

## Nigeria Strategy Report – H1 2017 Excerpts

### Key Developments in Domestic Economic and Policy Environment

#### Economic Snapshot

December 2016 Inflation Data/Indices			
	MoM	YoY	Prev YoY
<b>Headline</b>	1.09%	18.55%	18.5%
<b>Food</b>	1.34%	17.40%	17.2%
<b>All Items Less Farm</b>	0.63%	18.05%	18.2%
<b>Imported food</b>	0.99%	21.08%	21.2%
<b>Energy</b>	0.71%	31.33%	31.4%
Currency Markets			
	Latest	Daily Chg	YTD
<b>USDNGN</b>	305.0	0.0%	0.0%
<b>EURNGN</b>	334.1	0.03%	-0.75%
<b>GBPNGN</b>	381.9	-0.03%	2.38%
<b>JPYNGN</b>	277.0	-0.36%	-2.97%
Monetary Aggregates – October 2016			
	(₦bn)	MoM	YoY
<b>M2</b>	22,276	0.7%	22.4%
<b>CPS</b>	23,070	1.9%	20.9%
<b>NCG</b>	3,705	1.2%	63.8%
<b>NFA</b>	7,742	-1.7%	64.7%
<b>NDC</b>	26,775	1.8%	25.4%
External Position			
	Latest	QoQ	YoY
<b>Trade Balance (\$'mn)</b>	-214	84.8%	-86.1%
<b>External Reserves (\$'mn)</b>	26,876	12.1%	-4.7%
<b>Foreign Debt (\$'mn)</b>	10,718	0.9%	10.4%
Growth Data – Q3 2016			
	(₦bn)	%of total	YoY
<b>Real GDP</b>	17,574	100%	-2.2%
<b>Agriculture</b>	5,035	28.7%	4.5%
<b>Oil</b>	1,439	8.2%	-22.0%
<b>Services</b>	5,950	33.9%	-1.1%
<b>Wholesale and Trade</b>	2,880	16.4%	-1.4%
<b>Manufacturing</b>	1,700	9.7%	-4.3%

#### ENERGY SECTOR REFORMS: AN UNBALANCED SCORE CARD

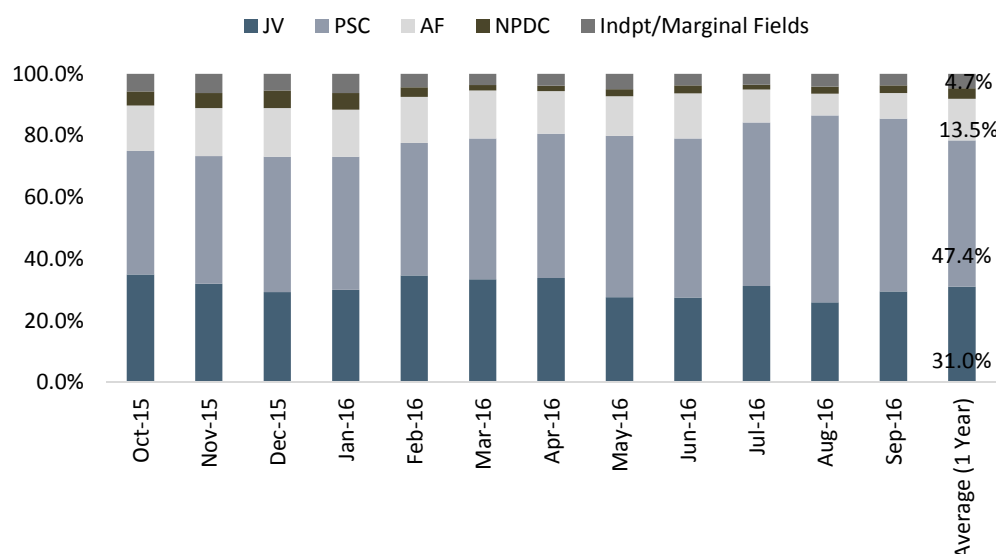
##### *Optimism trails the Upstream Sector as NNPC exits Cash Calls Agreement*

In a bid to lessen the impact of the drastic fall of crude oil prices, which has made it challenging for the FG to concurrently meet its cash call<sup>1</sup> obligations on its Joint Venture (JV) agreements and its budgetary commitments, the NNPC announced exit from the arrangement. The announcement marks a watershed in financing operations on JV operated fields which accounted for 31% of Nigeria's total production.

Historically, funding JV cash calls has been problematic as they require budgetary allocations which leave payment subjects to the vagaries of legislative-executive politics, including delays and inadequate funding. Specifically, due to chronic underfunding over the last four years, NNPC estimates put FG's cash call debt at \$6.8 billion with underfunding in 2016 alone amounting to \$2.5 billion. Given NNPC's majority stakes in JV operations (55-60%), cash call challenges have stalled ongoing projects as it reduced incentives for IOCs to expand production.

