

Macroeconomic Outlook Update for 2020: COVID-19, Global Oil Price and the Nigerian Economy

NESG RESEARCH

Abstract

The global economy started the year 2020 with hopes of gradually reducing trade tensions reflected by a partial trade deal reached by the United States and China. The IMF earlier projected that global GDP would expand by 3.3% in its World Economic Outlook for 2020 released in January. Meanwhile, the world was caught unawares by the sudden outbreak of COVID-19 in Wuhan City of China and its rapid spread to the rest of the world. Against the huge economic damage brought about by the viral infection, the IMF's revised growth forecasts showed that the global economy would contract sharply by -4.4% in 2020. The Fund also downgraded its growth projections for major advanced economies and emerging markets to negative territory. Consequently, the Nigerian economy was hardly hit by the twin crisis of health shocks and pandemic-induced decline in crude oil prices. The IMF expects the economy to contract by -4.3% in 2020. In this article, we present a review of the global economy as well as the Nigerian economy in the wake of COVID-19 pandemic. Specifically, we revised our growth projections for the Nigerian economy in 2020. In our worst scenario, we estimated that the economy will contract by -7.3% in 2020.

Introduction- Review of the Global Economy

The outbreak of COVID-19 in China dampened its economic outlook for the year 2020. Efforts to contain the spread of the virus has led to widespread movement restrictions and shutdown of industrial activities. The effect is evident in China's Manufacturing Purchasing Managers' Index (PMI), which slipped into negative territory at 35.7 points in February 2020. This implies the growth figure that will emanate from China will significantly contract and therefore affect the global economy. The regimented movement of humans due to fear of contagion and the inability to secure vaccine continue to dampen economic activities. For the first time since 1992, the economy of China recorded negative growth in Q1'2020 at -6.8% down from 6.4%

in the corresponding period of 2019 and 6% the previous quarter (Q4'2019). However, China is no longer the main concern regarding COVID-19. In the last few months, the United States (US) and some countries in Europe have recorded a higher number of confirmed cases and deaths. Most of these countries have implemented movement restrictions, lockdowns, among other measures, to contain the spread of the virus. These measures will hurt global economic growth in 2020. Advanced economies led by the United States will be largely responsible for the significant decline in global Gross Domestic Product (GDP) in 2020 as a result of the COVID-19 pandemic. The International Monetary Fund (IMF) projected global GDP to decline by 4.9%,

with countries such as the United States, Germany, United Kingdom and Italy recording significant output decline of 8%, 7.8%, 10.2% and 12.8%, respectively in 2020. In Q1'2020, the US has posted a GDP contraction of -4.8 percent relative to 3.1% in the same period last year and 2.1% in Q4'2019. Likewise, the European Union (EU) has reported slightly lower contraction of -2.7%, compared with economic expansions at 1.7% and 1.3% in Q1'2019 and Q4'2019 respectively.

Meanwhile, emerging markets continue to feel the heat of the global pandemic. The economies of emerging markets and developing countries expanded by 3.7% in 2019, much higher than the global growth of 2.9%. Growth was largely driven by China and India, which recorded significant expansions at 6.1% and 4.2%, respectively, in 2019. With the outbreak of the virus, economic activities in emerging and developing countries have been subdued due to lockdowns, movement restrictions, lower foreign investment inflows and declining commodity prices, for those that rely on commodities exports. Subsequently, the IMF downgraded growth outlook for emerging and developing countries to -3% in 2020, from an earlier projection of -2%. Countries such as Nigeria, South Africa, Brazil, Mexico and Russia are projected to record negative growth rates in the year 2020. The manifestation of the impact of the pandemic is evident in the commodity market. Being the second largest economy and consumer in the world, an economic slowdown in China means a significant

decline in the demand for commodities. Particularly, the oil market has been badly hit. WTI and Brent oil prices plummeted by 35.8% and 37% to US\$40.8 and US\$41.2 per barrel, respectively on June 30, 2020, from their levels in the beginning of the year.

Nigerian Economy in Challenging Times

The economy is expected to contract in 2020

The outbreak of the coronavirus pandemic with its attendant restriction on economic activities and severe impact on the oil market is set to reverse Nigeria's growth of 2.3% achieved in 2019. Already in the first quarter of 2020, the effect of the pandemic and the slump in crude oil price is evident on Nigeria's Purchasing Managers' Index (PMI), which tracks the performance of the business aspect of the economy. The Manufacturing PMI fell further to 41.1 points in June 2020, after slipping into the negative region in the previous month from an expansion of 51.1 points in March 2020. On the other hand, the non-manufacturing sector contracted as its PMI slid to 35.7 points in June 2020 from 49.2 points recorded in March 2020. This suggests a weaker growth in the second quarter of 2020. As expected, the Nigeria economy contracted sharply by 6.1% in the second quarter of 2020 relative to the reported economic expansion of 1.9% in the first quarter of 2020. The lockdown of several states and the Federal Capital Territory (FCT) in the second quarter of the year will have an immense negative impact on GDP growth in the year. The three major GDP components - household consumption, government spending, private investment -

