MANAGING VOLATILITY IN NIGERIA
Managing Volatility in Nigeria¹

David Nabena²

Abstract

In recent times, Nigeria has faced headwinds that have posed serious fiscal and macroeconomic risks. Subdued oil prices since mid-2014 was the latest of the recurring episodes of boom and bust cycles, similar to the oil collapse of 1980 – 1986, and the sharp decline recorded in 2009 when oil price fell from over US$100 to US$60 within a year. Between 2014 and 2016, the cost of crude fell to levels not seen in the last decade; and it became the third largest in the last 30 years, when oil began trading in the futures exchange.

Five years after, macroeconomic disruptions have remained larger than fundamentals alone would have suggested, with the impact reflecting poor government policy choices before and after the shock.

Volatility is rising, with latent fragility in economic, fiscal and social stability. The phenomenon has continued to diminish the government’s capacity to manage macroeconomic, exchange rate and fiscal policies, necessitating the need for consensus on pooled governance reforms, including specific mechanisms to dampen the volatility, reforms to realign the social contract between the government and the citizens, and a new deal on fiscal federalism.

1. Introduction

The Nigerian economy is at the crossroads. Subdued oil prices since mid-2014 led to a slump in government revenues and ultimately, an economic contraction in 2016. Since 2014, government revenue to GDP declined by nearly half, from 11 percent in 2014 to 6 percent in 2016, before rising to 8.5 percent in 2018. General government net debt (% of GDP) more than doubled from 9 percent in 2014 to 22 percent in 2018 (IMF, 2018), while government budgets were disrupted in the absence of a strong macroeconomic and fiscal base. This trend has continued to threaten fiscal stability in the country, and has highlighted the need for stronger governance, including rules and procedures that guide economic management. In 2018, the economy grew by 1.9 percent, achieving sustained growth since the 2016 recession, but the growth remains fragile to the oil volatility. The impact of the oil slump has been shaped by a combination of economic and political factors, including the economic structure and level of diversification, degree of dependence on oil exports, quality of macroeconomic fundamentals such as fiscal and external balances, fiscal buffers, and government policy responses.

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³ Nigeria recorded its first convergence in oil and non-oil revenues in 2016, in the wake of the mid-2014 oil slump.
For an oil-dependent economy, it is not unusual that falling oil prices would impact the economy negatively and cause significant ripple effects, including widening fiscal deficits, eroding currency, and looming debt risks, but the magnitude was unprecedented (Jerome and Nabena, 2016). Although the oil sub-sector accounts for less than 10 percent of Nigeria's GDP, it plays a central role in the economy, accounting for 90 percent of exports and 70 percent of government revenues. Macroeconomic disruptions were also larger than fundamentals alone would have suggested, with the impact likely reflecting poor policy choices implemented to counter the shock (IMF, 2017), including the delay in implementing government budgets and the use of foreign exchange restrictions. This was worsened by the rise in sabotage of oil infrastructure in the Niger Delta. This challenge has also adversely affected governments’ capacity to achieve inclusive and pro-poor growth, with the incidence of poverty worsened by rising unemployment and suppressed wages.

The Nigerian federalist system has several positive features that can potentially support the country's development agenda, such as the fiscal federalism structure which consists of expenditure responsibilities and tax assignments, inter-governmental fiscal transfers, and a fiscal policy framework that seeks to ensure overall macroeconomic stability. States also operate a high degree of decentralised autonomy under hard budget constraints which is essential to spur development and fiscal stability. However, governance challenges and poor economic management has stifled prospects for meaningful growth.

The objective of this paper is to steer action and build consensus on the most desirable fiscal governance reforms, given the volatility effect on macroeconomic and fiscal conditions in the country. The volatility effect is not new and will not go away; but it can be turned into a blessing if better managed. This paper is prepared as an evidence-based analysis to provide an agenda for discussion by governments at both the federal and sub-national level.

2. What is the volatility effect?

The impact of commodity prices on resource-dependent countries has shown broader scale impact than just on economic growth. The experience of these countries have been hinged on conditions such as an export boom, a price-inelastic tax system, public enterprise performance, increased expenditure created by political exigencies or administrative weaknesses, and worsening terms of trade (Tanzi, 1982), which tend to lead such economies into fiscal equilibrium when not properly managed. The welfare implications of resource abundance can also be different from the growth implications, such that resource abundance may be good for consumption even if not good for growth and vice versa (Sachs and Warner, 1995). The direct positive effect of resources on growth can also be swamped by the indirect negative effect through volatility, especially for countries that do not have a robust financial system that can withstand the large and sudden fluctuations in resource revenues (Van der Ploeg and Poelhekke, 2009). Although many of these countries have aimed to use their vast resource revenues to finance diversified investments, the volatility effect has remained unswerving, and reflective in government fiscal balances and macroeconomic stability. The volatility effect is prominent in mono-exporting countries such as Nigeria, Venezuela and Algeria, compared to less oil-dependent and diversified economies such as Canada, Indonesia and Malaysia.
Table 1 shows the historical volatility of oil price, domestic crude production, oil exports and oil revenues in Nigeria for the period 2000 – 2017 (also see appendix). Although local crude production stabilized through the period, oil price volatility rose significantly (much of it explained by the 2009 and mid-2014 oil price collapse), creating heightened instability in oil exports and revenues. Oil price volatility increased from 23.5 percent between 2000 – 2010 to 33.2 percent between 2010 - 2017. This led to a rise in the volatility of oil exports from 26 percent to 46.8 percent, while oil revenues fared even worse, from 41.7 percent to 43 percent.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variables</th>
<th>2000 - 2010</th>
<th>2010 - 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Oil price</td>
<td>23.5%</td>
<td>33.2%</td>
</tr>
<tr>
<td>2.</td>
<td>Domestic crude production</td>
<td>10.1%</td>
<td>7.1%</td>
</tr>
<tr>
<td>3.</td>
<td>Oil exports</td>
<td>26%</td>
<td>46.8%</td>
</tr>
<tr>
<td>4.</td>
<td>Oil revenue</td>
<td>41.7%</td>
<td>43%</td>
</tr>
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### 3. Oil price volatility and fiscal crises: Nigeria has been here before