<sup>1</sup> Cash calls are requests for payment for anticipated future capital and operating expenditures, sent by joint venture operators to non-operating partners, in this case, the IOCs to the FG

**Figure 1: Breakdown of Nigerian Crude oil Production by Commercial Agreement**

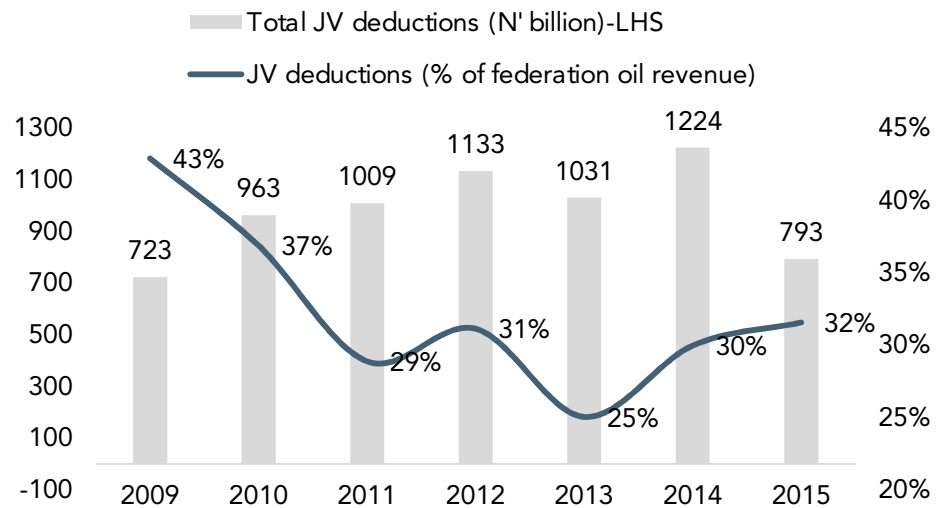


Source: NNPC, ARM Research

Unsurprisingly, underfunding of JV operations combined with militant attacks largely account for the ~20% decline in oil production from JV assets to 800kbpd—which has resulted in a wave of divestment of onshore assets by the IOCs. The concern heightened in 2016 as competing national and fiscal demands drove a 40% cutback in budgetary provision to fund JV operations<sup>2</sup>. On the fiscal front, the JV cash call has impacted government revenue with fiscal pressures across all levels of government. For the sake of context, based on the latest NNPC monthly financial report, total export crude Oil & Gas receipt for the period of November 2015 to October 2016 stood at \$2.66 billion, out of which the sum of \$2.59 billion was transferred to JV cash call and the balance of \$730 million paid to the Federation account during the period. Overall, with average JV cash call requirement of about \$600 million monthly alongside cash call arrears of \$6.8 billion, managing the JV funding posit an important challenge for the NNPC.

2. NNPC has informed its JV partners that this year's Capex will be cut by 40% from the initial proposed budget of \$13.5 billion. The \$13.5 billion has been the level that has been maintained in the past three years but because of the drastic decline in oil prices, that level cannot be sustained this year.

**Figure 2: JV deductions**



Source: Budget Office, ARM Research

To put an end to this quagmire, the NNPC and the Ministry of Petroleum Resources put forward an alternative funding mechanism which allows the JV finance itself by retaining its operating cost and capital allowances. According to the Minister of State for Petroleum Resources, under the new funding stream, the JVs would become incorporated and source for their own financing, freeing-up the FG from the budgetary obligations of coming up with the cash calls.

The modalities of the new model were tested in September 2015 under the NNPC/Chevron Nigeria Limited Joint Venture, which is owned on a 60-40 basis that raised \$1.2 billion alternative funding arrangement secured by the NNPC. From our understanding, the financing was structured in a way that the lenders have no recourse to the JV assets, as the loan is secured from forward sale of incremental volumes—a Modified Carry Arrangement (MCA). The MCA is a financing agreement whereby the IOC will advance a loan to NNPC for investing in upstream projects with an understanding that the IOC will be reimbursed through a combination of after-tax Internal Rate of Return (IRR) and incremental oil production derived from the JV operations.

Furthermore, as part of discussions with the IOCs, the NNPC was able to reduce the \$6.8 billion cash call debt to \$5.1 billion, resulting in \$1.7 billion savings for the

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government. Under terms of the deal, the IOCs agreed to receive accumulated arrears of \$5.1 billion, payable over a period of five years' interest free and in the form of incremental barrels generated by the oil companies above 2.2mbpd. Thus, assuming peace holds in the Niger Delta, the cost recovery option implies that IOCs no longer have to wait on a partner unable to fund its capital commitments on oil fields which should result in greater incentive to raise oil production on JV fields.

