THE NIGERIAN ECONOMIC SUMMIT GROUP

Sectoral Impact Assessment and Optimal Policy Response

COVID-19, Global Oil Price and The Nigerian Economy

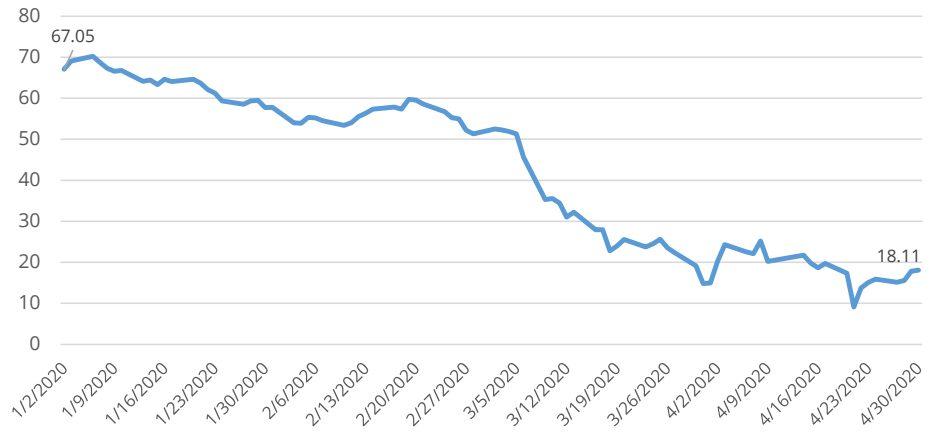
Introduction

The outbreak of COVID–19 in China dampened China's 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 below the sectoral expansion benchmark of 50 points to 35.7 points in February 2020. This implies the Gross Domestic Product (GDP) growth figure that will emanate from China will show a significant contraction. Further, the regimented movement of humans due to the fear of contagion and the inability to secure vaccine, continue to dampen economic activities.

With the spread of coronavirus to other continents, global output will experience a decline in 2020. The IMF projected global GDP to decline by 3 per cent, with countries such as the United States, Germany, United Kingdom and Italy recording significant output decline of 6.1, 7.0, 6.5 and 9.1 per cent, respectively in 2020. Across these countries, the immediate priority has been to contain the spread of the virus as well as limit its impact on citizens and businesses. This has, therefore, necessitated the implementation of massive fiscal stimulus, tax breaks, monetary policy cuts to boost production and aggregate demand.

The manifestation of this pandemic is evident in declining oil price and lower demand for crude. As a result of movement restrictions and lockdown of major economies across the world, the demand for crude oil has plummeted significantly, leading to falling and volatile crude prices. The price of Brent crude fell from US$70 per barrel at the dawn of 2020 to US$20 per barrel as of April 22, 2020. Given the continued spread of the virus to other countries, it has graduated from a Sino-epidemy to a pandemic, as its epicentre has now moved to Europe, America and Africa. Furthermore, as the contagion effect intensifies, the continued global banning, border closure, social distancing and restrictions will suppress growth further globally. Coupled with the unrelenting power tussle between Saudi Arabia and Russia in the global oil market, the worst is still ahead for the oil market.

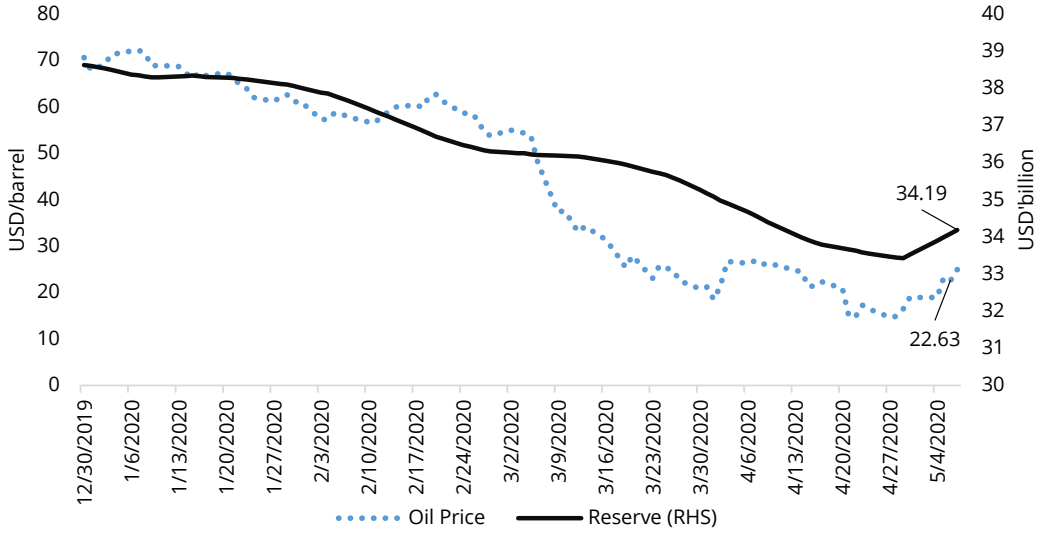
Figure 1: Brent crude price (US$) has fallen by 73 per cent from January to April 2020



Data: US Energy Information Administration; Chart: NESG Research

Lower bonny light price has continued to take a toll on the reserve thereby limiting Nigeria's creditworthiness and the ability of the monetary authority to defend the country's currency. As a result, the external foreign reserve has shed over 12% from USD 38.54 billion on January 1, 2020, to USD 33.63 billion as of April 23, 2020. However, with the slight upward drift in Nigeria's crude oil price. Also, the exchange rate vis-a-vis the US dollar was adjusted from to N360/$ from N305/$, the exchange rate at the Investors' & Exporters' FX window (I & E) was adjusted to N380/$ from N360/$, whereas at the parallel market, the US dollar trades at over N400 (See figure 3). The commercial bank lending rate has remained stable, but with a wide difference of over 15 per cent between the Maximum Lending Rate (MLR) and the Prime Lending Rate (PLR)

Figure 2: Trend in Nigeria's oil price and External Foreign Reserve



Data: CBN, Oil Price.com; Chart: NESG Research

For Nigeria, the fiscal effect of the fall in oil price will be enormous with severe sectoral implications. Nigeria, being a major dependent player in the oil market faces a dual challenge of dwindling windfall from oil and economic constriction as global lockdown continues on the back of COVID–19. While the fragility of the economy persists, the oil market impacts the Nigerian economy through its dominant contributions to export earnings, foreign exchange inflows, movement in external reserves and government revenue.

From a fiscal point of view, the 2020 budget of the Federal Government was based on $57 per barrel benchmark, which was later revised to $25 per barrel. Falling crude prices, in addition to weak export demand, would significantly add pressure on Federal and State governments' finances. This means that the revenue projections in the revised 2020 budget will be unmet, thereby constraining government's ability to meet its obligation such as payment of salaries and financing critical social and infrastructure projects in the year. Many States in Nigeria rely solely on allocations from the Federal Account Allocations Committee (FAAC), which are predominantly oil-dependent. Falling oil price means that many States will have difficulty in paying salaries of workers. This will have negative implications on aggregate demand and the performance of key sectors like Construction, Cement and Manufacturing. For non-oil revenue, limited economic activities arising from lockdown of some States and restriction of movement will result in poor performance of non-oil revenue.

One direct effect of COVID-19 on the economy is the movement restrictions and lockdown of some States. The shutdown of production facilities and lockdown of several States across the country will have negative implications on investment, aggregate demand and overall economic growth. While the lockdown and restrictions was relaxed in some States on May 4, 2020, economic activities during the four-week lockdown were severely constrained, and this is expected to reflect on GDP growth figures for the first to second quarters of 2020. In the World Economic Outlook projections released in April 2020, the IMF estimates that the Nigerian economy will contract by 3.4 per cent in 2020.

What will be the impact of COVID-19 on the performance of key sectors in Nigeria? To respond to this question, we reviewed the performance of major sectors before the outbreak of COVID-19 then examined the implications of low oil price, disrupted global supply chain, technological shock and restrictions on identified sectors.

Performance of Major Sectors Pre-COVID-19

Nigeria's economic growth has remained weak and fragile since the exit out of recession in the second quarter of 2017. The economy expanded but at a slow pace in 2018 (1.9 per cent) and 2019 (2.3 per cent). While the non-oil sector was responsible in driving overall GDP expansion in 2018, the oil sector became instrumental in 2019, with significant growth of 5 per cent, higher than non-oil sector growth of 2 per cent in the year. On the aggregate level, the economy expanded in 2019 despite weak growth in consumer demand and slow performance in the output of major economic sectors.

