

# The impact of Declining Commodity Prices on African Countries

## *Impact of falling oil prices in Nigeria's economy*

### 1. Introduction

Plummeting oil prices have set off an economic unraveling in Nigeria, one of the world's top oil producers. The country which became Africa's largest economy following the rebasing of its Gross Domestic Product (GDP) by the National Bureau of Statistics (NBS) in April 2014 to better reflect the structure of the economy, surged past South Africa to become Africa's largest economy and 26<sup>th</sup> in the world with a rebased GDP of US\$514 billion in 2013 (as against US\$270 billion that was previously reported) compared with US\$366 billion for South Africa and US\$286 billion for Egypt. The over 90 per cent GDP increase was attributed to new sectors of the economy such as telecommunications, movies, and retail which were previously not captured or underreported. In 2014, this figure grew to US\$569 billion, according to World Bank Statistics.

In the last decade and a half, the country maintained remarkable growth in real GDP, recording an average growth rate of 7 per cent from a large economic base, with a reasonably high potential for further growth (Ajaikaye et al, 2015). However, its economy has also been transforming from an agrarian economy into a tertiary service industry without going through the intermediate stage of industrialization as seen in the Asian tiger economies. The contribution of both the agriculture and industrial sectors to the country's GDP recorded compound annual negative growth rates of -3.1 per cent and -4.4 per cent respectively between 1990 to 2014, compared with the services sector which grew by 6.4 per cent (Table 1). These sectoral dislocations have continued to fuel the rise of urban agglomerates and youth unemployment, as young people are increasingly moving from largely predominant subsistence agriculture in the rural areas to tertiary activities in the urban areas.

**Table 1: Sectors, value added (% of GDP), GDP growth and per capita growth, 1981 – 2014**

Indicator Name	1981	1990	2000	2005	2010	2011	2012	2013	2014
Agriculture, value added (% of GDP)	28.5	31.5	26.0	32.8	23.9	22.3	22.1	21.0	20.2
Industry, value added (% of GDP)	40.0	45.3	52.2	43.5	24.9	27.8	26.7	25.3	24.2
Services, etc., value added (% of GDP)	31.5	23.2	21.8	23.7	51.2	49.9	51.2	53.7	55.5
GDP growth (annual %)	-13.1	12.8	5.3	3.4	7.8	4.9	4.3	5.4	6.3
GDP per capita growth (annual %)	-15.5	9.9	2.7	0.8	5.0	2.1	1.5	2.6	3.5

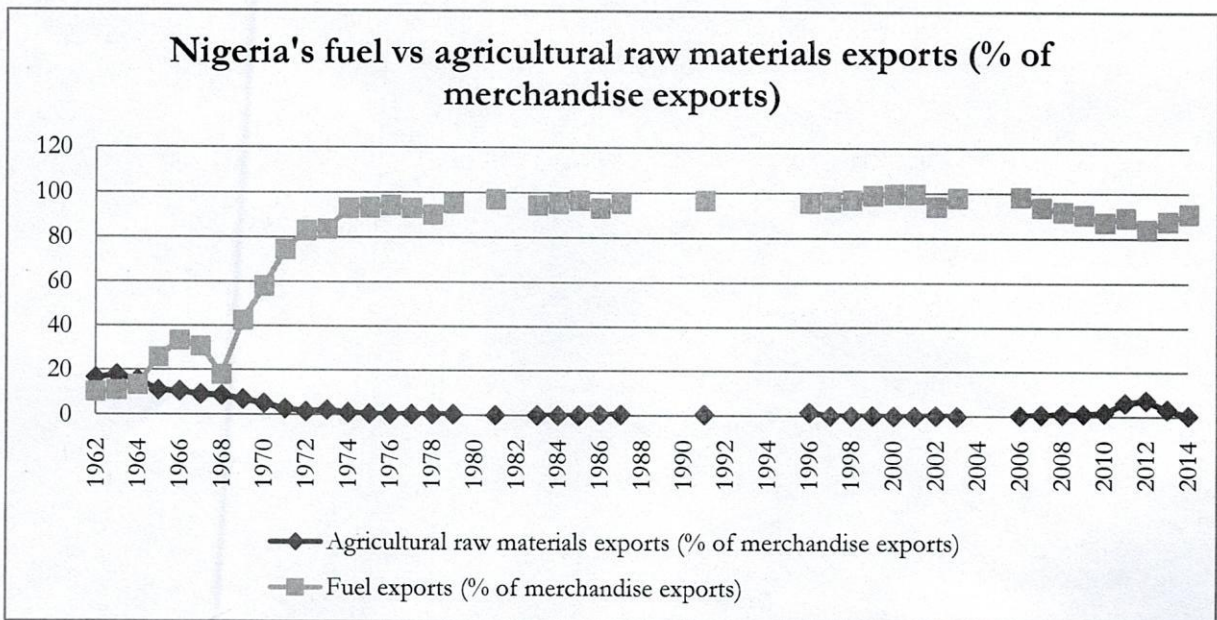
*Data Source:* World Bank WDI (2016)

Nigeria's recent growth pattern does not mean it's clearly on the path to convergence. While the non-oil sector may account for 90 per cent of GDP, the oil sector plays a central role in the economy. Its high growth rate has largely been spurious, and characterised by poor social and human development indices. With a population growth rate of 2.8 per cent, the country's 184

million people according to the United Nations Department for Economic and Social Affairs (UN-DESA) data, has put a strain on the economy and its already deficit infrastructure. Although real GDP per capita has nearly doubled from US\$590 in 1990 to US\$1,098 in 2014, the indicator is far less than Algeria's US\$3,391 and more than 5 times lower than South Africa's US\$6,088 recorded in the same year. The country's high population growth is offsetting the more rapid GDP growth, causing per capita growth to be much slower (Table 1). Nigeria also has 62 per cent of its population living below the income poverty line of US\$1.25 according to its 2013 National Demographic and Health Survey, as the percentage of unemployed and underemployed people grew from 3.5 per cent in 1990 to 21.4 per cent in 2010 and 26.8 per cent in 2015 – with approximately 18 million unemployed people (NBS, 2016).

The 'tertiarisation' of the economy has also failed to deliver quality jobs that guarantee inclusive and sustainable economic growth (Ajaikeye et al, 2015), notwithstanding the high demographic dividend of over 97 million working age population, set to grow to 151 million in 2030 – almost 16 per cent of Africa's labour force. In the 2015 Human Development Report, Nigeria was ranked low in human development at 152 out of 188 countries. The wellbeing indicator grew marginally from 0.493 in 2010 to 0.514 in 2014, with average life expectancy at 53 years and the average number of years of education received by people ages 25 and older at 6 years.

**Figure 1: Nigeria's Trade Repositioning**



*Data Source: World Bank WDI (2016)*

Much of the country's merchandise exports structure has not changed since the late 1960s. Exports have centred on primary products which make up 98 per cent of products exported annually, while less than 1 per cent of the country's commodities exported are manufactured locally (Table 2). In the last decades, fuels alone have made up 94 per cent of exports, notwithstanding volatilities that

characterise the commodities market. This dominant role, coupled with inadequate management of oil revenue during periods of windfall, has pushed other productive sectors like agriculture and manufacturing aside; thus, exposing the country to the volatility in the crude oil market.