Expectedly, the Ministry of Petroleum Resources has been sanguine post deal announcement with the Ministry estimating that the immediate effect of the new cash call policy would boost net FGN Revenue per annum by about \$2 billion while raising output to 3mbpd. Longer term, NNPC projects that net payments to the Federation Account should double from about \$7 billion to over \$14 billion by 2020.

Given the sizable strain on fiscal budgets, the removal of JV operations, which have accounted for on average 32% of 'crude oil revenue to the federation' over the last six years, is the key driver of higher oil revenues in the 2017 budget (+142% YoY to N1.9 trillion). Whilst details about the deal are still developing, we think optimism of the NNPC's \$2 billion estimates are hinged on crude production assumption of 2.2mbpd. Given that these JV operations remain within reach of militant attacks, as opposed to the deep offshore platforms under PSC arrangements, we express reservations over the oil production estimates (2.2mbpd). That said, the JV deal aligns FG thinking towards working out peace agreements with the militants, which likely informed the increase in amnesty allocations in the 2017 budget to N65 billion (2016: N20 billion) and adoption of more conciliatory posture towards the region vs the belligerent approach at the start of 2016. This point, and greater IOC focus on boosting production, to our minds is the key positive from the reforms to the JV arrangement.

### *Power sector companies under stress from the tough operating environment*

In H2 2016, though power generation improved from the end of June (3031MW) rising to 4208MW in December, per TCN data the sector continued to face a myriad of structural and financing problems—majorly coping with the fall-out of NGN

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depreciation, paucity of the dollars, disruptions in gas supply for thermal plants and high levels of unpaid electricity bills.

First, post implementation of Multi Year Tariff Order (MYTO) in December 2015, which saw electricity prices increased by an average of 45% in February 2016, labour unions sought and obtained a Federal High Court ruling which not only nullified the tariff increase by the NERC in July 2016, declared the hike illegal and ordered a reversion to original prices. However, NERC has insisted it would retain its planned increase in electricity tariff and would file an appeal against the court ruling. Thus, delays in the administration of justice could see uncertainty around the electricity pricing—linger well into 2017. In the interim, the electricity pricing regime is set to get even more uncertain in the coming months following significant spike in other variables in the pricing model—inflation and exchange rate, which implies that despite higher cost, DisCos are still expected to sell at the MYTO price because it has not been reviewed, thus creating the stated liquidity shortfall. Incorporating these changes suggest that the Discos should, in no time, request further upward review of the electricity tariff. To add, citing the impact of lingering dollar scarcity and continued depreciation on cost of operations, DisCos estimated that they incur a loss of N10 per kWh of electricity supplied to customers.

Higher up the electricity power chain, pipeline vandalization on gas pipelines, given its share of gas in national energy production (~80%) has made it more difficult for the GenCos to meet the capacity of the existing power plants and to fulfil obligations to supply power under the various power purchase agreements. The challenge of passable funding for the GenCos can be exemplified with the issues facing the Nigerian Bulk Electricity Trading Plc (NBET)—NBET has recently entered about 14 Power Purchase Agreements (PPAs) with independent power producers for solar power supply—NBET is indeed over-stretched, as evidenced by the huge debt portfolio it has with the GenCos. Accordingly, the Distribution companies (DisCos) and Generation Companies (GenCos) put the liquidity challenges in the power sector at N809 billion in December 2016 because the expected generation capacity was not met, and the dollar shortage affected the supply of gas to power plants—DisCos now pay less than 40% of their energy invoice due to illiquidity crises which has further stalled meter investment. (2015: 65%).

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Besides the foreign exchange impact on operations on power companies, particularly gas prices, currency concerns relating to debt repayment and expansion in loans books have stifled profitability of power firms—largely due to currency mismatch and associated risks—from NGN denominated revenues to service a dollar-denominated loan facility. Total power sector loans following the sale of assets in 2013 stood at N219.7 billion (DisCos) and N287 billion (GenCos). However, the ~ 80% devaluation of the NGN from 2013 till date majorly expanded the loan books by about one-fold—implying significant FX losses on financials. To add, the increased cost of sourcing the dollars as well as dollar scarcity has made debt repayments harder, thereby impacting on investment. Furthermore, the sector has had to grapple with the rising debt profile of Ministries, Department, and Agencies (MDAs) which NERC estimated at N79 billion as at the end of Q3 16.