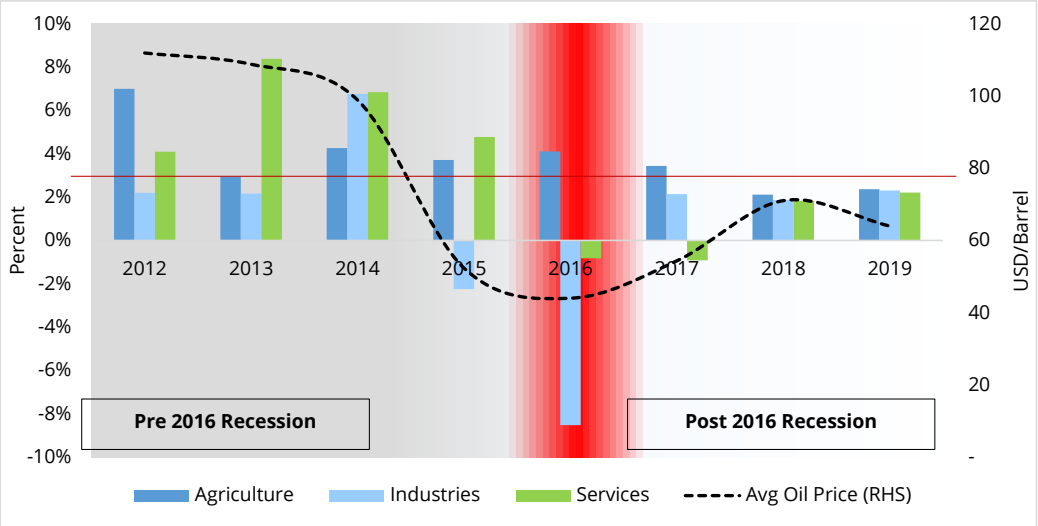
Table 1: Sectors Description and Performance Pre-COVID-19

Sectors	Share of GDP (%)	2019 growth (%)	Remark compared to 2018 growth**		
			Fast growth	Slow growth	Contracting
Primary	34.07	2.85	√		
Agriculture	25.16	2.36	√		
Crude oil & Natural Gas	8.78	4.59	√		
Secondary	9.06	0.77		√	
Industry	17.98	2.47	√		
Manufacturing	9.06	0.77		√	
Construction	3.72	1.81		√	
Agro-Business	6.75	1.40		√	
Tertiary	56.87	2.15	√		
Services	56.87	2.15	√		
Trade	16.01	-0.38			√
Real Estate	6.12	-2.36			√
Information and Communication	13.04	11.08		√	
Transport and Storage	1.48	10.73			√
Financial and Insurance	3.01	2.56	√		
Accommodation, Hospitality, Entertainment and Recreation	1.12	3.11	√		
Social	2.79	0.69	√		

***Performance Criteria: Fast Growth: 2019 > 2018, Slow growth: 2019 <2018 and Contracting: growth < 0.*

Within the last three years, the major economic sectors in Nigeria have struggled to exert significant expansion in output.
Since the exit of the recession in 2017, annual output growth of Agriculture, Services and Industry has remained below 3 per cent, poor performance when compared with pre-recession growth rates (See figure 3). The industrial sector has been the most volatile, largely as a result of the impact of crude oil price and output. The sector was the first to record negative growth of 2 per cent in 2015, and it contracted further by 9 per cent in 2016 following the fall in crude oil price and low production volumes. In all oil price-related shocks, the Nigerian economy has witnessed, the industrial sector is usually the first and major casualty, especially because of its exposure to foreign exchange.

Figure 3: Growth across major economic sectors remains below the pre-recession



Source: NBS; NESG Research

While the Agricultural sector was resilient during the recession in 2016, the sector's annual growth has remained weak at just over 2 per cent since 2017, significantly below 6 and 4 per cent recorded in 2012 and 2014. One major factor for the sector's resilience during an economic crisis as experienced in 2016, is the Nigerian government efforts to implement import substitution policies and support local food production to conserve foreign exchange.

The Service sector was the fastest-growing sector before 2016. Growth of the sector was driven by ICT, Finance and Trade sub-sectors. In addition to the Industrial sector, the Services sector was severely impacted by the recession in 2016 and has maintained low growth rate since the recession. Although major subsectors such as ICT and Transportation recorded remarkable performance post-2016 recession and were the fastest-growing activity sectors in 2019, Trade and Real Estate sectors recorded 3 consecutive declines in growth since the second quarter of 2019, suggesting that both sectors are already in recession. Lower consumer demand, as well as the impact of the land border closure, were largely responsible for this trend.

In essence, our narrative on the 3 main economic sectors shows that from a sectoral point of view, the economy has been fragile even before the outbreak of COVID-19. As pointed out in our Macroeconomic Outlook for 2020, we noted that "Nigeria's slow growth has been associated with two main features which include, heavy concentration of growth in very few sectors and lower investment inflows into major sectors of the economy, exemplified by the poor performance of both local investments and Foreign Direct Investment (FDI)." The report showed from a sectoral perspective that the economic recovery continued to confirm signs of fragility, as 13 out of the 46 sectors contracted in 2019 (up to the third quarter -Q3). While about half of the 46 sectors recorded growth of less than 2% in the same period. Major economic sectors such as Trade and Contraction in Real Estate have continued to weigh down economic growth in the period, however, share in GDP remain significant.

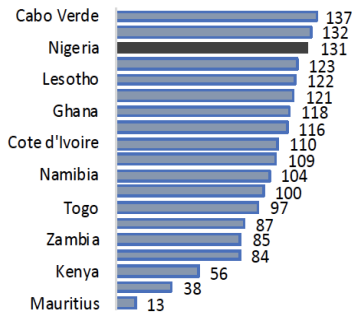
Structural challenges continue to limit the sectoral expansion

Across the sectors, the issues of the high cost of doing business, uncertainty surrounding the management of exchange rate and infrastructure deficit were major factors that inhibited growth, productivity and investments. Businesses across all sectors continued to grapple with regulatory setbacks, insufficient power supply and insecurity concerns in some parts of the country. Notwithstanding these challenges, Nigeria made progress in some areas relating to ease of doing business.

The 2020 World Bank's Doing Business Report showed that in 2019, Nigeria was among the top 10 improvers and ranked 131st out of 190 countries in the Ease of Doing Business Rankings. This represents a significant improvement from 146th and 169th positions from the 2018 and 2016 rankings, respectively.

Figure 4: Ease of Doing Business Ranking in Nigeria

(Rank, 2019, 1 = best, 190 = worst)



	2019	2018
Dealing with construction permits	55	149
Starting a business	105	120
Resolving insolvency	148	149
Trading across borders	179	182
Getting credit	15	12
Registering a property	183	184
Protecting minority rights	28	38
Paying taxes	159	157
Enforcing contracts	73	92
Getting electricity	169	171

Note: Shading – Improved & Worsened

Source: World Bank and NESG Research

Among the 10 indicators tracked by the World Bank, cost and time to secure legal approval for starting a business remains a challenge. According to the report, it takes approximately 7 days, 7 administrative procedures and cost over 26% of the per capita income of household to get this done in Nigeria. The country ranks 105 out of the 190 countries in this category. Also, the performance of Nigeria in indicators that directly relate to the business environment – getting credit and paying taxes -worsened in 2019.

These, in addition to factors such as weak social amenities, inadequate power supply and multiple taxations, contributed to the current business environment which is intimidating for business and private sector development. No doubt, improvement has been recorded in several aspects, especially since the establishment of the Presidential Enabling Business Environment Council (PEBEC) in 2016, a lot more work needs to be done particularly in streamlining regulations and procedures of Ministries, Departments and Agencies (MDA) that directly influence business activities.

While foreign exchange was available to businesses in 2019, the challenge of multiple exchange rates, as well as uncertainty regarding the country's exchange rate policies, lingered. For most of the year, the exchange rate premium between the official and parallel markets was at +N50/US$ and several rates and charges were applied to businesses, leading to higher costs and charges. Also, fears of a declining external reserve and lower foreign inflows dominated the third and fourth quarter of the year, thus, holding back investment plans in the Real sector - exemplified by poor FDI inflows throughout the year.

Preamble: Relationship between Sector and Macroeconomic variables

The dual effect of falling oil price and the pandemic has elicited stimuli responses such as fiscal, exchange rate, restructuring loans and liquidity injection. These stimuli have a far-reaching direct impact on government spending, reserve and credit as well as a transmitted impact on exchange rate, interest rate and inflation rate. As a preliminary phase before modelling, we established a relationship in terms of sensitivity between these macroeconomic indicators and sectors. The result points out that all sectors are fundamentally sensitive to interest rate (see Table 2). However, only the Telecommunications and Information Services sector poses to be most sensitive to changes in external reserves. At a more disaggregated level, Manufacturing, Telecommunications & Information Services and Power & Utility sectors are sensitive to the size of government spending. This is occasioned by the capital-intensive nature of these sectors and the fact that the provision of basic infrastructural facilities in Nigeria rests on the government via annual capital expenditure.

Table 2: Sector sensitivity to Macroeconomic variables

Sectors	Exchange rate	FG spending	Reserve	Inflation rate	Interest rate
Primary	-0.07	0.01	0.02	-0.02	0.57
*Agriculture	-0.02	-0.04	-0.01	-0.08	0.46
**Oil/Gas	-0.11	0.07	0.04	0.07	0.54
Secondary	-0.06	0.10	0.04	-0.18	0.20
*Industry	-0.09	0.06	0.04	0.00	0.47
**Manufacturing	-0.06	0.10	0.04	-0.18	0.20
***Agro-Business	-0.06	0.05	0.04	-0.18	0.47
**Construction	-0.06	0.00	0.00	-0.03	1.18
Tertiary	-0.05	0.02	0.00	-0.06	0.39
*Services	-0.05	0.02	0.00	-0.06	0.39
**Trade	-0.05	0.03	0.01	-0.06	0.24
**Information and Communication	-0.16	0.08	-0.01	-0.09	0.74
***Telecommunications & information services	-0.28	0.48	0.11	-0.17	0.50
**Real Estate	-0.06	0.02	0.01	-0.02	0.19
**Transport & Storage	-0.14	0.07	0.05	-0.07	0.86
**Power & other Utility	-0.19	0.13	-0.02	0.08	0.73
**Accommodation, Hospitality, Entertainment and Recreation	-0.15	0.00	0.03	-0.17	0.95
**Finance	0.10	0.00	-0.02	-0.15	1.01
**Social	-0.05	-0.01	0.00	-0.05	0.06

Data: NBS, Table: NESG Research

Covid-19 Pandemic and Current Government Stimulus

Announced intervention in Nigeria is estimated at N4.5 trillion – 3.1% of GDP

In Nigeria, the monetary value of announced intervention to contain the spread of the virus and cushion its impact on key sectors and households has totalled N4.5 trillion (US$11.2 billion), which is 3.1 per cent of GDP. This consists of interventions from the Central Bank of Nigeria (CBN), fiscal authorities and donations.