were constrained during the lockdown induced by the spread of coronavirus and are expected to perform poorly in 2020 relative to the previous year. This is based on the high level of uncertainty over the pandemic, as well as, the fragility of the economy exemplified by the poor performance of major macroeconomic indicators. In the NESG macroeconomic outlook report released in January 2020, three scenarios were projected for the Nigerian economy in the full year 2020.

The underlying assumptions include movements in crude oil price, government capital spending and oil production volumes. Our worst-case scenario assumed an average crude oil price at US\$44 per barrel in 2020; average crude oil production of 1.5 million barrels per day and capital spending of N1 trillion in the 2020 budget.

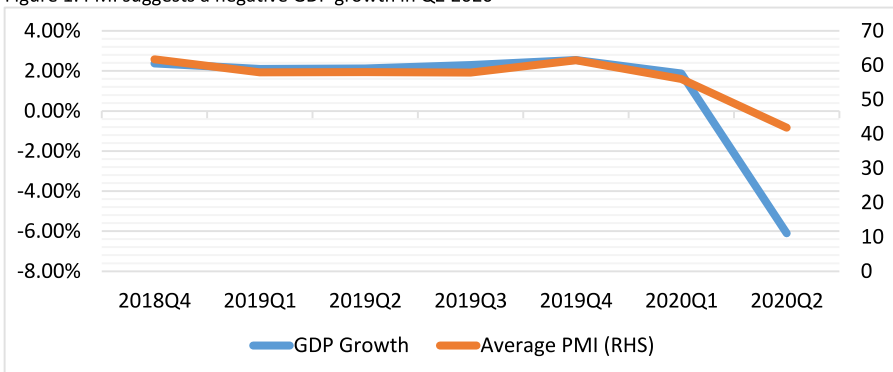
The outcome showed that GDP will decline by 1.9%; Inflation will rise to 15%; Government revenue will decline by 25%;

Exchange rate will reach N400/US\$1 while the unemployment rate and underemployment rate will increase to 52% in 2020. With the COVID-19 outbreak and restrictions of movement and economic activities across certain sectors, the Nigerian economy will be severely affected in 2020. This means that our new worst-case scenario will capture more pessimistic expectations about the movements in crude oil price and output most especially. Several industry estimates have shown that Nigeria's GDP would contract significantly in 2020 (See Table 1).

Major economic sectors will feel the impact of COVID-19

From a sectoral perspective and prior to COVID-19 outbreak, the economy showed signs of fragility as 10 out of the 46 activity sectors contracted in 2019 while about 16 of the 46 sectors recorded growth of less than 2% in the year. Looking at the three broad sectors, Services remained the largest sector accounting for 52.6% of GDP.

Figure 1: PMI suggests a negative GDP growth in Q2'2020



Source: CBN, FSDH & NESG Research

Table 1: Growth Projections for Nigeria in 2020

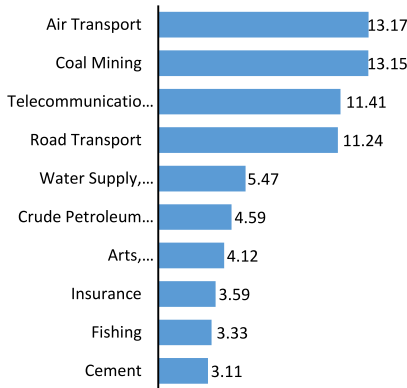
Fitch	-1%
IMF	-5.4%
McKinsey (worst-case scenario)	-8.8%
Dalberg (worst-case scenario)	-27%

The sector was a major contributor to overall economic growth and housed three of the top five fastest growing sectors in the year (See Figure 2). Growth in Agriculture intensifies – the sector grew by 2.4% in 2019, an improvement from 2.1% in the previous year with growth led by aquaculture followed by crop production. Adequate rainfall, which improved vegetation and continued support of the government to farmers improved agricultural output in 2019. Nigeria's huge market, improved oil sector performance, as well as, government's interventions were not enough to trigger significant growth of the industrial sector during the year. Industrial activities expanded by 2.3% with Coal Mining; Water Supply, Sewage, Waste Management and Remediation, and Crude Petroleum and Natural Gas playing major roles in the sector's growth narrative. The manufacturing sector grew marginally by 0.8% in FY'2019 and continued to grapple with the perennial challenges of inconsistent policies, infrastructure deficit, poor electricity supply and lack of policy direction. Considering the impact of COVID-19 on global crude oil price and demand, Nigeria's oil sector will be the first and main culprit as it is expected to display negative growth in the year. Lower oil prices and staggering production are likely to persist