Nigeria has experienced a combination of adverse fiscal and macroeconomic conditions that have exerted strong pressures on the fiscal sustainability of its national and sub-national governments. Between 2014 and 2016, the cost of crude fell to its lowest levels in the last 14 years. This was largely driven by headwinds generated by slow growth in advanced economies, several years of large upward swings in oil supply (including OPEC’s refusal to cut production, oil exports from Iran, and the rise of US shale production); China’s slowing demand; unwinding of geopolitical risks that had threatened production; structural changes in the global economy and the appreciation of the U.S. dollar (Baffes et al., 2015). The oil bust is similar in magnitude to the decline between 1985-1986, when OPEC members reversed earlier production cuts, and in 2008-2009, at the outset of the global financial crisis. The slump has stirred new macroeconomic restructuring across oil-dependent countries, including the Organization of the Petroleum Exporting Countries (OPEC)⁴ to shore up public finances and find alternative sources of revenue, amidst economic indications that many of its members did not do enough to reduce their dependence on the commodity. In 2018, the price of oil settled at US$71 pb, higher than the previous 3 years, but lower than over US$100 pb recorded between 2011 and early 2014.

**Nigeria’s merchandise exports structure has not changed over the last 5 decades.** Exports have been dominated by primary products which make up 98 percent of products exported annually⁵. In 2017, mineral fuels accounted for 92 percent of merchandise exports. This dominant role of oil, coupled with the poor management of oil revenues during periods of windfall and the tertiarization of the economy, has exposed the economy to the oil market volatility (figure 1).

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⁴ In 2017, OPEC members controlled approximately 82 percent of the world's total proven oil reserves and 56 percent of the world's total oil supply.

With over-dependence on oil exports, growth in industry has lagged. Despite being Nigeria’s major source of revenue, the oil sector contributes less than 10 percent of the country’s GDP. This suggests that Nigeria’s GDP is not revenue-based, and new initiatives will be required to effectively diversify its sources of growth. Over the last two decades, the economy has been transforming from an agrarian to a service-oriented economy, without going through the intermediate stage of industrialization (Ajaikaye et al, 2015). The share of both the agriculture and services sectors to real GDP rose by 1.6 percent annually between 2000 and 2018, compared to the industrial sector which contracted by 3.5 percent over the period. By 2018, industry’s share of real GDP had declined from over 40 percent in the early 2000 to 22 percent (figure 2). These sectoral shifts have had a major impact on employment in the country, given that industry is the leading high-productivity sector and a high value-added sector for labour. An earlier study by Koren and Tenreyro (2007) on volatility and development suggests that as countries develop their economies, their productive structure shifts from more to less volatile sectors. In other words, the volatility of macroeconomic shocks falls with development.
Market trends suggest that the opportunity for transformational change may have been underutilised. Nigeria may be losing an opportunity to put in place a range of measures to help both the federal and subnational governments adequately anticipate and manage the oil volatility. Figure 3 shows that Nigeria like most oil exporting economies, recorded a significant decline in government revenues between 2013 and 2016 as oil prices declined, even as recessionary trends lingered in Nigeria, Angola, Brunei Darussalam, Libya and Russia\(^6\). For many oil dependent countries, mismatched balance sheets led to steep declines in reserves. How quickly the fiscal adjustment took place, and how far it impacted, depended on the size of their fiscal buffers and scale of oil reserves. Countries with comfortable fiscal and external buffers and limited policy risks adjusted to lower oil prices gradually and used their policy buffers to smoothen the transition (for example, Norway).

The Fiscal Sustainability Plan (FSP) and the Economic Recovery and Growth Plan (ERGP) were put forward by the authorities in 2016 and 2017 respectively, as strategies to address fiscal responsibility and restore macroeconomic stability in the short term; but these plans appear to have been less sufficient in tackling the challenges highlighted in the latter sections of this paper. The country has maintained sustained growth out of recession reaching 1.9 percent in 2018, but economic stability remains fragile and strongly susceptible to the volatility effect.