Table 3: Overview of Key Fiscal Intervention 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'). Also, the Federal Government has provided ₦102.5 billion for direct interventions in the healthcare sector.
3	Augmentation to the States' FAAC allocations and a 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 Enterprise 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 oil price benchmark and production $25 and 1.94mbpd, respectively.

Source: Federal Ministry of Finance, Budget and National Planning

Table 4: Overview of Key Monetary Policy Interventions in Nigeria

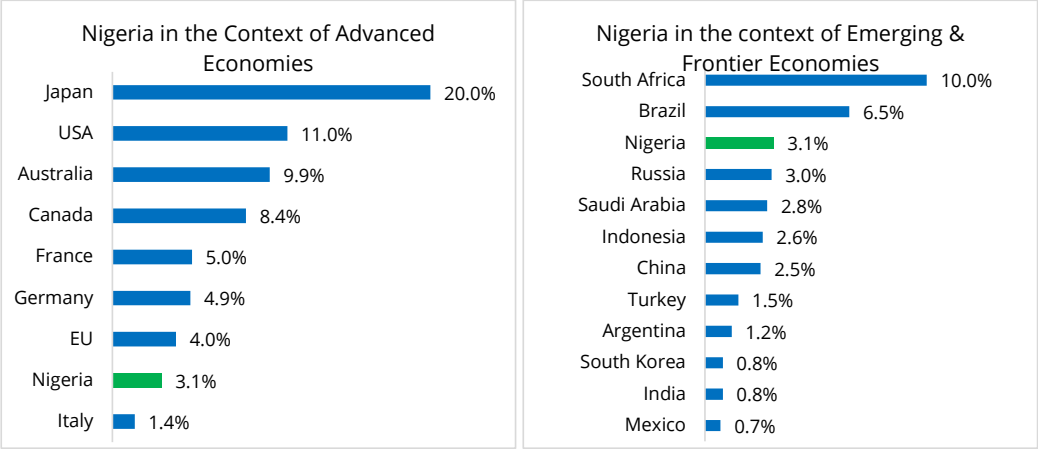
1	Maintained all policy rates at the current levels;
2	Reduction of interest rates on all CBN interventions from 9 to 5 per cent;
3	Introduced a one-year moratorium on CBN intervention facilities;
4	₦50 billion ($139 million) targeted credit facility;
5	Liquidity injection of ₦3.6 trillion (2.4 per cent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

Source: Central Bank of Nigeria

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 per cent of its GDP, the value of select country's response (in figure 5) amounts to 5 per cent of national GDP, on average.

Figure 5: Value of COVID-19 fiscal stimulus packages in G20 countries as of April 2020, as a share of GDP



Source: Statista, NESG Research

Nevertheless, the IMF estimates a funding gap of N5.6 trillion (US$14 billion) to ameliorate the economy

For a low-middle income country like Nigeria, with a slow and fragile economic growth- having over 100 million individuals living in poverty and a high unemployment /underemployment rate at 43.3 per cent, the financing gap was estimated at N5.6 trillion (US$14 billion). In the initial 2020 Budget, fiscal deficit stood at N2.1 trillion representing 1.4 per cent of GDP, well below the stipulated 3 per cent in the Fiscal Responsibility Act. However, following the downward revision of the budget which saw the reduction of crude oil benchmark, we anticipate an expansion in the 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 per cent in the Fiscal Responsibility Act to 5 per cent.

Modelling the Impact of Nigerian Government Responses and Oil Price movement on the economy

Having identified sectors that are more sensitive to exchange rate, government expenditure, reserves, inflation rate and interest rate, this report, adopts the regional-wide Dynamic CGE model of the Nigerian Economic Summit Group, (NESG-DynCGE-Model). The model was revised to accommodate the uniqueness and peculiarities of the issues under consideration-COVID-19 and the impact of weak oil price on the economy.

Scope of the Study

The Social Accounting Matrix (SAM) was adjusted in line with the objectives of the study. There are twenty-five (25) production activities related to domestic transactions, two (2) factors of production (labour and capital), economic agents- four (4) households' categories-, a representative firm, government, capital account (savings, investments, and margin), and the rest of the world (imports and exports). The Nigerian Social Accounting Matrix (SAM) captures the Nigerian economy. The SAM is designed to fit into the CGE model and provide a comprehensive benchmark database for the study. Also, the CGE model employed in this study is recursive-dynamic and thus forward moving with 4 years.

Underlying Considerations for Economic Impact Shocks, Scenario Crafting and Simulation Strategies

The impact of COVID-19 on the global economy is severe and the near-term economic outlook appears gloomy. According to the International Monetary Fund (IMF), the pandemic will inflict a deep economic recession on the world economy. To mitigate the impact of COVID-19 on the Nigerian economy, the government has embarked on different policy measures and palliatives both on the fiscal and monetary fronts. The extent to which the current measures can dampen the impact of COVID-19 on the economy depends on the depth, coverage and efficiency of the implementation of these measures.

More importantly, it also depends on the outlook of the fundamental driver of the economy- the global oil price. How do we expect the sectoral activities to respond to government policy measures under varying oil price scenarios? With a 70 per cent drop in oil price from January to April this year, will the government responses be sufficient to prevent economic recession or depression in the worst case?

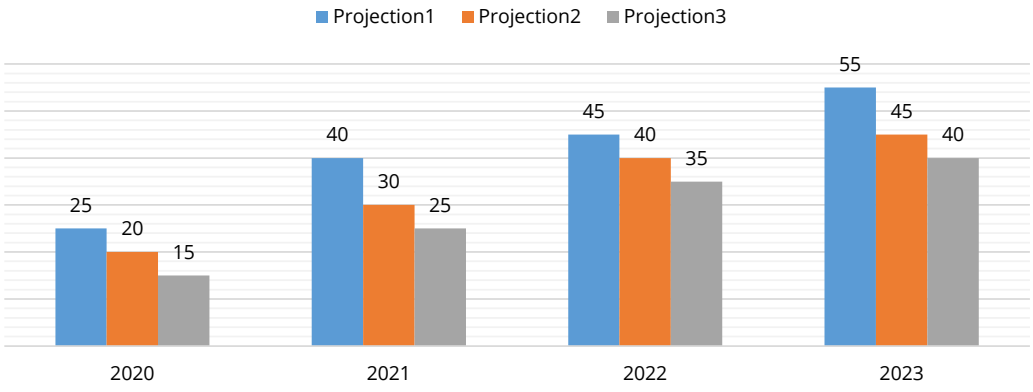
To respond to these questions, we constructed a base case for the economy which takes into account the implementation of the current policy responses on both the short and medium-term and the secondary economic shock indicators (namely foreign capital Inflow, capital productivity and technological shocks).

Fundamental indicator: Oil price and production

For the global oil price from 2020 to 2023, this report draws on the NYMEX, IMF and the U.S. Energy Information Administration (EIA) near-term projections. Given the volatility and uncertainty of global oil market at present and, indeed, the global economy, the oil price outlook reflects three separate projections:

- Oil price projection 1: We assumed relative stability in the global oil market covering 2020 to 2023. In essence, global oil price averaged $25/barrel in 2020 and closed at $55/barrel in 2023.
- Oil price projection 2: The oil price projects a less optimistic overview compared with the first scenario. Here, we see a deeper downturn in the global oil market reflecting in oil price averaging $20/barrel in 2020 and eventually picking up to $45 barrel in 2023.
- Oil price projection 3: This mimics a worst-case scenario where global oil price a eraged $15/barrel in 2020 and rises in the short to medium term to $40/barrel in 2023.
- Oil production projection: Also, along the oil price projections are the projected oil productions of 1.3 million barrels per day (mbpd), 1.5 mbpd, 1.7 mbpd and 1.8 mbpd for 2020, 2021, 2022 and 2023, respectively.

Figure 6: Average Crude Oil price projection (US$ per barrel)



Source: NESG Research

Secondary drivers

These factors are both direct and indirect impact of COVID-19 pandemic on investment, productivity and supply chains. In this respect, the model assumed a negative outlook for foreign capital inflow, capital productivity and technological shocks.

- First, we experiment with the impact of a decline in foreign capital inflow. All things being equal, it is expected that the decrease will lead to a depreciation of the real exchange rate.
- Second, due to COVID-19's impact on the global supply chain and economic ou look, we have assumed a reduction in economy-wide productivity of capital in terms of idle capacity.
- Thirdly, in reflecting the technological shocks, we attempt to reflect the impact of COVID-19 concerning increased costs of international trade (broken supply chains, restricted movement of people and goods).
- Lastly, we examine the impact of government interventions on different sectors of the economy.

Scenario Results: Sectoral Impact Responses

Quantifying the sectoral impact of COVID-19 under varying oil price scenarios

The combined impact of economic shocks from COVID-19 is expected to disrupt general sectoral activities. While the impact is transmitted to the economic sectors through changes in aggregate demand, constrained capacity utilisation and falling capital accumulation, government's responses will play a significant role in dampening these impacts.