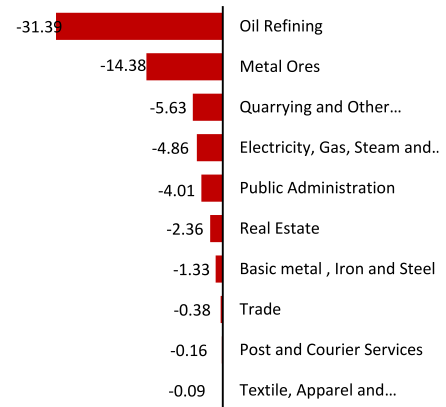
with negative implications on government finances, other economic sectors and overall economic growth. Drawing from previous experiences, contraction in the oil sector often drags overall economic growth. In several instances, the contraction in the oil sector had resulted in an overall economic recession in the early 1980s, 1990s and in 2016. However, there are also a few cases where contraction in the oil sector did not lead to a recession, and this was largely a result of the resilience of the non-oil sector and the adequacy of external reserves. For instance, the oil sector contracted between 2006 and 2008, but growth in the non-oil sector averaged 11% and sustained the economy. Similarly, external reserves stood at US\$50 billion during the period. Unfortunately, non-oil sector growth in 2018 and 2019 averaged 2% showing weak resilience, with external reserves currently at \$36bn. These factors, coupled with the direct impact of lockdown and restrictions of economic activities in some sectors, will result in poor performance of the non-oil sector in 2020.

Figure 2: Nigeria Real Sectors performance (%)

Top 10 Sectors with fastest growth in 2019 in %



Bottom 10 Sectors with least growth in 2019 in %



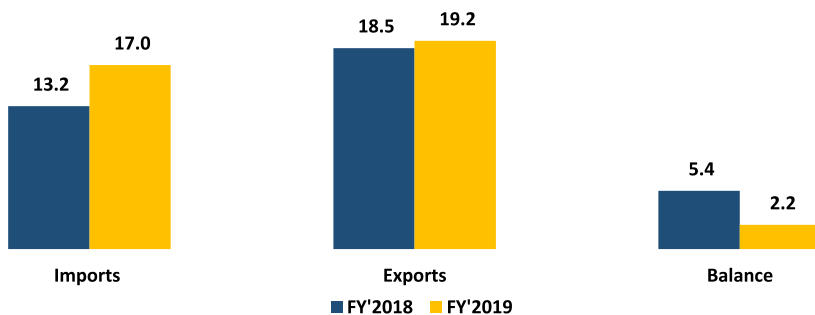
Source: NBS and NESG Research

Trade Balance declined in 2019 and was negative in the last quarter of the year

In our Macroeconomic Outlook Report released in January 2020, we had noted the declining trend of Nigeria's trade balance which stood at N2.8 trillion as at September 2019 from N5.4 trillion in the previous year. With the release of trade data for the fourth quarter of 2019, the overall trade deficit for full-year 2019 fell further to N2.2 trillion.

This contraction was largely due to a decline in the value of crude oil exports and the negative impact of Nigeria's land border closure on non-oil exports which plunged by 43.9% in the fourth quarter of 2019. Also, in the quarter, Nigeria's trade balance slipped into a deficit of N579 billion (\$1.6 billion) for the first time since the third quarter of 2016. With the outbreak of the coronavirus and lower crude oil demand, the export of crude

Figure 3: Exports, Imports and trade Balance (Trillion Naira)



Source: CBN and NESG Research

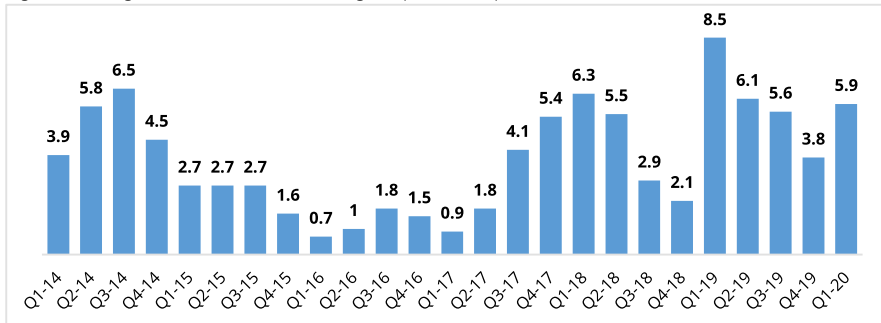
is expected to fall further in 2020. As experienced in 2016, the trade balance is expected to plunge into a deficit in FY'2020, with huge implications on government revenue, export earnings and external reserves.