***How will the FG step in? A return to the subsidy devil or jump into the debt sea?***

Based on the foregoing, the challenges facing the power sector relates to a weakened commercial structure alongside viability and fundability - Grid energy insufficiency and instability, Network infrastructure challenges; Tariff challenges and revenue shortfalls; Metering challenges; Operational challenges; and Funding challenges. The DisCos and GenCos are cash strapped and laden with huge debts—DisCos remittances to NBET for energy has fallen from an average of 65% in 2015 to ~35% over 2016, while monthly revenue shortfalls have increased from 2015 average of N9 billion to N25 billion in 2016. The revenue shortfall of the DisCos has triggered systemic risk in the sector since the GenCos, who rely on the Discos for revenue, have largely been stifled. That said, the core drag at the bottom of these challenges relates to revenue and funding strain—despite the steps taken to improve operations of the GenCos and DisCos as well as the TCN—failure to address the huge debt profile, foreign exchange burden, revenue shortfall and working capital of companies, expectations of momentous advance by firms will be a head in the clouds. Firms who were already facing difficulties in servicing the over N700 billion loans which they collectively took to purchase the plants when they were privatised in 2013, thus leading to cash liquidity crisis that had reduced their ability to pay for gas supplies

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and in whole threatening to completely undermine the electricity value chain and ability to continue to serve customers.

Given public resistance to upward tariff adjustments to meet revenue shortfalls, the power companies have clamored for FG intervention which would come in form of subsidy. Indeed, based on the current power sector model (2005), revenue shortfalls—were anticipated and modelled as high ATC&C losses embedded in the entire value chain—were to be funded by the FG through monthly subsidies. Precisely, the proposed rulemaking on transitional trading arrangement and financial settlement system published by NERC in July 2008 states that “...Given the revenue inadequacy which will now be funded by the subsidy in the first three years of the MYTO, the shortfall between the obligated payment and actual revenues collected, will be met by the Government monthly.” That said, ongoing fiscal revenue challenges and burdens associated with funding subsidies, we think the FG is more likely not favourably disposed to the DisCos request.

Another alternative embedded in the power sector reforms is via the bulk trader NBET, which was established to act as a credible and credit worthy off-taker of power and seller of power to DISCOs and to generate market confidence through well negotiated and well aligned contracts with fair risk allocation that protects market participants from credit risks and systemic risks. In the event of revenue shortfalls from DisCos, the Bulk Trader was expected to use its capitalisation to bridge the revenue shortfall and ensure GenCos and other market participants are paid in full for power generated. That said, NBET has been deficient in meeting its obligations due to under-capitalisation. Towards this end, NBET sought to issue a N300 billion Medium-term note (MTN)—with an embedded risk guarantee from the FG—to enhance its capitalisation but was rebuffed by parliament in April 2016. The NBET notes were to be backed by the FG, and repaid through a direct credit agreement between NBET and the DisCos, wherein the shortfall amounts by DisCos are converted to term loan obligations to DisCos and amortised against DisCos cash flows for the life of the NBET Notes.

In our view, while this would have been a step in the right direction, the planned amount of N300 billion is inadequate to address revenue gaps and provide market

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confidence on NBET's ability to stabilise the power sector—current revenue shortfall of N809 billion is about three-folds the planned bond size and this insufficient to address the backlog. We think to be adequate, NBET would need a debt program in excess of N900 billion to present revenue shortfalls, for a start, to boost confidence. Bringing it altogether, though the size of the planned NBET bond tempers our optimism as a fix to power sector challenges, the politics regarding the issuance with the legislative arm putting it on hold negates this scenario as a possible fix for the power sector.

A third alternative currently gaining grounds is a proposed Electricity Sector Recovery Plan in partnership with the World Bank—though details are still unknown—aims to restore investors' confidence, attract public and private investment in generation, transmission, and distribution for enhanced service quality, protect sector revenues with improved metering and collection. Taking a cue from the World Bank's \$112 million partial risk guarantee (PRG) to Seven Energy for the supply of natural gas to the 560MW Nigerian Integrated Power Project (NIPP)<sup>3</sup>, we think some sort of intervention from cost standpoint is likely to play out in coming months. From the cost angle, the PRG framework or creating a bulk trading entity for the gas sector are the likely scenarios we expect to play out—having an adequately capitalized bulk gas trading company that buys gas from gas producers and sells it to IPP off takers, could be a short to medium term solution to the revenue shortfall. Of the various alternatives, we think in the near term, the FG is more likely to work out an arrangement to clear the rising debt owed by the MDAs as well as work out on intervention to offset the revenue shortfall and dollar-debt which is also a concern in the Nigerian Financial sector.

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<sup>3</sup> The World Bank PRG will secure the supply of up to 130mmscf/d natural gas to NIPP Calabar and enable the consistent generation of an additional 560 MW of electricity to the national grid, about 20% of current power generation in Nigeria—the World Bank PRG, which is backed by the FG, guarantees payments to Seven Energy's wholly-owned subsidiary, Accugas.



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