**Table 2: Merchandise trade by product groups, exports in millions of dollars, annual, 1995-2014**

Product Group	1995		2010		2011		2012		2013		2014	
	Export Value	Export Share	Export Value	Export Share	Export Value	Export Share	Export Value	Export Share	Export Value	Export Share	Export Value	Export Share
Mineral fuels, lubricants and related materials	11,310	91.6%	80,631	93.1%	119,085	94.8%	108,569	93.6%	97,832	94.1%	91,225	94.0%
Food and live animals	351	2.8%	1,420	1.6%	1,453	1.2%	2,124	1.8%	2,175	2.1%	1,947	2.0%
Crude materials, inedible, except fuels	329	2.7%	1,162	1.3%	2,940	2.3%	3,165	2.7%	1,741	1.7%	1,831	1.9%
Manufactured goods	190	1.5%	1,385	1.6%	813	0.6%	962	0.8%	967	0.9%	850	0.9%
Machinery and transport equipment	36	0.3%	872	1.0%	584	0.5%	556	0.5%	456	0.4%	465	0.5%
Miscellaneous manufactured articles	27	0.2%	245	0.3%	129	0.1%	206	0.2%	292	0.3%	223	0.2%
Chemicals and related products, n.e.s.	65	0.5%	228	0.3%	257	0.2%	179	0.2%	215	0.2%	196	0.2%
Beverages and tobacco	5	0.0%	186	0.2%	171	0.1%	159	0.1%	195	0.2%	190	0.2%
Commodities and transactions, n.e.s.	24	0.2%	437	0.5%	189	0.2%	80	0.1%	111	0.1%	46	0.0%
Animal and vegetable oils, fats and waxes	7	0.1%	1	0.0%	19	0.0%	2	0.0%	15	0.0%	27	0.0%
Total all products	12,342	100%	86,568	100%	125,641	100%	116,000	100%	104,000	100%	97,000	100%

*Data Source:* UNCTAD STATS (2016)

For a mono-product economy like Nigeria, it is not unprecedented therefore, that a sudden and sustained decline in the price of the product will impact the country's revenue negatively. No wonder the former Central Bank Governor, Sanusi Lamido Sanusi (2012) stated: "Our major concern is [that] a major decline in the price of oil or (domestic) output would lead to a massive depreciation of the currency, a collapse in reserves and a huge growth in deficits.... and some of the states outside of the oil-producing region might find actually themselves in a situation where are not able to pay salaries".

Unsustainable oil exploration activities has also rendered Nigeria's Niger Delta region one of the five most severely petroleum-damaged ecosystems in the world (Kadafa, 2012). The oil producing region which once boasted of diverse ecosystems, with the largest wetland in Africa and among the ten most important wetland and marine ecosystems in the world (Nenibarini, 2004), has suffered from contaminated streams and rivers, forest destruction and biodiversity loss. In 2006, Nigeria's Ministry of Environment, WWF UK<sup>1</sup> and the International Union for Conservation of Nature (IUCN) Commission on Environmental, Economic and Social Policy after visiting spill-damaged sites in the

<sup>1</sup> The World Wide Fund for Nature is an international non-governmental organization founded on April 29, 1961, working in the field of the wilderness preservation, and the reduction of humanity's footprint on the environment.

region, estimated that about 9 million – 13 million barrels (1.5 million tons) of oil have been spilled in the Niger Delta ecosystem over the past 50 years. During this time, rural communities in the region have suffered most from the environmental and social costs, and claim to have received very little of the benefits; hence, the motivation for the current violence, sabotage of pipelines/installations and instability in the region (Obot et al, 2006).

Around 3,000 – 5,000 spill sites in the Niger Delta are currently documented as requiring cleanup and remediation without a clear plan on remediation timeframes backed by enforcement penalties, of which roughly the same number of spill sites remain undocumented (Onwuteaka, 2016). Despite high expectations from developing a separate institution such as NOSDRA<sup>2</sup>, compliance, monitoring and enforcement systems have remained weak, as only in less than 0.2 per cent of sites (10 sites out of over 5,000 sites) have records of attempts at cleanup and remediation including the UNEP ‘Environmental Assessment of Ogoniland’ report which was released in August, 2011.

Nigeria’s no flaring policy introduced in 1984 has also been overlooked (Nelson, 2015). The country is the second largest flarer in the world, flaring approximately 13 bcm annually while millions of its citizens lack electricity – another case of the resource curse of the Petro-dollar State struggling to manage its resources efficiently. Perhaps, this is not unconnected with the strong link between oil rents and corruption as supported by Arezki and Brückner (2011), which is fueled by the dominant role played by the government in the country’s oil industry. According to the World Bank (2004), the extent of economic loss due to gas flaring and venting is estimated at US\$2.5 billion annually, roughly 0.4 per cent of Nigeria’s GDP.

## **2. Managing Boom and Bust in Oil Earnings**

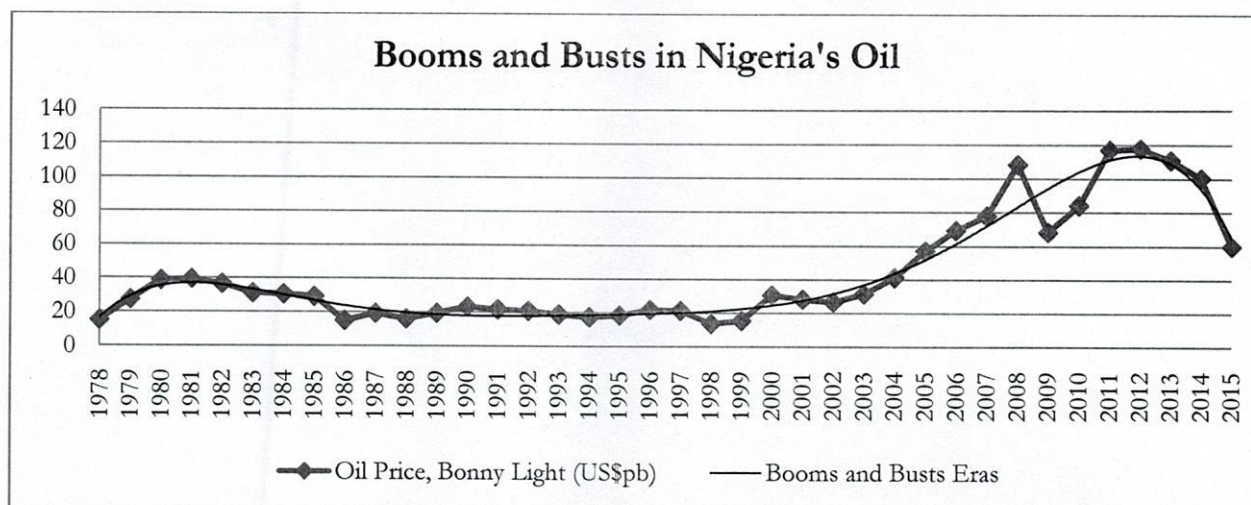
Historically, Nigeria’s growth has largely been driven by its richness in natural resources. The discovery of commercial oil in January 1956 – four years before its independence, launched the economy into the limelight as a resource-rich State. This era also heralded the structural repositioning of the economy from an agrarian economy. In the course of a decade, fuel exports (% of merchandise trade) skyrocketed from just 18 per cent in 1968 to 90 per cent by 1978 and 91 per cent in 2014, compared with agricultural raw materials exports (% of merchandise trade) which plunged from 9 per cent to 0.38 per cent and 0.43 per cent over the same period. Five decades after, petroleum production and exports still play a dominant role in the country’s economy and accounts for about 90 per cent of its gross earnings.