Foreign Investment inflow in 2019 outperformed 2018 but declined consistently from Q2'2019

At US\$24 billion, foreign investment inflow in 2019 was the highest Nigeria has recorded in over 10 years. As with previous years, growth in investment inflows was led by Foreign Portfolio Investments (FPI) and 'Other Investments', which accounted for

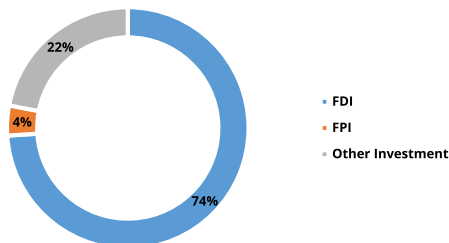
68.2% and 27.9% of total inflows, respectively. Despite the significant increase in investment inflows relative to previous years, high level of uncertainty in the aftermath of the elections, delay in ministerial appointments and weak investors' sentiments resulted in declines in overall inflows from US\$8.5 billion in Q1'2019 to US\$5.8 billion in Q2'2019, US\$5.4 billion in Q3'2019 and US\$3.8 billion in Q4'2019. Foreign investment inflows for Q1'2020 fell sharply by 31.2% to \$5.9 billion from \$8.5 billion in the corresponding quarter of 2019 (Q1'2019). The year-on-year decline in investment inflows is the first since the last recession in 2016. Foreign

Figure 4: Foreign Investment Inflow into Nigeria (Billion US\$)



Source: NBS & NESG Research

Figure 5: Types of Foreign Investment Inflows into Nigeria in Q1'2020



Source: NBS & NESG Research

investment inflows into Nigeria would experience a significant decline in 2020 given the fall in crude oil price, external reserves and uncertainty caused by the sudden outbreak and rapid spread of COVID-19 across world economies.

Foreign Direct Investment (FDI) Inflow continued to perform poorly...

Nigeria's recent history on FDI has not been impressive and the year 2019 was no different. FDI in 2019 and Q1'2020 stood at US\$934 million and US\$214 million, respectively, representing only 4% of total investment inflows into the country during both periods. Nigeria's FDI inflows have consistently remained around US\$1 billion in the last four years, a meagre amount when compared with that of similar developing countries. FDI inflows, most especially cross-border investments, are expected to fall significantly in 2020 due to huge disruptions to global supply chain arising from COVID-19 crisis.

...and external reserves to face pressures in 2020

Despite a relatively stable oil price in 2019, external reserves for 2019 stood at US\$42.8 billion down from US\$44.5 billion in 2018. The continued intervention of the Central Bank of Nigeria (CBN) in the FX market, high dollar demand for imports of services and goods as well as external debt servicing obligations were largely responsible for the falling reserves during the year. Coming into 2020, the outbreak of COVID-19 further amplifies the sliding trend in the reserves position through the oil price transmission channel. Given the bleak outlook for crude oil price and foreign investment inflows, as well as, an anticipated widening of trade deficit, external reserves are expected to come under intense pressure in 2020 going forward. While we do not rule out the possibility of a temporary rise in reserves due to external borrowing, this increase would, however, be offset by weak oil and

Figure 6: External Reserves (US\$ Billion)



Source: CBN and NESG Research

Inflation rate continues to amplify as the effect of COVID-19 comes to play

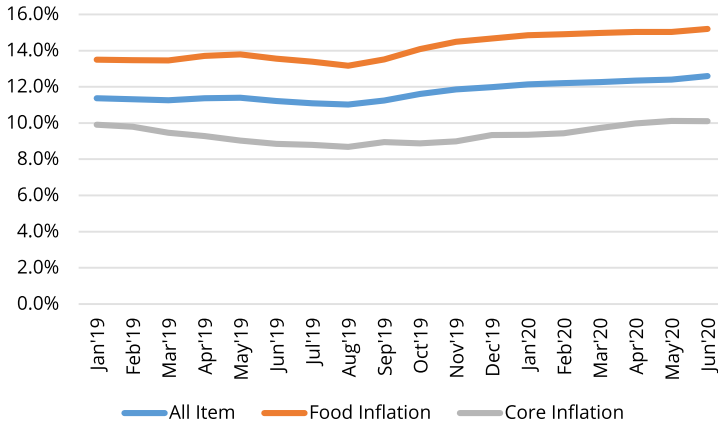
Since the implementation of the border closure policy, the inflation rate has risen sharply from 11% in August 2019 to 12% in

February 2020. The headline inflation stood at a 25-month high of 12.4% in June 2020, the inflation rate pointed at 12.3%.