\(^6\) In 2016, these five countries recorded negative GDP growth, from as high as -2.80% in Libya, Brunei Darussalam (-2.47%), Nigeria (-1.6%), Angola (-0.81%), and Russia (-0.22%).
Figure 3: Most oil exporting countries recorded declining revenues, 2013 – 16

Government revenue (percent of GDP)

Source: International Monetary Fund, World Economic Outlook Database, 2017

Growth in the size of Nigeria’s Sovereign Wealth Asset was until recently, flat unlike its peers. Sovereign Wealth Funds are usually operated by resource-rich governments, as special-purpose investment vehicles intended to save for the future or provide stability against economic shocks. Nigeria’s sovereign wealth fund (SWF) performance has remained low and at odds with the global growth in oil and gas-related SWFs. The country’s 7-year old SWF has a core capital of US$1.5 billion, compared with some of its African peers with US$4.6 billion in Angola and US$7.6 billion in Algeria. Since its creation in 2011, the fund recorded its first injection of US$500 million by the current administration, which helped raise the asset value from its initial seed capital of US$1 billion. The new direction has been overdue, given that the fund did not benefit from the 2011 – early 2014 golden age of oil, when oil traded at over US$100 pb. Other countries such as Norway (US$1.06 trillion), UAE – Abu Dhabi (US$683 billion), Kuwait (US$592 billion), and Saudi Arabia (US$875.6 billion) have turned their SWFs into global large-scale investment vehicles. Norway’s sovereign wealth fund recorded an annual return of US$130 billion in 2017 alone, with investments in over 9,000 companies (WEF, 2018).

Nigeria’s perverse social contract may be the reason for its low tax revenues. The need to address Nigeria’s deficient social contract between the people and successive governments has remained unsettled although lessons from the Lagos experience have shown that a strong social contract may be the most sensible way of achieving a diversified revenue base (Gramont, 2015). The country’s low tax-to-GDP ratio of 4 percent in 2017 compared with 17 percent in Kenya, 16 percent in Ghana, 26 percent in South Africa, and 25 percent in Morocco has been as a result of a vicious

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7 In June 2018, US$650 million was also transferred to the NSIA for the Presidential Infrastructure Development Fund (PIDF), to finance road and power infrastructure assets such as the 2nd Niger Bridge, Lagos to Ibadan Expressway, East-West Road, Abuja to Kano Road, and the Mambilla Hydroelectric Power.
cycle of the low quality of public services and the public’s inclination to evade taxes and operate in the informal economy. At the State-level, tax to GDP ranges between as low as 0.34 percent and 2.8 percent\(^8\). Over the years, there has been little or no incentive for small businesses to “go formal” and pay taxes. A 2018 NESG Nigerian Tax Perceptions Survey conducted for over 10,000 households and 5,000 small firms showed that over 50 percent of the population considered not paying taxes on income wrong but understandable, while over 20 percent believe it is not wrong at all.

Out of over 90 million in Nigeria’s labour force, of which just over 50 million are fully employed, only about 20 million are registered taxpayers. Additionally, only about 77,000 of the 1.5 million registered VAT taxpayers remit VAT to the Federal Inland Revenue Service (FIRS).

4. What Nigeria has lost to the volatility

The drastic fall in oil price hampered Nigeria’s growth since 2014 and contributed to rising unemployment. The fall in oil price has tested Nigeria’s role in the “Africa Rising” narrative. Nigeria carries the largest weight in the continent, accounting for 30 percent of the region’s GDP and population. The cost of the volatility has been devastating and has resulted in a steep turnaround for a country that was hitherto ranked amongst the world’s fastest growing economies\(^9\), bringing with it, fiscal shocks and macroeconomic disruptions amidst rising unemployment (figure 4) and poverty. A full recession was recorded in 2016 with a GDP growth rate of -1.6 percent, and the trend has continued to linger, compared with other more diversified African countries which maintained strong growth. Ethiopia, Kenya, Rwanda and Tanzania recorded GDP growth rates above 6 percent in 2016. Unlike Nigeria, these economies are more diversified and resilient than a decade ago. In 2018, the economy grew by 1.93 percent, but it remains fragile due to its atypical nature of growth. Despite the recovery since 2016, unemployment grew from 14 percent to 23 percent in 2018.

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\(^9\) Between 2000 – 2015, Nigeria recorded a compound annual growth rate of over 7 percent, ranking amongst the fastest growing economies in the world.
The fiscal resilience of governments was weakened, with debt levels rising significantly. Nigeria’s public debt stock is low by international standards, but debts have risen significantly in the last four years (figure 5). Debt servicing remains a major threat due to the country’s low revenue base. Between 2014 and 2018, public debts grew by a compound annual rate of 21.4 percent, up from a previous 3-year average of 18.8 percent. By 2018, total public debts had more than doubled to N24.4 trillion from N11.2 trillion in 2014. External debts for both federal and state governments grew even faster by a compound annual average of 47.4 percent from N1.6 trillion in 2014 to N7.7 trillion in 2018. Spurred by low global interest rates, Nigeria took advantage of existing arbitrage to access global commercial debt markets with the aim of financing more capital projects and rebalancing the structure of debts. At the subnational level, the debt stock of States has risen faster than growth in domestic revenues, with many States transiting into high debt positions, with increasing incidences of default. In 2018, only three States where classified as low risk, compared to seventeen in 2013.
At the subnational level, where States maintain a high degree of fiscal autonomy under the Nigerian Constitution, the fiscal federalism framework does little to compel or encourage States to exercise prudent fiscal management. Falling revenues during the period led to high borrowing to refinance existing loans and service recurrent expenditures (including the payment of workers’ salaries). Debt management has remained weak at the State-level due to the absence of reliable debt management strategies and poor institutional oversight. The series of bail-outs\textsuperscript{10} issued by the federal government to States, indeed also carried significant moral hazard. Many States had in fact ‘borrowed’ from their staff, their pensioners and suppliers, by accumulating significant arrears during the period. In the heat of the crisis, 27 out of the 36 States were unable to pay the salaries of their workers.