Over the last 50 years, the Nigerian economy witnessed its share of precarious openness to the global oil market, following the rise of oil prices in the 1970s to the most recent crash which started in mid 2014. In what follows, the eras of booms and busts are reviewed based on stylized facts explicating the impact of oil price movements on the country’s economic and fiscal position.

---

<sup>2</sup> NOSDRA was established by the National Assembly of the Federal Republic of Nigeria Act of 2006 with the responsibility for preparedness, detection, and response to oil spillages in Nigeria.

**Figure 2: Booms and Busts in Nigeria's Oil**



*Data Source: Energy Information Administration (2016)*

### The Rise of Oil in the 1970s

Nigeria first recorded its double digit GDP growth rate of 24.2 per cent in 1969, up from an average of 0.2 percent between 1961 and 1968. The price of oil had catapulted from less than \$1pb to over \$10 in 1975 and around \$36 in 1980, owing to the nationalistic fervors across the entire oil-producing world, most notably in Iran and Venezuela – the two countries that became critical in bringing about the Organisation of Petroleum Exporting Countries (OPEC). The end of the Biafran war also coincided with the rise in the world oil price, and Nigeria was able to reap instant riches from its oil production. By the early 70s, Nigeria had attained a production level of over 2 million barrels of crude oil a day (NNPC n.d) from around 5,100bpd when it first joined the league of oil producers in 1958. Fuel exports (% of merchandise exports) multiplied from 17 per cent in 1962 to 43 per cent in 1972 to over 90 per cent by mid 70s. Total reserve<sup>3</sup> which had averaged just around US\$220 million in the 60s rose strongly to US\$5.7 billion in 1975 and nearly doubled to US\$10.6 billion by 1980.

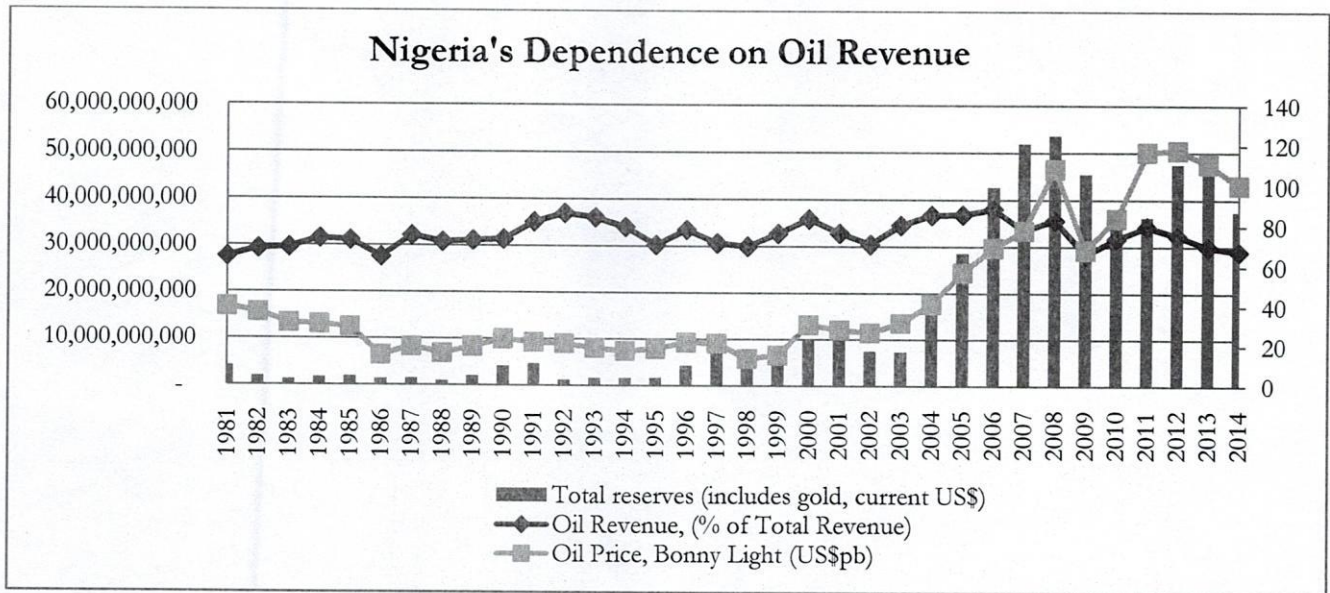
The government responded by promptly establishing its control in the country's oil industry, by establishing the Nigerian National Oil Cooperation (NNOC) in 1971 which later became the Nigerian National Petroleum Company (NNPC) in 1977, a regulator and major player in both the upstream and downstream sectors. The country also became the 11<sup>th</sup> member of OPEC in 1971.

Government capital spending grew significantly during this period, taking up over half the entire windfall of the 70s; however, much of it failed to generate the required rate of return needed to improve the country's servicing capacity (Budina et al, 2007). Following the course of the decade, the country's external debt stock grew by a compound annual rate of 26.7 per cent from US\$837

<sup>3</sup> Reserves are expressed in current US\$ (including gold), unless otherwise stated.

million in 1970 to US\$8.9 billion in 1980. Most of these capital spending plans were perhaps conceived in a hurry without a comprehensive economic roadmap, to generate the needed infrastructure and burgeoning manufacturing sector; hence, the large failures and wastages.