Food inflation was a major driver of overall inflation, rising to 15% in March from 14.7% in December 2019. Alongside the inflationary impact of the border closure, the outbreak of COVID-19 has further

heightened inflationary pressures on the economy. Value chain disruptions, exchange rate depreciation along with structural issues such as poor electricity supply, infrastructure deficit will trigger a rising inflation rate in subsequent months.

Figure 7: Nigeria's Inflation Rate (%)



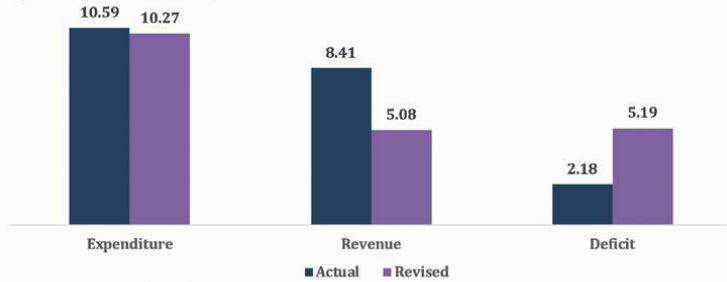
Source: NBS & NESG Research

The outbreak of coronavirus and oil price slump aggravate the shrinkage of fiscal space

Nigeria's fiscal position is being challenged as oil and non-oil revenue projections in the 2020 Budget are likely not to be met. Consequently, the 2020 Budget is being revised downwards with an approved crude oil price benchmark of US\$25 per barrel and an estimated crude oil output of 1.7 million barrels per day (mbpd). In a revised 2020 Budget proposal sent to the National Assembly, the federal government budget has been revised downward from NGN10.6 trillion to NGN10.3 trillion, representing a 2.8% decline. This translates to a reduction in expenditure components: capital

expenditure was slashed from N2.8 trillion to N2.6 trillion, non-debt recurrent expenditure was lowered by 0.7% to NGN4.5 billion. Going deep into the year 2020, efforts must be geared towards prioritizing capital expenditures due to its significance in stimulating growth through infrastructure delivery. Similarly, the revenue projection for 2020 was revised downwards from N8.4 trillion to N5.1 trillion. Projected oil revenue witnessed the biggest cut by 90% to N254.3 billion while the expected non-oil revenue was reduced from N1.8 trillion to N1.5 trillion. Consequently, the overall budget deficit widened by 57.6% from N2.2 trillion to N5.2 trillion.

Figure 8: FGN Revised Budget (Trillion Naira)

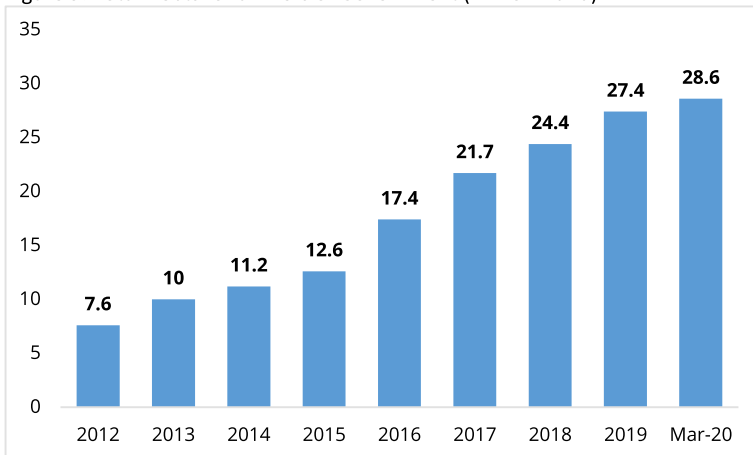


Source: Budget Office of the Federation and NESG Research

With declining revenue, Nigeria's debt position will be worsened as the government is set to embark on massive borrowing of over N4.43 trillion. Nigeria's total public debt, which stood at N28.6

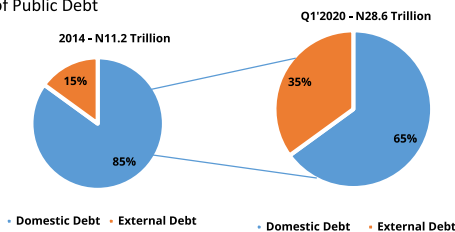
trillion as at March 2020 is expected to continue its upward trend in 2020 going forward. Ultimately, debt servicing as a share of revenue is expected to increase significantly.