\textbf{Several guidelines\textsuperscript{11} for borrowing have not been adhered to by some State governments.} The post-2014 period marked an era of higher debt vulnerability, with records of high budget deficits, mounting debts and unpaid public sector wages across States. Between 2014 and 2018, the domestic debts of State governments grew by a compound annual rate of 23 percent from N1.7

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure5}
\caption{Rising public debt, 2010 – 18}
\end{figure}

\begin{itemize}
\item Debt stock (in NGN trillion)
\item Source: Debt Management Office (2019)
\end{itemize}

\textsuperscript{10} In July 2015, the federal government released three bailout facilities to State governments – an excess crude account-backed loan facility for 34 States, a salary bailout for 31 States, and restructured commercial bank loans for 23 States. One year after, in June 2016, the government announced a one-year budget support facility of N14.16 billion per State to 35 State governments.

\textsuperscript{11} The monthly debt service ratio of a State, which includes the commercial bank loan being contemplated, should not exceed 40\% of its monthly federation allocation of the preceding 12 months. State governments are allowed to issue securities only if the total amount of loans outstanding at any particular time, including the proposed loan, does not exceed 50\% of the actual revenue of the State concerned for the preceding year.
trillion to N3.9 trillion. In 2015, two States exceeded the 250% threshold set for the size of public debt to total revenue ratio; this increased to five States in 2016 and three States in 2017. Three States also borrowed above the recommended liquidity\(^{12}\) threshold of 40% in 2016, while two States exceeded the threshold in 2017 and one in 2018. The rise in government borrowing has been widespread except in a few States, such as Anambra, Jigawa, Sokoto and Yobe, where borrowing remained moderate.

In 2016, the federal government kickstarted an easing process by providing bailout packages to States to help shore up short term liquidity and address accumulating wage bills\(^{13}\), pension and contractors’ arrears; but bailouts came with unintended consequences including a spike in debt servicing from federation transfers (Figure 6), creating a setback on already sliding federation receipts. In 2016, over 20 percent of States’ gross federation revenues was deducted as service payments, nearly 3 times the amount in 2014. The share of federation deductions declined to 12.5 percent in 2018, but the amount remains high and destabilizing, compared to the pre-2014 period.

**Figure 6: Rise in deductions from Federation transfers to States, 2010 – 18**

Federation deductions (% of gross allocation)

Since the crisis, budget credibility has faltered. The federal government did not meet its revenue targets in the last three years mainly due to lower crude prices and production levels, with only about 52 percent of expected income realized in 2017. Although gross oil revenues rebounded in 2017 to N4.1 trillion, it performed 23.4% (N1.3 trillion) below the annual budget. Gross non-oil revenue of N2.8 trillion generated also recorded a shortfall of N1.5 trillion (or 34.5 percent) below

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\(^{12}\) Liquidity ratio measures the ability of the State to service its short-term debts as at when due. It is measured as the total 12-month average federation deductions divided by the 12-month average federation allocation.

\(^{13}\) Civil servants and pensioners in some States staged public protests and undertook strike actions, which further impacted negatively on public service delivery. Productivity of public service delivery was already negatively affected by poor morale, pay arrears and inadequate funding of non-staff recurrent costs.
the annual estimate of N4.3 trillion. Total inflow for the 2017 federal budget stood at N2.7 trillion, indicating a shortfall of N2.4 trillion (or 47.7 percent) below the annual estimate for the year. The revenue gap resulted in a fiscal deficit of N3.8 trillion in 2017 – N1.4 trillion (or 61.5 percent) above the projected annual deficit of N2.4 trillion and above the fiscal deficit of N2.2 trillion recorded in 2016.

At the State level, poor budget credibility is primarily linked to unrealistic targets for internally generated revenues, with most States achieving only about 60% of their revenue targets. In the wake of the mid-2014 oil price slump, federation transfers which make up over 70 percent of the total revenue of States declined to N1.6 trillion in 2016 – the lowest in the last decade, before rising to N2.1 trillion in 2017 and N2.9 trillion in 2018 as oil price rebounded. Although States have initiated measures of fiscal consolidation through payroll audits, implementation of the treasury single account (TSA) and the establishment of efficiency units, these reforms are unlikely to be adequate to provide medium-term fiscal sustainability and intergenerational equity. In 2017, personnel costs grew to 40 percent of States’ total expenditure, growing at a compound average of 17 percent in the last 6 years from 15 percent in 2011. The share of capital expenditure fell from 52 percent in 2011 to 35 percent in 2017.

The impact on Nigeria’s terms of trade and exchange rate position has been acute. Over the 2014 – 2017 period, the official naira-dollar exchange rate depreciated by 82 percent from 168 naira per US$ in 2014 to 306 naira in 2017. The ripple effect saw consumer prices surge to 18.55 percent at year-end 2016, before settling at 15.37 percent in 2017 and down to 11.44 percent at the end of 2018. Between 2014 and 2017, the country recorded a decline in both terms of trade and purchasing power of exports from 210.7 to 141.7 and 274.5 to 155.6 respectively.

