79	78
B. Bound Tests											
B1. Real GDP growth	26	27	40	45	62	70	80	108	121	132	141
B2. Primary balance	26	26	37	42	56	62	71	96	104	110	115
B3. Exports	26	26	38	50	66	75	82	104	111	119	121
B4. Other flows 2/	26	26	38	46	59	68	76	97	105	112	115
B6. One-time 30 percent nominal depreciation	26	24	35	38	45	54	61	80	84	93	95
B6. Combination of B1-B5	26	25	38	42	53	61	68	90	100	105	108
C. Tailored Tests											
C1. Combined contingent liabilities	26	26	42	47	81	72	81	147	113	122	137
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	26	26	37	43	56	68	75	94	98	102	105

Sources: 2020 DSA

[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

Executive

1.	Patience Oniha	- Director-General, DMO

Technical Working Team

2.	Hannatu Bint Musa	- DMO
3.	Joe Ugoala	- DMO
4.	Maraizu Nwankwo	- DMO
5.	Maryam Omar	- DMO
6.	Jummai Sa'id	- DMO
7.	Adamu M. Bara	- DMO
8.	Funmi Olasoji-Onadipe	- DMO
9.	Chinwe Nwogbo	- DMO
10.	Hafizu Murtala	- DMO
11.	Nura Adamu	- DMO
12.	Ahmed U. Bajoga	- OAGF
13.	Philips Obasi	- FMFBNP (Planning)
14.	Samuel Omenka	- BOF
15.	Musa Abdullahi	- CBN
16.	Zainab Sani	- CBN
17.	Simon Oga Ode	- NBS