Figure 9: Total Debts for all Tiers of Government (Trillion Naira)



Source: NBS & NESG Research

Figure 10: Share of Public Debt



Source: NBS & NESG Research

COVID-19: Quantifying the Sufficiency of Government Response

Governments around the world have adopted various measures to curtail the spread of the virus and address the associated negative socio-economic impacts. Although identical approaches and containment measures (non-economic) have been deployed, ranging from mobility restrictions, social distancing among others, the economic responses with regards to fiscal, monetary, exchange rate and macro-financial policies and their magnitudes vary significantly. While Japan has announced stimulus packages worth 20% of its GDP, the value of other selected countries policy stimulus amounts to 5% of national GDP, on average (See Figure 11).

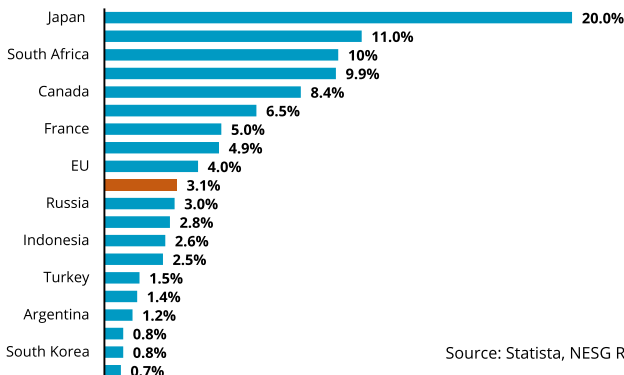
Announced interventions in Nigeria is estimated at N4.5 trillion (3.1% of GDP)

In Nigeria, the monetary value of announced interventions to contain the spread of the virus and cushion its effects on

key sectors and households has totalled N4.5 trillion (US\$11.2 billion), representing 3.1% of the overall GDP. This consists of interventions from the CBN, fiscal authorities and donations.

Nevertheless, Nigeria requires N10.1 trillion (7% of GDP) worth of interventions to ameliorate the devastating impact of coronavirus on the economy. For a low-middle income country like Nigeria, with a slow and fragile economic growth, over 100 million individuals living in poverty, and a high unemployment/underemployment rate at 43.3%, we estimate that combined government interventions should amount to 7% of GDP. This represents a financing gap of N5.6 trillion (US\$14 billion). The importance of closing this funding gap cannot be overemphasized, considering the level of decay in the country's health sector, coupled with the dominance of informal micro, small and medium scale businesses in the economy, that are in dire need of support.

Figure 11: Value of COVID-19 fiscal stimulus packages in G20 countries as of April 2020, as a share of GDP



Source: Statista, NESG Research

Table 2: Overview of Key Fiscal Interventions and Stimulus in Nigeria

1	Establishment of a ₦500 billion COVID-19 Crisis Intervention Fund to upgrade federal/states healthcare facilities and finance the creation of a Special Public Works Programme.
2	Enhanced financial support to the States for critical healthcare expenditure: US\$190 million World Bank Regional Disease Surveillance Systems ('REDISSE') facility, to be accessed by the Nigeria Centre for Disease Control (NCDC). In addition, the Federal Government has provided ₦102.5 billion for direct interventions in the healthcare sector.
3	Augmentation of FAAC allocations to States and moratorium on States' debts: US\$150 million from the Nigeria Sovereign Investment Authority (NSIA) Stabilisation Fund to support the June 2020 FAAC disbursement.
4	Strategic Sectoral intervention: Small / Micro Enterprises are now completely exempted from corporate taxation; corporate tax rates for Medium-sized Enterprises reviewed downward from 30% to 20%; and the Finance Act, 2019 VAT Exemption List for essential food, medical supplies and other basic items that are critical in our efforts to address the COVID-19 Pandemic.
5	Amendment of 2020 Appropriation Act: Revision of benchmark oil price and production for 2020 to US\$30/barrel and 1.7mbpd, respectively.

Source: Federal Ministry of Finance, Budget and National Planning

Table 3: Overview of Key Monetary Policy Interventions in Nigeria

1	Maintained all policy rates at the current levels;
2	Reduction of interest rates on all CBN interventions from 9 to 5 percent;
3	One-year moratorium on CBN intervention facilities;
4	₦50 billion (\$139 million) targeted credit facility;
5	Liquidity injection of ₦3.6 trillion (2.4 percent of GDP) into the banking system;
6	Regulatory restriction was also introduced to restructure loans in impacted sectors;
7	Adjustment of official exchange rate by 15 percent;
8	Ongoing plan to unify the various exchange rates;
9	Foreign exchange funding to pharmaceutical companies.

Source: Central Bank of Nigeria

In the initial 2020 Budget, fiscal deficit stood at N2.1 trillion representing 1.4% of GDP, well below the stipulated 3% in the Fiscal Responsibility Act. However, following the downward revision of the budget which saw the reduction of crude oil benchmark, we anticipate a widening of the budget deficit. Meeting the additional financing need for COVID-19 response will require adjusting the fiscal deficit, as a share of GDP, from the stipulated 3 percent in the Fiscal Responsibility Act to 5%.