During the period, activities in the black market reached a size and maturity that threatened the effectiveness of capital controls. Operators in the market spent large amounts of resources to support rent seeking behaviour, while the government lost credibility dissipating its resources to police a system that was not enforceable. Although some stability was reached since the end of 2016, and at a huge cost, the country needs to dismantle the parallel market, and work towards a unified rate that will ensure transparency and fair play for all dealers in the foreign exchange market, with limited room for ad-hoc interventions.

There has been marked but fragile improvement in the capital market. Declining market capitalization since 2014 showed marked improvements in 2017 as the Nigerian Foreign Exchange Fixing (NIFEX) rate (about N330/USD) and the Nigerian Autonomous Foreign Exchange Rate (NAFEX) were introduced. As oil prices stabilized and Nigeria’s reserves improved, the foreign exchange market started to record some convergence between the commercial and parallel market rate of N360 per dollar. Equities market capitalization which had dipped from N11.5 trillion in 2014 to N9.26 trillion in 2016, picked to N13.62 trillion in 2017. High inflationary pressures and yields of sovereign benchmarks however saw a reduction in corporate bond issuances – from N108 billion in 2016 to N23.15 billion in 2017 (only 3 bond issuers compared to 9 in the previous year). The Bond market continued its upward trend from N5.4 trillion in 2014 to reach N9.3 trillion in 2017. In 2016, the federal government borrowed N2.2 trillion from the domestic bond market to finance its

budget deficit. The federal government also accessed a sum of US$4.8 billion through Eurobonds and a Diaspora Bond in 2017, while Sub-national bond issuance rose by 107.21 percent from N47 billion in 2014 to N97.4 billion in 2017, although only the Lagos State government participated in the domestic bond market in 2017.

**Diminishing social outcomes, including jobs and household purchasing power.** The social impact was larger than fundamentals alone would have suggested, likely reflecting policies implemented after the shock (including the delay in implementing government budgets). Factors such as the depreciation of the Naira and high rate of inflation eroded consumers' spending power, even amidst the 2019 general elections. A striking trend was the rise in the number of people who transited into low-skilled, low-wage subsistence jobs – over 7 million in the last 7 years and about 1 million people every year. Between 2010 and 2017 alone, 20 million people were added to the country’s labour force (growing at an annualised rate of 4 percent), with the number of unemployed persons rising from 2 to 8.5 million.

Poverty reduction has so far not followed the economy’s growth rate, mainly as a result of the tertiarization of the economy. Unemployment reached 23 percent in 2018 amidst suppressed wages for most of those who find jobs.

**Oil price has improved, but the golden age may have been lost.** 2011 – early 2014 was the golden era for oil, when prices averaged over US$100pb. Prices have since been cut by half even as the country faces internal volatility in domestic oil production. In August 2016, the country recorded a production volume of 1.6 million barrels per day (bpd) – the lowest in the last decade, owing to disruption of oil facilities in the Niger Delta. Production levels improved in 2018 to over 1.9 million bpd, but prospects remain fragile and below a record of over 2.6 million bpd in October 2010 (figure 7). Government efforts to stabilise production have been positive but only palliative. While armed rebellion in the Niger Delta region has been quelled, sabotage, protests and crude theft for artisanal refining are undermining the industry. The industry estimates that about 200,000 barrels of crude oil per day is lost to oil theft, while about 500,000 barrels per day is deferred in production shut-ins. Loss from crude oil theft between 2016 and 2017 was put at N3.8 trillion by the Nigeria Natural Resource Charter (NNRC). At an average of US$71pb, 2018 closed with a better position for oil price, but industry forecasts are very conservative, with the 2019 estimate put at US$62.8pb by the Energy Information Administration.
Figure 7: Volatility in oil price and domestic oil production, 2010 – 18

Source: Nigerian National Petroleum Corporation (2019)
5. The mild recovery has not been accompanied by fiscal consolidation

Following the mild recovery of oil prices in 2018, Nigeria’s external reserves improved significantly, but the fiscal space remains constrained. For the first time since 2014, external reserves rose to US$39.4 billion in 2017 and US$43.12 billion by 2018, while market capitalization bolstered from N9.26 trillion in 2016 to N13.6 trillion in 2017 before sliding to N11.7 trillion in 2018. At the public sector level, the size of the government has remained small, relative to the size of the economy. Total expenditures (% of GDP) rose from 12.7 percent in 2014 to 13.7 percent in 2018, ranking low among comparator economies in terms of per capita GDP. The low public expenditure level is a fallout of low government revenues (% of GDP), which fell from 10.5 percent in 2014 to 8.5 percent in 2018, lower than the sub-Saharan average of 18.7 percent and 26.8 percent in emerging market and developing economies according to IMF statistics.