Primary

The non-economic measures adopted to tackle the spread of the pandemic affect the primary/extractive sector which house agriculture and oil and gas sectors respectively. Whilst, the impact in the oil and gas sectors is reflected in the dwindling oil price as a result of supply chain and demand chain disruption, the agriculture sector is taking a hit from limited access to market and reduction in agro supplies. By implication, Scenarios 1 and 2 suggests that the primary sector will slip into recession from 2020 to 2021 and Scenario 3 suggests that recession may extend till 2022. However, as global economy rebounds, the sector recovers and steps into a growth path from 2023 to 2024 (See Appendix 2).

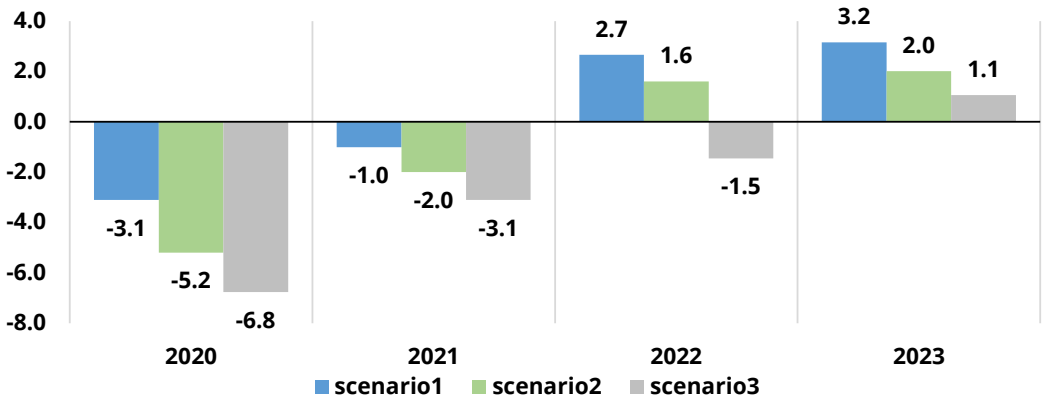
Agricultural Sector

Transport restriction and quarantine measures will affect the food supply chain in Nigeria. Shortage of labour owing to these measures would also disrupt the production of foods as the agricultural sector is largely labour-intensive. In the crop production sub-sector, these measures will limit farmers access to markets and curb production capacities. Low production will lead to low sales and higher price of food commodities and staples such as rice, millets, beans, etc. In the wake of COVID-19, food prices have increased significantly in Nigeria. The price of rice has increased by more than 30% and a similar upward trend was noted in other food staples (Bloomberg, 2020).

For the fisheries sub-sector, the production level will be impeded by logistics problems associated with the restriction in transportation, border closures, and the reduced demand from the accommodation and hospitality sector. The livestock sub-sector will also face similar production challenges due to the reduced access to major inputs such as animal feeds. Also, the total export of agricultural produce will drop significantly while the import of food items will rise to cover for the gap in local production. Import of agricultural inputs will also increase significantly.

Empirically, these direct and indirect effects ultimately culminate into a substantial impact on the agricultural sector. The impact of COVID-19 pandemic on the performance of Nigeria's agricultural sector appears more profound than the direct impact of the fail in oil price. As indicated in Figure 7, in all scenarios, the agricultural sector will slip into recession from 2020 to 2021 on the backdrop of a significant contraction in major sub-sectors such as the crop production, livestock, forestry and fishery. However, as the global economy takes shape from the heat of the Coronavirus and oil price outlook improve, the adjustment path of the sector shows a marked recovery of the sectoral output from 2022 to 2023 reversing the earlier declining trend.

Figure 7: Agricultural Sector Impact Response



Source: NESG Research

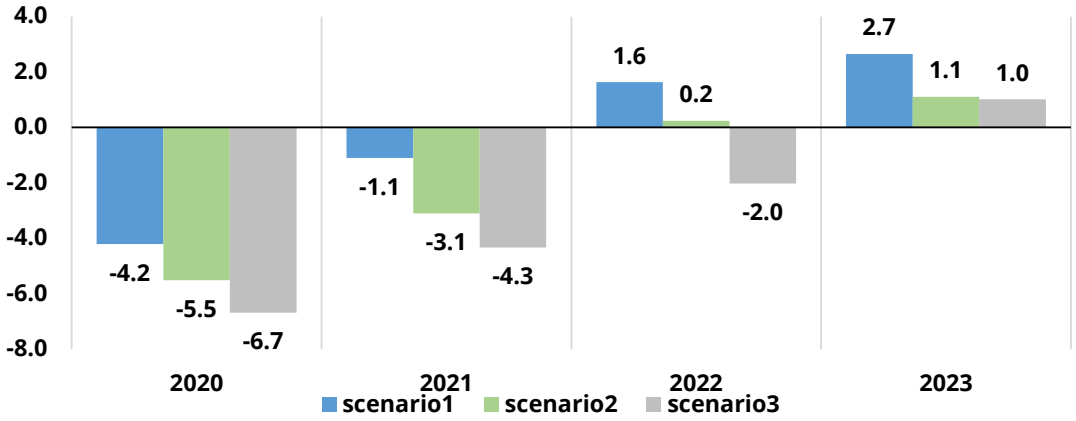
Oil and Gas Sector

All major industries in the economy tightened significantly in 2020, especially following the impact of dwindling oil price. This is particularly true for the extractive industry dominated by oil production. The outbreak of COVID-19 has already put pressure on global oil demand to a low ebb. As a result, the oil price has fallen to historic lows of $25/barrel in April 2020. Consequently, this has created a blurred outlook for the Nigerian oil and gas sector. Historical data have shown that a period of bearish oil market also cumulates into poor oil sector growth for Nigeria. Given that both global oil price and crude oil demand are significantly distraught, the situation heightens the level of uncertainties about potential crude sales by the Nigerian government and other major multinational oil. This will, therefore, affect revenue/creditworthiness of the Nigerian government and may cause delay of many key off-shore projects in Nigeria and the Gulf of Guinea.

For the downstream oil and gas sector, a low crude-oil price is a welcome development but its reliance on imported refined petroleum products is a major headwind. Current restriction in global logistics and transport movements will also limit the sector's ability to sustain gains from the low crude-oil price if the pandemic lingers for a longer period of time. Export of crude oil will drop significantly owing to the low global demand while the country will pay more for import of refined petroleum products due to poor refining capacity in Nigeria. This will, thus, lead to a negative trade balance for the sector in 2020.

Evidence from the DynCGE further accentuates the impact of the COVID-19 outbreak on the oil and gas sector. The empirical results as presented in Figure 8 show that the oil and gas sector will contract significantly following the effect of the Coronavirus pandemic on oil prices. This will lead to declining output in 2020 and 2021 on the back of a blurry outlook for the oil market. The sector, however, will experience gradual recovery from 2022 to 2023 on the backdrop of a more optimistic global oil market and improved economic activities around the world.

Figure 8: Oil and Gas Sector Impact Response



Source: NESG Research

Secondary

The sector which reflects performance in the industry and plays host to the manufacturing sub-sector is not isolated from the pandemic and falling crude price. The disrupted supply chains, weak capacity utilisation and a significant drop in consumer demand induced by the dual shock results in a recession in all scenarios which may extend to 2023 if Scenario 3 is the case. From 2022 to 2023, however, the sector will gain significant momentum and return to the path of expansion (Appendix 3).

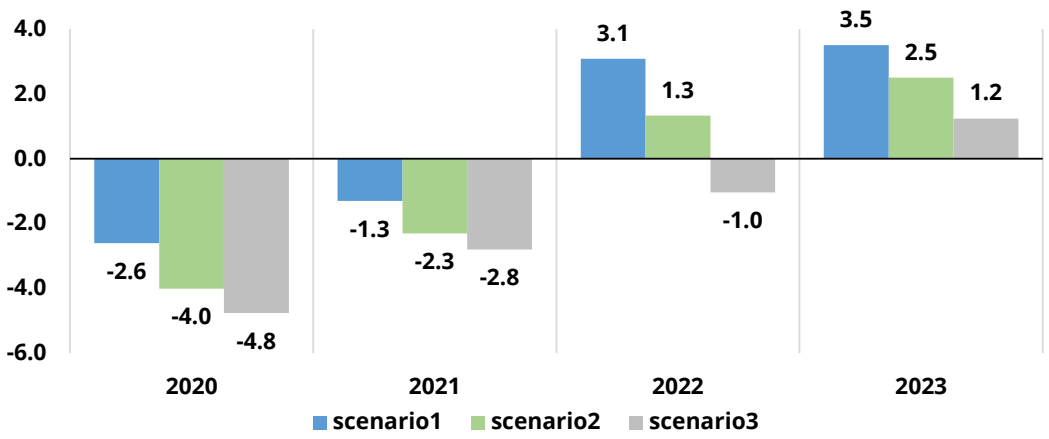
Agri-Business and Processing Sector

Just like the agricultural sector, agri-business and processing industry in Nigeria is labour intensive and under-developed. The movement restriction will lead to a shortage of labour which will affect production level. In addition to this, the industry heavily relies on importation of machinery to function effectively. Border closure and exchange rate devaluation due to dwindling external reserves and low oil price evidently pose a threat to the performance of the sector. While it is likely to see an uptick in local demand for agri-business goods, the increase in the cost of production will subdue potential gains of the industry.

Also, closure of public places and poor demand from the accommodation and hospitality sector will dampen the growth of agri-business and processing industry. In the same vein, the constrained performance of the agricultural sector will be passed on to the sector in the form of low inputs supply. As a result, there will be a drastic drop in the output level of agri-business and processing industry as well as the manufacturing sector. Like the agricultural sector, the outbreak of the Coronavirus and its attendant effect on agri-business and processing will be quite substantial.