**Figure 3: Nigeria's Dependence on Oil Revenue**



*Data Source:* Energy Information Administration (2016) and the Central Bank of Nigeria 2014 Statistical Bulletin

### The Oil Price Collapse of 1980 – 1986

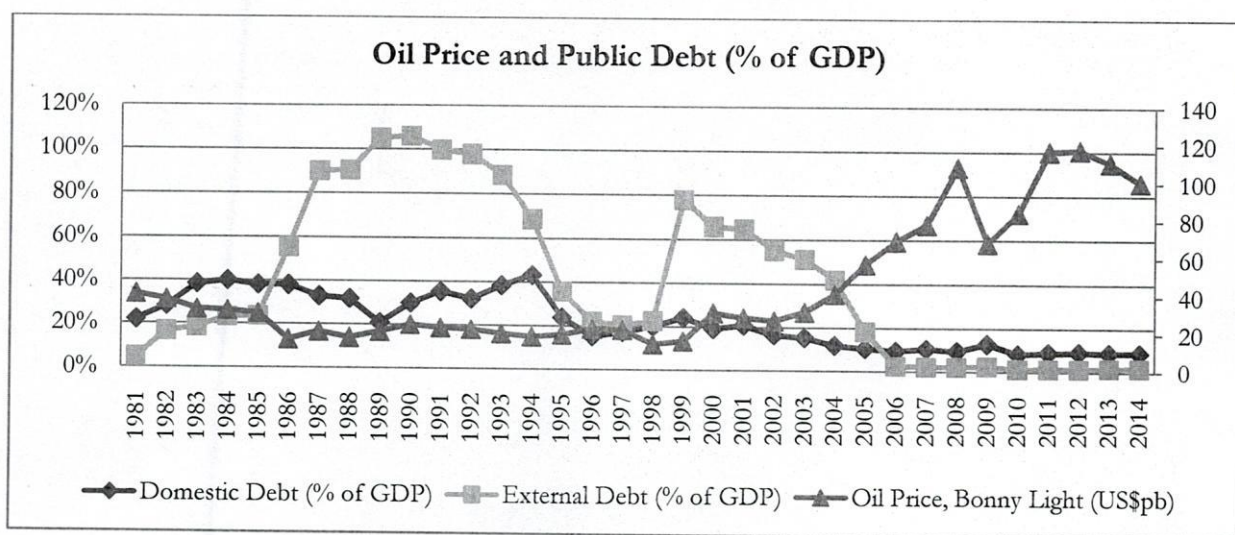
The oil price slump from US\$41 in 1980 to US\$27 by 1986 brought with it ripple effects on Nigeria’s oil earnings, reserves and even a problematic debt overhang. Within the six-year period, the country’s reserves declined by a compound annual rate of -29 per cent, from US\$10.6 billion in 1980 to US\$1.3 billion in 1986 (Figure 3), with total reserves (% of total external debt) declining to 10 per cent from 119 per cent in 1980. The country entered into big borrowing to finance post war reconstruction and other infrastructure projects. Debts rose rapidly to over 55 per cent of GDP for external debts and 38 per cent for domestic debts in 1986 from 22 per cent and 5 per cent respectively in 1981, with a plethora of Federal Government guarantees provided for state government loans and commercial credits or trade arrears incurred by private entities – a problem which became an overhang decades after. The euphoria of the oil boom was fast short-lived and the economy immediately suffered considerable strains, as its ability to service its infrastructure challenges strained.

The oil collapse led to massive external borrowings from the international capital market. A consumption pattern that favoured imported goods had also emerged, which was aggravated and sustained by the import substitution industrialization strategy that depended heavily on imported raw materials and machinery as well as an overvalued exchange rate regime (DMO, n.d). By 1985,

the debt profile had deteriorated due to persistent inability of the country to meet its external debt service obligations. Cumulative effect of arrears and penalty interest rates led to mounting arrears and unmanageable growth of the debt stock relative to available resources. The external debt stock, which was about US\$8.9 billion in 1980, grew to nearly US\$19 billion by 1985, while debt service climbed to US\$4 billion per annum or 33 percent of exports of goods and services in 1985, as against the recommended international threshold of 25 per cent. Correspondingly, the debt stock (% of export earnings and GDP) rose to uncomfortable levels of 154 per cent and 24 per cent, respectively (DMO, n.d.). At least 80 per cent of external loans were owed to the Paris Club and private banks (London Club).

GDP growth rate had plunged to -13.1 per cent in 1981, and remained at -8.8 per cent by the end of the era; and the production and consumption patterns that emerged during the oil boom of the 70s could not be sustained in the face of declining foreign exchange earnings. Balance of payments had declined from US\$5.2 billion (2.5 per cent of GDP) in 1980 to -6.5 billion in 1981 (-4 per cent of GDP) before recovering marginally to US\$211 billion (0.2 per cent of GDP) in 1986, although its vicissitudes had already been entrenched. Nigeria recorded its first trade arrears in 1982-83 (Budina, et al, 2007).

**Figure 4: Nigeria's Debt Overhang**



Data Source: Energy Information Administration (2016) and the Central Bank of Nigeria 2014 Statistical Bulletin

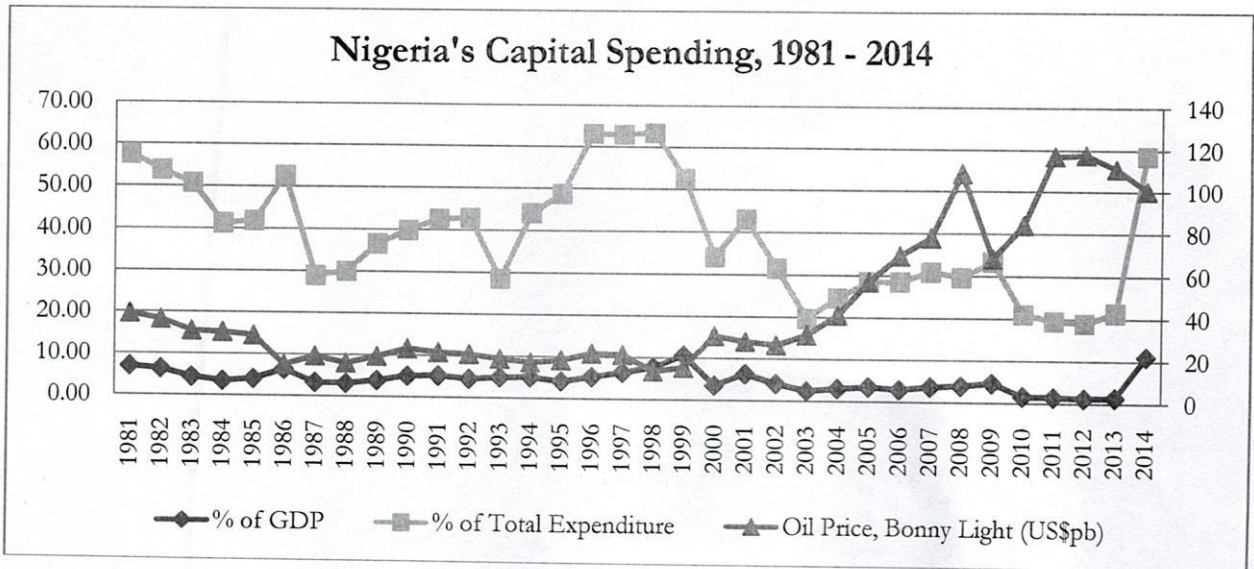
**Flat-Price Periods of 1986 – 1998**

The 1986 – 1998 era inherited a huge external debt burden which hovered over 100 percent of the country's GDP by 1989-99 (Figure 4), amidst flat oil prices which averaged US\$19 pb throughout the 13-year period. Domestic debt was also at its highest ebb, reaching 43 per cent of GDP in 1994. Public debt increased as a result of the large exchange rate depreciation in 1986 from 0.89 per US\$

in 1985 to 1.75 per US\$ in 1986 and by 1998, 22 per US\$ (Figure 6). To ease the situation, the country concluded several non-concessional rescheduling agreements with the Paris Club in 1986, 1989, 1991, and 2000. In 1992, Nigeria concluded a Brady deal with private creditors which reduced the debt considerably. From then on, private debts were serviced. However, the country continued to accumulate arrears with Paris Club creditors after each agreement (Dijkstra and Nederland, 2011).