Funding the gap: what option?

As earlier indicated, Nigeria needs at least N10.1 trillion worth of interventions. Our current intervention capacity stands at N4.5 trillion. To ameliorate the impact of COVID-19 and oil price decline on the economy, Nigeria needs to close the gap. So, the question is how do we fund the gap? Unfortunately, Nigeria is faced with the dual problem of declining revenue and the absence of adequate savings either in the form of external reserves or fiscal buffers to finance such a huge gap. This leaves policymakers with the option to borrow domestically or from multilateral agencies and embark on quantitative easing. To fund the gap, there are several options available to the Nigerian government, each with potential benefits and drawbacks:

Domestic borrowing:

The Federal Government can issue domestic medium- to long-term bonds to raise capital. On a positive note, at a time of uncertainty, fixed income securities will appeal to investors who are seeking safe havens for their funds. On the flip side, the significant rise in domestic debt often leads to higher domestic interest payments, which is detrimental to the private sector. This is more so in developing countries like Nigeria where national savings are quite low compared with those of developed countries.

External borrowing:

Nigeria can secure loans from multilateral institutions such as the World Bank, IMF, International Finance Corporation (IFC) and African Development Bank (AfDB). Already, the IMF has approved the government's request for a US\$3.4 billion credit facility as emergency funding. The Nigerian government is also looking to borrow US\$2.5 billion from the World Bank and US\$1 billion from the AfDB. More funding from multilateral institutions can be explored in this respect to fill the existing funding gap. The downside to this channel is obvious. Nigeria may have to follow the IMF and other multilateral institutions' conditionalities and reforms with their unpalatable implications on the socio-economic stability, especially at this period.

Quantitative Easing (QE):

In this challenging time, the Central Bank of Nigeria (CBN) could consider the purchase of government securities to increase the money supply and encourage lending and investments. While this approach is considered the second best to the more conventional monetary policy approach, quantitative easing can also deteriorate exchange rate stability and can put more pressure on inflation. Also, social welfare tends to be lower under optimal QE than under optimal conventional policy. In all, the sacrifice ratio reminds us that if we choose a low level of unemployment, we must reconcile ourselves to a high rate of inflation. Nigeria may then have to go for the lower unemployment rate at the expense of higher inflation, which will make inflation targeting a secondary monetary policy option.

Despite the challenges of borrowing, expansionary fiscal policy remains the optimal approach to revamping the economy. For example, an increase in government spending tends to increase demand for goods and services, which also increases output and employment. The question is, if we raise this differential, how will the economy be impacted? Table 3 shows new projections of GDP based on government spending at different sizes of fiscal stimulus. The results are instructive as the table depicts a more optimistic outlook for economic output from 2020 to 2023 as a result of the increased interventions. The results are instructive as the table shows capacity (at N4.5 trillion).

Table 4: New projections of GDP based on government spending at different sizes of fiscal stimulus

	2020	2021	2022	2023
N4.5 trillion (\$11.2 billion): 3.1% of GDP	-7.3	-4.0	-1.28	2.1
N6 trillion (\$ 15 billion): 4.1% of GDP	-5.6	-3.2	0.4	3
N8 trillion (\$20 billion): 5.5% of GDP	-4.1	-2.2	1.8	4
N10.1 trillion (\$25.2 billion): 7% of GDP	-3.2	-1.1	2.4	5
N12 trillion (\$30 billion): 8.3% of GDP	-2.8	0.5	3.3	6.4
N14 trillion (\$35 billion): 9.6% of GDP	-2.2	2.4	5	7.2

Source: NESG Research

Macroeconomic Projection for 2020 in light of Coronavirus Pandemic

Our projection was done based on the regional-wide Dynamic CGE model of the Nigerian Economic Summit Group (NESG-DynCGE-Model), which was revised to accommodate the uniqueness and

peculiarities of the issues under consideration, being COVID-19 and the impact of weak oil price on the economy.

The model involves dynamic optimization behavioural assumption while we extracted projections for 2020.