With general low spending, growth has lagged in per-capita terms due to low capital stock and high rate of population growth. Real per capita GDP which had doubled from US$1,287 in 2000 to US$2,563 in 2014, gradually came to a standstill in 2015 and has continued to decline since. By 2017, GDP per capita had fallen to US$2,412. Economic growth which settled at 1.93 percent in 2018 has not kept pace with the high population growth of 2.6 percent. The country’s low revenue base has been one of the major setbacks to kick-starting an investment-led growth. Dependence on oil revenues and the absence of tax revenues have permitted governments to avoid public accountability, including the need for modernization of the ailing infrastructure and institutional reform.

Sub-national domestic revenue growth is improving but below potential. The aftershocks of the latest fiscal crisis compelled State governments to rapidly grow their domestic revenue base. Internally generated revenue (IGR) grew by 20 percent in 2016, up from a 2.9 percent contraction recorded in 2015. By 2018, IGR reached over N1 trillion from N936 billion in 2017, as State governments adopted the use of technology to block leakages in revenue collection and established partnerships with local governments, trade unions/cooperatives and other collection agents to streamline tax collection. The rise in IGR helped shore up domestic financing, but much of the growth was accounted for by a few States due to the varied level of reform implementation. In 2016, States such as Kwara, Kano, and Ogun recorded high growth rates in IGR reaching 140 percent, 127 percent and 111 percent respectively, while frontrunners in 2017 were Sokoto (98.4 percent), Jigawa (88 percent), and Borno (86 percent). The size of growth recorded in recent times has provided compelling evidence of the gap between the tax effort and potential of States, and the expansive room for revenue mobilisation. Raising the tax to GDP ratio of States from its current average of 1.4 percent to at least 5 percent will lead to additional revenues of between N50 billion – N240 billion (including VAT) annually.\(^{15}\)

Subsidy remains a major drawback on government revenues. The aftermath of the slump meant that Nigeria was incurring little or nothing on subsidizing domestic consumption of petroleum products. By May 2016, the country’s Petroleum Products Pricing Regulatory Agency (PPPRA) adopted a

premium motor spirit (PMS) liberalization template which allowed the market to float up to a cap of N145 per litre to encourage private participation and competitiveness in the PMS market. However, prospects for liberalizing the market were short-lived following the 2017 recovery. The rise in crude oil price in the international market and the corresponding increase in importation cost introduced an arbitrage between the open market price and the pump price of PMS. By October 2017, a hike in cost, insurance and freight (CIF) coupled with high exchange rate pushed the open market price of fuel to N171 per litre. Private Oil Marketing Companies (OMCs) were unable to import PMS due to the higher open market price above the approved selling price of N145 per litre, paving the way for NNPC, which became the sole importer of petroleum products. The transition created a strain on overall government revenues accruing to the three tiers of government in the form of subsidies. Within a year, the average monthly cost of PMS subsidy grew from N18.2 billion in 2017 to N89.5 billion by April 2018 when oil price closed at US$52.7 per barrel, according to the NNPC reports.

**Nigeria’s financial market is not robust enough to ease the volatility effect.** The volatility effect has been more pronounced in countries with less developed financial system that can cope with the large and sudden fluctuations in resource incomes, including government spending bonanzas (Van der Ploeg and Poelhekke, 2009). This condition is not unique to oil-exporters, but non-oil commodity exporters of copper, coffee etc. While it may be difficult to lower the oil price volatility, it is feasible to deal with volatility in a more efficient way by raising and stabilising a robust financial sector. Nigeria’s domestic credit to the private sector (% of GDP) is around 14 percent. Its financial sector is less developed like other oil-exporting and less economically diversified peers such as Gabon (10.5%), Angola (15.8%) and Libya (17.2%), in contrast to countries such as Indonesia (38.7%), Kuwait (99.3%), and Norway (146.3%), where governments have built substantial savings and economic diversification is taking place. The volatility effect in Nigeria’s financial markets are passed through liquidity constraints such as reserve ratio restrictions, high interest rates and disparate access to foreign exchange. Yields from treasury bills and government bonds are more attractive for banks than credit to micro, small and medium-sized enterprises (MSMEs).

6. **Is the government responding adequately?**

**Some measures have been put in place to improve fiscal responsibility.** The Nigerian government has taken steps to cut unproductive and/or illicit expenditures by establishing efficiency units across its ministries, departments and agencies. The federal government also took tougher measures such as

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16 The PMS open market price is continuously shaped by crude oil price volatility in the International market with the cost under-recoveries due to the differential between actual supply cost and the PPPRA-approved retail price cap of N145 per litre.

17 The federal government’s Efficiency Unit was created in November 2015 under the Federal Ministry of Finance with a mandate to create measures for expenditure controls in order to eliminate wastage in government overheads and generate savings by making procurement processes more efficient using administrative tools (mainly circulars), financial tools such as e-payment channels and price guidelines.
adopter a treasury single account across all government organs, the Whistle Blowing Policy, the Presidential Initiative on Continuous Audit, development of a pricing template to curb procurement fraud, and implementation of the Integrated Payroll Personnel System (IPPS) across MDAs to enhance efficiency and eliminate unjustified payroll entries, among others. Following the implementation of the TSA, the government mopped over N7 trillion in revenues while over N200 billion was saved from the elimination of ghost workers according to the finance ministry.