Nigeria's reserves also stayed flat during the period at an average of US\$3.1 billion compared to over US\$10 billion in 1980. Capital spending was not left out either, as the government responded with a drastic cut in infrastructure spending, recording its historical lowest plunge to 29 per cent of total expenditure (3.3 per cent of GDP) compared with 58 per cent (7 per cent of GDP) in 1981 (Figure 5). Owing to severe balance of payments crises following the cumulative effects of the first oil shock, and the growing import needs of domestic industries, Nigeria adopted the International Monetary Fund/ World Bank Structural Adjustment Programme (SAP) in 1986, which required the government to implement policy reforms including deregulation of interest rates, trade liberalization, privatization of state-owned enterprises (parastatals), withdrawal of government subsidies, and currency devaluation to reduce the role of the State and assign greater role to market forces in the allocation of resources. However, the SAP reforms failed to deliver their development objectives. By the beginning of the 1990s, when the impact of SAP policies had become manifest, Africa (including Nigeria) had become the slowest growing region in the world (Kormawa and Jerome, 2015)

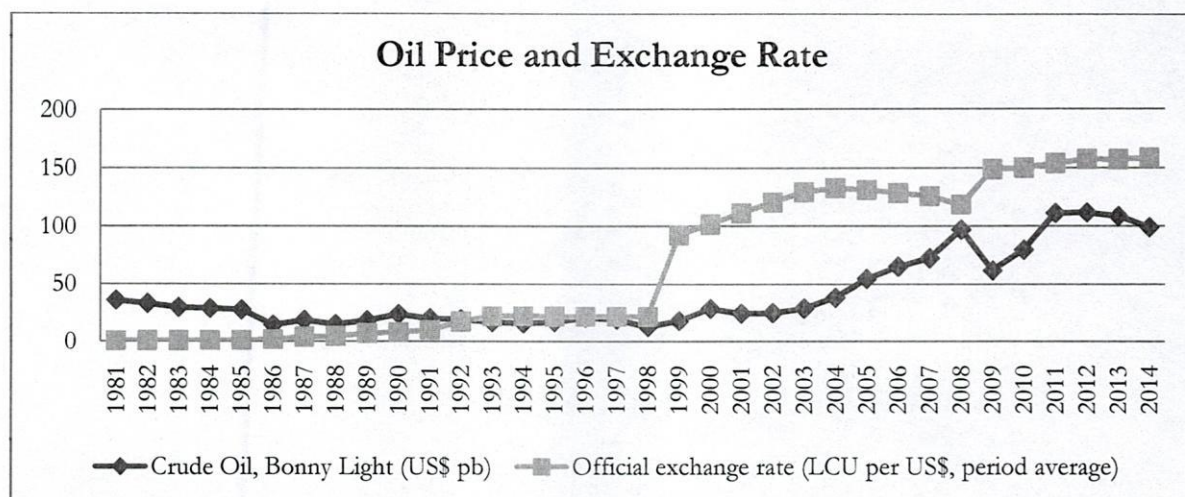
**Figure 5: Nigeria's Volatile Capital Spending**



Data Source: Energy Information Administration (2016) and the Central Bank of Nigeria 2014 Statistical Bulletin



**Figure 6: Trend in Oil Price and Exchange Rate**



*Data Source:* Energy Information Administration (2016) and the Central Bank of Nigeria 2014 Statistical Bulletin

### **Rising-Price Periods with the exception of 2008 and 2009, 1998 – 2014**

The 21<sup>st</sup> century marked a period of high economic growth for Nigeria. The decade and a half windfall saw oil prices soar from US\$14 in 1998 to more than US\$100 pb in 2014. Real GDP grew by around 7 per cent while per capita GDP doubled from US\$549 to US\$1,098. Reserves also grew from US\$7.3 billion in 1998 to US\$28.6 billion in 2005 and US\$37.5 billion in 2014 (Figure 3).

During the start of the century, fiscal challenges still remained and it could not fully finance development programmes such as the Millennium Development Goals (MDGs). The debt burden which had reached US\$36 billion in 2004 continued to crowd out necessary investment funding in infrastructure, health and education. A debt relief effort finally came through on June 29, 2005, when the Paris Club and Nigeria agreed on an US\$18 billion debt relief package, and by April 2006, Nigeria paid the last installment on the US\$30 billion it owed, which had accounted for more than 85 percent of the country’s external debt (Okonjo-Iweala, 2008). External debts (% of GDP) successfully declined from 78 per cent in 1999 to 2 per cent in 2006 and remained flat up till 2014 while domestic debts (% of GDP) hovered around 9 per cent.

The period also recorded wide reaching reforms, following Nigeria’s transition to democracy in 1999. The government focused on ensuring political stability, strengthening democratic practices, and tackling corruption (Okonjo-Iweala and Osafo-Kwaako, 2007). It also embarked on structural, institutional, governance, and macroeconomic reforms which culminated in the National Economic Empowerment and Development Strategy (NEEDS), and the State Economic Empowerment and Development Strategies (SEEDS) prepared by all 36 States and the Federal Capital Territory (FCT).

Fiscal reforms were also carried out, including the adoption of an oil-price based fiscal rule (OPFR) in 2004 in which government expenditure was based on a prudent oil price benchmark, and accumulated revenues saved in a special excess crude account. The rule helped de-link government expenditures from oil revenue earnings and generated significant savings for the country. Gross excess crude savings more than doubled from \$6.35 billion at the end of 2004 to \$17.68 billion by the end of 2005 which was subsequently used to finance Nigeria's Paris Club debt buyback and also to fund a number of infrastructure projects, especially in the power sector (Okonjo-Iweala and Osafo-Kwaako, 2007). Total reserves also tripled within a 3-year period from US\$17.3 billion in 2004 to US\$52 billion in 2007.

Despite the improvements, fiscal imbalances emanated afterwards. The excess crude account which had grown to over \$20 billion by November 2008 fell to less than \$4 billion by June 2010 due to budget deficits at all levels of government and the steep drop in oil price in 2009 (CBN, 2012). Amidst controversies surrounding the establishment of the Excess Crude Account (ECA)<sup>4</sup>, which was seen by sub-national governments and the National Assembly as an administrative tool developed without any legal backing, the national sovereign wealth fund was created as its replacement in 2011.