As represented in Figure 9, the impact of the COVID-19 pandemic on the agri-business and processing activities will result in a decrease in output in 2020 and 2021. This is consequent to the challenging operating environment for the agricultural sector and strain sector's value chain. Economic activities in this sector, however, will experience a slight improvement as reflected in an increase in output in 2022 and 2023.

Figure 9: Agri-Business and Processing Sector Impact Response



Source: NESG Research

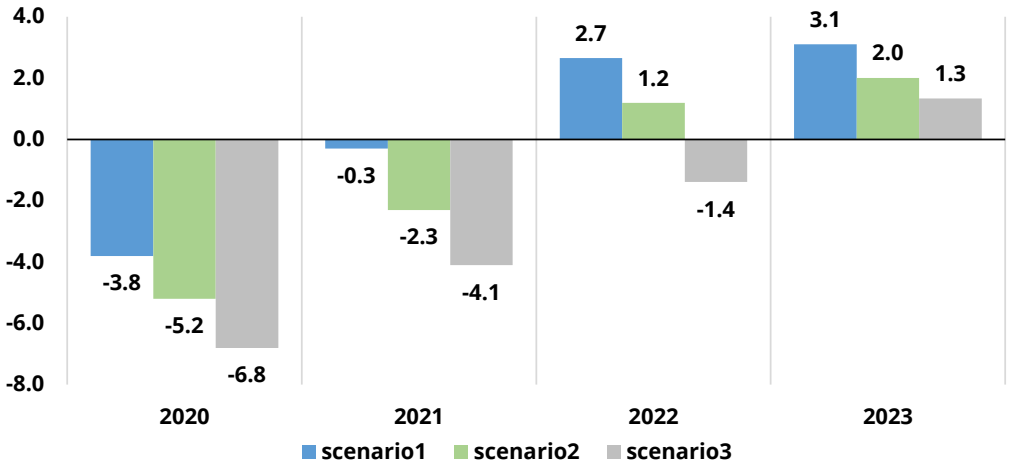
Manufacturing Sector

In addition to the existing structural challenges, the manufacturing industry faces huge disrupted supply chains, weak capacity utilisation and a significant drop in consumer demand. The import-dependent nature of the manufacturing sector, for raw materials and other key intermediate material, made it to be indirectly exposed to oil price shock via the exchange rate channel. Also, the disruption in the global supply chain will lead to an increase in the cost of inputs since they are largely imported. Without a doubt, the impact of COVID-19 on the overall economy will amplify the shocks to the manufacturing sector and hamper the performance of the sector in 2020.

Increase in foreign exchange risks and soaring operational cost are also critical challenges in the sector. Owing to this, the export of manufactured goods will decline significantly. Also, low inputs supply from the country's agri-business industry will increase the importation of both intermediate inputs and finished goods by the sector. Key sub-sectors to be exposed to this condition are food, tobacco and beverages, chemical and chemical products, pharmaceutical and drugs as well as textile, apparel and footwear.

Figure 10 corroborates the impact of the disruption caused by the spread of the COVID-19 on the manufacturing activities. The result shows that manufacturing output will suffer a decline from 2020 to 2021 on the back of the constrained demand value and supply chain as the Nigerian manufacturing sector has high import dependence for primary and intermediate input. From 2022 to 2023, however, the sector will gain significant momentum and reverse the earlier contraction.

Figure 10: Manufacturing Sector Impact response



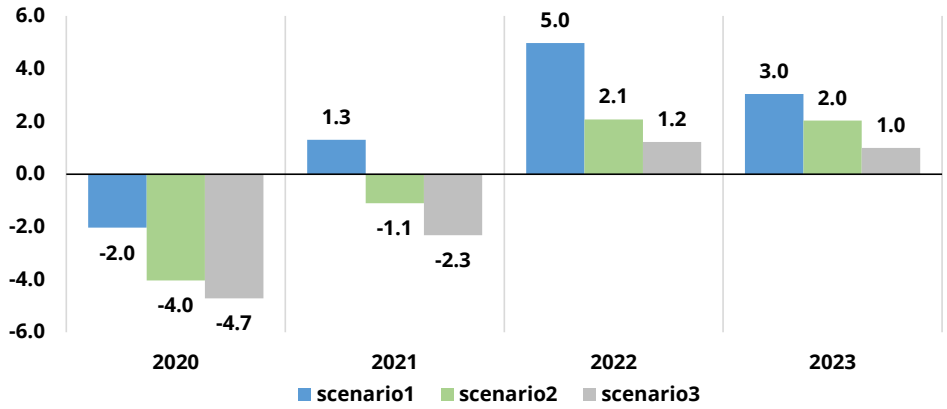
Source: NESG Research

Cement and Construction Sector

In Nigeria, cement and construction sector exhibits a typical case of oligarchy market structure. There are few players with large government presence, especially in the construction component. As a result, the performance of the sector is largely tied to the economic buoyance and government fiscal capacity. In the face of the dwindling oil price, many infrastructure projects may be halted due to constrained government financial capacity. Allocation to capital projects, with cement & construction sector as the major recipient, will be significantly reduced in the 2020 revised budget. Overall, the growth potentials of the sector in the short term will be affected if the current global trend persists. More so, the closure of factories, public places among others would intensify the slowdown in the performance of the sector.

Findings from the DynCGE as presented in Figure 11 indicates that under Scenarios 1, the cement and construction sector would experience declining growth in 2020 and recover in 2021. Meanwhile, for the other scenarios, the sector would experience a decline from 2020 to 2021 but returns to the expansionary trend from 2022 to 2023. The expansion would be driven by the resumption of capital spending by government at all levels on the back of improved oil price outlook.

Figure 11: ***Cement and Construction Sector Impact Response***



Source: NESG Research

Tertiary

The sector basically covers the activities in the broad service sector and a host of many other sub-sectors. Some of these sub-sectors (for example telecommunications) are currently impacted positively by the dual shock. However, decline in other sectors will erode the positive growth experienced in a few sectors and finally result in a contraction in the overall tertiary broad sector. As revealed by Appendix 4, despite the short-term gains in some sub-sectors, the tertiary sector would experience a recession in 2020 for all the scenarios. Under Scenario 1, the sector returns to the growth path from 2021 to 2023. The recession persists in 2021 for Scenarios 2 and 3, while it returns to the expansionary path in 2022 and 2023.

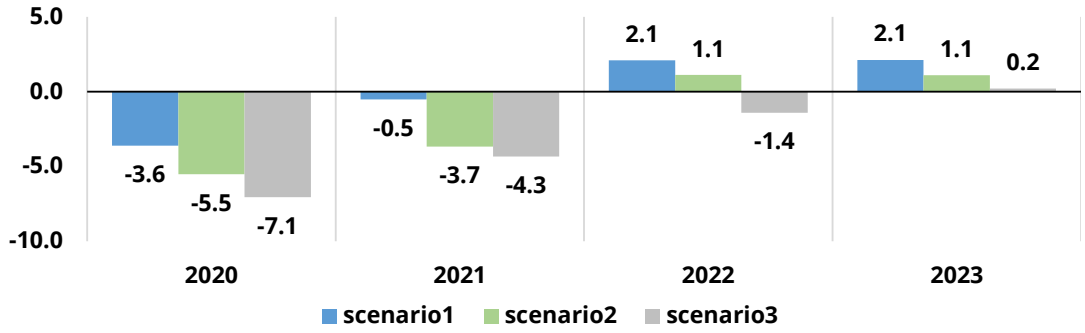
Trade Sector

The trade sector remains one of the most hit sectors of the economy by the spread of the coronavirus. The sector has the role of the market maker for other sectors and the facilitator of the supply chain. The COVID-19 pandemic has constricted the potential market for goods and services produced in the economy especially the non-essential commodities. More so, the volatile nature of the current foreign exchange market, as well as closure of the border, pose great pressure on the trade sector as a significant proportion of commodities traded are imported.

In addition, the restriction on movement has hampered the supply chain and distributional efficiency of almost every sector, inclusive of the essential products and service that enjoy some waivers. All these have inhibited the potential of the trade sector. Also, the declining aggregate demand in the economy, especially as government spending capacity is hampered by dwindling oil prices, stands to drive the trade sector further down the recessionary trajectory as it recorded negative growth of 0.85 percent in FY'2019. Generally, the poor performance of the agricultural, agri-business and manufacturing sectors will worsen the trade balance of Nigeria. The country is expected to import more and export less to meet local demand for goods and services.

As the impact of the spread of the virus on the agricultural, agri-business and manufacturing sectors is substantial, the trade sector is significantly impacted. As presented in Figure 12, under Scenarios 1 and 2, the trade sector would experience contraction in 2020 and 2021 followed by recovery in 2022 and 2023. But then, in Scenario 3, the sector will contract from 2020 to 2022 with a slight recovery in 2023.