	Assumption	Outcomes
Scenario 1: Best Case	<ul style="list-style-type: none"> Global oil price averaged \$35/barrel in 2020 Oil productions of 1.3 million barrels per day (mbpd) 	<ul style="list-style-type: none"> 4.1 percent decrease in real GDP in 2020 Investments will decline by 39.4 percent in 2020 Government revenue will plunge by 40 percent in 2020 Inflation averages 15 percent in 2020
Scenario 2: Business as Usual	<ul style="list-style-type: none"> Global oil price averaged \$20/barrel in 2020 Oil productions of 1.3 million barrels per day (mbpd) 	<ul style="list-style-type: none"> GDP will decline by 5.3 percent in 2020 Investment is expected to decline in 2020 by 50 percent Government revenue will decline by 51 percent in 2020 Inflation will average 17.5 percent in 2020
Scenario 3: Worst Case	<ul style="list-style-type: none"> Global oil price averaged \$15/barrel in 2020 	<ul style="list-style-type: none"> Real GDP will decline by 7.3 percent in 2020

Rationale & Outcomes

Scenario 1

Rationale: In our best-case scenario, we assume global oil price experiences some level of stability averaging US\$35 per barrel

in 2020 from US\$25 per barrel as at the end of April 2020. This is above the revised 2020 budget benchmark.

This is on the back of containment of the spread of the virus; major economies resume production tension between and Saudi Arabia and Russia pull through with the cut agreement. In terms of production, this scenario

assumes an improvement in crude oil production to settle at 1.3 mbpd following renewed demand in the market, the relative peace in the Niger-Delta region and recent commitments by the leaders of the National Assembly to begin work on the different aspects of the Petroleum Industry Bill.

Outcomes: GDP will decline by 4.1% in 2020, driven by a contraction in Agriculture, Manufacturing, Oil & Gas and Trade sectors. The investment will decline by 39.4% in 2020 as much investment would have gone into social security and palliatives. Government revenue will plunge by 40% in 2020 as oil and non-oil revenues are constrained. Inflation averages 15% in 2020 sequel to the global supply chain and devaluation of naira from N306/US\$ to N360/US\$.

Scenario 2

Rationale: In the business-as-usual scenario, we project a less optimistic overview of oil price compared with the first scenario. Here, we see a deeper downturn in the global oil market reflecting in oil price averaging US\$20 per barrel in 2020. This manifests as the coronavirus spread curve is

flattened while the chase for a vaccine continues and some parts of the world remain on lockdown. The assumption on oil production remains at 1.3 million barrels per day (mbpd).

Outcomes: The outcome for Scenario 2 is a deeper cut in economic activity. The economy is expected to slip into a deeper recession as the real GDP contracts by 5.3%. This will be as a result of a deeper contraction in major growth drivers in the economy. Investment is expected to decline by 50% as government revenue dips by 51% in 2020. Meanwhile, inflation will average 17.5% in 2020.

Scenario 3

Rationale: In the worst-case scenario, we assume crude oil price averages US\$15 per barrel driven by a persistent escalation of the virus and restriction of economic activities. Nigeria's crude oil production averages 1.3 mbpd.

Outcomes: The outcome of Scenario 3 for real GDP is a deeper recession; real GDP will decline by 7.3% in 2020. Investment level as well as government revenue will decline significantly by 65% and 63% respectively in 2020. Inflationary pressure intensifies as inflation rate averages 18.4% in 2020.

REFERENCE

Central Bank of Nigeria (2020). Crude oil prices, crude oil production and exports data. Retrieved from <https://www.cbn.gov.ng/rates/crudeoil.asp>

Central Bank of Nigeria (2020). Gross external reserves data. Retrieved from <https://www.cbn.gov.ng/IntOps/Reserve.asp?MoveDate=1/20/2020%2010:39:17%20AM>

Central Bank of Nigeria (2019). CBN Economic Report for Q3'2019. Retrieved from <https://www.cbn.gov.ng/Documents/quarterlyecoreports.asp>

Central Bank of Nigeria (2020). Purchasing Managers' Index (PMI) Survey Report <https://www.cbn.gov.ng/Out/2020/STD/MAR%202020%20PMI%20Report.pdf>

Debt Management Office (2020). Nigeria's Public Debt Stock as at December, 2019. Retrieved from <https://www.dmo.gov.ng/debt-profile/total-public-debt>

International Monetary Fund (2020). World Economic Outlook: The Great Lockdown. Retrieved from www.imf.org

National Bureau of Statistics (2020). Nigeria Capital Importation Report for 2019. Retrieved from <https://nigerianstat.gov.ng/elibrary>

National Bureau of Statistics (2020). Nigeria Gross Domestic Report for 2019. Retrieved from <https://nigerianstat.gov.ng/elibrary>

National Bureau of Statistics (2019). Nigeria Gross Domestic Report (Expenditure & Income Approach) for Q3, Q4'2018 and Q1'2019. Retrieved from <https://nigerianstat.gov.ng/elibrary>

National Bureau of Statistics (2020). Consumer Price Index for February 2020. Retrieved from <https://nigerianstat.gov.ng/elibrary>

Statista (2020). Value of COVID-19 fiscal stimulus packages in G20 countries as of April 2020 a share of GDP. <https://www.statista.com/statistics/1107572/covid-19value-g20-stimulus-packages-share-gdp/>