### Falling-Price Periods of 2014 – 2016

Tumbling oil prices since mid-2014 from around US\$115 in June, 2014 to US\$33 in March 2016, highlighted the end of the long windfall which began in the late 1990s, has perhaps set the steepest turnaround for one of the fastest growing economies in the last decade and a half. The oil price fall reflected predominantly rising oil supply as a result of shale exploration and weak global demand. The impact has been even more severe given that the cumulative oil price decline between June 2014 and January 2015 was the third largest of the past 30 years (when oil began trading in the futures exchanges) and was driven by a "perfect storm" of conditions that exerted strong downward pressure on prices (Baffes, et al, 2015).

In 2015, Nigeria's GDP growth fell to 2.8 per cent, recording an even worsening decline of -0.36 in the first quarter of 2016 according to the National Bureau of Statistics. The International Monetary Fund (IMF) in its Article IV Consultation forecasted a drop to 2.3 per cent in 2016 – the lowest in almost two decades. The resulting shortage of foreign exchange from oil exports meant less cash for imports, including fuel to power the import-dependent nation. With a large overlooked manufacturing sector including refining, it has long shipped its crude out of the country to be refined.

By July 2015, the government was convinced it had to take steps to ration foreign exchange and declared 41 imported items including toothpicks and private jets, as "not valid for foreign exchange in the Nigerian foreign exchange markets" to "conserve foreign exchange reserves as well as

<sup>4</sup> The ECA is a Nigerian government account used to save oil revenues in excess of the annual budgeted benchmark price.

facilitate the resuscitation of domestic industries and improve employment generation”. The official naira-dollar exchange rate was depreciated by 21 per cent from 162.8 naira per US\$ to 197 naira per US\$, while parallel rates rose to up to 360 per US\$. The ripple effect saw consumer prices surge to a six-year high of 13.7 per cent in April of 2016, reaching the highest level since August of 2010.

### 3. Diversification Efforts by the Country

50 years after, Nigeria is yet to learn from past oil price booms and busts to disentangle its heavy dependence on oil earnings. The scale of the current fiscal crisis explicates the country’s poor resilience to external shocks. While countries such as Norway and Saudi Arabia strengthened their sovereign wealth fund (SWF) assets to US\$847.6 billion and US\$758.4 billion respectively, Nigeria’s Sovereign Investment Authority was only US\$1.4 billion as at April 2016 according to the Sovereign Wealth Fund Institute, growing only marginally from its US\$1 billion seed funding. Although the rapidly changing dynamics and volatility of the oil market has underscored the need to build fiscal savings, the country’s performance has remained poor and at odds with the global growth in oil and gas-related SWFs which grew (% of total) from 55.2 per cent in 2010 to 56.6 per cent in April 2016.

The country’s unbalanced economic history underscores the need for the country to diversify its economy away from a primary economy to an industrial one. Growth in the manufacturing industry has been particularly poor. Manufacturing value added (% of GDP) grew from 5.5 per cent in 1990 to 9.8 per cent in 2014 compared with the services sector which grew strongly from 31.5 per cent to 55.5 per cent within the same period. In fact, the services sector has been the major driver of Nigeria’s GDP in the last decade, especially since the rebasing of its GDP which revealed previously undocumented activities such as the mobile telephone market, music and the popular local film industry, Nollywood, which was worth US\$5.1 billion, or 1.2 per cent of GDP.

The economy is transforming, but not in ways that were expected. It is largely bypassing industrialization as a major driver of growth and jobs, and the extent of reallocation of labor to high-productivity, non-traditional activities has been limited. Like several countries in Latin America and Sub-Saharan Africa, Nigeria is witnessing what Rodrik (2015) described as premature deindustrialization and the atypical transformation from agriculture to low productivity services (Table 1 and 2), the so-called “tertiarization” that has failed to deliver quality jobs.

**Trade composition and patterns:** In 2014, fuel exports dominated the composition of merchandise exports and accounted for 94 per cent (US\$91 billion) of export earnings, as high as it was since the 70s oil boom. While primary products accounted for most exports, manufactured goods contributed only 0.9 per cent of merchandise exports, according to UNCTAD statistics. The country’s manufactures have primarily been based on labour-intensive and resource-intensive manufactures, although this improved from 59.1 per cent in 1995 to 40.9 per cent in 2014 (Table 3). The country has not yet been able to transform into an innovation-based high-skilled ‘knowledge’ economy, and its trade composition and pattern has remained predominantly on primary commodities, with very little role played in the global value chain.

**Table 3: Degree of manufacturing good exports (%), 1995-2014**

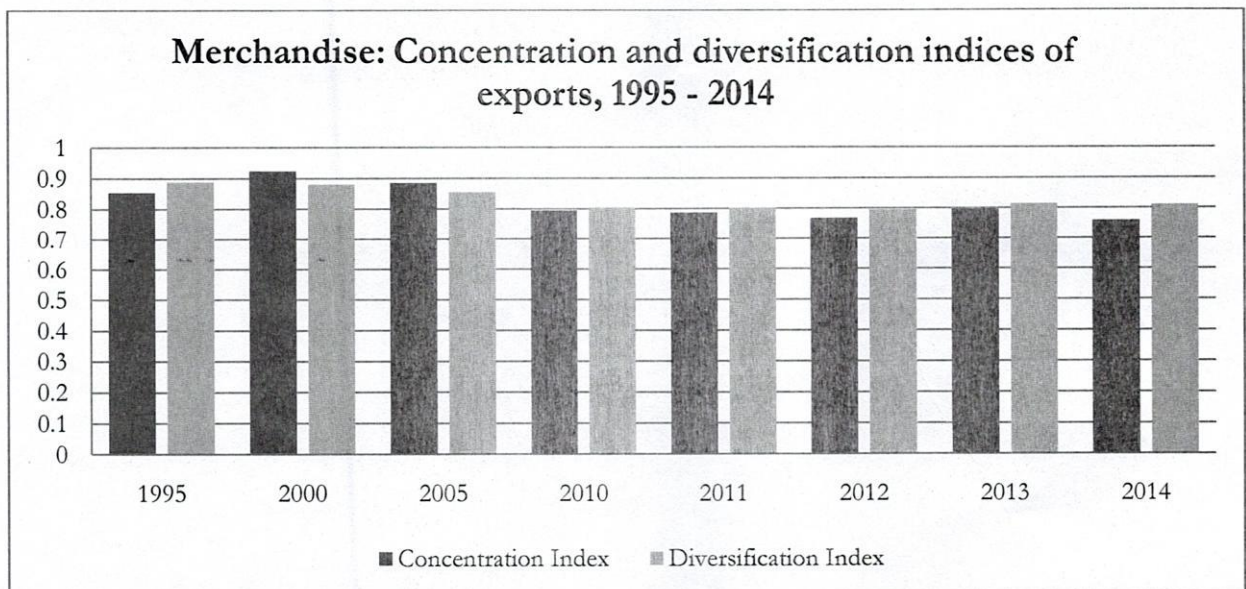
	1995	2000	2005	2010	2011	2012	2013	2014
Labour-intensive and resource-intensive manufactures	59.1	59.2	42.3	49.0	34.6	46.7	43.3	40.9
Low-skill and technology-intensive manufactures	3.8	9.5	29.0	28.3	34.2	28.7	18.1	26.0
Medium-skill and technology-intensive manufactures	11.6	13.5	15.6	10.8	9.0	8.3	14.5	11.7
High-skill and technology-intensive manufactures	25.6	17.8	13.1	11.9	22.3	16.3	24.1	21.4