Figure 12: Trade Sector Impact Response

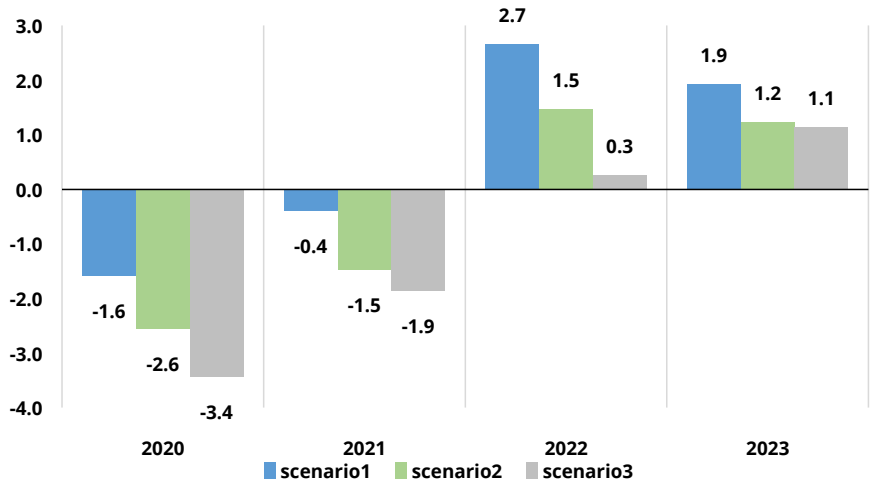


Source: NESG Research

Power and Utilities Sector

There is usually duality of effects of low oil price on the performance of power and utility sector in Nigeria. Low oil price would generally benefit the sector as cost of production drops significantly, however, demand glut that occurs usually erodes these marginal gains. In addition, the poor performance of the oil and gas sector will also directly affect the power and utility sector via low inputs (gas) supply. Government's ability to subsidise power production will be hampered by low oil price and this may trigger an increase in the cost of gas and higher cost of production to players in the power and utility sector. The empirical result is presented in Figure 13 and it reveals that the impact of COVID-19 spread will cause the power and utilities sector to contract in 2020 and 2021. Meanwhile, the sector will return to positive growth in 2022 and 2023.

Figure 13: Power and Utilities Impact Response

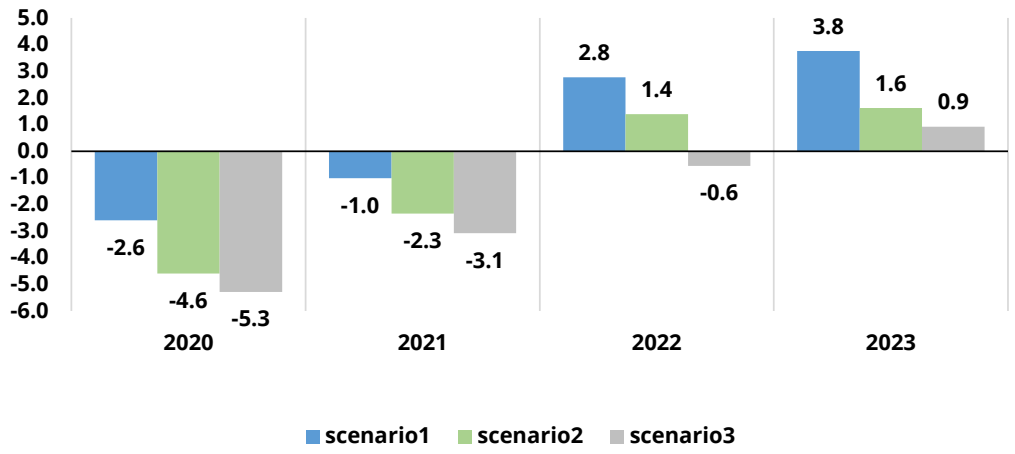


Transportation Sector

The transportation sector is negatively hit on two fronts following restrictions on the movement of people and non-essentials commodities and disruption in the supply chain of transportation facilities. The transport restrictions transcend road transport as it extends to air transportation as well as the partial effect on sea ports. In a bid to contain the spread of the virus, the motor vehicle and cycles assembly plants, as well as import, become constrained. Report from the NBS revealed that China and India, which are high-risk coronavirus areas, accounted for 29 percent and 70.4 percent of Nigeria's motor vehicle and cycle imports in Q4'2019, respectively. Hence, over 10% growth recorded in the transport sector in FY'2019 will be reversed.

Figure 14 presents the impact of COVID-19 pandemic on the transportation sector. Just like the trade sector, the transportation sector exhibits a similar response to the virus spread. Under Scenarios 1 and 2, the sector would contract in 2020 and 2021 while it would contract for three years from 2020 to 2022 under Scenario 3. The negative growth trend would be reversed from 2022 to 2023 for Scenarios 1 and 2 while the sector recovers only in 2023 for Scenario 3.

Figure 14: Transportation Sector Impact response

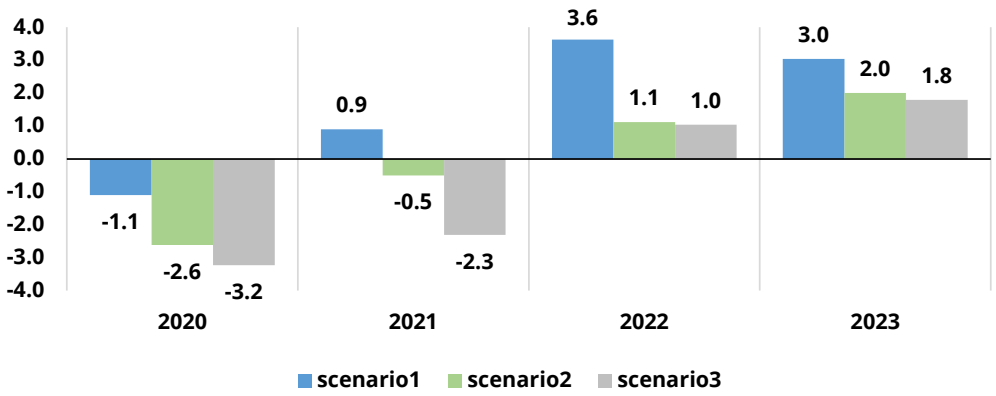


Source: NESG Research

Telecommunications Sector

The telecommunication sector is arguably becoming the respite for the society as remote working and distant communication and social connect take the order of the day. There is a remarkable surge in the demand for data that is used to facilitate video streaming, voice call and other internet communications. By implication, the sector is poised to record improved activities in the early part of 2020. However, there is a stain on the existing network infrastructure and planned infrastructure investment. In the event of persistent spread of COVID-19 in the medium term, importation of key equipment, as well as technical personnel, will significantly affect the sector negatively. As revealed by Figure 15, despite the short-term gains for the telecommunication sector, the sector would still fall into recession in 2020 for all the scenarios. Under Scenario 1, the sector returns to the growth path from 2021 to 2023. The recession persists in 2021 for Scenarios 2 and 3 while it returns to the expansionary path in 2022 and 2023.

Figure 15: Telecommunications Sector Impact Response

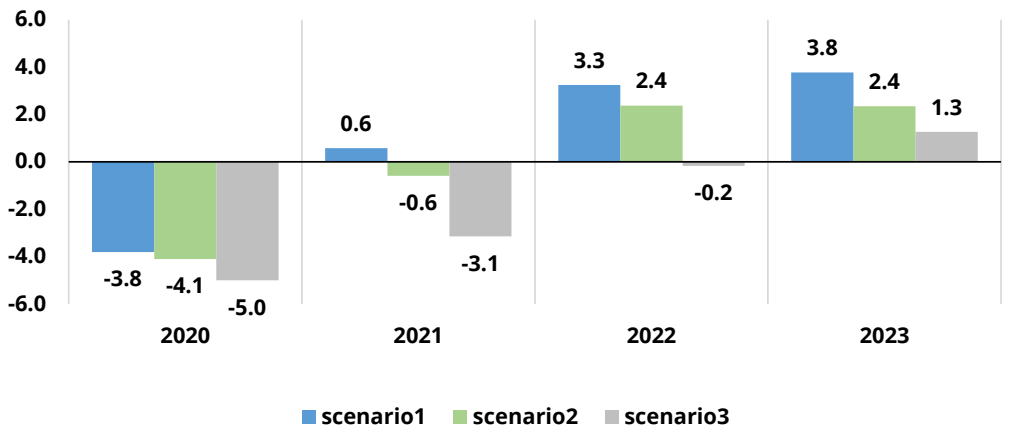


Source: NESG Research

Accommodation, Hospitality, Entertainment & Recreation Sector

As the spread of the virus continues to magnify by the day, the consumption pattern of people is tilting towards essential commodities. One of the most hit in this regard is the accommodation, hospitality, entertainment and recreation sector. Given the fact that most of the activities of this sector require the gathering of people in large numbers, the eventual near-zero patronage for some of these services will push sector operators to loss territory, especially if the spread of the virus is not contained any time soon. Hence, the sectoral recession is imminent. As exhibited in Figure 16, the impact of the outbreak will be substantial for 2020 in all scenario. The impact ameliorates in 2021 as the sector recovers under Scenario 1 and remains in recession under Scenarios 2 and 3. In 2022, the sector remains in recession under Scenario 3 while Scenarios 1 and 2 generate the expansionary figure. But then, the sector maintains positive growth figure in 2023 under all scenarios.