In May 2016, the Fiscal Sustainability Plan (FSP) was developed by the federal government and agreed to by all States, to start to address fiscal responsibility at the sub-national level. The plan highlighted five strategic objectives and 22 actions, with the aim of improving the fiscal behaviour and aligning both short and long-term sustainability objectives of the federal and State governments. The framework was designed as an incentive and condition for States to access a federally-guaranteed conditional budget support facility (BSF) provided to cushion short term liquidity and help meet State governments’ obligations (arrears) to workers, pensioners and contractors. Targets set by the FSP were time-based, but implementation across States was flexible enough to reflect the capacity of State institutions. Out of the 22 actions, 19 were to be implemented by State governments while 3 were measures to be undertaken by the federal government to support States.

Although the BSF was performance-based and originally designed for a 12-month period, to the end of May 2017, given the severe fiscal pressures, funds were disbursed to States even if they made less than expected progress in implementing the FSP. The plan carried with it a moral hazard, as the federal government’s objective for fiscal stability outweighed State government’s capacity to instill fiscal responsibility within the timeframe. By April 2017, only 15 out of the 22 actions of the plan had been implemented, with major weaknesses recorded for targets on accountability and transparency and debt management. The result showed that the FSP, despite its merits, would not by itself guarantee fiscal sustainability.

The FSP is also embedded within the Economic Recovery and Growth Plan (ERGP). The Economic Recovery and Growth Plan (ERGP) was launched in March 2017 as a medium-term plan (2017 – 2020) to restore economic growth hinged on the expected recovery of crude oil production (from 2.2 mbpd in 2017 to 2.5 mbpd by 2020) and growth in non-oil GDP (from 0.20 percent in 2017 to 7.28 percent by 2020). The new plan emanated as part of measures to strengthen fiscal consolidation in the country, by addressing structural impediments and the procyclical nature of the country’s fiscal policy.

The Ministry of Finance and the Federal Inland Revenue Service (FIRS) also introduced tax compliance strategies to ramp up domestic revenues. The Voluntary Assets and Income Declaration (VAIDS) was announced in July 2017 as a tax amnesty to qualified applicants who would benefit from waiver on penalty and interest, and exemption from tax audit/investigation. By the end of 2018, the

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18 In the last two years, the NGF HelpDesk has provided technical assistance to 18 States in areas such as domestic revenue mobilization and public financial management. Although the programme’s reach is open to all 36 States, the appetite for reform is noticeable in only about half of the States.

Scheme received over 5,000 applications and a voluntary declaration of over N90 billion with over N43 billion paid by companies. The VAIDS programme was a precursor to a tax amnesty programme initiated by FIRS in 2016, which attracted over 3,000 applications for waiver on interest and penalty. The programme resulted in the payment/collection of over N68 billion out of about N96.2 billion liability established from the exercise.

7. Outlook: what is on the horizon?

Oil price is expected to rebound slightly in the medium-term. Renewed sanctions on Iran and political instability in Venezuela are major factors that are stripping oil supply from the market and pushing prices back up. The world economy is however recording slow growth, contributed in part by the trade war between China and the US. China’s US$14 trillion economy recorded declining growth in the first quarter of 2019 at around 6 percent, compared to an average of 10 percent since 1980. In the EU region, growth is also slowing, amidst tensions from Brexit and declining exports in Germany. Brent crude averaged US$71.19 pb in 2018, up from US$54.15 pb in 2017, but the US Energy Information Administration’s estimates prices will slide to US$62.78 pb in 2019 and US$62 pb by 2020.

There is growing potential for Nigeria’s domestic crude refining. Raising Nigeria’s current production capacity of around 2 million bpd will help consolidate government revenues even when oil prices fall. The government plans to issue licenses to modular refineries across the country, some of which have the capacity of as little as 1,000 bpd. Modular refineries have been estimated to provide an additional 700,000 barrels per day to the country’s domestic crude output (Bloomberg, 2018). Of the 40 modular refineries registered, 10 are in advanced stages of development and could be refining fuel by 2019, a year before Dangote’s 650,000 bpd refinery becomes operational. This move will expand Nigeria’s crippled refining capacity and help reduce the country’s US$9 billion annual fuel import bill, and foreign exchange pressures.

Subsidy cost are set to destabilize the oil market recovery. Nigeria recorded one of its lowest cost of subsidy in 2016 when oil traded at an average of US$48.11 pb - the lowest since 2004. Cost of subsidy in that year was N28.6 billion according to NNPC reports, but the amount increased to N219 billion in 2017 and N345.5 billion by half year 2018 as the price of oil and domestic PMS consumption increased. At crude oil price of US$70 per barrel, the open market retail price of PMS per litre is estimated at N187, N42 above the retail price ceiling of N145. NNPC estimates show that where the price of oil rises to US$ pb, the unit subsidy cost will reach N61 per litre and higher as oil prices continued to rise, reaching over 60 million litres in the first half of 2018 compared to an average of 35 million litres in previous years. Arbitrage across the West Africa sub-region has fuelled cross-border smuggling, bringing serious threats to energy security and economic stability.

The volatility effect will be more pronounced. Fiscal and economic stability remains uncertain. Nigeria’s economic problems tend to ratchet up following each cycle of oil volatility, given that governments’ expenditure commitments stay on a linear growth path, and as fall in oil prices and revenues force the real economy to contract to a low equilibrium state. This is especially pronounced for governments that have in the past raised their permanent expenditures in response to temporary
windfalls. The volatility effect has continued to diminish governments’ capacity to manage macroeconomic, exchange rate and fiscal policies.