*Data Source: UNCTAD STATS (2016)*

**Export concentration and diversification:** Trends in export concentration and diversification declined marginally over the last decades, from 0.85 and 0.88 in 1995 to 0.76 and 0.81 in 2014 respectively. The high levels of both indices indicate high vulnerability to external shocks from the international market. Nigeria remains heavily dependent on a single commodity and few trading partners, showing very low level of diversification in trade structure. Kick-starting this transformation in export structure will be critical in catching up with major industrial power-houses such as China, Korea, India, Brazil, Malaysia, Vietnam, Indonesia and Mexico, which were previously primary-based economies.

In 2016, the government made diversification its major economic thrust by prioritising manufacturing and mining, agriculture value chain, and an upgrade of physical and social infrastructure. However, this requires stabilizing its capital spending that has historically been more volatile than oil prices. Between 1981 and 2014, government capital expenditure recorded a volatility of 16.9 per cent, compared with 11.4 per cent for oil prices.

**Figure 7: Trend in Export Concentration and Diversification**



*Data Source: UNCTAD STATS (2016)*

#### 4. Policy Responses to, and Impact of current decline in commodity prices

In recent times, Nigeria has taken steps to cut its cost of governance by eliminating ghost workers, and establishing efficiency units across its ministries, departments and agencies. These reforms have already saved the country at least US\$390 million, which will better be allocated to finance the huge infrastructure deficit. The government has also taken tougher measures such as adopting a Treasury Single Account across all government organs and ending subsidy payments – a palliative which depleted the country's already weak reserves. According to Nigeria's ministry of finance, subsidies on premium motor spirit (PMS) accounted for payments up to US\$13.6 billion in 2011. To strengthen its spending on infrastructure provision, the 2016 budget, which was based on a lower oil benchmark price of US\$38pb in 2016 compared with US\$53pb in 2015, was nonetheless increased by 35 per cent from US\$25 billion in 2015 to US\$30 billion in 2016, based on a fiscal deficit of 2.14 per cent of GDP.

Contrary to other positive reform outcomes however, the government's decision to cut funding to an amnesty programme for militants in the Niger Delta however saw increased attacks on the country's oil installations and pipelines; pushing oil production to a 20-year low of 1.7 million bpd. The economy is also still grappling with the underlying impact of the low oil economy. In December 2015, the federal government was obliged to address salary arrears of States and local governments through a partial bailout and restructuring of commercial bank loans to the tune of N575.52 billion (US\$2.9 billion), approximately 0.6 per cent of GDP. The negative growth rate of -0.36 per cent recorded in the first quarter of 2016 was amidst foreign exchange shortages, fuel shortages, and security challenges which slowed productivity and output in the private sector, and worsened the rate unemployment to 29 per cent<sup>5</sup>.

Foreign exchange reserves also declined significantly to US\$27 billion in April 2016 compared with US\$31.5 billion in July 2015, despite restrictions in foreign exchange. According to the International Air Transport Association (IATA), foreign airlines in Nigeria had in excess US\$565 million in March 2016, stocked with the Central Bank of Nigeria (CBN) as a result of foreign exchange scarcity. The Excess Crude Account fell to a low of US\$2.3 billion in April 2016 (from \$11 billion in 2012) while the impact in the external sector push exports and imports downwards by 41 per cent and 22 per cent respectively in 2015, and the current account from a surplus of 0.2 percent of GDP to a deficit of -2.4 per cent of GDP in 2015.

#### 5. Conclusions and proposed remedial actions

##### 5.1 Conclusions

The spuriousness of Nigeria's growth in the last decades offers exceptional discordance with the development narrative which associates high economic growth with empowerment and

*had fallen*  
*pushed*  
*US\$ 575*  
*The effect on Nigeria's aviation industry is likely to decrease towards airports from airports as a consequence of the reduced cost of doing business in the US*

<sup>5</sup> Unemployment rate is based on the old NBS methodology of people working less than 40 hours per week.

inclusiveness. Oil has historically modeled the country's economic growth structure especially since its first windfall in the 1970s. Despite its size, demographics and wealth, the country is facing serious challenges in fostering an inclusive growth that will provide quality jobs and reduce poverty. Oil, its major trading commodity has been responsible for changes in monetary policies and fiscal management, as well as far-reaching labor market adjustments. Price shocks have been fundamentally linked to the challenges in its external accounts, expenditures and debt profile; and nearly 50 years after, the country is witnessing another oil bust which has seen it slide to its first negative growth of -0.36 per cent in over a decade and a half. The abrupt impact has revealed a spurious economic growth that is largely driven by low-productive tertiary activities.

## **5.2 Proposed remedial actions**

With fiscal and external accounts accompanying oil price shocks, oil is undoubtedly Nigeria's riskiest export commodity. This study underpins the challenging but compelling need to address a number of fundamental challenges that will significantly improve the country's resilience to oil price shocks, including the following:

### **Changing the nature of public governance**

Previous attempts to provide a platform for the sustained diversification of the economy and bypass the overreliance on oil earnings has been hampered by the underperformance of public institutions and weak fiscal discipline of previous governments. Streamlining government expenditure is key to ensure the efficiency of public service delivery to foster fiscal adjustment. The new reality of low oil prices and low oil revenues means that the nature of government needs to fundamentally change to strengthen policy administration, address corruption and oil theft.

### **Addressing the infrastructure deficit**

Like most of Sub-Saharan Africa, Nigeria is experiencing a huge infrastructure deficit, especially with a large segment of the country's population living in conditions of energy poverty. The lack of adequate access to physical and infrastructure such as roads, railways, ports and logistics is a major impediment to trade, investment and labour mobility, and it has continued to impose large transaction costs on business and reduce competitiveness (Jerome and Nabena, 2016). Experiences from newly industrialized nations have shown that addressing this problem requires stabilizing the very volatile capital spending, improving the quality and quantity of expenditure, leveraging on private capital and adopting a regional development approach which can deliver economies of scale.