Figure 16: Accommodation, Hospitality, Entertainment & Recreation Sector Impact Response



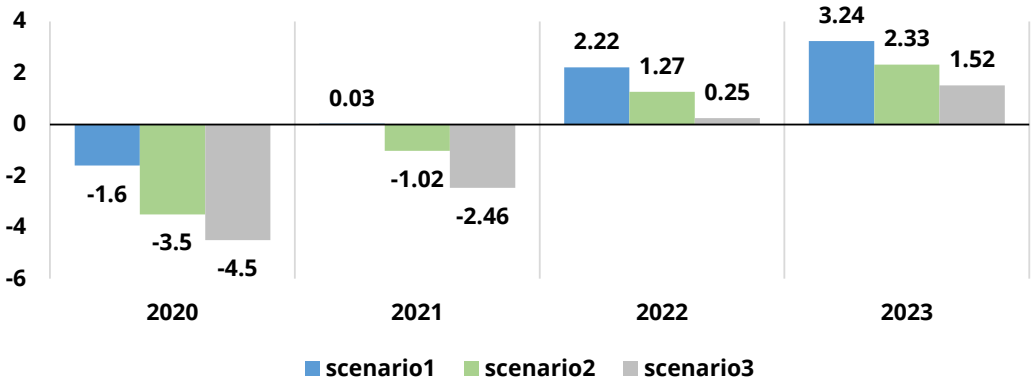
Source: NESG Research

Financial and Insurance Services Sector

Despite gaining traction in financial inclusion as demand for cashless financial service booms, the financial and insurance services sector has had a share of the downside risk of the spread of the coronavirus. Most of the companies and individuals that have taken up financial facilities are having challenges to meet up with their obligations and premiums. This will most likely reverse the gains earlier recorded in reducing non-performing loan position in the economy. The declining confidence in the investment climate, which drowned the value of financial assets across the globe, constitutes a great downside to the balance-sheet condition and profitability of financial institutions. In addition, financial-market volatility and a looming global recession are an immediate threat to financial and insurance services performance in Nigeria.

Figure 16 presents the impact of the COVID-19 on financial and insurance services sector. Scenario 1 revealed that the sector would fall into recession in 2020 while it would slightly recover in 2021 and return to a higher growth path in 2022 and 2023. Meanwhile, under Scenario 2 and 3, the sector will fall into recession in 2020 till 2021. However, the sector will return to a positive growth trajectory in 2022 and 2023.

Figure 17: ***Financial and Insurance Services Sector Impact Response***



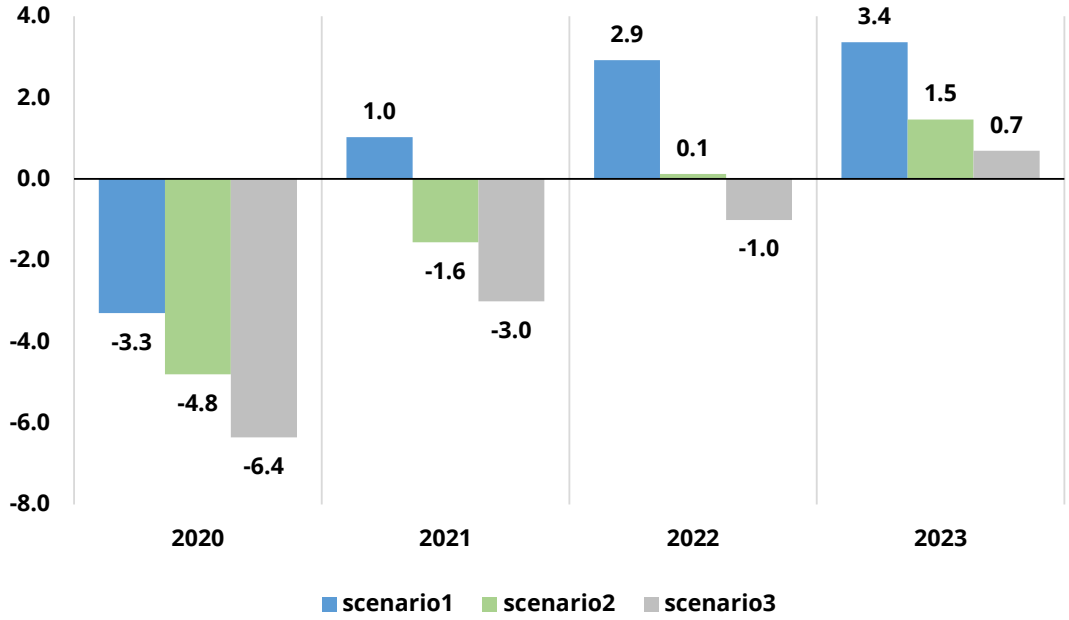
Source: NESG Research

Social Services Sector – Health & Education Sector

Arguably, the social service sector, as defined by the health and educational activities, is the major driver of productivity in the economy. With the direct strain on the already weak health care endowment of the country, the health sector is further hit by the disruption in the health care supply chain, especially from the Asian partners. Data from the NBS revealed that 99% electro-diagnostic apparatus imported in Q4'2019 were from Asian countries such as India and China. The restrictions on the movement that come with curtailing the spread of COVID–19 have also affected the education sector negatively as all educational outlets have been locked down. As such, sector participants – teachers and students – have resolved to the online platform as a means of learning.

As the number of cases continues to gain momentum, service providers in the education sector are bound to lose on revenue while the social output of building capacity on the part of the consumers is almost on a halt. The impact of the spread of the virus as presented in Figure 18 shows a significant impact on the social sector. Under Scenario 1, the social sector falls into recession in 2020 while it returns to positive growth path from 2021 to 2023. Under Scenario 2, the sector falls into recession in 2020 and 2021 while it slightly recovers in 2022 and grows in 2023. Under Scenario 3, the social sector remains in recession all through2020, 2021 and 2022 but only recovers in 2023.

Figure 18: ***Social Services Sector – Health & Education Sector Impact Response***



Source: NESG Research

Strategic Sectors of Interest Post-COVID-19

In the post COVID-19 economy, which sectors have strong potential for growth and employment in Nigeria?

At the end of the COVID-19 pandemic, Nigeria's unemployment and fragile economic growth problems would have worsened. It is, therefore, pertinent that the government develop a framework to achieve rapid economic growth and employment generation. In doing this, the government must prioritise sectors that have significant potential for growth; sectors that can meet the demand of consumers both at the local and export market and have the capacity to absorb a significant number of the country's labour force.

Based on the above criteria, the following sectors are identified to have satisfied these conditions:

- **Manufacturing:** Employs 5.4 million people, contributes 7% to total employment and 9% to GDP and a meagre 7% to GDP growth.
- **Construction:** Employs 1.75 million people, contributes 2.3% to total employment; 4% to GDP and a meagre 4% to GDP growth.
- **Professional, Scientific and Technical Services:** Employs 4.9 million people, contributes 6.4% to total employment; 4% to GDP and 0% to GDP growth.
- **Education:** Employs 2.7 million people, contributes 3.5% to total employment; 2.1% to GDP and -1% to GDP growth.
- **Health and Social Services:** Employs 2.1 million people, contributes 2.8% to total employment; 0.7% to GDP and 0% to GDP growth.
- **Trade:** Employs 10.8 million people, contributes 14% to total employment; 16% to GDP and a meagre -28% to GDP growth.

These sectors collectively employ a total of 27.8 million individuals, which represents 36% of individuals employed as of 2017. They also accounted for 35% of the GDP in 2019 and had an average growth rate of 0.5% in the last two years. The sector's poor contribution to GDP growth as well as its significant contribution to employment suggests the existence of untapped opportunities for growth. Considering these, the government needs to address key challenges to growth and job creation of the selected sectors. More so, they can be used as a Launchpad for economic recovery post-COVID-19.

RECOMMENDATIONS

Sector-Specific Action Points

1. **Agricultural Sector**
   - Establish production safety nets, which may include the government sustaining the supply of seeds and planting materials to smallholders; animal feed to livestock breeders; and aquaculture inputs to fish farmers to keep up production; special permits to transport drivers allowing distribution to remote areas and waivers for agri-food system operations to keep inputs flowing;
   - Collaborate with the private sector to set up agricultural settlements/clus ters at locations very close to urban areas or markets;
   - Capacity building on modern methods and techniques in agriculture;
   - Promote group collection and delivery to agri-business and processing companies.

2. **Agri-Business and Processing Sector**
   - Engage the private sector to drive the provision of key equipment or infr structure provision;
   - Focus aggressive intervention on one or two products with high market linkages and comparative advantages (local demand & export potentials) for Nigeria;
   - Dis-incentivise the export of primary commodities;
   - Provide guidelines for COVID-19 control and prevention along the supply chains to protect value chain actors and their families. These guidelines should include provisions for heightened biosecurity, personal protective equipment and hygiene;
   - Provide grants to increase packaging and freezing capacities. Small-and medium-sized enterprises and factories should be encouraged to produce safe products with long shelf lives;
   - Provide subsidies to agri-business and processing that maintain activities during lockdown; implement price controls to reduce inflation on commodities.

3. **Oil and Gas Sector**
   - Explore opportunities in the natural gas segment of the sector;
   - Expand the refining capacity of the local industry and tap into huge refined petroleum products market in the ECOWAS region;
   - Deregulate the downstream of the oil and gas sector.

4. **Manufacturing Sector**
   - Intensify the establishment and operations of product-specific industrial clusters.
     This will position the manufacturing sector to benefit from the growing local demand;
   - Provide markets linking infrastructural facilities;
   - Encourage Public-Private partnerships that lock-in clusters for continuous production and air-lifting of output for distribution.

5. **Power and Utilities Sector**
   - Intensify the development of the Off-grid segment of the sector's value chain;
   - The government should ensure provision of adequate gas to power plants in Nigeria.

6. **Cement and Construction Sector**
   - Address the cumbersome process for the collection of construction permits in Nigeria.
   - Improve the Public-Private Partnership environment and framework;
   - Use alternative financing sources to develop capital projects in Nigeria.

7. **Trade Sector**
   - Encourage focus on wholesale and retail trade of locally made goods;
   - Reduce import tariffs on COVID-19 related medical goods;
   - Streamline regulatory and border procedures to facilitate medical goods and essential food products.

8. **Transportation Sector**
   - Revive rail transport for inter-state movement of goods and people;
   - Encourage the setting up of dry in-land terminals at locations close to land borders, sea or air ports;
   - Regulate the number of passengers to maintain social distancing in accordance with WHO and Nigeria Centre for Disease Control (NCDC) guidelines.