**The role of development partners in fiscal governance is rising.** In June 2018, the World Bank introduced a hybrid fiscal operation with two components to support Nigerian States. The programme consists of a performance-based financing component of US$700 million to be implemented as a performance-for-result (PforR) to eligible State governments; and a capacity building component of US$50 million for State governments and national-level institutions. The programme was designed to become operational in the first quarter of 2019 to support sustained implementation of a subset of reforms from the FSP and the OGP.

8. **Looking ahead: what reform options could be considered in the aftermath of the 2019 election?**

In March 2019, Nigeria consolidated its democratic process with a general election which saw incumbent President Muhammadu Buhari winning a second term with 56 percent of the votes. Governorship elections also took place in 29 of the 36 States. The new governments will be confronted with a fragile economy, subdued revenues amidst downside pressures from a new minimum wage that will raise the income of the least-paid worker from N18,000 to N36,000. In a sign of high voter apathy, the election was tarnished by pocket of violence and tardiness in the way it was run. But with the elections Nigerians are expecting new governments both at the national and sub-national level, to do new things and to do more with less. The following are recommendations to cushion the volatility effect. They are by no means exhaustive, nor are they mutually exclusive.

a. **Nigeria must disentangle itself from the dependence on oil for exports and foreign exchange.**

   The government must take the diversification agenda seriously to achieve the transformation required in its trade structure, including the number and type of products exported. The country must reduce its export concentration\(^2\) and diversification\(^2\) indices which is around 0.76 and 0.86 currently, to around 0.24 and 0.54 respectively – the average for transition economies. This can only be achieved by expanding its agricultural and manufacturing base like other oil-exporting peers such as Indonesia and Malaysia. The manufacturing sector has been the main engine of growth and catch up, and successful cases of catch-up were countries which were successful in

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\(^2\) Concentration index, also named Herfindahl-Hirschmann Index (Product HHI), is a measure of the degree of product concentration. An index value closer to 1 indicates a country’s exports or imports are highly concentrated on a few products.

\(^2\) The diversification index is computed by measuring the absolute deviation of the trade structure of a country from world structure. The diversification index takes values between 0 and 1. A value closer to 1 indicates greater divergence from the world pattern.
industrialization. Value addition in the agricultural sector and innovation-based manufacturing will help diversify the country’s export base and source of foreign exchange. State governments must also play a more active role in addressing the infrastructural deficit, by taking a view on regional infrastructure projects. In a world where services trade matters as much as goods, they must also focus on harmonizing regulations and standards to strengthen the integration of value chains across the country.

b. **Realignment of the social contract between the government and citizens to consolidate and diversify tax revenues.** Nigeria depends on 1 percent of its population and around 20 percent of its labour for tax revenues, largely because over 70 percent of the population are in the shadow economy. Governments must reduce the incentive for businesses to remain in the informal sector by improving formal public service delivery and providing services for taxes. Better governance, transparency and accountability must be pursued to deliver better access public services (including healthcare, quality education and social safety). This must be accompanied by a sensible strategy to expand the limited revenue base and measures to strengthen institutions that administer tax, especially at the sub-national level.

c. **Developing the financial sector will help cushion the volatility effect.** The government must take measures to improve the lending capacity of financial institutions by reducing the cost of borrowing and improving financial deepening and intermediation for households and businesses. Reducing the financial sector’s dependence on yields from government debt instruments, attracting external finance flows (including remittances) and incentivizing private sector lending will help build a diversified financial intermediation system that can withstand the effect of the volatility.

d. **Establishing independent fiscal institutions to provide or scrutinize macroeconomic forecasts for budget preparation.** Fiscal governance can best be achieved with strong political commitment or when appropriate “watchdogs” are in place. Independent fiscal institutions are non-partisan public bodies, other than the central bank, government or parliament that promote sustainable public finance management through various functions, including monitoring compliance with fiscal rules, production or endorsement of macroeconomic forecasts for the budget, and/or advising the government on fiscal policy matters. They can also assess whether fiscal measures are appropriate in terms of respect of rules, sustainability of public finances, and stability-oriented fiscal policies.

e. **Streamlining government recurrent expenditure.** Managing and stabilizing public spending has been a challenge in Nigeria. Even during periods of economic contraction, recurrent expenditures continue to rise at the expense of capital spending. Addressing this challenge requires that governments do not expand permanent expenditures (especially the scope of entitlements) in response to temporary windfalls. Nigeria is also facing an overvaluation of public capital as a result of inefficiencies and corruption which lead to higher cost of implementing government projects than technically feasible. This phenomenon accounts for the rise in capital expenditure amidst lower returns on capital.
f. **Nigeria may need to consider a new deal on how its fiscal federalism works.** Major fiscal issues to be reassessed include the revenue sharing formula for the three tiers of government, the expenditure roles and responsibilities of governments and the capacity of governments to absorb the full cost of subsidies. For sub-national governments, this consideration is important in the light of the varying level of economic production and consumption and factor endowments.
APPENDIX

Figure 8: Volatility of oil price and domestic oil production

Figure 9: Volatility of oil exports

Figure 10: Volatility of oil revenues
REFERENCES


IMF (2018) World Economic Outlook Database, October 2018