### **Promoting non-oil revenue mobilization**

The realities of oil price volatilities mean non-oil revenue mobilization needs to improve significantly. Estimated at an 7.8 per cent non-oil revenue (% of GDP) according to IMF data, Nigeria faces revenue shortages to meet expenditure priorities and would require improvement in revenue administration; a broadening in its tax base; blocking leakages through technologies;

enforcing compliance across all tax types including value added tax (VAT), company income tax (CIT), and customs and excise duties (CED) and taxpayers categories; and reviewing existing tax incentives. The wide use of exemptions and waivers has also been attributed to the low non-oil revenue. According to the Budget Office (2012), waivers/exemptions granted in 2012 were valued at N54.5 billion (US\$276.8 million). Additionally, Crivelli and Gupta (2014) have shown based on an analysis of 35 resource-rich countries (including Nigeria) for the period 1992-2009, that for each additional percentage point of GDP in resource revenues, a reduction in domestic (non resource) revenues of about 0.3 percentage points of GDP can be achieved through reduced effort on taxes on goods and services (specifically VAT) followed by a smaller negative impact on corporate income and trade taxes.

### Developing a vibrant manufacturing sector

Since the late 18th century, the manufacturing sector has been the main engine of growth and catch up; and successful cases of catch up were invariably countries which were also successful in industrialization such as China, Malaysia and Thailand (Szirmai, 2009). These countries which became workshops of the global economy successfully grew their manufacturing sectors to contribute around 30 per cent – 40 per cent of their GDP, unlike Nigeria's manufacturing which contributes less than 10 per cent according to World Bank statistics. Nigeria has bypassed manufacturing into a largely services sector, with the consequences of a non inclusive and jobless growth. Addressing this problem and the high diversification and concentration indices requires value addition and economic transformation into high-skill and technology-intensive manufactures.

*This ~~sector~~ development enlarges throughout the economy (Aigbovbe, Shonubi and Wakenhorst 2009). The <sup>country's</sup> oil industry also requires for effective strategy that will focus on activities with the highest value addition including upstream activities such as research and development of manufacturing of key components; and downstream refining, marketing and distribution of products derived from crude oil and natural gas.*

## References:

- Ajakaiye, Olu, Afeikhena T. Jerome, David Nabena, and Olufunke A Alaba. (2015). 'Understanding the Relationship between Growth and Employment in Nigeria'. 2015/124. Helsinki: UNU-WIDER. Available at: <https://www.wider.unu.edu/sites/default/files/wp2015-124.pdf>; Accessed on May 20, 2016
- Arezki, R., & Brückner, M. (2011). Oil rents, corruption, and state stability: Evidence from panel data regressions. *European Economic Review*, 55(7), 955-963.
- Baffes, J., Kose, M. A., Ohnsorge, F., & Stocker, M. (2015). The great plunge in oil prices: Causes, consequences, and policy responses. *Consequences, and Policy Responses* (June 2015).
- Budget Office (2012) Waivers Granted in 2012. Available at [http://www.budgetoffice.gov.ng/pdfs/2012%20Waivers%20Granted\\_new.pdf](http://www.budgetoffice.gov.ng/pdfs/2012%20Waivers%20Granted_new.pdf)
- Budina, N., Pang, G., & van Wijnbergen, S. (2007). Nigeria's growth record: Dutch disease or debt overhang?.
- Central Bank of Nigeria (2012) Understanding Monetary Policy Series No 18. The Sovereign Wealth Fund
- Crivelli, E., & Gupta, S. (2014). Resource blessing, revenue curse? Domestic revenue effort in resource-rich countries. *European Journal of Political Economy*, 35, 88-101.
- Dijkstra, A. G., & Nederland, D. V. O. (2011). Mutual interests-mutual benefits: evaluation of the 2005 debt relief agreement between the Paris Club and Nigeria; main report. Ministry of Foreign Affairs of the Kingdom of the Netherlands.
- DMO (n.d.) Nigeria's External and Domestic Debt. Retrieved from <http://www.dmo.gov.ng/ardrnigeriaexternalanddomesticdebt.php>
- IMF (2016) Nigeria : 2016 Article IV Consultation- Press Release; Staff Report; and Statement by the Executive Director for Nigeria Series: Country Report No. 16/101
- Jerome, A., & Nabena, D. (2016). Infrastructure and Regional Integration in Africa. In *Region-Building in Africa* (pp. 89-108). Palgrave Macmillan US.
- Kadafa, A. A. (2012). Environmental impacts of oil exploration and exploitation in the Niger Delta of Nigeria. *Global Journal of Science Frontier Research Environment & Earth Sciences*, 12(3), 19-28.
- Kormawa, Patrick and Jerome, Afeikhena. (2015). Renewing industrialization strategies in Africa. In *Beyond a Middle Income Africa: Transforming African Economies for Sustained Growth with*



Rising Employment and Incomes. Chapter 7. (Eds) Badiane, Ousmane and Makombe, Tsitsi. ReSAKSS Annual trends and outlook report 2014. Washington, D.C.: International Food Policy Research Institute (IFPRI). <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/130008>

Nelson, N. (2015). National Energy Policy and Gas Flaring In Nigeria. *Journal of Environment and Earth Science (online)* Vol, 15.

Nenibarini, Z. (2004). Impacts of Extractive Industries on the Biodiversity of the Niger Delta. National Workshop on Coastal and Marine Biodiversity Management.

Nigeria Bureau of Statistics (2016) Unemployment/Underemployment Report Q4 2015 Available at: <http://www.nigerianstat.gov.ng/download/375>; Accessed on May 20, 2016.

NNPC (n.d.). History of the Nigerian Petroleum Industry. Retrieved from <http://www.nnpcgroup.com/NNPCBusiness/BusinessInformation/OilGasInNigeria/IndustryHistory.aspx>

Obot, E., Antonio, Q. B., Braide, S., Dore, M., Wicks, C., & Steiner, R. (2006). Niger Delta Natural Resource Damage Assessment and Restoration Project. Report submitted to the Federal Ministry of Environment, Abuja and Nigeria Conservation Foundation, Lagos.

Okonjo-Iweala, N. (2008). Point of View: Nigeria's Shot at Redemption. *IMF Economic Review*.

Okonjo-Iweala, N., & Osafo-Kwaako, P. (2007). Nigeria's economic reforms: Progress and challenges. *Brookings Global Economy and Development Working Paper*, (6).

Onwuteaka, J. (2016) Hydrocarbon Oil Spill Cleanup and Remediation in the Niger Delta. *forest*, 3, 2.

Rodrik, D. 2015. Premature Deindustrialisation in the Developing World. CEPR Policy Portal. London: Centre for Economic Policy Research. <http://www.voxeu.org/article/premature-deindustrialiationdeveloping-world>.

Sanusi L.S (2012) Nigeria faces big oil price risk: central bank chief. Retrieved from: <http://www.reuters.com/article/us-nigeria-cenbank-idUSBRE83E0IL20120416>

Szirmai, A. (2009). Is Manufacturing Still the Main Engine of Growth in Developing Countries?. *WIDER Angle newsletter*, United Nations University, World Institute for Development Economics Research.

World Bank. (2004) A voluntary standard for global gas flaring and venting reduction. *Global gas flaring reduction - a public-private partnership ; no. 4*. Washington, DC: World Bank. Available at: <http://documents.worldbank.org/curated/en/2004/05/4946640/voluntary-standard-global-gas-flaring-venting-reduction>