9. **Telecommunications Sector**
   - Ease the regulatory compliance for players in the sector;
   - Encourage starting 5G network in Nigeria.

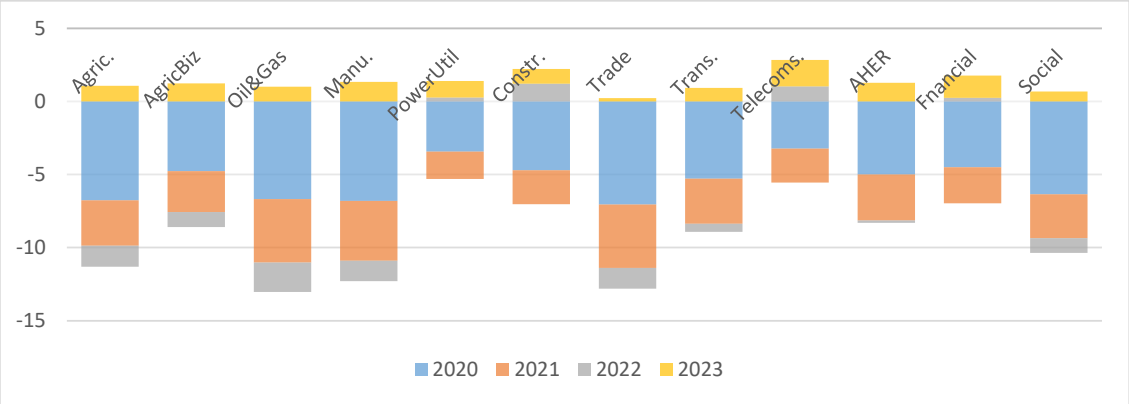
10. **Accommodation, Hospitality, Entertainment & Recreation Sector**
    - Develop and enhance various tourist points in Nigeria, both the old and new;
    - Begin a "Year of Return" programme for Nigerians in Diaspora and foreigners to key tourist locations in Nigeria.

11. **Financial and Insurance Services Sector**
    - Facilitate the integration of Financial Technology (FinTech). industry into the sector;
    - Encourage/deploy and regulate commissioning of agent banking.

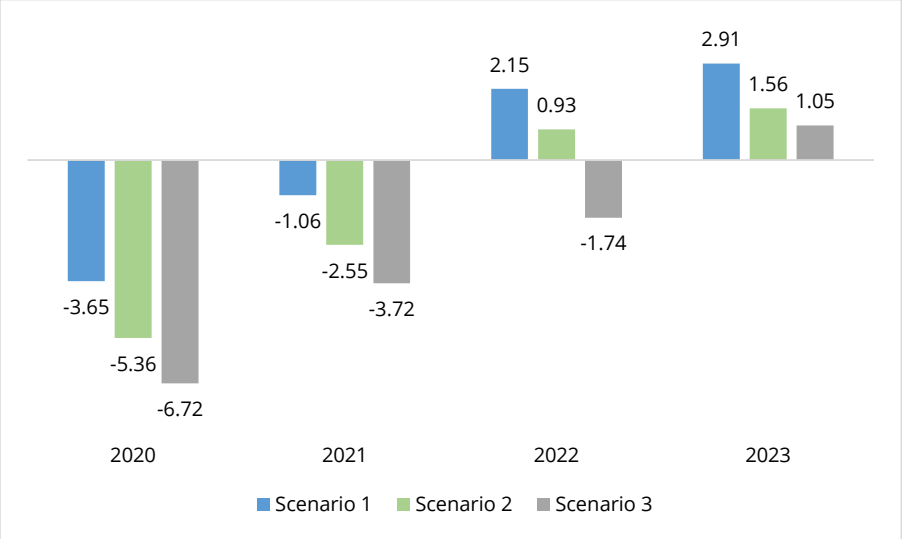
12. **Social Services Sector – Health and Education Sector**

- Government should support distance learning, scientific cooperation, and information support by encouraging the adoption of technology in the sector - Health technology and Education Technology;
- Encourage start-up/development of digital health and education tools;
- Track learning at different grade levels with real-time data;
- Expand social assistance capacity, hire new medical staff, education experts and train and redeploy/mobilize dormant social sector workers.

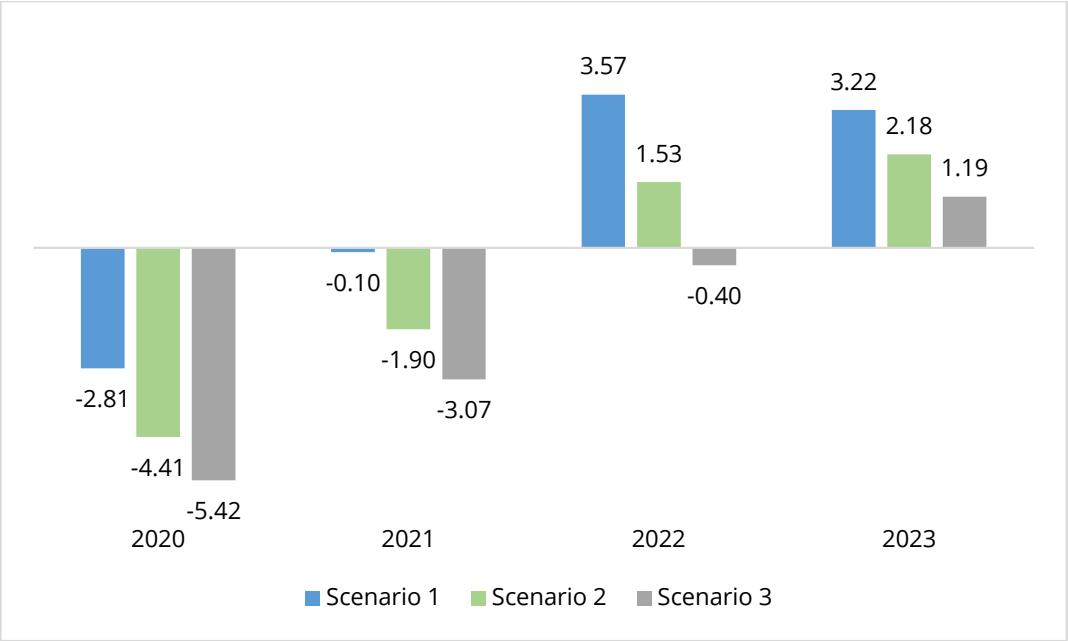
Appendix 1



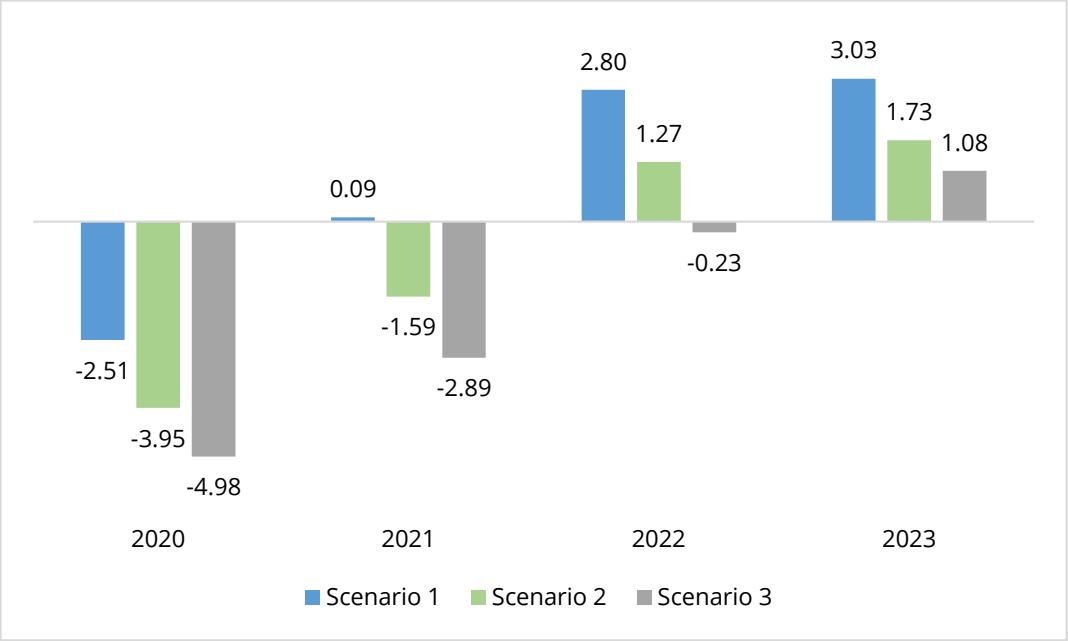
Appendix 2: Primary *Sector Impact Response*



Appendix 3: Secondary *Sector Impact Response*



Appendix 4: Tertiary *Sector Impact Response*



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Photos

NESG Archives. www.nesgroup.org/lockdown/
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About The NESG

The NESG is an independent, non-partisan, non-sectarian organization, committed to fostering open and continuous dialogue on Nigeria's economic development.
The NESG strives to forge a mutual understanding between leaders of thought so as to explore, discover and support initiatives directed at improving Nigeria's economic policies, institutions and management.

Our views and positions on issues are disseminated through electronic and print media, seminars, public lectures, policy dialogues, workshops, specific high level interactive public private sessions and special presentations to the executive and legislative arms of government.

OUR VISION
"To become Nigeria's leading private sector think-tank committed to the development of a modern globally competitive economy"

OUR MISSION
"The NESG has a mandate to promote and champion the reform of the Nigerian economy into an open, globally competitive economy"

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